



CHRISTMAS 1899

PRICE, 50 CENTS.



The Machines  
 THAT MADE  
 AMERICA FAMOUS!

THE LARGEST  
 FACTORY  
 IN  
 AMERICA.

Over 85 Acres in Area.

Working Force :  
 Nine Thousand Em-  
 ployees During 1899,  
 in Addition to Over  
 Twelve Thousand Local  
 Agents.

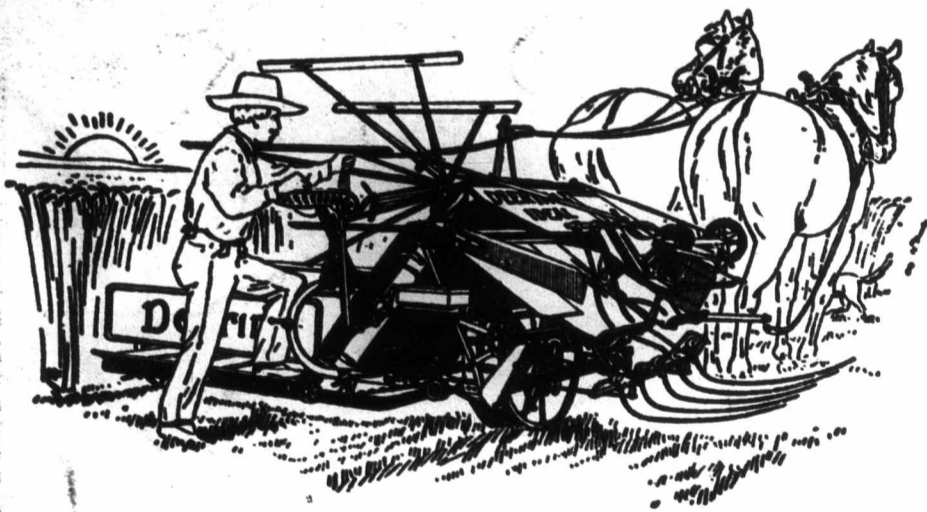


The following quantities of  
 raw material were used by  
 the Deering Works :

40,000 Tons of Steel,  
 45,000 Tons of Pig Iron,

6,000,000 ft. of Pine Lumber,  
 25,000,000 ft. Hard-wood Lumber.

Seven Thousand factory em-  
 ployees worked night and day to  
 convert this material into the  
 manufactured product.



DEERING IDEAL BINDER, 5, 6 AND 7 FOOT.

All the world loves a winner—especially one who wins on his merits. The Deering Ideal Binder has proved itself a winner; it is built by winners, sold by winners, and owned by winners everywhere.

IT PAYS  
 TO USE  
 DEERING  
 MACHINES.

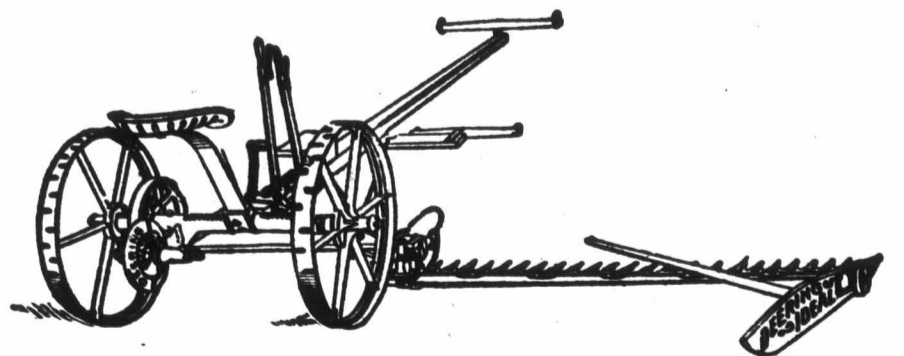
DEERING  
 BINDER TWINE.  
 New Twine from New Mills.

THE annual output of Deering Binder Twine is nearly 7,000,000 miles, and the annual consumption of fiber at the Deering Mills is 60,000,000 pounds. The Deering Twine sold in 1899 would load a solid freight train 20 miles long.



MAIN OFFICE AND FACTORY :  
 CHICAGO,  
 U. S. A.

DEERING  
 HARVESTER  
 COMPANY.



DEERING IDEAL MOWER, WITH ROLLER AND BALL BEARINGS. When you see a mower start cutting in the heaviest, toughest grass without backing the team or bending a straw, you will find the name "Deering" on it.

PERMANENT BRANCH HOUSES :  
 TORONTO, ONT.  
 LONDON, ONT.

MONTREAL, QUE.  
 WINNIPEG, MAN.

# Land for Everybody!

Free Grants of Government Lands.  
Cheap Railway Lands for Sale on  
Easy Terms.

GOOD SOIL. PURE WATER. AMPLE FUEL.

TAKE YOUR CHOICE IN

ALBERTA, ASSINIBOIA, SASKATCHEWAN or MANITOBA.

**M**OST desirable Land can be obtained in Southern Alberta in close proximity to the Calgary and Edmonton Railway and the Crow's Nest Pass Railway, suitable for Mixed Farming and Ranching on both a large and small scale.

Most desirable Land can be obtained in the Olds District, along the line of the Calgary and Edmonton Railway, about fifty miles North of Calgary.

In the Prince Albert, Duck Lake and Rosthern Districts, on the line of the Qu'Appelle, Long Lake and Saskatchewan Railway.

In the Beaver Hill District and along the line of the Manitoba and North-western Railway.

For full information concerning these Districts, Maps, Pamphlets, etc., **FREE**, apply to

**OSLER, HAMMOND & NANTON,**

LAND OFFICE,

381 MAIN ST., WINNIPEG, MAN.

Full Directions  
on all Tins.



Send to us for  
a Sample.

## FLEMING'S SHEEP DIP.

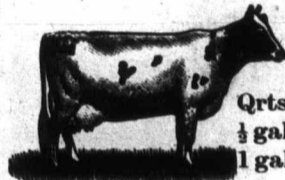
This now famous "Dip" has been manufactured for several years by us; the formula is one of the oldest in use; its sale is more than doubling each year; stockmen cannot afford to be without it.

### AS A GERMICIDE

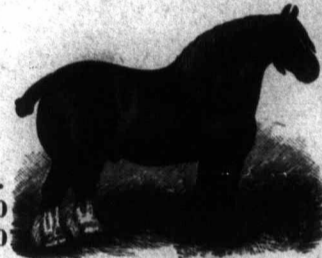
on Horses, Cattle, and smaller animals, it has no equal. We can send you yards of testimonials from those who have used it.

A 75c. Tin will effectively clean 20 large animals.  
**WE GUARANTEE IT**

to be the best "Dip" for sheep and animal wash ever introduced in America, and as cheap as any. Keep your animals clean and they will thrive.



Qrts., 75c.  
½ gal., \$1.50  
1 gal., 2.50



**FLEMING & SONS, CHEMISTS,**

BRANDON, MANITOBA.

J. A. SIMMERS, Toronto, Agent for Ontario.

# "Ensure the Harvest"

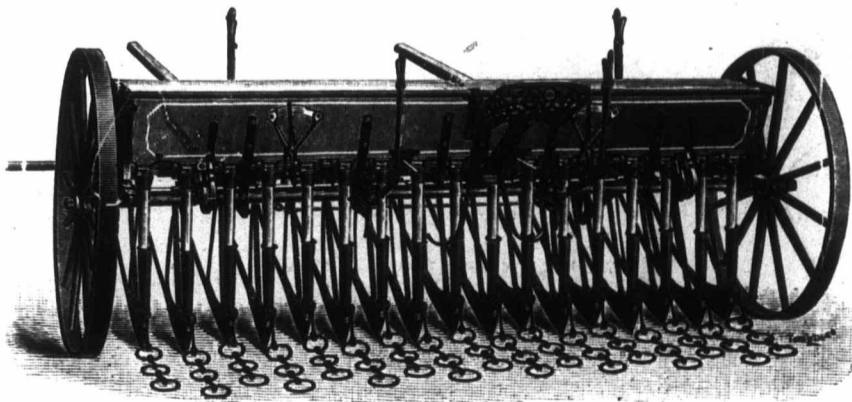
BY PURCHASING A

## COCKSHUTT SHOE DRILL

(9) NINE SPECIAL IMPROVEMENTS.

Lightest Draft

Accurate



Durability

Unequaled

WE HAVE THE BEST AND  
LATEST IMPROVED

### DISC SHOE.

IT IS NO EXPERIMENT, BUT  
A GUARANTEED SUCCESS.

FACTORY:

**BRANTFORD, ONT.**

**Cockshutt Plow Co.,**  
WINNIPEG, MAN. LIMITED.

# David Maxwell <sup>and</sup> Sons

St. Marys, Ontario,  
Canada.



## Harvesting Machinery



## Stock Raisers' Implements.

ALL "MAXWELL" MACHINES GUARANTEED.

RESPONSIBLE AGENTS WANTED  
IN ALL UNOCCUPIED TERRITORY.

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

\* AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.\*

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875.

VOL. XXXIV.

LONDON, ONT., AND WINNIPEG, MAN., DECEMBER 20, 1899.

No. 492



Canada,  
the Land we Love.

O fair Dominion! Yule-tide weather!  
Again together, a people free,  
On Love's quick pinion, thanks send Heaven  
For blessings given them and thee.

Fair land and fertile, harvest-laden,  
Dear land of Aiden, all lands above,  
Instead of myrtle, maples flourish,  
Charm, shield and nourish the land we love.

Through yon hoar woodland, quickly changing,  
Our king is ranging—the pioneer—  
All o'er that good land, once wild prairie,  
Toil—our best fairy—spreadeth cheer.

Toil, still uplifting and adorning  
With blush o' morning, lands erstwhile lone:  
The dark cloud rifting! Man seeks Duty,  
Finding Beauty! Life, a rose—new-blown!

Nor frowning mountain yet may stay him,  
Nor flood affray him, nor sullen cold,  
Till shines the fountain, shedding honor,  
Fame, wealth, upon her—the land of gold.

Toil taps the royal fount of honor,  
Dawn bursts upon her, her flocks increase;  
Strong, free and loyal, upward-tending,  
Still ascending sunny paths of peace.

Yet quick a thrilling call comes stealing,  
Stern stress revealing beyond the wave:  
We answer willing "For sake o' mother  
We give, oh, brother! our best—the brave."

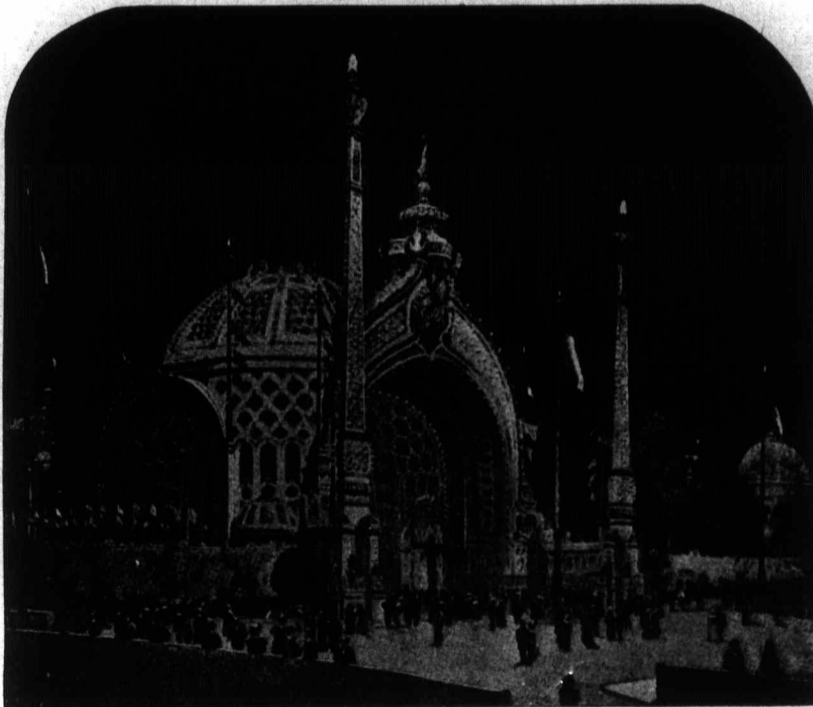
May they returning bring home glory  
To brighten story, good work, well done:  
Their Queen is yearning (Heaven smile upon her!)  
For peace with honor—an Empire, *one*.

Godspeed the flying to this Dominion  
On snowy pinion of that holy dove  
Of Peace undying, to leave us never,  
But to bless forever the land we love.

ROBERT ELLIOTT.

## Canada at the Paris Exposition.

The people of Canada, like those of Great Britain and all civilized communities, are taking much interest in the Paris Universal Exhibition of 1900, which, it is anticipated, will afford a most complete representation of the products and manufactures of the world. The French Government invited all nations to participate, and nearly all have accepted the invitation. At one time, when the feeling over the Dreyfus matter was at its height, it looked as if resentment at the treatment of the accused might result in the boycotting of the Exhibition by many who intended sending displays, but, so far as Canada and all other portions of the British empire is concerned, whatever feeling at one time existed has passed away, largely, no doubt, because Dreyfus has been set free, but in a measure from the desire of intending exhibitors to get as much advantage out of the opportunity presented as is possible. Even in Great Britain, where at one time the feeling was strong, but 16 out of 2,000 declared exhibitors withdrew, and now nearly all those too hasty advocates of the boycott are praying for re-admission.



MAIN ENTRANCE TO PARIS EXPOSITION.

The British Government has at work an able Imperial Commission, with His Royal Highness the Prince of Wales as chairman, and it is on the invitation of this Commission that Canada and other portions of greater Britain are co-operating. To secure the proper representation of the colonies, a Colonial Committee was named in the Imperial Commission. The nominee of the Canadian Government on this Committee is Lord Strathcona and Mount Royal, our High Commissioner in Great Britain, and a more representative or better qualified exponent of the Dominion could not have been named. The Colonial Committee showed well-merited confidence in Lord Strathcona by appointing him as its chairman, and by choosing him as the representative of the colonies and India on the General Executive Committee of the Imperial Commission. This naturally gives Canada a very prominent and advantageous position upon the Imperial Commission, and makes it all the more necessary that there should be hearty co-operation with the authorities in providing for the most meritorious exhibit of Canadian products possible.

In addition to Lord Strathcona, himself a power for the advancement of Canadian interests, the Dominion has an able and energetic Commission, which has been sparing no effort to make Canada's

display fully representative of our great and varied resources. Agriculture being our chief industry, Hon. Sydney Fisher, M. P., Dominion Minister of Agriculture, is properly chairman of the Canadian Commission. An experienced agriculturist, no effort on his part will be spared to have the staple industry amply represented. Dr. G. M. Dawson, the eminent scientist, in the selection and arrangement of our minerals is well fitted to give expert aid. Professor Robertson is devoting his attention specially to dairy products, in which Canada may be expected to take a high place in competition with the world. Dr. Wm. Saunders has charge of the farm product display, which will be magnificent. Major Gourdeau, Deputy Minister of Marine and Fisheries, is giving special attention to the fish, game and fur-bearing animal display, in which the Dominion will not take second place to any country. In Hon. A. H. Gillmor, of St. George, N. B., the Maritime Provinces have an old and trusted business man, who faithfully served in Parliament for over 25 years, and knows all about the products of the Provinces down by the sea. Mr. J. X. Perrault, the Quebec representative on the Commission, had already served on the Canadian Commission at the

Centennial Exhibition, and at the International Exposition in Paris, 1877-78. No one is working harder to secure a thoroughly representative Canadian exhibit than are Mr. J. G. Jardine, the Ontario Commissioner, and Mr. Wm. D. Scott, Commissioner for the West. Mr. Auguste Dupuis, Secretary of the Commission, has proved a most painstaking and obliging officer, who has handled the great mass of correspondence pertaining to the Canadian exhibit with courtesy and despatch.

The Commission has, of course, been compelled to rely on the different Provincial Governments for valuable assistance in making up the exhibits, and they have had cordial and intelligent co-operation, without which the good results likely to be attained would not have been possible.

It was early seen that the arrangement of the French Exhibition authorities, for a very limited representation of the products of each country, side by side, would not permit of entire justice being done to Canada and other portions of the British Empire. The Colonial Committee of the British Imperial Commission, therefore, obtained the privilege of a special building set apart for the occupation of these colonies. This was only obtained on 1st January. It was further made evident that the space allotted to Canada would in no measure be commensurate with the resources and prosperity of the Dominion, but the Canadian Commissioners were able to obtain a considerable additional allotment in the space set apart for the British Empire over and above that conceded to the special colonial building. In the colonial building, for the use not only of all the British colonies, but of the Empire of India, Canada will have 27,100 square feet out of a total of 36,000. This building is situated within the Trocadero Gardens, overlooking the Champ de Mars, and in full view of the great Eiffel Tower. In the Canadian section of the building, the products of the Dominion, of every description, may be shown, without restriction, the arrangement being entirely in the hands of the Canadian Commissioners. Though this portion of the exhibition is on the other side of the River Seine, as the

plan of the exhibition ground and buildings shows, it is much nearer the chief buildings of the exhibition proper than are a number of the structures situated on the opposite side of the stream—in the Place des Invalides, for example. Moreover, the colonization departments, which will be all placed in the Trocadero Gardens, embrace exhibits by every nation having colonies throughout the world, and will afford Canada very desirable opportunity of showing its resources alongside those of other countries.

As to the exhibition proper, the general plan is to have it divided by classes in 18 general groups, according to their nature, without respect to the country from which they come. Thus it is officially stated that the portion of the Imperial space allotted to Canada, apart from the Colonial building, is distributed through the different buildings according to classes, and in this space the exhibits must appear as exhibits of the British Empire, and cannot be grouped as coming especially from Canada, although each exhibit will be clearly marked in prominent letters, with the name and full address of exhibitor.

The total space conceded to the Dominion being only 45,721 square feet, it has been necessary for the Commissioners to arrange that it shall be occupied so as to most effectively advance the interests of Canada. The object aimed at has been to make such a representation of the products of the industry and enterprise of the people of the Dominion as to add to the attractiveness of the country as a place of settlement, as a field for investment, as a land from which to obtain needed supplies for the sustenance of man and beast. Therefore, while an endeavor has been made to compete in as many of the classes as is possible, the efforts of the Commissioners have been chiefly directed to making the most of the greater of our industries. And it can be said thus early that never before has there been got together such a display of Canada's mineral, agricultural, fishery and forest products as will be presented to the gaze of visitors. All parts of the country will be represented, and the products will be shown raw, semi-manufactured, and completed ready for use. They will be so arranged as to be of a thorough national character, illustrating the products, arts, and manufactures of the Dominion as a whole. Exhibitors may set a price on their property, and it can be sold subject to removal at the close of the Exposition.

It is most appropriate that in the Canadian department the central figure should be an agricultural trophy. It will be of octagon shape, and the hall will be entered by means of four archways. In the blind archways will be placed a magnificent collection of the food products of the Dominion; indeed, the space on the ground floor will be devoted almost entirely to the varied collection of Canadian food products, including cheese, bacon, hams. Added interest will be lent to this exhibit through the operation of a cold-storage plant as an illustration of the system to improve the quality of the exports of perishable products and add to the market of farmers. A unique display in the center of the Canadian department, in the Colonial exhibit, will be a large bin of wheat of finest quality, which, by a mechanical contrivance, will be kept in motion.

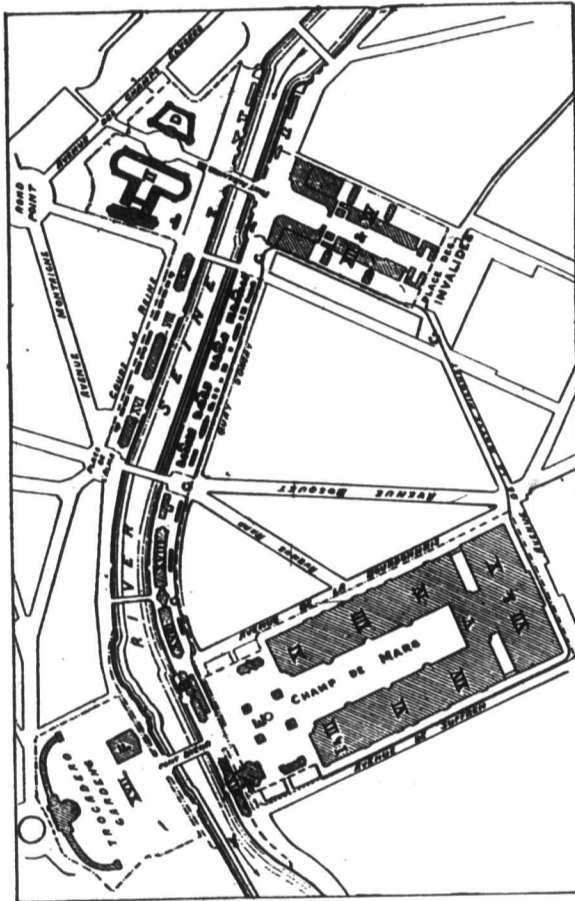
The first-floor space in the Canadian department will be devoted in part to agricultural products, and to such non-edible products as tobacco. Side by side will be a varied exhibit of manufactures from Canada—boots and shoes, furs, gloves, perfumes and extracts, and leather. In addition to a reception room for lady visitors and rooms for the Canadian Commissioners, there is also on this floor a department where mechanical contrivances manufactured in Canada will be seen in motion: linotype machines, typewriters, and boot and shoe machines, will be operated for the instruction of visitors. In another wing Canada will show what her manufacturer can do in the matter of producing heating apparatus, edge-tool machines, and other useful manufactures.

In all the great lines of industry, Canada will also be an exhibitor in those departments of the Exhibition which are situated on the opposite side of the River Seine, and will everywhere take her place as a competitor with the world. In the transportation building she will exhibit wagons, carriages, sleighs, and even the latest agency of motion—the automobile. The principal boat-builders in Canada will also have fine specimens of their handicraft on exhibition, and there will be models of what our shipbuilders have recently been accomplishing in the production of steel steamships and of the best types of mercantile marine. Canada's export trade in furniture will no doubt also be promoted by the fine exhibit of house and office furnishings, school desks, etc. In the exhibit of machinery and tools required for agriculture, Canada will, of course, take no secondary place; and she will take an equally creditable position in the exhibit of musical instruments and of fishing material of all kinds. Her show of animals and fish, prepared by the Deputy Minister of Marine and Fisheries, will also be very complete.

The display of fruit by Canada promises to be very fine. Already there has been sent forward nearly 3,000 jars filled with specimens, which will represent our fruit products in the early days of the Exhibition. As the season advances, it is intended to send forward in cold storage every variety of fruit that Canada produces. The display of apples by this country will, as usual, be very fine. Five hundred barrels of the choicest fruit have been shipped to Paris, and we will be much mistaken if they do not take front rank in the competition.

There are two great industries in Canada companions to the cultivation of the soil, and at the Paris Exhibition these, too, will be most attractively brought under public notice. Never before have so complete arrangements been made for interesting exhibits of the products of our forests and mines. Canada's forestry exhibit has been prepared by the noted naturalist, Mr. J. M. Macoun, and it will embrace specimens of the many varieties of wood that this country is famed for producing, gathered from every part of the Dominion, between British Columbia and Anticosti. It will be shown in merchantable form, from deals down to the finest polished woods. The great pulp industry of the Dominion will be exemplified by an exhibit of the process of manufacturing the wood, through its various pulpy and other stages, until it is finally evolved into paper of every variety.

The display of Canadian minerals will be striking. The principal exhibits will, of course, be made by Ontario and British Columbia, but it will be demonstrated that every Province of the Dominion has its mining districts of greater or less extent and richness. The Ontario exhibit, which has been arranged by Mr. Archibald Blue, Director of the



PLAN OF PARIS EXHIBITION GROUNDS AND BUILDINGS.

- KEY TO PLAN OF EXHIBITION GROUNDS AND BUILDINGS.
- I. Education and Instruction.
  - II. Works of Art.
  - III. Appliances and General Processes relating to Literature, Science, and Art.
  - IV. Mechanical Engineering.
  - V. Electricity.
  - VI. Civil Engineering and Transportation.
  - VII. Agriculture.
  - VIII. Horticulture and Arboriculture.
  - IX. Forests, Sport, Fishing, etc.
  - X. Food Products.
  - XI. Mining and Metallurgy.
  - XII. Decoration and Furniture of Public Buildings and of Dwelling Houses.
  - XIII. Thread, Yarns, Textile Fabrics, and Clothing.
  - XIV. Chemical Industries.
  - XV. Various Industries.
  - XVI. Social Economy, Hygiene, and Public Charitable Relief.
  - XVII. Colonization.
  - XVIII. Army and Navy.
  - XIX. Foreign Pavilions.
  - A.A.A. Mercantile Marine (Part of Group VI.).
  - B. Pavilion of the City of Paris.
  - C. Historical Exhibition of French Art.
  - D. Eiffel Tower.
  - E. British Colonies and India.
  - F. Circular Railway.
- Boundary of the Exhibition.

Bureau of Mines, shows how great are the varieties of the metals produced in the Province. In the exhibit are specimens of gold, silver, copper, mica, nickel, corundum, iron, and other ores. The British Columbia exhibit in this department will be very attractive. Samples of all the gold, silver, copper, and other rocks will be shown. There will be 100 samples of placer gold from 100 different creeks in B. C., the Rossland region, and every district to the far-away Klondike has been laid tribute to in order to produce a thoroughly representative showing of the richness of the rocks for hundreds of miles. All the different processes of smelting will be exemplified in the ores shown, and there will be models of some of the famous smelters. This collection has been arranged by Mr. W. F. Robertson, Provincial Mineralogist.

The two great Canadian railways—the Canadian Pacific and the Grand Trunk—will each make an exhibit of the striking scenery along their lines, and there will be illustrations of the social and school life of the country. Care will be taken to keep visitors thoroughly instructed as to the advantages and progress of the Dominion by means of descriptive literature.

The National Council of Women of Canada will have for distribution a special handbook relating to woman's work and standing in the Dominion, a volume unique in its character.

The Exhibition, which opens on the 15th of April and closes on the 5th November, 1900, promises to be by far the largest and best exposition that has ever taken place on the Continent of Europe. France is spending \$20,000,000 upon it, and in addition will provide the awards, which will take the form of diplomas, offered by the Minister of Commerce and by the Commissaire-General. These diplomas will consist of grand prize diplomas, gold medal diplomas, silver medal diplomas, bronze medal diplomas, and honorable mention diplomas. Then, foreign nations are spending on their preparations upwards of \$10,000,000, so that the display will be magnificent as well as comprehensive. As it is expected that more than 100,000,000 persons, from all parts of the world, will visit the Exhibition, the wisdom of seeing that the very best of our products are displayed must be conceded. It is to be hoped that whatever is yet necessary to be undertaken to do full justice to the Dominion will be carried out, and that Canada will come off with flying honors in the competitions that will take place and in the results that will follow from her enterprise.

### Agricultural Situation and Outlook for the Dominion.

BY HON. SYDNEY FISHER, MINISTER OF AGRICULTURE.

The year 1899 has been a prosperous one for agriculture in Canada and the commerce in its products. Our farmers generally have received an unusually large amount of money for their year's work, and this money has been very well distributed over all sections of the country and all branches of the industry. I feel, therefore, that I can congratulate the readers of the FARMER'S ADVOCATE on the results of the season.

Let us take a little survey of our crops. First, let us take up wheat. The price has been fair to good, though not abnormal. The yield per acre in Manitoba and the Northwest has been only average, and that in Ontario no greater. Yet, in consequence of a great increase in area in the newer parts of the Dominion, the aggregate value of the product has been probably the greatest in our history.

Of the coarse grains, roots and corn, hay and grass, much the same can be said, though as most of these crops is consumed on the farm or in local market, we have not such accurate data of yield and price. The season has been very dry in some parts of the country, and in others there have been periods of the year when the crops were almost drowned out. This has occasioned some local or special deficiencies, but the varied character of our agriculture and the great extent of the Dominion have made these of small moment; and again I say that the season's crops on the great Canadian farm which stretches from the Atlantic to the Pacific have been most satisfactory.

Let us now examine the live-stock business, which exists by virtue of the crops that our farm has produced. Here we find an even more satisfactory state of affairs. The prices for cattle of all classes have been unusually good; the demand has been brisk, even eager, during most of the season, and all over the country. Every Canadian stock-owner has had an opportunity of disposing, at remunerative prices, of every animal he has been willing to sell. It is true the export of live stock to Europe by the St. Lawrence port has seriously fallen off, but this year's record of this trade does not tell the whole truth. Space in ships on the St. Lawrence was so scarce and dear for some time at the end of the season that many Canadian animals went to Europe through United States ports. The United States demand was so keen, and such good prices were obtained in that market, now open to us through the removal of quarantine, that the Canadian stock-raiser was not obliged to ship across the Atlantic to make good profits. Although there were not so many as usual of Northwest cattle going to Europe, there was a very large sale of cattle from the ranches in the home market, and the best prices in many years were realized. It is also stated, I believe with truth, that over 30,000 head of cattle were sold from Ontario alone to go to the United States this season; while a constant stream of stockers and young females has been crossing the international boundary between Quebec and New England during the whole year, at prices which have been most tempting.

The demand for sheep and lambs has been good, and prices better than for years. Notably has this been the case in the Northwest Territories, where there seems to be a great opening in certain sections for further sheep breeding. I am sure that sheep should receive more attention all over Canada.

Good horses have fetched good prices; and if our export to Europe has fallen off, it seems rather due to the scarcity of the right kind of animal than the lack of a fair demand.

As to the sale of hogs from the farm, we have a somewhat different picture to look upon. The prices have ruled lower than for several years. Still, the production has been very large, and the aggregate sum brought to the farmers from the sale of hog products is probably the largest ever known in Canada. To those who have applied the best methods of care and feeding, even the low prices of this season have brought a fair profit, while the increased manure pile and the utilization

of by-products of the dairy have, through the raising and fattening of these hogs, helped the whole business of farming very materially.

We must not omit a reference to the egg and poultry industry. In both of these the output is the largest in our history, and the year's prices are on the whole satisfactory. The position of our products in the English markets has been greatly improved.

Next, let us turn to the dairy trade. Here we have the brightest page of the year's record. The production has been large, the prices high, and our reputation in our great market, the motherland, much improved. Canadian cheese has well maintained its proud position and its immense export. Our butter export has increased enormously, about seventy per cent. over last year, which was itself so large; while the price has averaged in the English market fully two cents a pound better than at any time in many years. A specially gratifying point is that Canadian butter has again this season improved its relative position on the English market, and has more firmly established its good reputation.

From this sketch of the agricultural season what lessons may we draw? First, it appears to me that we Canadian farmers may renew and strengthen our confidence in our country, our business, and ourselves. The success of the season is due to a wide area of fertile soil and a healthy, temperate climate; to natural conditions favorable to the best development of a sturdy industry, and to the mental and physical capacity of our people taking full advantage of these conditions.

Secondly, it is evident that our greatest profits, our most noted progress, have been in the live-stock branches of our farming. To understand the full meaning of this is most important; and the better it is understood the more satisfactory it appears.

Our crops may be divided into two classes: the one exported and the other consumed at home. We have no recent figures that are complete; but, for comparison, we may take the census and practically the same proportion is still true. Without counting pasture grass, but taking the gross weight of all other crops, twenty-five twenty-sixths of our total crop yield is used in Canada, and of this five-sixths is used to feed animals. Including pasture grass, we can say in round figures that considerably more than five-sixths of all the crops of our farms' produce goes into our live stock.

How doubly important, therefore, is it that our live-stock business should be profitable, since it appears to be more than five-sixths of the whole business of the farm in Canada. Of course, this includes both our export and home consumption. With the single exception of cheese, we consume much more of every class of animal products at home than we send abroad. Even of butter, notwithstanding the recent great increase of our trade, we still eat twice as much at home as we export.

With the present undoubtedly large increase of our population, and the extraordinary prosperity of the country, our people are no doubt consuming a much greater proportion of animal food than they did in 1891; and, therefore, the present relative importance of our live stock is greater even than in 1891.

With these facts before us, it is certainly of supreme importance that our live stock should be of a character to make the best possible use of this enormous product of our fields. If we devote our energies to producing crops, and then practically throw them away by feeding them to poor or inferior stock, we lose not only the labor expended on the stock, but also that expended on the growing of these crops and the use of our land. Then surely the supreme question for us is how to improve the general quality of our live stock?

We boast that Canadian stock is of the best. So it is, a small minor proportion of it which appears at our exhibitions or is to be found at the well-known homesteads of our best breeders. But any one who knows our stock generally, knows that it is not true to say that the majority of Canadian live stock is of the best or really first-class.

What, then, is the most important consideration for the improvement of this stock? Whence do we take our inspiration on live-stock matters? Where do we go to buy animals for the improvement of our stock? Great Britain. We find there the homes of the breeds which are the standard of excellence in domestic live stock: Durham, Ayrshire, Clydesdale, Shropshire, Leicester, Berkshire, Yorkshire, Tamworth. What do these names indicate? The places of origin of these breeds. They are not named from an individual, but from a locality. They have not been produced by an individual, but a whole section has steadily and systematically, for a long course of years, bred to a certain type which was found to have the best and most profitable qualities for that neighborhood or that market.

My observation leads me to believe that our people have very little appreciation of the importance of breeding systematically to a type. It is true that here and there, scattered all over Canada, but chiefly in Ontario, we have men renowned, not only in Canada, but in other countries, for their success as breeders: and I believe the best of these are as well informed and thorough in their practice as the best in the world. Something much more than this seems to be called for. Is there in Canada a district or county where any particular type of animal is especially celebrated? I have not found it. It is true that in some counties Shorthorn bulls have been plentiful, and there steers of a better

quality are to be found; and in some localities Olydesdale horses can be more easily found than in others. But, even in any such instance, the would-be buyer would find fully more animals not showing any signs of the type he wants than of those that fill his eye. In other words, we farmers, as a whole in Canada, have been breeding in all sorts of criss-cross ways, without any system at all: the result being that our stock generally is in any particular place of no particular type.

There have been one or two striking object lessons in our country of how not to do it, which are worth drawing attention to. In the Province of Quebec years ago there were two classes of stock with very valuable qualities and of well-defined characteristics, well worth perpetuating and capable of further development under proper management. These were the French-Canadian pony, or small horse, and the French-Canadian cow. To-day it is almost impossible to obtain a pure representative specimen of either of these. Why? Because as the country opened up, a little knowledge, which is so dangerous a thing, crept in amongst the *habitants*. The Canadian mares were bred to all sorts of stallions, often really pure-bred, but generally of a class not fitted to cross with them; the produce would be bred to a horse of some totally different class, and so on again, until the unfortunate foal of to-day has crosses of eight or ten different types, introduced haphazard and irregularly, and is therefore bound to be a misshapen, ill-balanced creature, and no two of them alike.

The same has to a large extent been the history of the cattle; and one will find in the same parish, and even the same herd, every imaginable cross of half the well-known breeds, but no uniform type and no certainty as to what the future generations of these cattle will be under a continuance of this system. In Maine, the Morgan horse was produced

they will have a number of different herds to choose from rather than where there is only one isolated herd of a particular class. And this is true, not only of cattle, but of the other classes of our live stock. I think I may venture to instance horse breeding in Canada as a glaring example of the failure to breed to a type. Some years ago a distinguished army officer was sent to this country to see if a purchasing station for the English army could be established in Canada. He, unfortunately, found no section of the country where the class of horses that he wanted could be purchased in any quantity. To-day the English purchasing officers for the army are on the lookout the world over for cavalry and artillery horses. They are not tempted to come to Canada, because our horses are such a mixture of all sorts of breeds that they could not pick up in a short time in this country a sufficient number of suitable animals to make it worth their while to come. In saying this, I fully appreciate that we have a certain number of very excellent horses in Canada, and that there are some men who have done great service to Canadian horse breeding; but the general principle on which most of our owners of brood mares have gone has been to mix up every conceivable breed in the product, with a result that is disastrous.

In my official position, as Minister charged with the care of agricultural interests, I have felt that the live-stock problem was one of the most difficult of solution, and therefore requiring most particular attention. It was with this in view that I secured from Parliament an additional sum of money to be devoted to the branch of the Commissioner of Agriculture and Dairying, and have created a new office in that branch of my Department. Your readers, I am sure, will sympathize with me in the satisfaction I feel in having obtained the services of Mr. F. W. Hodson as Live Stock Assistant in the branch of the Commissioner of Agriculture and Dairying. Mr. Hodson's experience amongst the live-stock associations of the Province of Ontario, and the excellent work that he has done there, gives me an assurance of what I trust will be the results of this new departure. I bespeak for this branch of my Department, and the work which through its officers I hope to energetically push on, the hearty co-operation and sympathy of the live-stock owners of Canada, and these are practically the farmers of our country.

#### Agricultural Education.

BY H. S. MACLEAN, ASSISTANT PRINCIPAL NORMAL SCHOOL WINNIPEG.

The nineteenth century has grappled with many difficult educational problems. Some of these it has solved satisfactorily; others, it must hand over to the twentieth century for final determination. Among the latter is the problem of agricultural education. Although this subject, when viewed in all its bearings, is really a complicated one, being bound up with many educational and social questions, yet it is gradually becoming more clearly understood; and, as its importance is now fully recognized by the best thinkers everywhere, there is good reason to hope that much new light will be thrown upon it, and that it will soon find its true place in educational work. Already a good beginning has been made, but there is much more to come. Also, it is gratifying to note that the beginning has been made at the proper end of the educational ladder; that is, in the primary school.

Frequently educational institutions are blamed for the tendency manifested by the young people of rural communities to leave their homes and seek occupation in the cities and towns. It is said that these institutions are the means of educating boys and girls away from the farm. A superficial view of the matter might, indeed, seem to justify this conclusion, but a more careful examination of all the conditions involved shows that the charge preferred is not well founded. Let us consider two or three of the causes producing the result complained of.

At the time in the history of agriculture when the soil was tilled with rude homemade implements, when grain was reaped with sickles and threshed with flails, when clothing was of homespun, the great majority of the people lived in the country and were engaged in agricultural pursuits. There was little inducement to leave the farm, for very few could find employment elsewhere. But with the advancement of civilization the conditions became completely changed. Progress in science has given rise to a division of labor by which the whole social organization has been revolutionized. The forces of nature have been harnessed so as to become available for the purposes of man. The railway, the steamship, and the telegraph have brought countries widely separated in space within easy reach of one another. Labor-saving inventions have enormously increased productive power, thus diminishing in a corresponding degree the number of persons required for any given amount of work. Large and important industries have sprung up, creating a demand for labor of many kinds, and consequently causing a rush of people from rural districts to cities and towns—the industrial centers. It is thus seen that the shifting of population is an inevitable outcome of the practical applications of science to the needs of mankind.

The bustle and stir of the city, the time it affords for recreation, and the variety of its amusements, tend to make it seem very attractive to many young people living in the country. Knowing little of the



HON. M. H. COCHRANE.  
Hillhurst Farm, Compton, P. Q.

by the intelligent crossing of the English Thoroughbred and the above-mentioned French-Canadian mare. The result was a largely-spread class of horses, the best in the world for light buggy driving, especially on hilly roads. But they have been improved out of existence by indiscriminate crossing with several sorts of imported stallions, until now hardly any good typical animals are to be found in their old domain.

I am satisfied that one of the most important maxims to be kept continually before our stockmen, is to breed to a well-chosen type; and one of the most important rules to be understood by those having any influence in stock matters, is to secure and keep to a uniform type for each locality of our country. To-day a fair start has been made in certain sections in the breeding of certain classes of stock. It will pay all the farmers of that section to follow that line year after year, thus helping to make their neighborhood famous for whatever class of stock it may be that prevails there.

One of the most deplorable practices in connection with breeding is to change the type of the male animal. If, for instance in cattle, a man has started with a Shorthorn bull, it is supposed that he wishes to produce either a beef animal or a general purpose animal tending towards meat production. If a year or two afterwards he discards his Shorthorn bull and takes to a Jersey, he certainly is not improving his position, and, following such a practice, can never make a name for himself or his herd for any particular excellence; while if he had continued in the line of the Shorthorn qualities, intelligent work would soon have made him a reputation and brought him buyers from everywhere, and consequently better prices.

The same I believe to be true of a neighborhood. There is no doubt that more buyers will go where

difficulties and dangers of city life, they look at its brightest side, contrasting this with the darkest side of country life, which in too many cases is unduly emphasized. There is but one remedy for this; it is to make boys and girls love their homes and home surroundings. Why should the young in the country be deprived of the pleasure that comes from proper forms of amusement? Why should they not be supplied with plenty of good, wholesome and interesting literature? Why should they not be led to take an intelligent interest in the operations that are daily carried on in and about their homes? If these questions received the consideration they deserve, the dullness, monotony, and drudgery, so frequently associated with farm life would no longer prove a bugbear to the young people of rural communities, and fewer of them would seek to exchange the realized enjoyments of the country for the anticipated pleasures of the city.

Theoretically, the social standing of the agriculturist is high, as it ought to be; practically, agriculture, in common with all pursuits in connection with which there is manual labor, is "a bar to social advancement," as it ought not to be. For this reason, many young people think that by taking to a profession or engaging in one of the "genteeler" occupations, their social standing will be much improved; consequently, they set their faces towards the city, bidding adieu to farm life. All this is owing to a perverted sentiment which has been developed along with the division of labor. This error is based fundamentally on the false assumption that agriculture does not call for much exercise of intellectual power, while it makes large demands for the application of physical force. If this were true there would be little hope for raising the social standing of the farmer in the estimation of the world, for the mental must always be given a higher place than the physical. But it is not true. On the contrary, there is no occupation that affords better opportunities for exercising the intellectual faculties than agriculture affords. Every operation performed on the farm leads to an investigation of the laws of nature for its explanation, and its success or failure depends on whether or not it is in harmony with these laws. Why is it that in almost every civilized country in which agriculture is pursued to any extent, there are expensively-equipped experimental farms and stations where scientific researches are carried on? Chiefly to give farmers the benefit of scientific knowledge which they may not have the opportunity of gaining for themselves. It is thus seen that the highly scientific character of agriculture is recognized in a very practical way. Why, then, should the farmer not be on a par intellectually and socially with the professional man? There is no valid reason why he should not. Of course, he may plow, sow, and reap without knowing the why and wherefore of what he is doing, but if so, he simply neglects his opportunities and thus intensifies the false impression already referred to. Agriculture as an occupation will never be elevated to the high plane to which it belongs until those engaging in it bring to bear upon their work the intelligence it demands. Its greatest need to-day is education.

Perhaps enough has been said to show that the general complaint laid against our educational institutions arises from various conditions over which they have little or no control, and, indeed, a great deal more might be said on this point. The truth is, these institutions have done much to further the interests of agriculture, as well as those of every other phase of industrial life. Does not everyone admit to-day that the influence of the public school has extended to every part of our national life, and has elevated its tone and character? That such is really the case, notwithstanding the grumblings we sometimes hear, there is the most convincing evidence in the unanimous and hearty support accorded to our public schools on every hand. And what would the public schools be were it not for the higher educational institutions from which they derive their vitality and power?

But if we accept as an axiom that a public system of education should be adapted to the conditions of national life, whatever these may be, then we have a perfect right to inquire whether our state-supported educational institutions are severally performing their highest functions in regard to the most fundamental, as well as the most important, phase of industrial life in our country, viz., agriculture. Further, if we find that our institutions for giving general culture are not sufficient to meet the requirements of this or any other great industry, we have a right to demand such technical schools as may be required, the whole community to be taxed for their support. Now, although the principle here stated is accepted and applied practically in nearly all civilized countries, yet it is easy to show that the claim of agriculture rests on a principle still broader than this one.

Agriculture is both a science and an art. As a science it takes account of the facts of nature, compares these facts with one another, and infers general principles or laws. It deals with such topics as soil, temperature, moisture, plant life, animal life, etc., regarding these not merely as separate things, but in relation to one another. In short, agriculture viewed from this standpoint is nothing more or less than a systematic study of such aspects of the world of nature as have a bearing on agricultural operations. As an art, agriculture applies facts and principles to actual farm work. It teaches how to cultivate and

manure the soil, feed and care for stock, make butter and cheese, etc., in harmony with the laws of nature.

Should agriculture be taught in the public school? In considering this question it must be kept in mind that the function of the public school is not to provide instruction along special lines, but to lay a broad foundation of general culture. We must therefore decide whether agriculture is a suitable subject for all children without regard to their future occupations. It has been shown that the study of agriculture as a science is essentially the study of natural objects and phenomena. In this sense no subject presents a stronger claim for recognition in the public school. Nearly 300 years ago Comenius said, "We should learn as much as possible, not from books, but from the great book of nature, from heaven and earth, from oaks and beeches," and almost every great educational thinker since his time has emphasized the same thought. Agriculture, as the term is here used, should be taught in the public school because it makes the pupil's life happier, richer, and better, by opening up to him the "great book of nature," from which he can learn many interesting, beautiful, and inspiring lessons. It develops the power of observing the things that come before him from day to day, and leads him to reflect upon these things. It requires him to gain information for himself, thus cultivating self-reliance. It teaches him the importance of weighing facts carefully before arriving at conclusions. It trains him to be systematic in doing his work. It affords the best possible conditions for cultivating the power of expression. We thus see that the claim of agriculture to a place on the public-school programme is based on the educational needs of the pupil, apart from all other considerations.

In the form of simple nature studies, agriculture is well adapted to pupils of the lowest grades. Nature has many attractions for little children. We all know how much they love to go out to the woods and fields, and how deeply interested they are in the birds, and flowers and pebbles. We know, too, of the delight they manifest in finding out things for themselves, and in telling about these things. This indicates closely what the character of the earliest lessons in agriculture should be, and also the manner in which they should be conducted. As the pupils develop mentally, closer and more systematic investigations of objects and phenomena are made, and so on. In the highest grades special attention is given to such phases of nature as bear more or less directly on practical agriculture. One of the greatest advantages of agriculture as a subject of study lies in the fact that it groups together and correlates several subjects as botany, zoology, etc., which have too often been dealt with independently of one another, thus making it difficult for the learner to get a connected view of the whole. Agriculture unifies these, and shows their bearing on industrial life.

Although the purpose of agriculture in the public school is not to instruct the pupil in practical farming, yet, if it is given a sufficiently important place on the programme of studies, and is properly taught, agriculture as an industry cannot but be benefited to a great extent. This study gives the pupil a permanent interest in natural objects and phenomena, thus tending to make life in the country attractive to him. It enables him to put meaning into farm operations, revealing the fact that farming demands intelligence of a high order. He learns to recognize the value and dignity of labor. He also gains much information that can afterwards be turned to practical account on the farm. From these considerations it is evident that the study of agriculture in the public schools will do much towards leading boys and girls to appreciate the advantages of farm life, and to regard agriculture as a desirable and worthy occupation. These ends can be gained only on one condition—the pupils must find the subject matter of their lessons not in books, but in the woods, the fields, the gardens, etc.; they must make their own observations, form their own conclusions, and express the result of their investigations in their own words. After all this is done, the book cannot do any harm, and it may do some good. Agriculture, when taught by the intuition method, is a subject of absorbing interest, but when taught otherwise, it proves a failure.

In order that the teaching of agriculture may be carried on satisfactorily in public schools, proper provision must be made for the training of teachers. This implies that due prominence must be given to the teaching of agriculture in the higher educational institutions. This matter cannot be adjusted, except in a tentative way, until the needs of the public school are fully determined; for if an effective system of agricultural education is to be established, this greatest educational institution—the university of the masses—must be considered first in constructing the general plan. That the demand for instruction in agriculture has directed attention to the public school is indeed fortunate, because on this account we may expect that when a final arrangement of courses is made the higher institutions will be brought into close touch not only with this phase of industrial life, but with every other.

#### Oats as a "Finisher" for Fat Stock.

We have great faith in the virtues of crushed oats as a food for fattening stock, and its inclusion in all rations intended for animals of this description. We observe that in its last issue our esteemed con-

temporary, the *Live Stock Journal*, contains an interesting contribution on the finishing of fat stock, in which the virtues of crushed oats are duly appreciated. Under the heading, "A Hint to Christmas Feeders," a correspondent writes in our contemporary: "Possibly no greater mistake is made by feeders than to finish animals for the butcher with an excess of oily food. It may be more quickly put on an appearance of ripeness and finish, but it is at the best but a blubber finish and one that does not deceive, whether the animal is intended for exhibition or simply for sale. If the former, and especially if the judges should include a butcher, there will be no prize, and in both cases the selling price per pound will be less. Whether for beef, mutton or pork, there is no feeder equal to our own home-grown oats, no feeder that gives such good results both before and after slaughter. The oil-puffed flesh either never sets, or takes a long time in doing so; it is not pleasing to the eye nor to the palate, and the carcass-weight to live-weight is disappointing. Animals finished on oats and oatmeal are just the reverse of this. In life they are firm to the touch, give the highest percentage of dead meat, the flesh sets quickly, is ripe, marbled, pleasing to the eye and to the taste. Oats for mutton, oatmeal for beef and pork. In finishing the two latter, cattle and pigs, balls are made of oatmeal and cold water, worked up into the consistency of dough, and about the size of a cricket ball. Begin operations by placing, night and morning, on the top of each animal's feeding tub, three of these oatmeal balls, increasing the numbers as the animals show a disposition to clean them up day by day to the end."

#### The Future of British Agriculture.

BY ARCH'D MACNEILAGE, EDITOR OF THE SCOTTISH FARMER.

This has been suggested to me as a suitable subject for the special number of the *FARMER'S ADVOCATE*, and it is a somewhat interesting coincidence that the editor of a leading agricultural journal in Canada, a veteran agriculturist like Mr. Gilbert Murray, now living in retirement at Orchardlee, Gervan, and Mr. Alexander Cross, M. P., the senior partner of the world-famed firm of Alexander Cross & Sons (limited), should at one and the same time have had their thoughts directed to this theme. Mr. Cross was addressing the Renfrewshire Agricultural Society on this very subject two days ago, and Mr. Murray is at present engaged in writing a paper on it for the Glasgow and West of Scotland Agricultural Discussion Society. This paper was to be read on 13th December, and will therefore be in circulation before what I now write will appear in type. That there is something interesting in the present state of British agriculture may be regarded as a fair conclusion from this coincidence, and in what follows I will endeavor, not to forecast the future, but to suggest reasons for the existence of this renewed interest in our great industry.

In after-dinner oratory it is not uncommon for the city man to round off a period by declaring that agriculture is the greatest of all our industries. The observation is usually well received, but there is some ground to fear that it either comes from the lips only, or is the sentiment of a man who takes somewhat shallow views of public questions. Great Britain is primarily now not an agricultural country; she is not even to the same extent as formerly a manufacturing country—she is increasingly a distributing and commercial country. Her wealthiest citizens are no longer her manufacturers, but her merchants, and they are quite as eager to handle the produce of other lands as of the land in which they dwell. Continental nations like Denmark and Holland are agricultural countries, and hence the vast amount of attention bestowed by them on all that affects agriculture. Great Britain imports more of her bread than she grows, and the volume of her imported food products is increasing every year. It would be easy to burden this article with figures in proof of this, but such a course is unnecessary. The fact that it is so will not seriously be challenged. All this does not suggest that Great Britain is becoming poorer. On the contrary, it is conclusive evidence that wealth is increasing, for imports are a stronger evidence of wealth than exports. The country which buys from all the world must have wherewith to buy. All this, however, is quite consistent with the decadence of agriculture, and it is in some degree because of this consistency that so many are contemplating the future in this old land of the primeval industry of our race.

Two forces are in operation which awaken misgivings in the breasts of those engaged in agricultural enterprises here. The one is the scarcity of labor, and the other the increasing keenness of foreign competition. There may not be much connection between the two, but combined they form a serious menace to agriculture as presently prosecuted. In the South of England, and especially in Essex, Suffolk, and Norfolk, labor is the agricultural problem. The transition from wheat-growing has in many cases been successfully accomplished, and not without a vast amount of suffering and great loss of capital; but the dairy farmers who have taken the place of the wheat-growers do not find that their troubles are at an end. Dairying, more than any other form of rural labor, demands a plentiful supply of labor, either male or female, at least at both ends of the day, and no sufficiently adaptable and cheap mechanical power has yet been put upon the market which adequately takes the place of the human hand in milking cows. Dairying is



paying fairly well this year, but alike in districts given over to the task of supplying the cities with milk and in those in which cheesemaking is followed the scarcity of labor is having a bad effect. Various expedients are suggested for overcoming this, but Rider Haggard appears to have hit upon the right one. The scarcity of labor in rural districts may be charged against various causes, but chiefly its source is economic. Agricultural labor is scarce because industrial labor is better paid. No doubt dearth of cottage accommodation is in some localities a cause, but as a rule labor is as scarce in the vicinity of decaying villages, alike in England and in Scotland, as it is in other localities where cottages are rare. If the dearth of farm laborers be due to economic causes, it can only be remedied by an advance in the wages of such; but how this is possible in face of decreasing profits caused by excessive foreign competition is a question not easily answered.

Foreign competition itself has occupied the attention of many writers, but not much real light is thrown upon the problem by all that has been said. We are told that a period must sooner or later be put to competition from the United States and Canada—in the wheat market—and no doubt the day will come when, your great territories being filled up, and Chicagos and Winnipegs innumerable dottings what now is prairie, you will have plenty to do to feed your own people, but that day is so far distant that it hardly need be reckoned with in considering the future of British agriculture. Others cheer us with the thought that there will be less strenuous competition by and by in the cattle and sheep markets; but even if that were so the problem is not near solution. What is before us in this country most of all is the potent fact that in any case we can never feed our own population unaided. If there were not free trade here food would be at famine prices. Even if every inch of arable land in this country were cultivated in the most intensive way, we would still need to import, and so long as such conditions exist here, considerations based on shortage in foreign supplies bear very little on the future of British agriculture. If we produce the best, we can get the best price for all kinds of produce, and proximity to the best market in the world must always give the home producer a big start of his foreign competitor. At present the British farmer, speaking generally, is a much more prosperous individual than his neighbor abroad. He has more capital, more ready money, lives better, has greater social amenities, and altogether in the main can afford to wish no ill to his neighbor, without in any special degree laying claim to unwonted Christian generosity. All classes of farmers in this country are this year fairly well off, except those who had store sheep to sell, and those whose profits depend on the success or failure of the turnip crop. Dairy produce is in good demand, and making high prices; all kinds of stock are selling well, and the latest returns show that fat cattle are making in some cases 40s. per live cwt. of 112 lbs.

These facts suggest pretty clearly the lines upon which agriculture in the future is likely to continue profitable. No doubt the British farmer might make more than he has done in the past of the little things about the farm. Poultry is a more profitable item than was supposed, and in the vicinity of large towns the growing of vegetables has been made a great success. Many jeered when a great statesman suggested that there was "money in jam." There is money in jam, and some of the wealthiest men amongst us, at present handling high-class stock, have made their money in the jam trade. At the same time this kind of farming cannot be prosecuted everywhere. Like dairying, it requires a great supply of female labor, and this can only be secured in the vicinity of villages and large towns. It is easier to get labor for the fruit trade than for dairying, and chiefly because the fruit trade does not demand the same constant attention as the other. What causes repugnance to dairy work is the constant drudgery, year in and year out, the daily grind seven days a week, and it is impossible not to sympathize with that feeling. Doubtless a change will take place by and by, but meantime such are the facts. The lesson of it all is that the success of British agriculture in the future, as in the past, will be in the adoption of sound commercial principles by farmers, in growing and producing what can be grown and produced profitably, and in adopting ways and methods to the exigencies of the times.

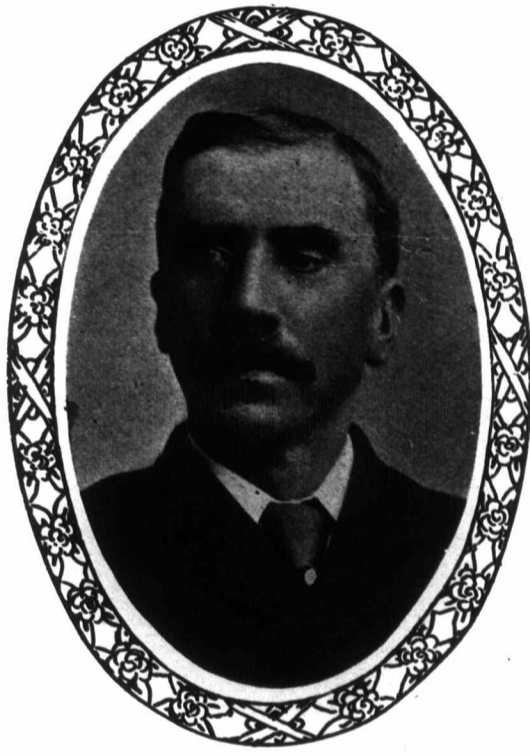
Whatever else may fail, Great Britain, as far as can be judged at present, has an immense reserve of agricultural wealth in her pure-bred stock. Even in this department there have been ebbs and flows, and at the present time the tide is flowing, but at its worst the pure-bred stock raiser was the man who had ground for keeping cheerful. He had always some profit for his labor if he went about his work in a reasonable way, and when the inevitable revival has come such an one finds that the Old Country is reaping the benefit of her 150 years' close attention to stock breeding, for all the world comes to Great Britain for breeding stock. Bulls, stallions, rams, boars—it is the same story. Australia, New Zealand, North and South America, Russia, Germany, France, Sweden, one and all have to come to this old land to buy. They will need to do so in the future, for either they are too poor to purchase the females, without which no breed can be established in a new land, or the climates and soils of these countries do not grow the breeds as they grow in their native haunts. After a bit they degenerate,

and recourse must again be had to the fountain-head. For 50 years all lands have come to Great Britain for pure-bred stock, and, so far, no land has been able to supply us with anything better than we have at home. Good pedigree stock has been imported into Great Britain, the descendants of that which was taken away, but nothing of any breed has as yet been imported which excels the stock raised in the old land. Therefore, I conclude that one stronghold of British agriculture in the future, as in the past, will be her herds, flocks, and studs. The reserves in these departments are numerous and strong, and defeat is far from us. The other difficulties, to which reference has been made, are not insurmountable, and although there will be periods of transition, and these always involve pain and suffering, the crossings will be made, and, for better or for worse, seed time and harvest will continue with us so long as the present economy of things endures.

### A Bright Chapter for Stockmen.

BY C. F. CURTISS, DIRECTOR OF THE IOWA AGRICULTURAL EXPERIMENT STATION.

The closing years of the nineteenth century mark a new era in the live-stock industry of America and of the world. Primitive conditions and pioneer stock have given way to advanced methods and improved herds and flocks. The live-stock industry is of necessity the mainstay of any system of agriculture that is to be permanently successful. Superior breeds of live stock do not come by chance or haphazard methods. They are the result of a high degree of skill, intelligence and ability. Along with the stock of the highest excellence and most nearly perfect scale of points will be found the clearest thinking, the soundest



MR. WM. DUTHIE.

Shorthorn breeder, Collynie, Tarves, Aberdeenshire, Scotland.

judgment, the keenest perception; in short, the best brains and intellect. There is an inspiration in the calling of the husbandman devoted to the fascinating study of live-stock improvement that is worthy of the best talent of a master mind. During the present year it has been my privilege to sit at the feet, so to speak, and study the work of a number of the best breeders on both sides of the Atlantic. Some of these noble men have now passed to their reward in the world beyond, but their work lives on.

As I trod the luxuriant pastures and feasted my eyes on the green and sunny slopes that marked the once active labors of some of these masters of the profession, I instinctively felt that I was standing on sacred ground. The value of such labors can never be counted in dollars and cents, great as these results were measured by this standard. These men gave more than their energies, ambitions and intellect to their work—they put into it their integrity, their honor, their souls. Without this no man ever fully succeeds as a breeder of improved stock. The work exacts the best of the God-given qualities and attributes of man.

I recently spent a few days on the great cattle ranges of Texas. Instead of the once famous long-horned Texan steer, I saw the champion of the great World's Columbian Exposition and his progeny; and he had for a companion the champion of a greater show, measured by the standard of bovine excellence, the recent Trans-Mississippi Exposition. These, and not the lank-sided ranger, are the wards of the modern cowboy. On this ranch were not less than seventy bulls of comparatively high merit. The same appreciation of good blood prevails elsewhere. On the bleak ranges of Wyoming and Montana may be seen the pick of the best studs at the head of enormous bands of horses; while across the border in British Columbia,

the tops of Ontario's prime herds and flocks are found, and even the cream of British skill is not exempt from the universal pressure for improvement on the range. The farmer whose land is rapidly increasing in value and whose feedstuffs and employed labor are constantly becoming more and more expensive, cannot withstand this competition without resorting to improved stock and improved methods. This solution is inevitable. The stockman's calling never had stronger support or brighter prospects than to-day. The American Hereford Breeders' Association recently sold about 300 head of cattle at an average of \$317, and the Aberdeen Angus Association held a similar sale in November, at which about a hundred head were disposed of at an average of \$323 per head. Correspondingly advanced prices prevail for other breeds of cattle. An American-bred sheep sold at public auction for \$500. And even the horse is returning to his former popularity and prestige. Those who predicted a coming horseless age misjudged the trend of the human mind. Not until the inherent nature and inbred characteristics of the most progressive and enlightened people of earth are changed will the demand for good horses cease. The production of superior bacon, in which Canada has made such rapid strides, is comparatively a new industry. A prime cut of tender, highly-flavored bacon is a modern luxury that commands a higher price than any other staple article of meat on the market. This is not a temporary fad, but the beginning of a transformation in our meats, meaning the necessity of higher skill and intelligence in pork production. It means pork production for a specific purpose and the necessity of creating a hog having the highest possible adaptation to that purpose.

The past season has been one of almost unparalleled prosperity in the stock business in Great Britain. The Collynie Shorthorn calves reached the gratifying average of £123 at the annual sale held in October, and £500 is not an uncommon price for good breeding animals, many of the best of which are going to South America. The stockmen of Canada and the States should take note of this. A competition is coming from our neighbors on the south that will make itself felt in the markets of the world. It is already a strong factor in the sheep trade of London and Liverpool. This competition, however, will only stimulate the production of better stock in America as a whole. There is a range of \$2 per hundred on the Chicago market to-day between cattle of prime quality and finish and those of ordinary merit. This means from 25 to 40 per cent. better returns for the feed and labor expended in producing a well-bred and properly-finished animal than can be realized from one lacking the inherent qualities of excellence. Can we afford to bear this loss? Ignorance or failure to act in accordance with nature's laws is the most expensive thing in the world.

The prices quoted do not represent inflated values. There is every indication that they will continue on approximately the same plane for a reasonable period—at any rate until the meat production catches up with the increase of population. Canada and the States have every reason to be encouraged at the outlook. We have attained a degree of excellence in our stock that compares favorably with the best that the world affords. We are continually drawing on the best of foreign lands, and it goes without saying that we are capable of improving practically every product that crosses the water; yet we recognize the excellence and real worth in all that comes from our rivals.

The field for the American stockman is broadening. The day will come when the breeders of foreign countries, particularly South America, will look to the flocks of Canada and the United States as the best source of suitable blood for the improvement of their stock.

These conditions mean a higher calling for the American stockman. Increased opportunities always bring added responsibilities. It should be the purpose of every breeder to honor this high calling. The field is particularly inviting to young men of energy, ability and education. I emphasize education because the time is at hand when agriculture demands the best talent and the best training that can be acquired. There is no calling to-day that offers better openings for young men combining practical and scientific training. The demand for services of this kind is constantly in excess of the supply, and the compensation and advantages are not exceeded in any other calling.

Agricultural College, Ames, Iowa.

### Our Old Friend the "Mummy Pea."

"At Kames, in the Isle of Bute, Mr. R. A. Stewart, a saddler, has succeeded in growing a fine crop of peas from seed found in a tomb of an ancient Egyptian king. Mr. Stewart got the peas from a Glasgow friend of his who has sons in Egypt, by whom they were forwarded to Glasgow, and the seed is estimated to have been 2,000 or 3,000 years old. The peas were sown in open ground, and the plants have grown up strong and vigorous to a height of about six feet. They possess certain characteristics. The flower of the ancient Egyptian variety has a beautiful red center, surrounded by a white corona, and looks very chaste and handsome. The pods average from two to three inches in length by one-half inch in breadth, and the peas are said to be of excellent flavor."—*Current Literature.*

**James I. Davidson and the Cruickshank Cattle.**

Belonging to the farseeing class of Scots of practical turn of mind, and full of enthusiasm for the work in hand, Mr. James Ironside Davidson, of Shorthorn fame, was early led to read correctly the signs of the times in the Shorthorn world. Away back in the early seventies, when the great majority of breeders of Shorthorns could see no superiority in the Cruickshank strains, Mr. Davidson, knowing their family make-up and the lines along which the brothers were working, was convinced that the produce of Sittyton possessed a superiority that could not fail to assert its just claims. So, while others were honestly giving the thick-fleshed, low-set and early-maturing composite-blooded Cruickshank families, frequently termed "little beasts," the "cold shoulder," Mr. Davidson was establishing himself on the ground floor of an enterprise that by its intrinsic utility has swept the cattle-breeding world with its well-founded popularity. After eleven years of studious experience with the two cows, Rolla 4498, bred by the late John P. Wheeler, of Scarborough, and Cherry 2611, bred by the late George Miller, of Markham (both descendants of imported stock), and their produce, an importation of six heifers was made in 1871 from Sittyton. They were all two-year-olds, and with one exception all in calf. Two were purchased at auction and the others at private bargain. The latter three were held by Mr. Cruickshank until the time arrived to ship, when Mr. Davidson was offered ten pounds to leave one of them behind. The offer was refused, however, but one of the others which was housed at a farm apart from the main herd could not be got to shipboard in time to sail with the others, on account of a storm, so that Mr. Davidson's friend, who had made the purchases, put in a heifer he had secured at auction to fill the passage taken for the sixth beast. She was Matchless 15th, and being undersized and thin, cost just one-third the price of each of the others. When they arrived the little heifer was a disappointing specimen. To use Mr. Davidson's own words, "She was a shabby little beast." By the time she calved, however, she compared favorably with any of the others, and her first offspring, which was sold for \$500.00 to Mr. C. Jordan, of Iowa, at fifteen months old, proved to him a profitable investment, as she turned out a grand breeder, mothering, as she did, a valuable herd. Matchless 15th continued her good work, as she produced many high-priced animals, and herself sold for a long price when quite advanced in years. We have in this an evidence of the value of pedigree, without which even the most successful showing winners have little value in the breeding herd. Without an exception, the entire importation proved regular and fortunate breeders of choice stock. In 1873 two heifers, Orange Blossom 19th and Mysie 37th, were brought over the sea. While they each did well, the excellence of the latter still lives in such beasts as Capt. T. E. Robson's Mysie's Rose, that was recently shown so successfully in Canadian and American competitions, winning the female championship at Toronto two years in succession. In 1874 Mr. Davidson made the bold stroke of importing 19 cows and a bull from the best in the Sittyton herd, placing him to the front as an importer for that year. Like former importations, these turned out well for Mr. Davidson, as well as for his customers who were fortunate enough to get hold of them. At this time the bull, Crown Prince of Athelstane 2nd, was the chief head of the herd. Some of the straight-laced breeders were pleased to consider this sire an out-cross, but his value may be indicated by referring to a daughter of his from Mysie 43rd, that brought at auction at the clearing sale of Lancelot Palmer \$1,850, the entire herd of Cruickshank cattle bringing an average of five hundred and sixty-eight dollars. The cow referred to, being the highest priced at the sale, was secured by Col. Harris, who made the well-grounded assertion that "Crown Prince of Athelstane injured nothing, but improved everything that bore his blood." In 1881 Mr. Davidson made a visit to Scotland, and personally selected eleven females and three bulls, many of which found their way into such leading American herds as those of Messrs. Kissinger, Potts, and Col. Harris. From this time importations followed yearly until the outbreak of pleuro-pneumonia at quarantine. From 1871 until this date Mr. Davidson's importations included 185 animals from the herd of Mr. Amos Cruickshank. During recent years a strong herd of the best families have been maintained to breed for his old customers.

While Mr. Davidson has left the three score and tenth mile-stone considerably in the distance, he maintains his old-time activity and interest in the doings of the day, and except for weakening vision, enjoys a full measure of vigor. It may be mentioned, too, that his enthusiasm awakens as he refers to the present-day acknowledged superiority of Cruickshank blood, which predominates to so large an extent in the prizewinners at the great national shows. He also feels a satisfaction in the evidence of their excellence indicated by the sale prices as well as the show ring, which he feels leaves them in need of no other recommendation. Realizing, too, that the excellence thus proven is so much of a utility character, we feel like saying "Amen" to his wise observation, that, "A man who introduces a Cruickshank bull among his cows is taking the best method of securing a good herd, with the least loss of time, and at least expense too."

**Manitoba December Crop Bulletin.**

The final estimate of the crop shows, as was expected as soon as threshing began, a considerable falling-off from the estimate made in August. The most promising-looking crops were in many cases the most disappointing. The soil being excessively wet in spring caused the wheat plant to root very shallow, and from the waterlogged soil moisture evaporated more rapidly during the midsummer drought than had soil conditions been normal, and when the time came for the grain to fill, the soil was baked and dried out, and the plants, being without deep roots, were unable to furnish sufficient nutriment. Some districts were also, for the first time, visited by the Hessian fly, and to this cause may be attributed some of the falling-off. The sample, however, has on the whole been very fine, the bulk grading No. 1 hard. The sample of oats, too, has been much above the average. In the August estimate the yield was placed at 22.5 bushels per acre; whereas the final report places it at 17.13: the December, 1898, estimate was 17.01.

WHEAT.			
Area in crop.	Average yield per acre.	Total yield.	
Acres.	Bushels.	Bushels.	
North-western.....	137,700	18.8	2,588,760
South-western.....	682,965	16.20	11,077,692
North Central.....	306,560	16.73	5,128,748
South Central.....	390,770	19.	7,421,630
Eastern.....	112,000	15.2	1,702,400
Province.....	1,629,995	17.13	27,922,290
" 1898.....	1,488,232	17.01	25,313,745
OATS.			
North-western.....	86,920	38.76	3,369,019
South-western.....	195,020	35.	6,825,700
North Central.....	90,160	38.2	3,441,112
South Central.....	111,136	42.1	4,679,667
Eastern.....	90,880	35.	3,180,800
Province.....	575,136	38.80	22,318,378
" 1898.....	514,824	33.6	17,308,252



MR. JAMES I. DAVIDSON.  
A pioneer breeder and importer, Balsam, Ont.

BARLEY.			
Area in crop.	Average yield per acre.	Total yield.	
Acres.	Bushels.	Bushels.	
North-western.....	18,500	30.	557,200
South-western.....	35,640	30.	1,069,200
North Central.....	33,840	29.	981,360
South Central.....	55,842	32.3	1,803,696
Eastern.....	39,000	24.8	967,200
Province.....	182,912	29.38	5,379,156
Flax total in Province.....	21,780	14.	304,920
Rye.....	3,217	20.	64,340
Peas.....	1,366	15.	20,490
POTATOES.			
North-western.....	2,837	165.	468,405
South-western.....	4,883	153.	738,175
North Central.....	3,230	175.	565,250
South Central.....	3,148	194.	610,712
Eastern.....	5,231	163.	852,653
Province.....	19,151	168.5	3,226,395
Other roots.....	10,079	265.	2,670,108

POULTRY DISPOSED OF BY FARMERS.			
	Turkeys.	Geese.	Chickens.
North-western.....	15,000	5,000	33,000
South-western.....	22,545	6,075	38,725
North Central.....	7,200	3,120	46,400
South Central.....	12,500	7,760	61,680
Eastern.....	8,000	3,200	46,400
Province.....	65,845	25,155	246,205

DAIRY PRODUCTS.			
	Quantity.	Price.	Value.
Butter Dairy.....	1,341,790	14.44	\$19,364,80
" Creamery.....	1,092,790	18.75	18,892,68
Cheese.....	232,490	\$8.81	\$2,051,48
	818,800		\$6,880,16
1898 Total value of dairy products.....			\$49,611,64
1898.....			49,153,26

	NEW BUILDINGS.	FALL PLOWING.	SUMMER-FALLOW.	BREAKING.
	Acres.	Acres.	Acres.	Acres.
North-western.....	\$ 190,000	42,500	37,400	30,000
South-western.....	413,000	225,450	264,000	61,155
North Central.....	273,960	200,640	64,000	20,160
South Central.....	295,240	253,560	77,760	33,600
Eastern.....	224,000	133,920	29,280	13,600
	\$1,402,200	861,070	472,500	158,515
				= 1,492,085 acres

**Beresford Stock Farm, Brandon, Man.**

One of the most extensive breeding establishments in Manitoba is that owned by Mr. John E. Smith, at his Beresford and Smithfield stock farms, and from these farms have been distributed to all parts of Manitoba and the Territories breeding stock of Shorthorn cattle and Clydesdale horses. At the Beresford farm, which lies about 16 miles south-west of the Wheat City, an extended area of land (some 960 acres) is under cultivation, with an additional 960 acres of pasturage and hay land, all fenced. On the cultivated areas, wheat, of course, is the principal crop, with a smaller acreage of oats and barley. Mr. Smith's system of cultivation consists of summer-fallowing, followed by one or two crops of wheat, one of oats or barley, and summer-fallowing again. His experience has shown that better results are obtained from spring or fall plowing, but as the spring season is so short, he finds it necessary to plow a considerable area in the fall. Of the breeding stock, a large number are kept at Beresford Farm, thus utilizing the best of the oat straw, wheat chaff, etc., and converting a large percentage of what would otherwise be wasted into manure, which is returned to the land. At Smithfield Farm there are 320 acres lying within the limits of the City of Brandon. Nearly all of this area is under cultivation, oats and barley being the chief crops grown. Brome grass has been recently tried, and the yield this year has been over three tons per acre. On this farm is a comfortable, substantially-built brick dwelling house, an engraving of which appears in the illustration in this issue. The house, being built under Mr. Smith's personal supervision, is well laid out for convenience and economy of labor, and is easily heated. The building site is a very desirable one, on high, rising ground, with sufficient fall for perfect drainage, and sheltered on north and west by the steep hills that here form the northern banks of the Assiniboine River; with a light, sunny exposure, and a magnificent view of the City of Brandon on the opposite slope, and glimpses of the river as it winds its circuitous course along the bottom of the valley, with here and there a cluster of elm trees along its banks.

Adjoining, at a convenient distance from the house, is the brick poultry house, comfortable, warm and well ventilated, in which the fowls are kept laying all winter. A specialty is made of the Brown Leghorns and Barred Plymouth Rocks, by Mr. John Hunter Smith. To the south-east of the residence, along the southern slope of the hill, an extensive plantation of small fruit trees has been set out, which will, with the avenue trees recently planted, in a few years add greatly to the attractiveness of the situation. West of the house, as portrayed in the illustration, are the two large barns, one 50x112, with 10-foot stone basement and 16-foot superstructure. The cattle floors were removed this year and replaced by Thorold cement. Stall accommodation is afforded for 50 head of cattle, besides seven large loose boxes for calves, and at the west end, separated by a close board partition, stalls for eleven horses and a number of box stalls for stallions are provided. The loft of this barn, which is entered by two drive floors, is for holding fodder and grain. It is provided with windmill for pumping water, crushing grain, running straw cutter, grindstone, and bone crusher, the latter for crushing green bone for the poultry. The smaller barn is 36x72, 10-foot stone basement, 12-foot superstructure, and a lean-to 18x36, giving capacity for 38 cattle and 8 horses. All the cattle in this stable are fed from the center passage at their heads. The winter feed consists of oat sheaves (sometimes cut), hay and straw. Chopped oats and barley, with an equal amount of bran, forms the principal grain ration. Some turnips are grown for the young stock, and it is a rule with Mr. Smith to grow 10 acres of potatoes, which are either sold or fed to the stock, as the price and market seem to warrant. All roots are put through the pulper before feeding.

The Clydesdale stud, consisting of some 30 registered mares and fillies, and a number of young stallions of such famous strains as Darnley (222), Prince of Wales (673), Old Times, etc., and at the head of the stud have been such noted sires as Bravery, Lord Randy, Neptune, and Sir Arthur, all imported stallions, prizewinners and prizegetters. In the illustrations are portrayed several representative animals from this stud, including the young stallions, Jubilee of Beresford [2359], by Protection [1617], out of Rosalie of Beresford [2340], by imported Lord Randy, and Sir Thomas Greenway [2361], by Sir Arthur (imported) (8863), dam Lady Kenmuir (imported), by Kenmuir Prince (1450), grandam by Darnley (222). Of the mares in the illustration are Bessie of Overlaw (imported) [451], by McPherson (3825), dam Dainty, by Champion of the North (1092); Flora Beresford [1900], by imported Lord Randy, out of Lady Skeldon (imported), by Bredalbane (1978); and Lady Aberdeen [2425], by Aberdeen [2269], out of Rosalie of Beresford, by imported Lord Randy.

The Shorthorns are made up of two herds, the older comprising about 50 females, headed by Lord Stanley 2nd = 22200 =, by Topsman, the champion Shorthorn bull of the Dominion for 1899, out of imported Roan Princess, a first-prize winner at the Highland Society's Show; and a young herd of about 30 females, all the get of Lord Stanley 2nd, headed by the imported bull, Golden Measure. At the head of the herd have been such bulls as Sunrise, a son of the great Barmpton Hero; imported Lord Lansdowne, bred by Cruickshank; and imported Windsor, bred by Campbell, of Kinellar. There are also about 25 yearling bulls and a score of females rising one year old, the get of Lord Stanley 2nd.

In the illustration appears an excellent likeness of Golden Measure = 26057 = (72615), not yet three years old, a rich red son of the Brawith Bud bull, Golden Count (68711), out of the Missie cow, Mistletoe 5th, by Scottish Archer, bred by Amos Cruickshank; grandam Missie 135th, by William of

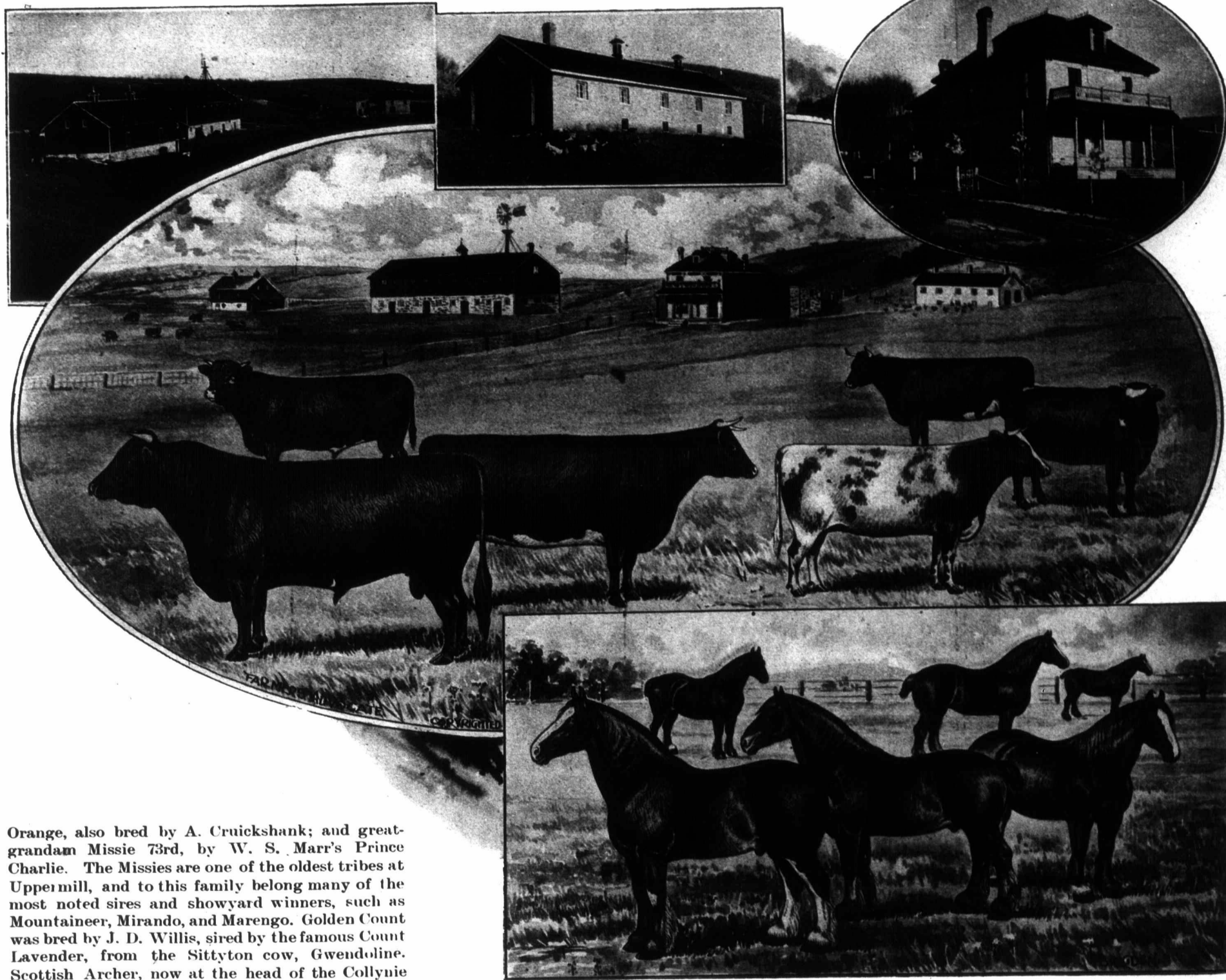
**Manitoba No. 1 Hard.**

BY WM. LAUGHLAND, HARTNEY.

The natural conditions in Canada are more favorable for the development of a great wheat-growing industry than in any other country. Stretching westward from the valley of the Red River lies the greatest area of the finest land in the world for growing hard red wheat, with the best climatic conditions for bringing the quality to perfection. In the distant future, the time is not yet in sight when there will be any falling off in the world's demand for wheat. So we have here, within our own borders, the foundation of our prosperity and the basis of great national wealth.

We have good government, the rising generation is receiving an excellent education, the people are healthy, fruitful, progressive, and proud of the equality and freedom they enjoy in this sweet land of liberty, a land destined yet to be the great center of the civilization of the West. The rapidly increasing acreage, and the fine dwellings and large barns that have been erected within the last few

way to maintain the fertility of the soil, etc. I presume to say that 50 per cent. of the wheat in the Province is cut on the green side. It is a simple matter to reduce a crop that would go 25 bushels to the acre to 20 bushels by cutting on the green side. I have had the satisfaction of receiving many prizes in the Province, in England, and in Europe, for Red Fyfe, and I never yet got a prize for grain that was cut on the green side. On the section on which I reside there are two fields that have been in cultivation for fifteen years without manure. The soil is a dark loam, neither clayey nor sandy, and even in quality. Last year, both fields were summer-fallowed, one field was plowed early in the season, before the weeds had attained much growth, and kept clean by repeated harrowing; the crop was cut on the green side; the yield was under 20 bushels to the acre, weighing about 60 lbs. to the bushel; there was straw for 40 bushels to the acre. The other field was plowed late in July, and a heavy green growth, principally fleabane, was turned under; in spring it was harrowed before seeding and after seeding, and after the grain was up, the straw was medium length and a clear yellow before it was cut. The yield was 35 bushels to the acre, weighing



BERESFORD AND SMITHFIELD STOCK FARMS. OWNED BY MR. JOHN E. SMITH, BRANDON, MAN., CANADA.

Orange, also bred by A. Cruickshank; and great-grandam Missie 73rd, by W. S. Marr's Prince Charlie. The Missies are one of the oldest tribes at Uppermill, and to this family belong many of the most noted sires and showyard winners, such as Mountaineer, Mirando, and Marengo. Golden Count was bred by J. D. Willis, sired by the famous Count Lavender, from the Sittyton cow, Gwendoline. Scottish Archer, now at the head of the Collynie herd, was sold by Mr. Cruickshanks to Deane Willis for 300 guineas, when a yearling. With such rich breeding and an individuality of equal excellence, low-set, thick, wide and deep, with a strong masculine head, and a rich, mossy, thick coat, Golden Measure is without doubt the best bull ever owned by Mr. Smith. Since his importation he has stood for some time at the head of the herd of Mr. John Isaacs, and some of his get were prizewinners at the late Toronto Exhibition. The handsome, thick-set, red bull calf, Lord Stanley 25th = 29247 =, also stands out prominently in the illustration. He is by Lord Stanley 2nd, out of Lady Greenway, by imported Lord Lansdowne, grandam by Barmpton Hero. Several Shorthorn females are also portrayed in the illustration, notably Maude of Beresford, a fine, massive cow, one of the matrons of the herd. Primrose of Beresford, another big, deep, sappy cow, and the heifers, Esther of Smithfield, and Violet, both by Lord Stanley 2nd.

years are a very good index to the profit there is in wheat-growing. Across the sea, under our own flag, we have the greatest wheat market in the world.

Good as our wheat is, it is not as good as the soil and climate are capable of producing, and I venture to say that with greater care in the selection of seed, and with more attention paid to cutting at the proper stage of ripeness, it is possible to raise the quality a full grade, and in all probability the yield will be one or two bushels more to the acre and the weight be one pound to the bushel heavier. These small gains would enhance the value of the present crop by more than two million dollars, and we have assurances of lower freight rates in the near future that will save a million dollars more.

We have yet much to learn; for instance, about the preparation of the land for wheat, and the best

65 lbs. to the bushel as it came from the machine; and on submitting a sample to the Department of Agriculture, they asked for sufficient to make an exhibit at the Paris Exhibition. A year ago there was a twin crop in the Province, and in some cases the worthless twin was the bulkier of the two.

The south-western division of the Province is devoted to wheat-growing, and some prophets tell us we will soon have the question of exhausted fertility to face. I do not think so. The average yield of wheat in Manitoba for the last fifteen years has been 30 per cent. greater than the average yield for the United States. I believe the average yield in Manitoba for the next fifteen years will not be any less. The conditions governing soil moisture are getting better understood, our implements are getting better, and the cultivation is better, and I also believe the land, if fairly treated, is capable of

producing that yield for a hundred years to come without materially exhausting the fertility of the soil, and the only fertilizers needed will be the manure that is made on the farm, plowing under green crop, and seeding to grass.

Not more than two or three cereal crops should be grown in succession, as short rotation is necessary to get rid of the accumulation of stubble in the soil, to check weeds, to kill insect pests, to conserve the moisture, and to prevent the land from getting wheat sick.

We are blamed for not turning our attention more to general farming. We are doing as they have done in Minnesota, where the soil and climate resemble our own. Minnesota is the greatest wheat-growing State in the Union, and is fast getting into the front rank in cattle-raising and dairying as well.

### An Excellent Market for Western Dairy Produce.

BY C. MARKER, DOM. GOVT. SUPT. IN ALBERTA, N.-W. T.

Since the opening up of the mining districts of British Columbia, a new era has dawned for the farmers of Western Canada.

A few years ago, the problem of finding a profitable cash market for the produce of the western farms was a difficult and perplexing one for the pioneer farmers. The local markets could but handle a limited quantity of the produce, and as a usual thing the business was done on the "trading" basis; i.e., the farmer who had produce to sell, had to "take it out" largely in groceries, dry goods, etc., and the local merchants would take chances on finding an ultimate market for what was often a motley assortment of perishable stuff. It was almost impossible to obtain satisfactory prices, owing to conditions peculiar to a new country, and limited markets.

A great change has taken place since, however. The mining and business centers in British Columbia, being developed and steadily growing, require regularly large quantities of food material, for which the consumers are quite willing to pay good prices if the quality be right. The recognition is given to quality, and this is one of the most encouraging features of a market; besides, there is a steady and growing demand. The transportation facilities have been very much improved of late, and the freight rates have been reduced by nearly one-half. A regular refrigerator car service is put on the principal railway lines during the summer months, with a view to facilitating the marketing of perishable food products. The shipper can have his butter, eggs, and meats sent through to their destination with as little delay as possible, and without any appreciable deterioration to the quality in transit.

The British Columbia market is an excellent one, and on that account it is not surprising that at times the competition is quite keen, and naturally the shipper sending the best goods will have the preference of the trade. Of the different kinds of farm produce, there is none so variable in quality as butter, nor subject to a greater fluctuation in price. Some brands sell at the very top price, others will scarcely sell at all. Still, the chemical composition of the two may be exactly alike, and the probabilities are that originally the inferior butter was produced at a greater cost per pound than that selling for the highest market price. This is how it usually goes: Unskilled vs. skilled labor. While individual tastes may differ, there is a certain recognized standard of quality or package peculiar to each market, which meets the general requirements, and the producer who wishes to cater to any particular market or customer will do well to study their requirements and meet them as nearly as possible.

The following remarks will, I think, give a fairly good idea of the requirements of the butter market in British Columbia:

The quality of the butter should be as nearly uniform as possible, the FLAVOR pure and sweet. As the flavor is the essential point in the quality of

butter, particular care should be taken in guiding the ripening of the cream in the right direction. So soon as the butter is made, it should be placed and held in good cold storage until shipped to the consumer. No matter how good the flavor of the butter may be when first made, it will very soon deteriorate unless held at a low temperature. The texture or grain should be quite apparent when a thin slice of butter is broken in two, or if a "plug" be taken with a trier, the end should show a clean break. The butter should also carry a sufficient percentage of moisture to make it quite palatable, and to "draw clear" on the back of the trier; in fact, the majority of the buyers like to see a few small drops of clear, sparkling brine on the back of

it certainly adds to the appearance of the packages, and in that way to the value of the butter.

### The Wit That Won the Teacher's Woodchuck.

To illustrate the position of one of the great national parties during a U. S. campaign noted for its fiery partizanship, Chauncey M. Depew tells this story of the youthful politician and the woodchuck:

"The tutor in one of the smaller schools near my native town of Peekskill had drilled a number of his brightest scholars in the history of contemporary politics, and to test both their faith and their knowledge he called upon three of them one day and demanded a declaration of personal political principles:

"You are a Republican, Tom, are you not?"

"Yes, sir."

"And Bill, you are a Prohibitionist, I believe?"

"I am, sir."

"And Jim, you are a Democrat?"

"Yes, sir."

"Well, now, the one of you that can give me the best reason why he belongs to his party can have this woodchuck which I caught on my way to school this morning."

"I am a Republican," said the first boy, "because the Republican party saved the country in the war and abolished slavery."

"And Bill, why are you a Prohibitionist?"

"I'm a Prohibitionist," rattled off the youth, "because rum is the country's greatest enemy and the cause of our overcrowded prisons and poorhouses."

"Excellent reasons, Bill!"

remarked the tutor encouragingly. "Now, why are you a Democrat, Jim?"

"Well, sir, was the slow reply, 'I am a Democrat because I want that woodchuck.'"

"And he got it, too," added Mr. Depew.

### Woodside and Burnside.

HOMES OF ROBERT NESS & SONS, AND THEIR CLYDESDALES AND AYRSHIRES.

The survey of most parts of the Province of Quebec gives farm lots a comparatively narrow frontage on the rivers or public roads, and where the farm buildings are located near

the front, as is generally the case, it has the effect of bringing neighbors nearer together than they are found, as a rule, in the more westerly provinces. The former system accounts for the close proximity of the homes and farmsteadings of Mr. Robert Ness and his son, Robert R., Woodside and Burnside, giving them the appearance of one establishment, which they practically are. Situated within a mile of the village of Howick and the stations of the Grand Trunk and the Canada Atlantic Railways at that place, forty miles from the City of Montreal and twenty from Coteau Junction, these farms, comprising some 350 acres of good strong land, are widely known throughout the Dominion as a center from which for many years high-class Clydesdale horses and Ayrshire cattle have emanated, taking prominent places in the competition at leading exhibitions in Ontario and Quebec, and

playing an important part in the improvement of the stock of the country.

Acknowledged, everywhere he is known, to be an excellent judge and an upright man, the ambition of Mr. Robert Ness has always been to own the best, and, with a keen eye for quality, he has imported and owned many animals of that stamp. Horse fanciers who have kept tab on that class in the last ten years will remember the very favorable impression made by his imported stallion, Lawrence Again, in his appearance at leading exhibitions in Ontario and Quebec, winning many high-class honors, including first prizes for



MAPLEHURST FARM.

Showing portion of grove planted a few years ago by Mr. R. M. Graham, at Maplehurst Farm, Melita, Man. The beautiful elm in foreground was planted about twelve years ago.

the trier when drawing a plug from a package for testing. If the butter is worked rather dry the customers generally characterize it as being "greasy."

The COLOR should be fairly high, as near the natural June color as possible. Streakiness can be avoided by working the butter sufficiently after the salt has had time to dissolve.

The SALTING is perhaps the point wherein the requirements of our local market differs from the Old Country markets. While the latter want only about 1/2 oz. of salt per pound of butter, the former requires not less than 1 1/2 oz. per pound; some customers prefer even a little more than that.

The PACKING is also a very important point to observe. The packages should be clean and look invit-



OLD HOME OF PRESIDENT MCKINLEY'S FAMILY, COUNTY ANTRIM, IRELAND.

ing to the buyer, as the outward appearance of a package gives him the first impression of it. If the impression be favorable, so much the better for the contents upon subsequent examination. Whilst some large size packages, from 50 lbs. up, sell well on the general market, the smaller ones seem to have the preference, particularly for family use. The bulk of the butter made in the Territorial creameries is packed into square boxes holding 11, 28 and 58 pounds each. These boxes are covered with jute bags, which prevent them becoming soiled in shipping. These sacks add slightly to the cost of the package, but it is a good investment, as

a sire and his get, and leaving a capital class of offspring, which have made their mark wherever shown, and have been eagerly sought after by discriminating breeders and buyers.

In the spring of the present year, Mr. Ness, in view of the increasing demand for Clydesdales and the necessity for new blood, crossed the ocean in March and brought out in May three excellent stallions, two of which found ready sale at paying prices, and one was reserved for home use. Thus encouraged, he made a second trip to Scotland in July, bent on securing the best he could buy, returning in August with another importation of stallions of the highest type, and he was certainly fortunate in securing these just when he did, as prices for that class and breeding went up with a bound before he sailed for home, and have kept steadily advancing since.

Readers of the FARMER'S ADVOCATE who have watched the reports of the shows in Britain the past year, as chronicled by our Scottish correspondent, will have noted the remarkable record of Messrs. Montgomery's great stallion, Baron's Pride, and his sons and daughters, in winning almost all possible 1st prizes in all classes at the principal spring shows in Scotland, including all the championships but one, both male and female. At the Ayr show, in the competition for the sweepstakes silver cup, the first prize females in each class paraded, and of the five, four were daughters of Baron's Pride. At Glasgow the champion in all was his son, Casabianca, and the champion female his daughter, Lady Victoria, who was also champion at the Highland

and stands four square to every wind that blows. He made a sensation at the Ottawa Central Exhibition the first time shown in Ontario, winning the first prize in his class and the championship. Of the two sons of Baron's Pride imported, the bay 3-year-old, *Lord Chancellor*, a son of Nellie Macgregor by Prince of Kertle, by Prince of Wales, grandam by Macgregor, is a big, strong, well-coupled horse, with a long, swinging gait, and excellent underpinning; and has lots of quality. He was first at Ottawa and Huntingdon. *Bravada*, the other son of the champion and of Bonnie Kate, by Cairnbrogie Stamp, is a two-year-old brown, who was in the prize list at the Highland Society's Show this year, and first at Ottawa only three weeks after landing. He is big for his age, but smoothly turned, and has capital action and the best of feet and legs. The bay 3-year-old, *Full of Fashion*, is another of the importation. He was sired by Prince of Kyle, the Cawdor Cup champion, and out of Heroine, a noted prize mare. He has the action of a Hackney, plumb and square going, rolling his knees and gathering his hocks in orthodox style, and his feet, pasterns and legs are such as never go wrong.

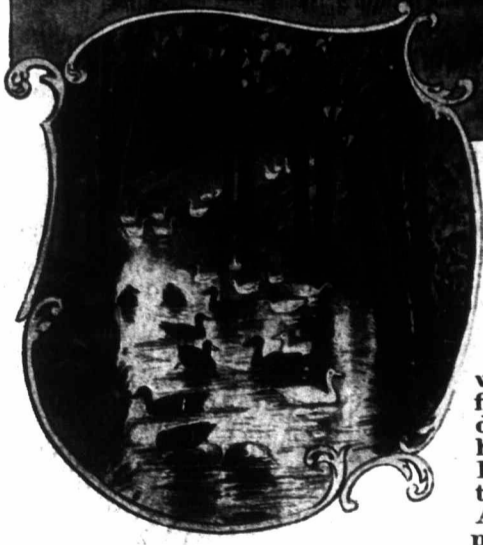
These are the four horses shown in the picture, together with the mare, *Nettie*, whose dam died

hair are qualities challenging the highest admiration, and which gained for him at the hands of two of the best judges in the Dominion the highest honors at the Canada Central Exhibition at Ottawa, the male championship of the breed in competition with the winner of that distinction at Toronto and London the same year. With him in the importation came the deep-milking and dairy-built three-year-old cow, *Gaiety of Langside*, who was first prize winner in Scotland as a two-year-old in 1888, and as a three-year-old quey in calf at Old Cummock in 1899, first at New Cummock, and fourth in the Derby for all ages the same year. She was sired by *White Stag of Lagg*, and her dam is *Twin of Muirdyke*, and her bull calf, which came out with her, is a very promising youngster of fine quality and character, fit to go to the head of any herd.

The two-year-old bull, *Goldfinder*, by *Beauty's Heir*, and from imported *White Glen of Holehouse*, who has been in service in the herd the last two seasons, has left a capital lot of calves, and is a bull of fine dairy form and quality, and is now held for sale. The younger cows, sired by imported *Nellie Osborne's* great son, *Matchless* (by imported *Glencairn 3rd*), who was owned in partnership by Messrs.



WOODSIDE AND BURNSIDE FARMS. PROPERTY OF ROBT. NESS & SONS, HOWICK, QUEBEC, CANADA.



Show at Edinburgh, where for the first time she defeated her half-sister, *Empress*, by the same sire. At Kilmarnock, Baron's

*Pride* won the family prize for a sire and his offspring; his son, *Elator*, secured the male championship, and his daughter, *Jeannie Deans*, the female championship; while at Castle Douglas and Ayr the female championship went to his daughter, *Empress*.

Mr. Ness, impressed with the superiority of this horse and his prepotency in siring the same sort, determined, if possible, to secure some of his get and others nearly related to him, and was fortunate in securing his half-brother, *Durward Lely 3900*, by the Glasgow champion, *Sir Everard 5353*, sire of *Baron's Pride*, and out of *Maggie of Crookston 2219*, dam of Mr. Wilson's noted mare, *Jeannie Wilson*, which won first at the Royal and at Paisley some years ago. *Durward Lely* (the right-hand figure in the group of horses in the illustration) is a horse of great weight and substance, turning the scales at 19½ cwt., or 2,112 lbs., at Kilmarnock station the day he started for Canada. He has a grand set of feet and limbs of the best quality, has a strong back, well-muscled neck, free action and model temper,

when she was two weeks old, and who was raised by hand. She is 7 years old, and was sired by *Imp. James Arthur*, by *Macgregor*, and her dam, *Imp. Nettie*, by *Druid*. She was first prize mare with foal at foot at the Ottawa Exhibition, 1899. Another excellent imported stallion in the stud is the bay 5 year-old, *Prince of Anniek*, winner of first prize this year at Sherbrooke and St. Johns, sired by *Prince Alexander*, winner of the Cawdor Cup in 1892; dam *Rosalind*, by *Flashwood*, full brother of *Macgregor*, and first winner at principal shows at two, three and four years old, in Scotland. He is neatly turned, clean limbed, has strong bone and good pasterns and feet.

THE AYRSHIRES.

The Ayrshire herd, kept principally at Burnside farm, under the management of Mr. R. R. Ness, have gained a wide reputation as prizewinners in the hands of their owners, and are well up to the modern standard, combining style, color and type with utility of a high order, the cows carrying large and well-balanced udders, and showing strong and robust constitutions, while the younger stock are uniform in character and promising to well sustain the reputation of the herd as they grow up.

Included in the importations of 1899 was the grand yearling bull, *Duke of Clarence of Barcheskie* (portrayed in the foreground of the engraving), bred by Mr. Andrew Mitchell, sired by *Mischief-maker of Barcheskie*, dam *Judy 5th of Barcheskie*. He is a typical Ayrshire of the modern stamp, full of style and quality, and comes of a long line of deep-milking ancestry. His handsome head, well-set horns, long, muscular neck, deep ribs, level quarters, wide thighs, and fine handling of skin and

Ness & Sons, show strongly the capacity for dairy work which goes with the family, while the older matrons by *Golden Guinea* and the other noted sires that have figured in the herd in former years are evidently dairy performers of a high order. A score or more of yearling and two-year-old heifers promise well to equal their dams when they come into use.

As evidence of the standing of the Woodside Ayrshires, it may be noted that at the Ottawa Exhibition this year, where it is admitted the competition was stronger than at any other of the principal shows in Ontario, they won a round dozen prizes, one half of which were firsts, including the sweepstakes for the best bull any age and the first prize for a young herd; while at the Quebec Provincial Exhibition they carried off no less than fourteen first prizes.

The foundation of a flock of registered Dorset Horn sheep has been laid by the purchase of first-class selections of typical animals bred direct from imported prizewinning stock, and with this prolific breed, so well adapted for supplying the market for early lambs, it is only a question of a short time when a standard flock may be found here.

Another interesting branch of farm stock raising carried on under the care of the younger members of the family, and which is intelligently and successfully conducted, is that of poultry, of which a number of varieties are kept, including *Barred* and *White Plymouth Rock*, *Light Brahma*, *Dorking* and *Silver-laced Wyandotte* fowls, *Pekin*, *Rouen* and *Cayuga* ducks, *China geese*, *Bronze turkeys*, and fancy pigeons, all of which are high-class representatives of their respective breeds.

### The Debit Side.

WHAT AGRICULTURE OWES TO SCIENCE.

BY G. E. DAY, ONTARIO AGRICULTURAL COLLEGE, GUELPH.

We never weary of magnifying the importance of agriculture. Its influence in the world's economy is wholly beneficent. The hard-earned profits of the farmer impoverish no one else; nay, more, when the farmer prospers, the rest of the world prospers with him. Whatever praise agriculture has received, it deserves it all, with interest. But while so much may be placed to the credit of agriculture, there is also a debit side which is frequently overlooked, and the object of this paper is to place on record a few of the many debts which the various branches of agriculture owe to occupations with which they apparently have little in common. No attempt will be made to make anything like a full list, but only a few will be enumerated by way of examples.

The study of the influence of centrifugal force upon substances of different specific gravity apparently has little to do with agriculture, yet such knowledge, combined with a knowledge of the component parts of milk, resulted in the manufacture of the cream separator, which has practically revolutionized dairying.

The man with the microscope, studying bacteriology, who talks learnedly of "cultures" and uses scientific terms of appalling length, seems to be very remote indeed from "the man with the hoe"; yet it was such men who discovered that certain bacteria are associated with the roots of leguminous plants, such as clover, peas and beans, and that through the action of these bacteria, leguminous plants are able to avail themselves of the nitrogen of the air. Thus the bacteriologist has shown the farmer the importance of these crops, since they gather nitrogen which is not available to other crops, and tend to increase the supply of this valuable fertilizer in the soil. The same men have studied the influence of bacteria upon milk, butter and cheese, and to them the dairy industry is directly indebted for much of the progress it has recently made. There is a much closer relation between the bacteriologist and agriculturist than many farmers suppose.

Then, the chemist has studied the composition of animal bodies and animal foods, and as a result we have learned much regarding the best use of stock foods and how to combine them for the best results. Besides this, he has studied the composition of plants and soils, the requirements of different crops, and many other matters which have been instrumental in enabling the farmer to plan a satisfactory and rational rotation of crops. Yet while we make use of the knowledge obtained from the chemist, we forget what long years of labor were necessary to obtain it, while many a farmer looks upon the work of the chemist as entirely useless.

Then there is the physicist puddling among soils and water in a most incomprehensible manner. "How foolish!" we say, and so pass on. But all we have learned of the best methods of conserving soil moisture we owe to him, and who can estimate the increase in the farmers' profits derived directly from his labors?

The clover midge threatened to destroy one of the farmer's most valuable allies in maintaining soil fertility; but to-day the clover midge has largely lost its terrors owing to changed methods in growing clover seed. Instead of cutting the first crop for hay, the first crop was pastured until about June 20th, and then allowed to produce seed. Who hit upon this plan? Was it merely a lucky guess? By no means. The entomologist patiently studied the insect and discovered that it produced two broods each season. The first brood developed in the first crop of clover, and the insects of this brood laid eggs in the second crop to attack the clover seed. By pasturing the first crop, no shelter is provided for the first brood, and the clover seed matures earlier than under the old method, thus making conditions as unfavorable as possible for the midge. The whole plan, therefore, depends upon a knowledge of the life-history of the insect, and for this knowledge we are indebted to the entomologist. A number of years ago the orange groves of California were threatened with destruction by an insect known as the "cottony-cushion scale." Prof. Riley, the noted entomologist, took hold of the matter. The scale had come from Australia, and experts were sent to Australia, at his suggestion, to investigate. What a fool's errand this must have seemed to many; and when these experts began sending from Australia a species of little beetle, commonly known as ladybird beetles, we can fancy what disgust would fill the souls of those who hold the study of entomology in contempt. But these beetles were imported because it was discovered they lived upon the cottony-cushion scale, and it was not long before the scale was checked and the orange groves were saved, with all the millions in money which they represented. Then, again, do we ever reflect why we apply one kind of insecticide for one insect and a different kind for another insect, and why we apply insecticides at certain seasons in order to be effective? There was no guesswork about these discoveries; they all arose from the careful study by entomologists of the habits of different insects. Thus we know that Paris green is useless against insects which suck the juices of plants, and kerosene emulsion would be wasted if applied for insects which eat the leaves or other parts of plants. How can we estimate the magnitude of the debt we owe the entomologist?

Neither has the botanist been behind in useful work for agriculture. The whole system of origi-

nating and improving varieties of plants is based upon the information collected by the botanist. To the botanist, also, belongs the credit of explaining the mysteries in connection with fungous diseases of plants, and of rendering effective treatment possible in many cases.

But to go into these matters fully would require a whole volume. We cannot stop to enumerate the discoveries of men engaged more directly in agricultural research, such as Lawes and Gilbert, in England, and many others in the different countries of the world. The work of investigation is slow, and frequently the methods employed are beyond the comprehension of those in whose interests the work is performed. An attempt has been made to show the relation of a few leading sciences to agriculture by giving as briefly as possible one or two examples to show something of the nature of the debt we owe to science. Thus, while we hope that we may always have a good conceit of ourselves, let us not be unmindful of the debit side of our account, nor fail to give honor where honor is due.

### Deschenes.

AN OTTAWA VALLEY FARM.

On the Quebec side of the Ottawa River, 5 miles from the capital, conveniently reached by means of the Ottawa & Aylmer Electric Railway, is the beautifully-located, fertile and well-kept dairy and stock farm of Messrs. R. & W. Conroy, whose post-office address is Deschenes Mills, where they are largely interested in manufactures. The farm, which is under the careful and competent superintendence of Mr. Gilmour Woodburn, comprises 360 acres of strong clay loam, inclining to sandy loam in parts, and produces heavy crops of hay, oats, corn and roots. Three hundred tons of hay were saved this year, an average of 2½ tons per acre for first crop clover, and 1½ tons of second crop, mainly timothy. Two silos with a combined capacity of 600 tons of corn ensilage were nearly filled, and a generous supply of roots were stored, making a liberal provision for the winter keep of the stock on the farm, which is principally dairy cattle, the leading feature of the farm being a cream and butter business, for which the equipment is very complete. The fine barn, with dimensions of 50x120 feet, has basement stable accommodation for tying up 96 head of cattle, and is lighted by electricity from the water and steam power plant at the mills near by, which also operates the machinery in the dairy building.

From 50 to 70 cows, Jerseys and grades, are kept at various seasons of the year, cream being sold in summer in the city, and buttermaking the specialty in winter, for which a complete creamery outfit is provided, with all modern improvements. The lines of pure bred stock maintained are Clydesdale horses (of which a few excellent brood mares and fillies are in stock), Jersey cattle, and Tamworth swine.

### THE JERSEY HERD.

The foundation for a herd of registered Jerseys was well laid last year by the purchase from the noted herd of Miller & Sibley, of Pennsylvania, of a richly-bred bull and a trio of typical females, from which an exceedingly useful herd is being built up, which has already made its mark in the showing, winning eight first prizes, including the herd prize, at the Ottawa Exhibition this year, the first time they have been shown. The bull, Ida's Rioter of St. Lambert 27th 47570, is a 2-year-old son of the famous Ida's Rioter of St. Lambert, one of the most richly bred of the breed and the sire of a long list of tested cows having registered records of butter production averaging high up in the twenties weekly. He is a model bull of the breed, and bears the stamp of his worthy sire in his lordly bearing, the depth of his body, and the richness of his skin secretions, for the latter of which virtues he is doubly indebted to his parents, his dam, Becky of Pogis 63069, by Major Appel Pogis, having a butter record of 17 lbs. 15½ ozs. in a week. Among the females a striking figure is the grand old matron, Dilwa 30515, with a record of 15 lbs. 10 ozs., by Jersey Express 5771, and out of Wilda 21205, a magnificent model of a dairy cow in conformation, milk vein and udder development, and evident capacity for work, her bright eye, deeply-dished face, fine withers, exceeding depth of ribs, and long, level quarters, combined with a velvet skin and rich secretions, indicating a high order of usefulness in the dairy and as a breeder, the latter feature being realized to a charm in her sweet little daughter of a few months now in the herd, one of the most completely promising calves we have come across during many moons. Sired by the present stock bull, so richly bred, and with Dilwa for her dam, she has started in life with an endowment of constitution, conformation and quality which, with judicious training, should carry her to the pinnacle of fame long before she reaches the mature age her mother has attained. Heiress of Prospect 116423, a 4-year-old daughter of Major Appel Pogis, and having for her dam the rich Ribbon's Gift 77375, with a record of 18 lbs. 1 oz. butter in a week, 46½ lbs. milk in a day, and 9.974 lbs. in a year, is a dairy cow of high degree, with a capacious udder, a breedy look, and combining many indications of usefulness at the pail and in the churn. A number of other pure-bred Jersey cows, prominent among which is the 5-year-old Flora Katie, a deep-milking dame, having given 7,000 lbs. in 8 months, and 11½ lbs. of butter in a week, bred from standard families and combining the blood of many of the best-known families, are included in the herd, and show evidences of usefulness in a large measure, while a trio of excellent

young bulls bred direct from the imported stock, and held for sale, have all the dairy characteristics of their progenitors in profusion, and would make creditable heads for first-class herds.

The production of pork works in well with a dairy business, the separated milk and the buttermilk making the best of food for the young pigs, and the Deschenes farm is well equipped for this branch of husbandry, the large and well-arranged new pigery, 30x100 feet, being provided with all conveniences for heating, cooking, killing and cleaning, as well as for the breeding and care of the herd of registered Tamworths maintained on the farm, which is well up to the standard of the best, having won the first prize at Ottawa Exhibition in 1898, and embracing among a lot of useful sows the typical aged Amber Trip, second prize at Ottawa, by Ranger, bred at the Ontario Agricultural College, dam imp. Middleton Mimulus, and her almost faultless full sister, Aylmer's Maid, a yearling, winner of third prize at Ottawa; while Gilmour's Choice, a sow under a year, which won first at Ottawa Exhibition, sired by Dominion King and having Middleton May for her mother, is one of the most perfect of her kind. The boar, Samson, now in his 2-year-old form, and head of the harem, is an animal of strong breed character and ideal bacon type. With such foundation stock, it is not surprising that the young things descended from them are of the proper stamp; and with the facilities for developing them found on the Deschenes farm, there is every reason to expect a steady advance in the quality of the stock produced.

### A Week's Allowance.

The following extract from the diary of a Scotch shepherd some forty years ago will strike our readers as curious. It is explained that the whiskey of that time was less than half the price in later years:

Monday.—A half gill to wash awa' the effects o' a dry sermon, 1½d. Midday—A gill to wet my lips for dog whistlin', being out after the sheep, 3d. For gatherin' wi' the neebors, twa gills, 6d. Mair dog whistlin', a gill, 3d. ....	1 1½
Tuesday.—A wet mornin'. A gill, 3d. (there being some holes in my plaid). Dog whistlin' through the day, twa gills, 6d. Consolin' wi' Jock Macdonald over the loss of his wife, four gills, 1s. ....	1 9
Wednesday.—Market day. Forgatherin's, sax gills, 1s. 6d. Dog whistlin', twa gills, 6d. Gills wi' folks I hae nae mind o' whatever, 1s. Gill wi' the man that sang "Auld Lang-syne," 3d. ....	3 3
Thursday.—A gill to try to mind whaur I peeled ma knuckles in a poetical argument, 3d. Introducing Jock Macdonald to a likely lass to mak' his second wife, twa gills, 6d. Sunday dog whistlin', twa gills, 6d. ....	1 3
Friday.—Among the sheep, fortifyin' myself for Jock Macdonald's wife's funeral in the afternoon, twa gills, 6d. Anither on the road to keep myself fra greetin' for the pair body, 3d. Dog whistlin', 3d. The funeral, sax gills, 1s. 6d. ....	2 6
Saturday.—To keep the mist out o' my plaid, the holes no being mendit, gill, 3d. Giein' in the banns for Jock Macdonald's marriage, fower gills, 1s. Dog whistlin' and forgatherin's, three gills, 9d. ....	2 0
Sunday.—The Sawbath day. A we drap to clear ma throat for cryin' on ma dog, a gill, 3d. Anither at Luckie's when the bells are ringin', 3d. Some brandy, so as no to tak' in the smell o' whiskey into the Lord's House, 6d. A drap to digest the sermon, twa gills, 6d. ....	1 6
Total .....	13 4½

### The Salaries of Potentates.

The Czar has an income of \$1,000 per hour, the Sultan \$450, the Emperor of Austria \$500, the Kaiser \$450, the King of Italy \$350, Queen Victoria the same, the French President \$250, the King of the Belgians \$85, and the President of the United States \$7.50 per hour.

### Farming in the Transvaal.

From two books ("South Africa To-day" and "On Veldt and Farm") recently published, we glean the following:—

"On first looking at the plentiful foliage in Johannesburg—seven-year-old trees often 40 feet in height—and on seeing evidence of the rapidity of growth of various kinds of vegetable produce, one is tempted to believe that the agricultural products of the country may be as brilliant as the mineral. But the experiences of those who have tried farming have not hitherto been very encouraging. Trees certainly grow well because there is plenty of water under the soil, and because their roots can readily penetrate to a great depth. But the soil where these surprising results in tree-growing have been obtained is not really rich, and has little staying power unless manure be applied. And agriculture has many natural obstacles to contend with. Hailstorms of unexampled severity occur every three years or so, beating down the crops and destroying the fruit. Locusts frequently eat up the crops and the leaves of the fruit trees. It is said that wheat cannot be grown in summer because the rain falls in that season and causes rust, and in winter there is all sun and no rain, so that to grow wheat irrigation must be resorted to."

"Although localities are to be met with where cattle will answer, and though sheep will thrive pretty generally, it would be altogether untrue to represent the Transvaal as a cattle country. The scarcity of grazing forces the Boers to 'trek' through a large portion of the year in search of pasture. These men are known as 'trek Boers.' The habit is not distasteful to them; the tendency to 'trek' is inherent."



VIEWS OF MESSRS. R. & W. CONROY'S STOCK FARM, DESCHENES MILLS, QUEBEC, CANADA.

### Farnham Farm.

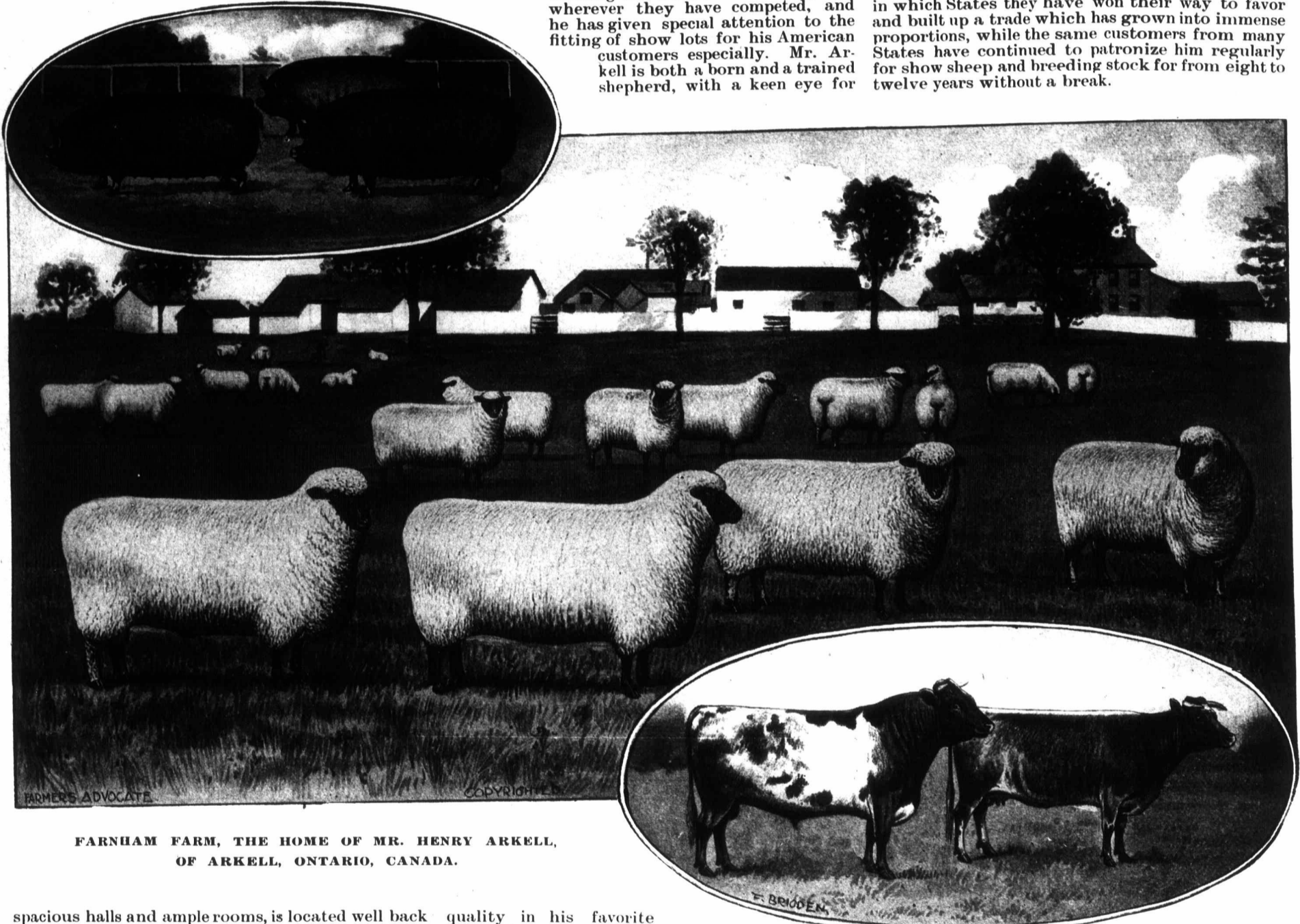
One of the most interesting rural homes in the Dominion is Farnham, the widely-known stock farm of Mr. Henry Arkell, of Arkell, Ontario, famed for its flock of Oxford sheep, situated on the Puslinch Plains, six miles from the Royal City of Guelph, and less than half a mile from Arkell station on the Canada Pacific Railway. The farm of 300 acres was homesteaded in 1831 by the late Mr. Thomas Arkell, who came out from Berkshire, England, about that time, at the age of 28 years, in company with the late Mr. F. W. Stone, the well-known stock breeder, who took up an adjacent bush lot, and here the two young men set to work, with little capital other than strong arms and stout hearts, to hew homes for themselves in the forest primeval. Mr. Arkell lived to see the fruits of his labor in a well-cleared, fertile and systematically laid-out farm, with substantial buildings, quite among the best of their time, and left the homestead, subject to certain legacies, to his youngest son, who was born in 1854; the elder having been previously provided for. The present stone dwelling house, built by the late Mr. Arkell in 1852, after the model of English farmhouses in his native country, with its high gables,

as his first importation in 1831 numbered an even one hundred sheep, mostly young ewes, selected from some of the best flocks in England, and he has continued to import a few nearly every year from that date to the present. With such a foundation stock, and the continued use of only first-class imported rams, the pick of the first-prize pens at the Royal Show during all these years, it is not surprising that the Farnham flock has won its way to the position aimed at by its owner, and that during the years when he was making his reputation as a breeder and an exhibitor his flock won more than a full share of the highest honors at the principal shows in Canada in his own hands, and in the United States in the hands of his customers, and that at the World's Fair at Chicago, in 1893, with 12 entries he won nine prizes in keen competition, comprising many of the prizewinners at the English Royal Show of that year.

His reputation having, by this record and his past successes, been fully established, he ceased from showing, but, as a result of his discriminating judgment and skill as a breeder, his sheep, prepared each year by himself, have gone into the hands of other breeders in Canada and the United States, and well maintained the character of the flock by winning the bulk of the best prizes wherever they have competed, and he has given special attention to the fitting of show lots for his American customers especially. Mr. Arkell is both a born and a trained shepherd, with a keen eye for

Royal of 1898, bred by Mr. Wm. Arkell, has been used the present season to part of the ewe flock, a big, strong sheep, weighing about 300 lbs. in breeding condition on grass alone, having a dense fleece of good length and fine quality, and the nice gray or light brown color of face and legs preferred by Mr. Arkell and most experienced breeders. Six choice ram lambs from the same flock were imported in the present year, two of which, Royal Windsor 3rd and Royal Windsor 6th, selected from the second-prize pen at the Royal Show at Maidstone, are retained in the flock, and are true to the best characteristics of the breed in type and quality, and promise well to perpetuate the high character of the flock. About 100 ram lambs are being wintered, the tops of which, a grand lot, will be pushed forward for show sheep next year, and a handsome bunch of ewe lambs are in stock which will make a capital lot of yearlings next year to go into the flock or fill orders for show purposes, while in the neighborhood of 100 ewes are being bred the present season.

Mr. Arkell has played a leading part in the distribution of the Oxford Downs over wide areas of the American continent, having sold the first that went into the range territories of Wyoming and Colorado, and probably the first to go to Montana, in which States they have won their way to favor and built up a trade which has grown into immense proportions, while the same customers from many States have continued to patronize him regularly for show sheep and breeding stock for from eight to twelve years without a break.



FARNHAM FARM, THE HOME OF MR. HENRY ARKELL,  
OF ARKELL, ONTARIO, CANADA.

spacious halls and ample rooms, is located well back from the public road, near the center of the farm, and is surrounded by large and well-kept lawns, garden and orchard, which, together with the spacious grassy courts around the farm buildings, kept clear of litter and rubbish, gives to the establishment an air of neatness and order which gives the visitor a favorable impression from the first, and one which grows upon him on further acquaintance with the genial host and his estimable wife.

The farm, laid out in uniform, well-fenced fields of 20 acres each, on either side of a wide, grassy lane, is gently rolling, of sharp, gravelly loam, and rises gradually to the rear, where from a high elevation the view of the farm, with its flocks feeding, and its general surroundings, bears a striking resemblance to that seen from the Downs in some of the counties in Old England. And to complete the likeness, here are the "Down" sheep—Oxfords galore—the flock numbering 280 at the time of our visit in November, after a successful season's sales.

While sheep have been the leading feature of stock-raising on the farm for forty years or more, it was in 1881 that the present owner nailed his colors to the Oxford banner and started out with the ambition to stand high in the front rank of Canadian breeders of this class of strong, vigorous and high-quality sheep, and his initial venture in importing was made on a scale corresponding with his faith in the future of the breed on this conti-

quality in his favorite breed of sheep, and carries in his mind the individuality of each of the sires used in the flock since its inception, which were: From 1881 to 1883, a Hobbs sheep; in 1884 and 1885, one of Mr. William Arkell's breeding, a relative of the family, who has scored high in the Oxford competitions at the Royal Show for many years; in 1886 and 1887, a Hobbs sheep was in use; in 1888 and 1889, one from the flocks of Mr. John Jacobs; and from 1890 to 1898, rams from the flocks of Mr. Geo. Adams and Lord Brassey were in service. From the last named came the grand-old Royal Warwick, who was the choice of the first-prize pen of ram lambs at the Royal Show in 1892, and has been retained in the flock till the present time, a large proportion of the younger members of the flock being sired by him, and showing much uniformity of type, robustness and character. He is a typical representative of the breed, with grand constitution, standing well on strong legs, having an even fleece of fine quality, and presenting a living example of the hardiness and longevity of the breed. Having served his time well at Farnham, he has been sold to head the flock of that discriminating breeder, Mr. Henry Arkell, of Teeswater, where he will find a further field of usefulness.

The imported yearling ram, Hero 6th, the pick of the first-prize pen of three ram lambs at the

THE SHORTHORN HERD.  
A nice herd of Shorthorn cattle, comprising about 20 females and a few young bulls, is maintained on the farm, part of which are descended from the early importation of Hon. Adam Ferguson, noted for deep-milking qualities, and part from the Syme stock, imported from Scotland by the Millers, of Markham and Pickering, the top crosses in all their pedigrees being by Scotch-bred bulls, rich in the blood of such famous sires as Barmpton Hero, Aberdeen, and Imp. Indian Chief; the present stock bull, Crown Jewel 20th, being a blocky, thick-fleshed roan 2-year-old, grandson of the last named noted sire of champions; while the previous head of the herd was a descendant of the gold medal cow at the Centennial Exhibition. The cows are of good size, straight, smooth, of good quality, and are, as a rule, excellent milkers, and the young things are low-set, fleshy, and of the modern type, showing strong indications of early maturity. A small herd of registered Berkshire swine of the improved and approved stamp is also kept, which have been bred from some of the best importations. To Farnham Farm and its enterprising owner is due unstinted credit for their influence in importing, producing and distributing high-class stock in this Western world.



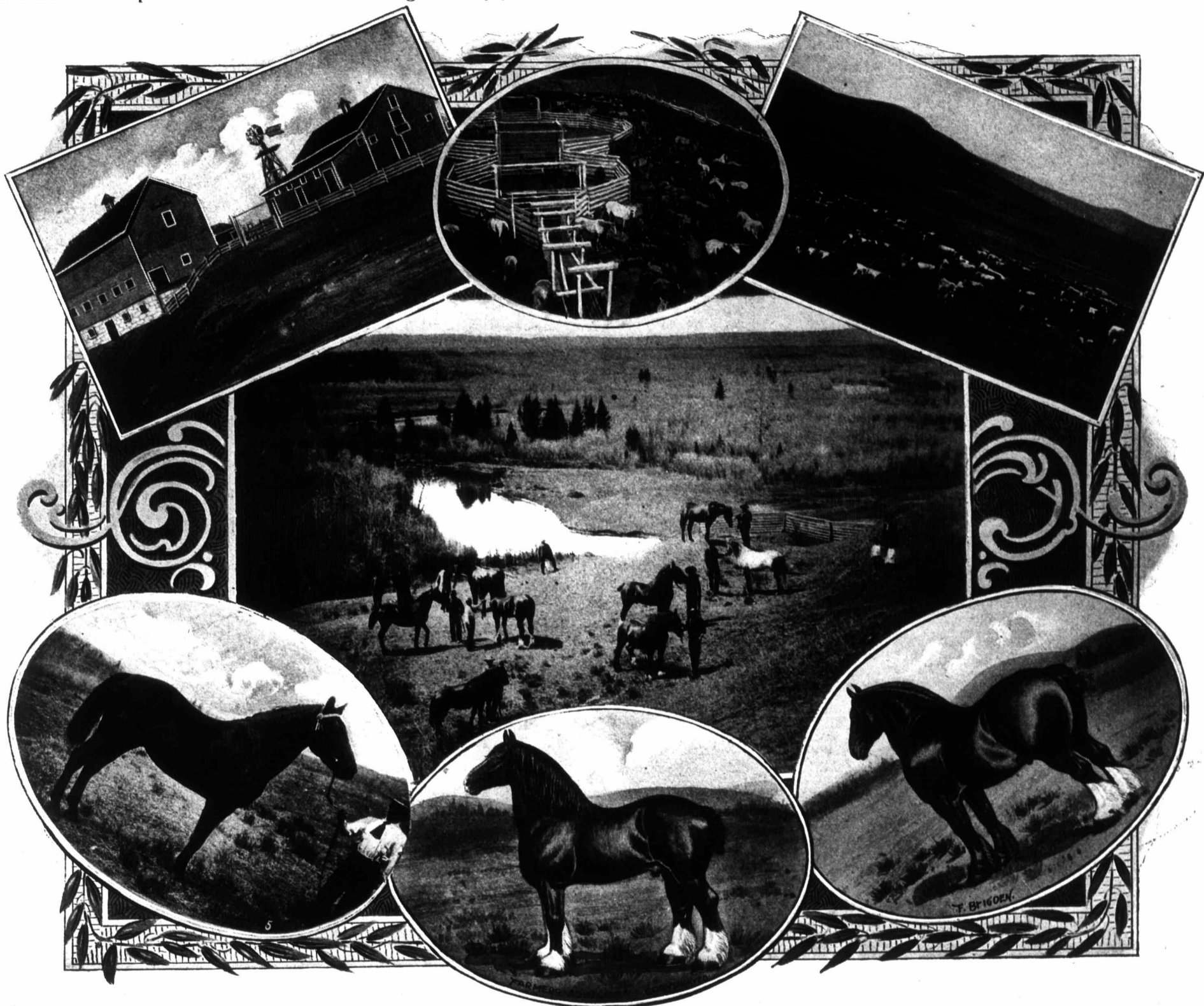
**Elbow Park Ranch.**

Elbow Park Ranch comprises four sections (2,560 acres, all fenced) of high, rolling prairie, lying on the north side of Elbow River, about 7 miles south-west of the City of Calgary. Being so conveniently situated to the capital of Alberta, and the genial proprietor, Mr. R. G. Robinson, being so widely known, this ranch is visited by many hundreds of people every year, in order to get some idea of how a successful ranching business is carried on. From the unpretentious cottage residence magnificent views are had of the Elbow, which at this point forms a great bow from which the ranch derives its euphonious name. The valley is deep and broad, with a rapid-flowing mountain stream of crystal water winding its way through the wooded bottoms, the golden yellow of the poplar in its autumn dress contrasting richly with the dark green of the spruce. Across the valley the south bank rises abruptly, with a rolling plateau of prairie land stretching away to the horizon, while to the westward loom up in the far distance the snow-

winning 1st prize and sweepstakes at the Calgary Fair held in October last. He has also been three times sweepstakes winner at the Winnipeg Industrial, and in the hands of the Turners at Millarville his progeny has proved his prepotency. Another Clydesdale that has been in service for a number of years at the Elbow Ranch is the imported Drum-ble (9897), by Duke King, and out of a Sir William Wallace mare. And to these has been added the promising colt, Enterprise (2439), bred by D. & O. Sorby, of Guelph, and imported by J. A. Turner, of Millarville. He is by the celebrated Grandeur (6814), by Darley (222), and out of imported Venus (2069), by Queen's Own (7176), by Prince of Wales (673), thus possessing the very best of good blood, and as he gives every promise of being large, smoothly-topped, and with beautiful quality, he should certainly prove a great stock-getter. On some light mares, when a Coach cross would "nick" best, the Cleveland Bay Cazique (949), by Lord Stansfield, dam by Emperor, a big, rangy, level-going horse, has proved himself a useful sire, and has been retained in the stud a good many years. Glen, another Coach horse, is

the spring, before they get too fat, to be thoroughly broken to harness, for which there is a full equipment of breaking carts, wagons, etc. They are then used as wanted about the farm and made to earn their living while they are being fitted for the market.

The cattle herd consists of some 1,800 or 1,900 head, of which 600 are breeding cows, about 200 steers being turned off each year. Mr. Robinson breeds all his own cattle in preference to buying "doggies." Until about a year ago he has used Shorthorn and Hereford bulls, but hereafter will use nothing but Shorthorns. He considers the Hereford cross helps to give hardiness and vigor, while the Shorthorn gives the quality. There are now about 40 Shorthorn bulls; six youngsters purchased last year from W. R. Elliott, Hespeler, Ont., have been reserved for next year's service. The cattle are all kept on the summer and winter ranges, only the bulls after the October round-up being brought in to the home ranch, where they are stabled and fed green oats and hay. They are turned out again about the middle of July, and in this way the calving time is



ELBOW PARK RANCH, THE BEAUTIFUL WESTERN HOME OF MR. R. G. ROBINSON, CALGARY, ALBERTA, N.-W. T., CANADA.

crowned peaks of the Rockies. Upon this home ranch, or, more properly, horse ranch, 150 acres are under cultivation: this year 70 acres of oats (an excellent crop), 40 acres of rye for green feed, and 40 acres of rye seeded down with Bromo grass, of which there was a good catch.

The horse stock consists of 1,000 head, of which 450 are brood mares. While the breeding of heavy horses is made the main object, there are some mares of lighter type, and the mating of each mare is directed by the proprietor, stallions being used that are considered most likely to produce the best result. In order to accomplish this end the following stallions are kept: The imported Clydesdale Culzean (8500), by Lord Erskine (2744), by Boydston Boy (111); dam Jewell (6188), by Prince of Wales (673); a big, massive draft horse with lots of action and vim, that has done splendid stud service at this ranch. Balgreggan Hero (8446), another celebrated imported Clydesdale, a grandson of Darnley (222), now in his tenth year and as fresh as a peach,

also used on certain types of mares, as are also the trotting-bred Patchen, Eclipse, and Morgan Sharper by Sharper King, out of a Hambletonian mare. The imported Irish Thoroughbred, Tanghaballaugh (351), has also done many years' stud service at this ranch. He is a clean-limbed, gay little dark chestnut, and a 1st-prize winner in 1890 at the Toronto Industrial. With such a string of stallions to breed from, it is little wonder that Mr. Robinson produces some "good uns."

During the breeding season (June and July) the mares are all run on the home ranch. The foals which come in May and June are weaned in November and brought in, halter-broken and run in a foal yard 200 feet square, all shedded over, and fed on green fodder or hay and some oats, particular attention being given to carry them through their first winter in good growing condition; at this time they are also handled and halter-broken. In the spring they are turned back to one of the outer ranges, and at 3 years old are again brought in, in

controlled and the bulls kept vigorous and strong.

In addition to the horse ranch, Mr. Robinson has winter and summer ranches further west; the latter consists of two sections of "own" land about 20 miles south-west on the Elbow River, on which are corrals for 2,000 head of cattle and sheds for 500 calves. The winter ranch is further up in the foothills on Fish Creek, and comprises three sections of "own" land, about a township of lease land, and an almost unlimited open range. It is equipped with a stock barn 120x60, with storage capacity for 300 tons of hay, stabling for 40 horses, and sheds for 500 calves. During the haying season some 15 or 20 men are employed, and some 3,000 tons of hay are put up to provide against any possible contingency of weather. Haying is supposed to be finished before the middle of October, when the beef round-up takes place. The cattle are rounded up twice a year—the second week in July and again in October—and branding takes place at both round-ups. Horses are only rounded-up once a year.

### Elmshade and Its Ayrshires.

Forty miles from the City of Montreal on the Grand Trunk Railway, twenty from Coteau Junction on the Canada Atlantic line, and close to the village of Howick, a station on both roads, is Elmshade, the 200-acre farm and the home of Mr. William Wylie and his bonnie herd of Ayrshire cattle. The Chateaugay River forms the boundary line of the farm and runs close by the steading, furnishing a never-failing supply of water for the stock. The name of the owner has long been familiar to those who have watched with interest the records of the Herd Books and the prize lists of the leading exhibitions of Ontario and Quebec, where his cattle have figured prominently, the famous bull, Lord Sterling, son of the matchless Silver King and of imported Lady Sterling, having himself won eighteen first prizes during his three years' term of service in the herd, where he left his impress for good on his offspring, some of which are now deep-milking matrons in the herd, while his sons are heading other noted herds and handing down to his posterity the excellencies which characterized himself and his princely progenitors. He was succeeded as head of the harem by his stately son, Silver Prince (portrayed in foreground of picture), a bull of magnificent conformation and splendid quality, who was signally successful in his showyard career winning in strong competition first prize in his class and the male championship of the breed at Canada's greatest Fair at Toronto in 1890, and also

purchase, for an inspection of all the best herds in Britain failed to find her superior, and she came out to the shows of 1890 in her 2-year-old form, fresh in milk, large for her age and faultless in form, with a model shaped udder and well-placed teats of good size, and easily won first-class honors in her class all around the circuit, capturing also the female championship at London and Ottawa. A beautiful heifer calf by The Don 8255 (a son of Matchless 7500), and out of the younger Nellie Osborne, enriches the herd and gives promise of following in the footsteps of her dam and grandam.

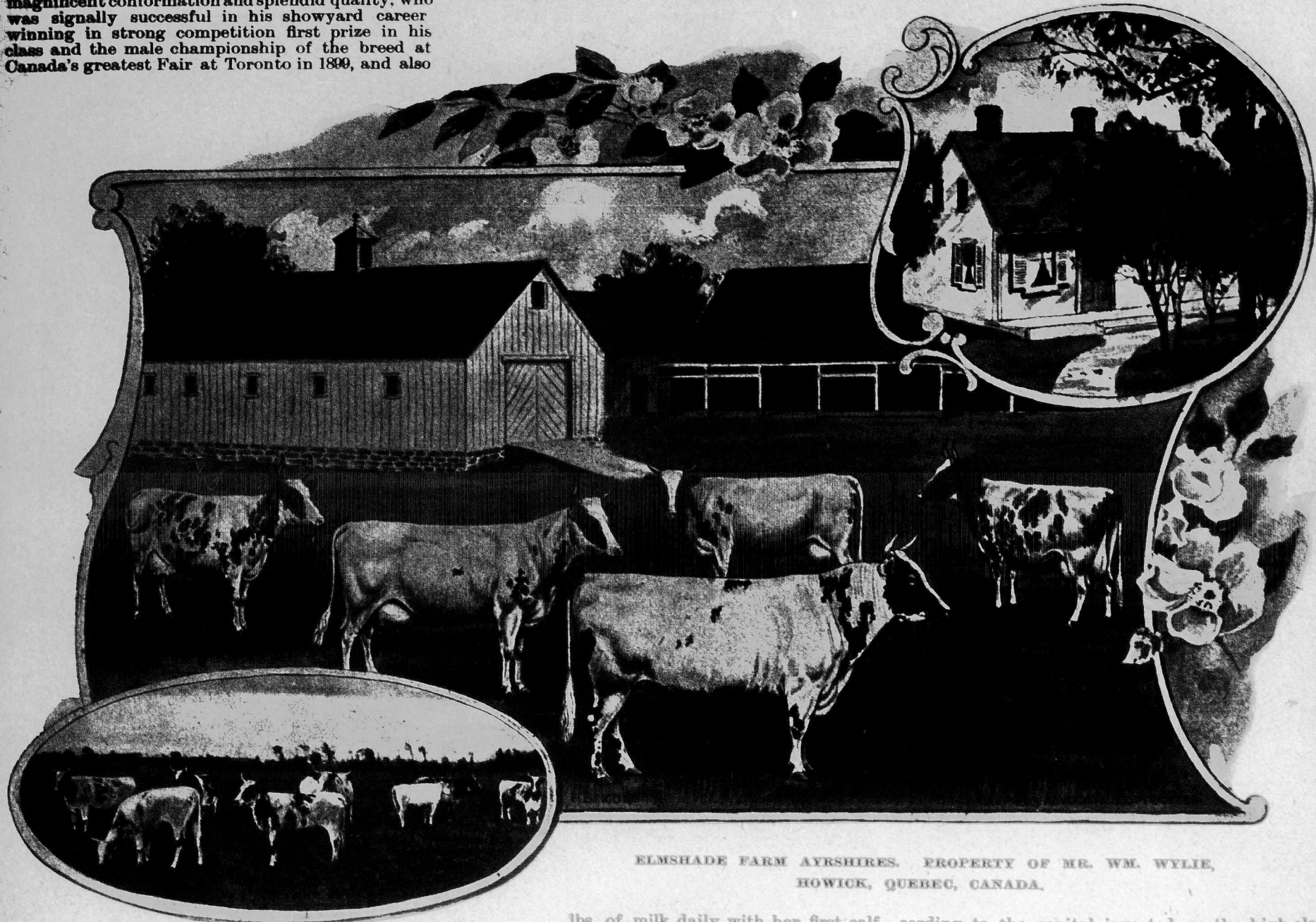
In the spring of 1890 Mr. Wylie journeyed to Scotland and personally made selections of ten young cows in calf to high-class sires from some of the best herds in that country, the home of the breed. These were safely landed at Quebec in May, and most of them have since produced promising calves, while the cows, which are typical representatives of the best of the breed, have shown fine dairy qualities, having shapely udders, and proving deep milkers, a quality which comes to them honestly by inheritance from a long line of milky matrons in their maternal ancestry, as well as on their sire's side of the family tree. Prominent among the imported contingent is Sprightly of Carston, just three years old and having given 46

The aim is to keep the herd up to an average of about forty head, which, owing to active demand and numerous sales, is rather more than the number now on hand, but we understand that it is the intention of the owner to increase the number by another importation during the coming winter.

A promising lot of bull calves imported in dam, and a choice lot of yearling heifers and heifer calves, contribute to the make-up of this ideal herd of Ayrshires, which ranks with the best on the continent in breeding and individual merit. Mr. Wylie is a partner in business in Montreal and spends most of the winter in the city, but has a capable cattleman in charge of the herd, and from May to November gives constant personal attention to the farm, the herd and the dairy, for which he has a strong liking.

### English Shorthorn Sales of 1899.

The year 1899 has been decidedly favorable to breeders of Shorthorns in this country; prices were good at the opening spring sales; private sales to Buenos Ayres, etc., were good throughout the summer, and the autumn dispersions have been best of all, the farmers' herds dispersed in the southern counties yielding as good a return, probably, ac-



ELMSHADE FARM AYRSHIRES. PROPERTY OF MR. WM. WYLIE, HOWICK, QUEBEC, CANADA.

at the Western Fair at London the same season, where he stood at the head of the Elmshade contingent which won first herd prize, as well as at the Central Exhibition at Ottawa the following week. This bull, being closely related to many of the females at Elmshade, has since been sold to head the fine herd of Ayrshires recently established by Mr. Massey, of Toronto, where he will doubtless make himself a still more enviable record. He is succeeded by the imported 2-year-old bull, Scotland's Glory, a "braw" son of Lord Nelson and of Kate Wallace of Auchenbrain (now in this herd) by Baron Wallace, of deep-milking and prizewinning ancestry in Scotia's land, a bull of large size, having great length of quarters and strong breed character.

At the dispersion sale of Mr. Daniel Drummond's noted herd, in February, 1890, Mr. Wylie, who had then made all arrangements for a trip to Scotland with a view to making an importation of choice Ayrshires, took the precaution to follow to a finish the keen competition for possession of the great show heifer, Nellie Osborne 2nd of Burnside (prominent left central figure in engraving), with an unbroken record as a first-prize winner as a calf and a yearling at the three great shows—Toronto, London, and Ottawa. It took a bid of \$415, the highest price for many years paid for a female of the breed in Canada, to secure the best daughter of imported Nellie Osborne, the sweepstakes cow at the World's Columbian Exhibition, a record repeated more than once in even stronger competition in Canada since that time. Yet it was a judicious

lbs. of milk daily with her first calf before attaining her third birthday. She is delineated in the group in illustration of the Elmshade steading. She won first prize as a yearling at Ochiltree, was one of a group of four yearlings which won the special breeder's prize, and gained second prize at the same place as a 2-year-old. White Glen of Holehouse, 5 years old, is another strong member of the herd and a great milker, with fine dairy form and typical character. Countess of Langside, another 5-year-old cow, by Whittie of Carbello, shows a model milk vessel and great capacity for dairy work. Other notable cows are White Rose of Langside, by Peter of Whitehill, one of the leading stock bulls in Scotland. Daisy 4th of Broomhill, a handsome 3-year-old, winner of second money at Dundonald, by Winsome Lad of Broomhill. Favourite of Broomhill, Queen of Burnbrae, Stately of Crosshouse, Countess Chrissy, and Beauty of Langside, all of which are choice young cows of uniform excellence of type and character.

A charming group of yearling heifers growing up give promise of supplementing the dairy workers in the near future, among these being the first prize yearling at all the leading shows this year, and a grand lot of heifer calves are coming on. The first prize bull calf at Toronto, Bolivar, by imp. Napoleon of Auchenbrain, heads a fine lot of bull calves from imported dams. He is a model to go by, and the younger ones imported in dam are exceedingly promising. Being sired by noted stock bulls in Scotland and from such choice cows, they should find ready sale to go into high-class herds.

ording to the capital invested, as the high-class stock in Scotland, so that all breeders have had a better trade, as our forthcoming "circular" will show in its averages which we are now getting out. We have been very busy with exportations of all sorts of live stock. This week we are sending to Austria, and last week we sent Mr. V. T. Hills, U. S. A., a herd of Red Polled cattle, some of the very best. But our grandest Shorthorns go to the Argentine buyers, who are spirited bidders and want the same good-colored bulls that our breeders like to use, and consequently they are not bought easily.

We wish you and your readers a Merry Christmas.  
Yours faithfully,  
JONAS M. WEBB,  
of John Thornton & Co.  
London, Eng., Nov. 21st, 1899.

### Professional Courtesy.

Dr. — had a valuable cow which became sick and seemed likely to die. After inquiry of his servants he sent for Jimmy Lafferty, who, they said, "could cure any cow in the wurruld." The cow doctor accordingly came, drenched and physicked the animal for four or five days, in the lapse of which time he waited on the doctor and pronounced her cured. The doctor, greatly delighted, put his hand to his pocketbook. "Well, Lafferty, what do I owe you?" "Owe me," replied Jimmy, drawing himself up with great dignity, "sorra the penny; we doctors niver take monee of one another."

**Brookbank Dairy and Stock Farm.**

Brookbank Farm, the home of one of the most notable Holstein-Friesian herds on this continent, and located at Currie's Crossing, some six miles south of Woodstock, Ont., is an interesting institution to visit. Its proprietors, Messrs. Alfred and George Rice, have shown commendable skill and thoroughness in establishing, building up and maintaining the herd in its high state of perfection, and in manipulating the farming and dairying operations. The farm consists of two lots of 100 acres each, a few acres of which are cut off by the railroad.

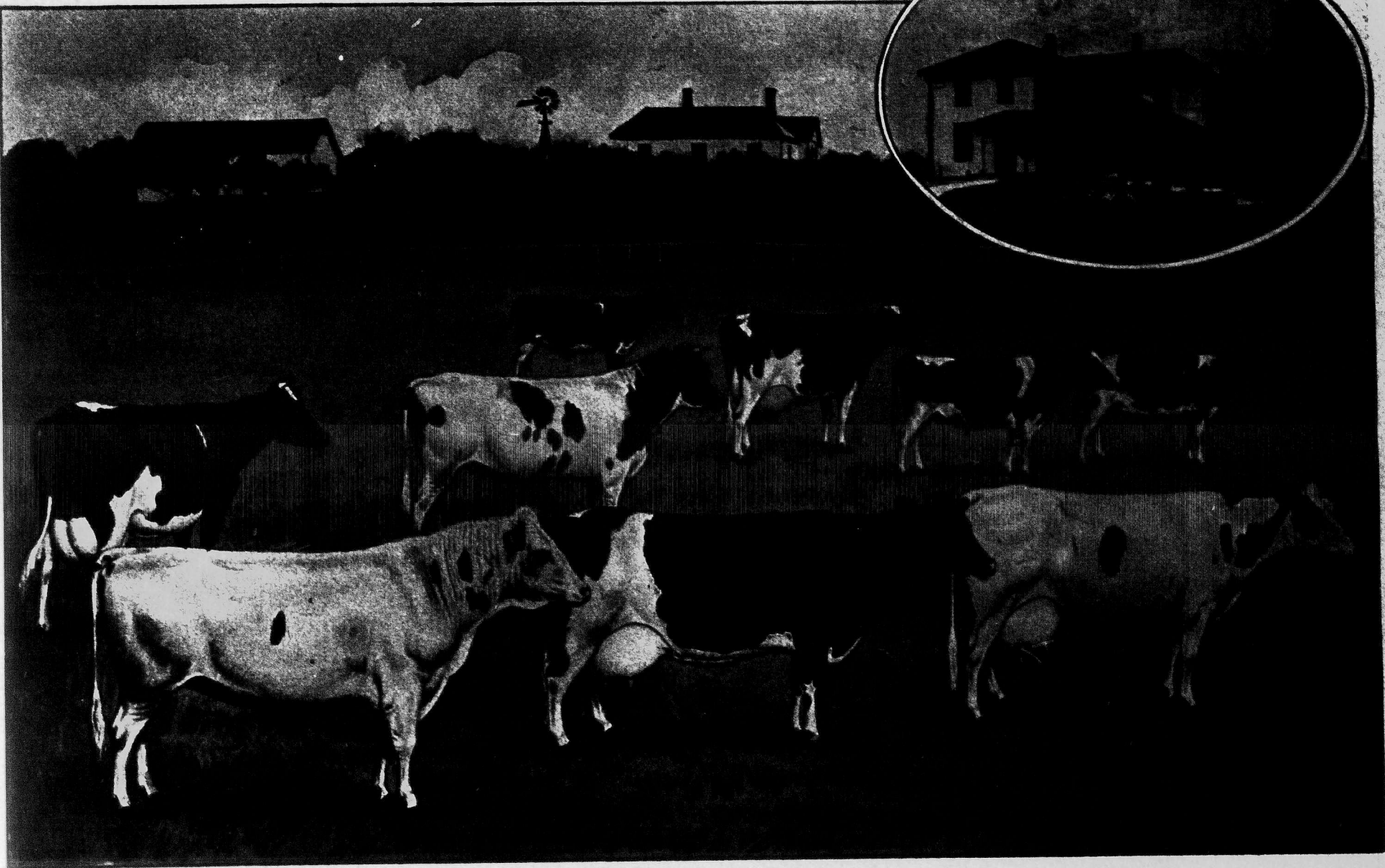
It was in 1841 that Mr. Alfred Rice, Sr., father of Mr. Alfred Rice, Jr., and grandfather of Mr. George Rice, of the present firm, settled in this district, having to hew out a home from the primeval forest. It was not many years after this date that dairy farming was engaged in, and latterly a cheese factory built on the farm and operated for a number of years. In time Mr. Rice's large family of boys grew up, and a number of them settled on farms of their own in order to pursue their avocations each for himself. Among these sons was George, father of the present George and brother of the present Alfred. His inclination led him to beef raising, which he followed as long as he conducted the farm. About this time George, Jr., took command, and as beef became very cheap, he was led to turn

pounds 10 ounces in a (24 hours) day test, and also won the Toronto milk test of \$150, in 1894. She was selected by Mr. George Rice, from the herd of W. B. Smith & Son, Ohio, along with the now famous Calamity Jane and Iolena Fairmount. Calamity Jane still looks hale and hearty, after four successive sweepstakes victories in the Ontario Provincial test. Her official record made last November in seven days was twenty-five pounds, which placed her second in America last year, being beaten only by a few ounces. This butter was produced at a food cost of \$1.57, or 7.4 cents per pound. She has been a producer chiefly of heifer calves, one in New York, one in Ohio, and one at Brookbank. Her only son is retained in the herd for service, but now goes to head the famous herd of Henry Stevens & Son, N. Y. State. Count Calamity Clay, a grandson of hers and Eunice Clay, takes his place. Edgley Frena may also be mentioned as a matron of the herd. She has made a capital test record, and has given in public test 102 pounds of milk in two days, four months after calving. From these and a few other similar cows the present strong herd of some sixty-five head has been produced. Among the late additions may be mentioned a carload in 1897, from the herd of Henry Stevens & Sons, New York. These were young animals, including a number of bulls carefully selected for their pedigrees and form, and have been largely disposed of to the increasing

and needs only a light dressing to get a full crop.

With regard to the development of the heifers in the herd, it may be interesting to know that they are grown as rapidly as possible from calthood without becoming unduly fleshy. They are bred to calve at 23 to 26 months old, generally in the fall of the year. Heifers that calve for the first time in spring are milked over a year and bred to produce their second calves the succeeding fall. As far as possible the cows are each given fully twelve months between calves, and six weeks is the time preferred for them to run dry. The conclusion is arrived at from close observation, extending over a number of years, that a cow's excellence is largely dependent upon the vigor and condition of her dam during the last few weeks previous to the birth of the calf. As an example, in the Brookbank herd Daisy Texal 2nd is a considerably better cow than others of her full sisters that were not so favorably born because of the dam having been dry shorter periods previous to their birth. Others are good; she is great.

In addition to the young stock sold, the firm turns off about 100 head of bacon pigs annually, which are partially supported by the dairy by-product.



BROOKBANK FARM. PROPERTY OF MESSRS. A. & G. RICE, CURRIE'S CROSSING, ONT., CANADA.

his attention to dairying, and, notwithstanding his tastes had been cultivated to favor the beef form, his keen perception and thorough business principles soon directed him in the selection and possession of a grade dairy herd of a very high order. The recognized close connection between parentage performance and dairy form led the proprietor in 1891 to launch out still further and introduce the foundation stock of the present famous herd of Holsteins. It was just here that the success now being realized hinged, and it was a wise stroke of business when Daisy Texal and Maid of Netherland were purchased from the herd of Mr. W. P. Whipple, of New York State. It was at this time that the present firm became partners. The former of these cows has proved a tower of strength to her owners, and to the breed. In 1894 she won 2nd prize in the Toronto milk test, while her form was of pure dairy type. She has produced five daughters and three sons without an inferior beast amongst them. Of these we may refer to Daisy Texal 2nd, still in the herd, that made 18.19 pounds of butter as a three-year-old under a seven-day official test last November. She has been a repeated showing winner in many close contests, while her sister, Daisy Texal 3rd, gave 10.05 pounds of butter as a two-year-old in the official seven-day trial. In 1893 the herd was further materially strengthened by the addition of Eunice Clay, that won the Ohio milk test in 1893, giving 84

trade. In 1898 Winnie R. and her daughters were added, and others. There was also added this year thirteen head from Messrs. Horr & Chapman, Ohio, as well as the present stock bull, Homestead Albino De Kol, from the herd of Hon. W. A. Mattison, New York. Hengerveld's Albino De Kol won 1st as a yearling at Toronto, London, and Ottawa, 1898. He is sired by the great bull, Pietertje Hengerveld Paul De Kol. He won 1st at the New York State Fair in 1890. Calamity Jane's Son, by Sir Paul De Kol's Clothilde, is also used on the herd, as well as Nicolo Belle's Prince De Kol, a rare good one that pleases his owners and all others who see him. Very much could be written in description and reference to the pedigrees, performances, and care of this notable herd, but some reference must be made to the methods of Messrs. Rice.

The farm is of rich, rolling land, varying from rich, dark, low-lying grass land to rolling loam; the latter produces grand crops of fall wheat. It is well watered by a spring brook, which meanders through a considerable portion of the pastures. Corn for ensilage, roots, coarse grains, hay and fall wheat are the chief crops grown, and are followed in a wisely-directed rotation. Wheat is the only crop sold, and the money for it is paid out for coarse grain, bran, oil cake, etc., to feed the cows. The feeding of so much stock makes it possible to manure a large area each year, as the land is already rich

with, chiefly skim milk from the home dairy creamery plant, which is one of the most complete and convenient we have yet seen. The dairy is situated below the kitchen, and the steam boiler below the woodshed. The creamery is well fitted up with cream separator, cooling vats, ripening vats, churn, etc., of the most approved patterns. Adjacent to the make-room is a cemented spring well and a cement cistern tank. The boiler is of eight-horse-power capacity, and the engine, a small portable machine, is six-horse power. Connected with the boiler is a steam pipe, which heats the house above, and another pipe extending to the barn and hog house, 250 feet away. Besides heating and cooking feed, the steam at the barn is used for power by attaching it to the engine, which is very quickly hauled to any position on a stone boat. The dairy has been fitted with a special view to light, ventilation, etc.; and to keep the drains pure and clear, the exhaust and blow-off steam pipes are directly connected with them, so that they are frequently scalded out, which will prevent mold and decomposing bacteria from accumulating to give trouble. It is calculated to make from fifty to one hundred pounds of butter per day, the milk for a portion of which will be supplied by neighboring patrons. Taking the institution in any of its parts or as a whole, there are few that can approach it in stock equipment, arrangement and manipulation.

**Hillhurst.**

Beautiful for situation is historic Hillhurst, overlooking the fertile valley of the Coaticook River, across which lies the comely village of Compton, Quebec. Nestling amid the luxuriant growth of trees planted and grown during the occupancy of the owner, commanding a charming view of never-tiring landscape, embracing hill and valley, lake and mountain, is the farm home of Senator Cochrane and his son, James A., and here the scene of their extensive pure-bred stock interests, which have won the admiration of lovers of fine stock all over the American continent. Few men whose early training was alien to farming and to the care of live stock made such rapid progress as a student of these arts as did Matthew Henry Cochrane, who at the age of forty-five, after a singularly successful commercial career, turned his attention to the reclaiming of the paternal homestead, and to breeding and building up a herd of pure-bred Shorthorn cattle, which in surprisingly short time gained a world-wide reputation. Men talk of high prices for stock in these days, and the difficulty of doing business with British breeders, but they will find food for reflection in a recollection of the record of Mr. Cochrane's first importations,

Mr. Cochrane, as one of the few who safely survived that perilous period in the history of Shorthorn breeders, never lost faith in good cattle, nor his love for Shorthorns, even in the darkest days that followed, and we find at Hillhurst and in quarantine at the present time, ready for the improved trade, a herd of about sixty head all told, including the new importation of 18 head, in which is the grand young Duthie-bred bull, *Joy of Morning*, purchased at the late joint sale from the Collynie and Upper Mill herds at 300 guineas, believed to be the highest price paid for a bull for Canada or the United States this year, or for many years. He is a dark roan, a year old this month, and was sired by the well-known stock bull, *Pride of Morning*, and from *Jessica 2nd*, one of the best young cows at Collynie, by *Scottish Archer*. His sire is a son of *Star of Morning*, and of *Patience*, of the favorite Cruickshank Clipper tribe. *Pride of Morning* won in 1883, first prize, and the Shorthorn Society's prize of £20 at the Royal Northern Show; and in 1894, at the Highland Society's Show, first, and the Shorthorn Society's prize of £20 for the best bull, any age, and the Duke of York's gold medal for the best Shorthorn animal in the show.

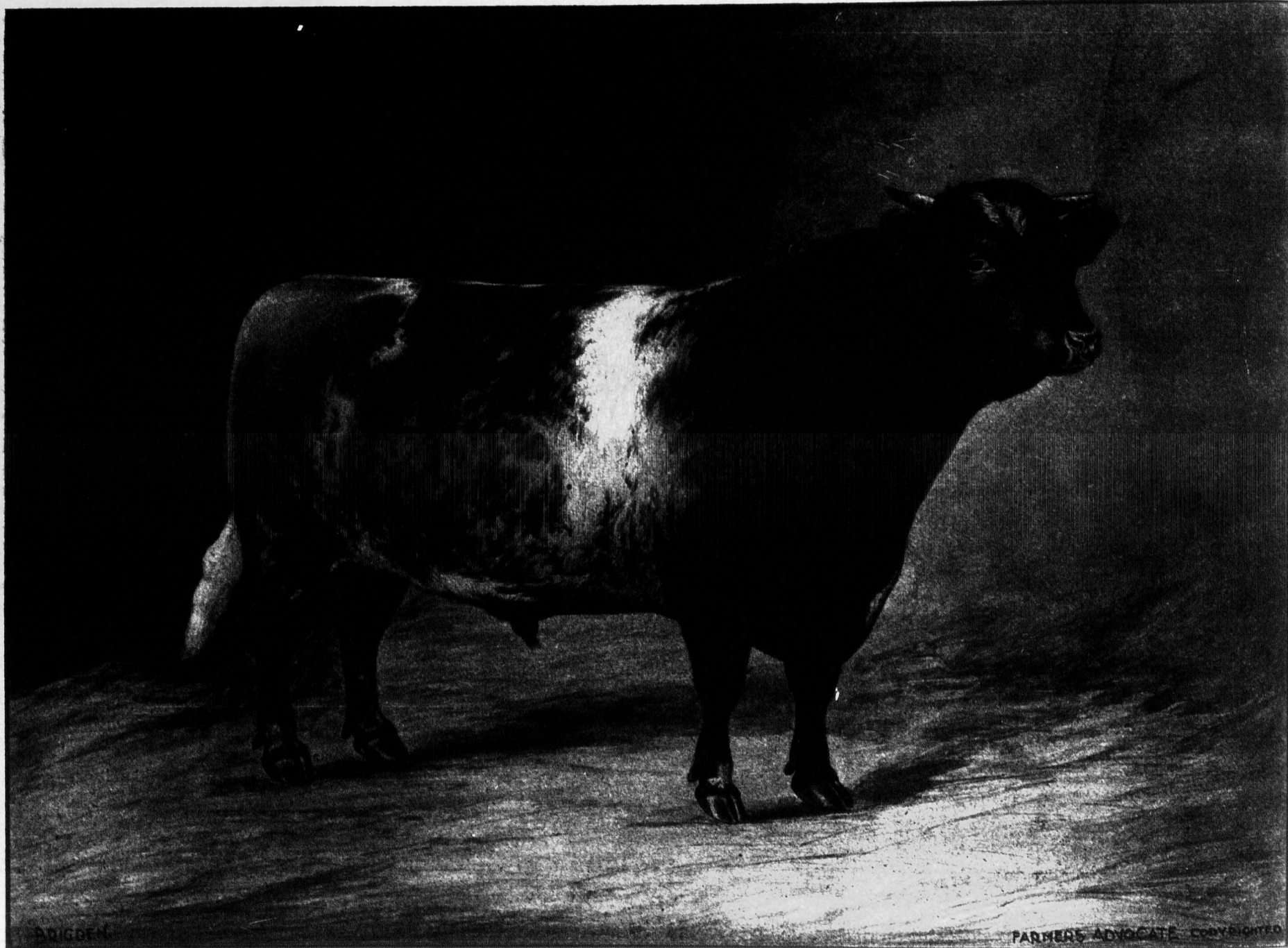
In the same consignment came seventeen young cows and heifers, selected by a first-class judge from

ported cows are: *Rhoda M.*, by *Scotch Rose*; *Alpine Beauty 2nd*, *Royal Beatrice*, and also representatives of Cumberland, Yorkshire, and Gloucestershire families, combining size with general utility; while among the younger females are many handsome and robust heifers of modern type; and young bulls of the same stamp, some of which were imported in dam, and are thrifty, vigorous, thick-fleshed youngsters. Among the Canadian-bred contingent are representatives of *Rose of Strathallan*, *Constance*, *Fillagree*, and other useful sorts bred for milk as well as beef.

The old-time Shorthorn in its up-to-date form, "Scotch and Scotch-topped," is the sort it is aimed to produce at Hillhurst, and they are there in health and vigor, and of a high order of individual merit.

**THE HACKNEYS AT HILLHURST.**

The Messrs. Cochrane were among the first to recognize the suitability of the Hackney for improving the ordinary horse stock of the country for the production of high class harness horses and for general use in most sections of the country, and they have imported from England and bred at Hillhurst many of the most noted animals in the ranks of the breed on this continent, combining size, style and action in high degree.



YEARLING SHORTHORN BULL, "SCOTTISH HERO."

PROPERTY OF HON. M. H. COCHRANE, COMPTON, QUEBEC, CANADA.

back in the sixties, when he paid prices ranging from \$2,000 to \$5,000 each for animals he had set his mind on securing, and when expenses of importation were vastly greater than in these times.

It required no little courage for a young breeder in a young country to be the first in the annals of Shorthorn history to set the pace of a thousand guineas for a single cow; but Canada contributed the man for the occasion, and the sequel showed that the purchase of *Duchess 97th* by Mr. Cochrane at that figure was not an instance of reckless daring, but a carefully considered business transaction which panned out profitably, proving but the prelude to vaster ventures than had been, and which, by the exercise of exceptional business tact and foresight, brought the bold young breeder safely through a business boom such as comes to any industry but once in a century. The tale has been so often told that we deem it unnecessary to recite in detail at this date the colossal contracts in which he played a part in those exciting times, when he made sales of single animals at prices ranging from \$10,000 to \$23,000.

three of the best herds in Scotland, all deeply bred in the blood of many of the most popular tribes of the day. In the 1888 importation came the young red roan bull, *Scottish Hero*, now about two years old, bred by Mr. Duthie, sired by *Scottish Archer*, and from *Missie 134th*, by *William of Orange*, and therefore full brother in blood to *Marengo*, winner of the championship at the Royal Show last year. *Scottish Hero* is one of the very best young bulls imported in recent years, showing strong breed character, being well proportioned, of splendid quality, and one of those which grow in favor as the months go by. He won first prize in his class as a yearling at the Quebec Provincial, and at the New Brunswick Provincial Exhibitions this year, at both of which the Hillhurst herd won the first prize for best Shorthorn herd of one bull and four females, competition open to all.

In the same importation came the robust, red Duthie-bred cow, *Vain Belle 2nd*, a fine specimen of the Scotch type, herself a winner and the dam of winners, being of the same family as the Royal champion, *Challenge Cup*. Among the other im-

Evidently, the Hackney is steadily gaining ground among the farmers of Canada, who now see that in this breed they have an ideal general purpose animal, quick and active, with weight enough for all kinds of farm work, and fit to drive on the road for business or pleasure; while dealers are quick to snap up the most promising knee-actors. The noted stallion, *Barthorpe Performer*, one of the principal sires in the Hillhurst stud, bought in the rough as a yearling in England, has since won ten first prizes at New York, Philadelphia, Boston, Toronto, and Montreal, and has developed into one of the best sons of the grand old Garton Duke of Connaught, the champion sire of harness horses in Great Britain to-day. Although showing much greater action than in his colthood, *Barthorpe Performer* has sons and daughters enough to add to his laurels in the showing, among others: the beautiful two-year-olds, *Queen Dagmar* and *Queen Louise*, first and third prize winners at Ottawa in 1890; the yearling, *Lady Minto*, second prize; and the sensational yearling bay colt, *Matchless Performer*, first at Ottawa this year. The produce of

Hayton Shales, the other great imported stallion in use, are also distinguishing themselves in the showing, two of his daughters having won the gold medal in tandem at Ottawa; while another, Lady Isabel, won the Hackney Horse Society's silver medal for Hackney in saddle; a daughter of Maxwell taking the silver medal for Hackney in harness, as well as first for single harness and second for high-steppers. Foals by Hayton Shales took first, second, and third prizes in the general purpose class at Sherbrooke, a two-year-old filly winning diploma for best female at the same exhibition the present year.

#### THE SHEEP FLOCKS.

The broad fields of Hillhurst's 1,000-acre farm afford a generous range for the high-class flocks of pure-bred sheep maintained there, probably the largest in number on any single farm in all the Eastern Provinces, totalling at the time of our visit nearly 600 head, and comprising registered Shropshires, Dorset Horns, and Hampshires, of which latter a new importation of 20 ewes in lamb has just been received, due to begin lambing in January, and the young sheep of the flock are up-to-date in character and quality, and kept in the best possible condition for future usefulness as breeders.

The FARMER'S ADVOCATE tenders to Senator Cochrane sincere congratulations on his continued success in his stock-breeding operations and his unabated enterprise in securing the best available and keeping up to date in the character of his stock in the various lines he has adopted. The best wishes of a large circle of admiring friends we are

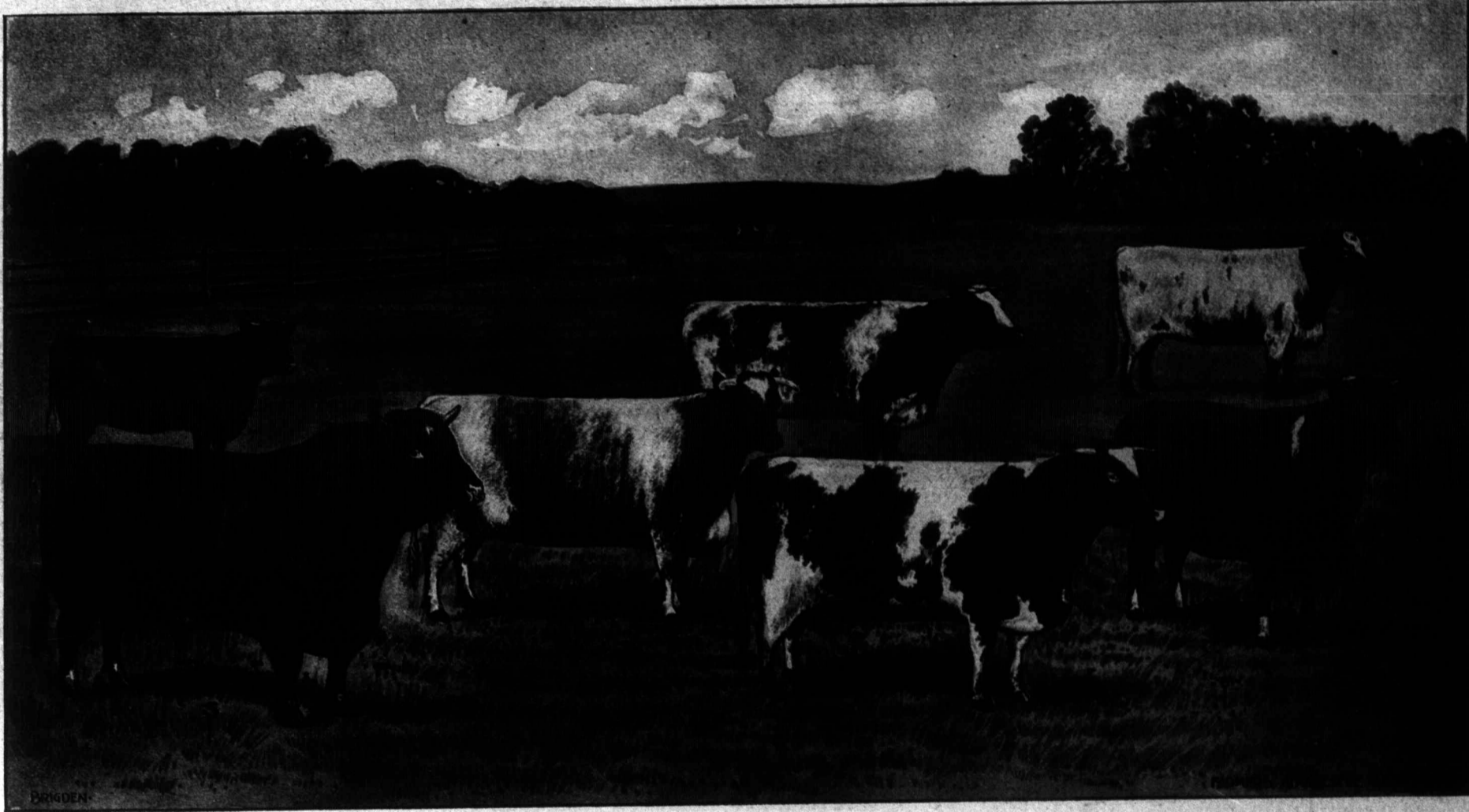
the treasury of the Dominion Shorthorn Breeders' Association enabled them to supplement the prizes at the Toronto Exhibition to such an extent that the offerings were far in excess of any heretofore hung up in any class in a Canadian showyard, and the competition was in consequence keener than for many years previously. Yet the Ilderton herd won eight of the first prizes, including the senior and junior herd premiums for one bull and four females in each, the sweepstakes for the best bull any age, three first prizes in the female sections, and two in those for bulls. This record was practically repeated at the other two principal Ontario exhibitions at London and Ottawa in the same year, and the success of the herd was nearly, if not quite, as marked all around the same circuit of shows in the two previous years.

The herd now numbers about sixty head, of uniform type, and few herds in the Dominion embrace representatives of so many of the most popular Scotch-bred families, having the benefit of the blood of so many noted prizewinning sires, as a study of these notes will abundantly show.

Among the principal stock bulls used in the herd in recent years may be mentioned *Golden Robe*, a son of imported Knight of St. John, who was bred by Mr. Duthie, of Collynie, and a first-prize winner at Toronto, Montreal, and Ottawa. The dam of *Golden Robe* was imported *Golden Bud* = 23105 =. He was succeeded by *Nominee*, winner of the championship at Toronto in 1897, at the Minnesota State Fair in 1898, and at the Trans-Mississippi Exposition at Omaha. The imported

ner of the junior championship over all beef breeds at the World's Fair at Chicago, being by the same sire.

A large number of the best known and most popular families of Shorthorns are represented in the breeding of the female members of the herd, and by animals of superior individual merit, which has come to them by inheritance through a galaxy of prizewinners rarely equalled in the ancestry of any herd. Prominent among the cows is the low-set, thick-fleshed, smoothly-turned, rich roan 4-year-old cow, *Freida* = 27621 =, winner of second prize at Toronto as a 2-year-old, and first at London the same year, defeating Mysie's Rose, the champion female at Toronto in that year, bred and shown by Capt. Robson; also first as a 3-year-old at the Winnipeg Industrial in 1898. *Freida's* sire, *Abbotsford* = 19446 =, a first-prize winner at Toronto, was by the Kinellar Mina bull, Blake, by imported and exported Hospodar, whose dam, *Golden Lady*, was by Champion of England, the best of Sittyton sires, and the dam of *Abbotsford* was imported *Village Blossom* (bred by Amos Cruickshank), who was also the dam of the great *Young Abbotsburn* = 6326 =, winner of the grand sweepstakes as best bull of any beef breed at the World's Columbian Exposition in 1893. The dam of *Freida* was by *Prince Albert* = 3669 =, winner of the sweepstake silver medal at the Provincial Fair, 1885, and sired by *Barrington Hero*. The handsome and comely red three-year-old, *Gem of Athelstane* = 28324 =, one of the most perfect of her day, was an outstanding first in a great collection of 23 heifer calves at Toronto in 1896, first



GROUP OF TYPICAL SHORTHORNS, AT CAPT. THOS. E. ROBSON'S FARM, ILDETON, ONT., CANADA.

sure follow him and covet for him a large measure of health and happiness in the Indian summer of his useful life.

#### Capt. T. E. Robson's Champion Herd of Shorthorns.

The record made by the Shorthorn herd of Capt. T. E. Robson, of Ilderton, Ontario, in prizewinning at the principal shows in Canada in the last three years, is unique in the history of the breed in this country, and speaks volumes for the judgment, taste and skill of the owner in breeding, selecting and fitting the sort of cattle that win. To succeed in capturing the principal prizes for Shorthorns at the leading shows in Canada is practically to stand at the head of the class on this continent, and the fact that for the last three years in straight succession the Ilderton herd has carried off the first herd prize at Canada's greatest fair, and supplied the male champion of the breed in each of these years, and the female champion twice in the same three years, pronounces it up-to-date and places its owner on a pinnacle of fame where a less modest man might be made vain, but the Captain wears his honors so meekly, and takes his reverses so philosophically when they come, that no apprehensions are felt on that score, and no one envies him his success. The brief statement of his winnings above outlined does not by any means adequately express the measure of his success in the showing in this year of grace, which was in some sense a jubilee year in Shorthorn history here, since the plethora condition of

Kinellar-bred bull, *Blue Ribbon*, followed in service, and was succeeded by *Moneyfuffel Lad*, three times a champion at Toronto, and as often at other leading shows in Canada.

The stock bull now at the head of the herd is *Topsman* = 17347 =, winner in 1897 and 1899 of 1st prize in his class and the championship as the best bull of the breed at the Winnipeg Industrial Exhibition, and in 1899 of 1st prize in his class and sweepstakes as best bull any age in the great competition at Canada's greatest show at Toronto, as also at London and Ottawa. He is a bull of grand constitution and quality, straight in all his lines, evenly covered with high-class flesh all along his level back and quarters, with wide, full crops, deep foreribs and flanks, and the best of buttocks. He stands well on short, straight legs, well set under him, and walks like a winner, and why should he not, since he is all that, and coming from such a list of champion sires as are named in his pedigree, being got by *Stanley* = 7949 =, by *Challenge*, by *Barrington Hero*, who was by *Royal Barrington*, out of *Mimulus* by *Champion of England*. The dam of *Topsman* was *Nonpareil Victoria*, herself a first-prize winner at Toronto, sired by the imported *Cruickshank Victoria* bull, *Vice Consul* = 4132 =, a championship winner at Toronto. And *Topsman* is not only a champion and the son of a champion, but is also the sire of a champion, having begotten the great *Moneyfuffel Lad* = 20521 =, winner of the championship at Toronto three times, and as often at other leading shows in Canada. *Topsman* is also half-brother to *Lord Stanley*, win-

ner of the junior championship over all beef breeds at the World's Fair at Chicago, being by the same sire. A large number of the best known and most popular families of Shorthorns are represented in the breeding of the female members of the herd, and by animals of superior individual merit, which has come to them by inheritance through a galaxy of prizewinners rarely equalled in the ancestry of any herd. Prominent among the cows is the low-set, thick-fleshed, smoothly-turned, rich roan 4-year-old cow, *Freida* = 27621 =, winner of second prize at Toronto as a 2-year-old, and first at London the same year, defeating Mysie's Rose, the champion female at Toronto in that year, bred and shown by Capt. Robson; also first as a 3-year-old at the Winnipeg Industrial in 1898. *Freida's* sire, *Abbotsford* = 19446 =, a first-prize winner at Toronto, was by the Kinellar Mina bull, Blake, by imported and exported Hospodar, whose dam, *Golden Lady*, was by Champion of England, the best of Sittyton sires, and the dam of *Abbotsford* was imported *Village Blossom* (bred by Amos Cruickshank), who was also the dam of the great *Young Abbotsburn* = 6326 =, winner of the grand sweepstakes as best bull of any beef breed at the World's Columbian Exposition in 1893. The dam of *Freida* was by *Prince Albert* = 3669 =, winner of the sweepstake silver medal at the Provincial Fair, 1885, and sired by *Barrington Hero*. The handsome and comely red three-year-old, *Gem of Athelstane* = 28324 =, one of the most perfect of her day, was an outstanding first in a great collection of 23 heifer calves at Toronto in 1896, first

dustrial. She is a young cow of much merit, combining substance and quality with sweetness of expression and approved type. *Lovely Lorne 2nd* is a ladylike roan yearling of good size, fine form and superb quality. She was awarded first money without protest in a strong competition of heifer calves at Toronto, London and Ottawa in 1893, and as a yearling in 1899, and would rank with the best in any company in any country. She is a daughter of Golden Robe =20396=, by the Collynie-bred bull, imported Knight of St. John, first-prize winner and head of first-prize herd at Toronto, Montreal and Ottawa in 1895. The dam of Golden Robe was imported Golden Bud =23105=, by Moonstone, and the dam of *Lovely Lorne 2nd* by British Chief, by imported Indian Chief, grandam by Sir Arthur Ingram 2nd =5060=.

A prominent matron in the herd is the massive red cow, *Louan of Brownvale 2nd*, twice a first-prize winner at Minnesota State Fair, and being barred from further competition in that State, she came to Canada and won first around the circuit of shows at Toronto, London and Ottawa in 1893. Her latest daughter, the queenly *Queen of the Louans*, born in January, 1899, bids fair to walk in the ways of her mother, having started her show career by winning first prize as a heifer calf this year at Toronto, London, and Ottawa. She certainly comes as near filling the bill for a perfect model of bovine beauty as one can well conceive, being level, straight, smooth and full in all points, with a sweet head and face, well-covered shoulder points, full crops, a strong, well-covered loin, level quarters, and standing squarely on short, fine limbs. She was sired by Golden Victor 121164, A. H. B., a son of Golden Rule, a pure Cruickshank bull, by imported Goldstick, out of imported Golden Feather, by Cumberland. The dam of Golden Victor, a Cruickshank Victoria, was Victoria of Glenwood 8th, by the Duthie-bred Earl Marshall, and his grandam was by Roan Gauntlet, the sire of William of Orange and Field Marshal. The Marr Missie family, made famous by producing Marengo, the Royal champion of 1893, and many other noted prizewinners, is represented by the excellent red six-year-old cow, *Missie of Neipath 16th*, by Indian Prince, a son of imported Indian Chief and of a Nonpareil cow. The large and heavy-fleshed red 7-year-old cow, *Caprice*, is one of Mr. Cruickshank's good old Buckingham family, tracing to imported Airy Buckingham, bred at Sittyton, being sired by Earl of Moray =16183=, who was also the sire of Nominee, the championship winner, while in Capt. Robson's hands, at Toronto in 1897. Another good Scotch family, the Lady Fannies, bred by Mr. Bruce, of Fochabers, has a capital representative in the herd in *Lady Fanny 3th*, a red yearling heifer by Lord Lovell's Heir, her grandam being imported Lady Fanny, by Earl of Moray (43171). The red-roan 3-year-old, *Diamond 19th*, is one of a good Aberdeenshire family, out of imported Diamond 18th, bred by Mr. Crombie, Woodend, and sired by the superior breeding bull, imported Rantin Robin =18958=, bred by Mr. Duthie, got by Roan Robin, and out of Lady Lancaster, by Field Marshal. She is a very useful sort, and is breeding well. The Kinellar Claret tribe is represented by the straight, smooth and wealthy-fleshed roan 7-year-old cow, *Clavias Eclipse =225092=*, out of imported Claret 7th, by Minister Eclipse =5501=, by imported Eclipse, bred at Collynie, a Highland Society winner, and out of imported Minerva by Luminary.

The Kinellar Rosebuds are represented by the substantial, sappy and thick-fleshed red cow, *Rose Hill*, by imported Goldfinder's Heir 2nd =6908=, bred by Mr. Bruce, Fochabers. She has size and quality combined, and is a good breeder and a large milker. The Sheriff Hutton herd of Mr. Linton has a useful representative in *Soverby's Bride Elect 2nd*, by Lord Stanley, the winner of the junior championship at the World's Fair as best bull, any beef breed, under 2 years. The favorite Cruickshank Duchess of Gloster tribe has a good representative in the nice red 2-year-old heifer, *Gem of Gloster*, by the first prize Toronto winner, Abbotsford, dam by Blake, by Hospodar, grandam by Prince Albert, by Barmpton Hero. *Verbena's Dandy* is a very handsome roan heifer calf, promising to make a first-class show animal. She is of the same family as the great show bull, St. Valentine, and her dam was one of the four females in the herd which won the \$1,000 grand sweepstakes prize as the best herd of any beef breed at the World's Fair, Chicago, the highest cash prize ever awarded at any cattle show in America, or perhaps in the world. Her sire is the imported Duthie-bred bull, Prime Minister =15230=, a Toronto winner, by Chesterfield, and out of Princess Lovely by Field Marshal, grandam by Heir of Englishman. *Village Flirt* is a handsome roan 2-year-old heifer of the Cruickshank Village Blossom family, from which came Abbotsford and Young Abbotsford, the World's Fair champion. She is by Merlin =23379=, by Abbotsford, dam by Prince Albert, and tracing to imported Matilda, bred at Kinellar. Space forbids mention of a number of other useful young cows, and of the interesting lot of yearling heifers, heifer calves and young bulls which make up this first-class herd, which has held so prominent a place in the competition of Shorthorns at leading Canadian shows in recent years. The cattle must be seen to be fully appreciated, for good as is their breeding, the individual animals are correspondingly meritorious and rank high among the best of the breed. A capital flock of registered Lincoln sheep is also maintained on the farm.

### The Best is None Too Good.

Long ago the FARMER'S ADVOCATE nailed the above motto to the mast, and the old flag still floats. The farmer—and, above all, the Canadian farmer—is entitled to the best in an agricultural paper, and that service we have faithfully aimed to give. A trifle over a year ago we made large promises for the Christmas number of 1898 and our regular issues during 1899, the year now closing. The frank testimony of our readers is that those promises were more than fulfilled. What they say is that the paper returns them in actual value many times the small amount of the subscription price, some of them saving hundreds of dollars through advice given on various subjects. As an earnest of our intentions for the future, this issue tells its own story. An old subscriber, calling the other day to renew, said the last Christmas number itself was worth more than the dollar paid for the whole year; indeed, he felt "almost ashamed" to get so much for so little. Now, it is worth remembering that we have not thus far made any extra charge to our regular subscribers for the Christmas number, which goes to them as a regular issue with its greeting of goodwill, though its preparation involves an immense amount of extra outlay and labor on our part. The leading newspapers of the country issue Christmas numbers, many of them less costly and of less practical value than this one, but their readers do not receive them gratis—they pay cash extra for them, 50 cents, or whatever the price may be.

We trust that this number of the FARMER'S ADVOCATE merits the appreciation of our readers, and at this busy season we would, therefore, confidently request the remittance of their renewal subscriptions for 1900. To non-subscribers the price of a copy of this issue is 50 cents, not an unreasonable figure; but knowing that many of our regular readers will desire extra copies, we propose to give one gratis as a premium for the name of each new subscriber, accompanied by the subscription price (\$1), sent in. Any subscriber whose subscription is paid up for 1900, and who is unable to obtain a new subscriber, may secure copies at 25 cents each; but as the number of copies available over and above our regular list is limited, we would caution our friends to attend to these matters promptly, viz., the securing of new subscribers or remitting cash for extra copies. Our old offer of extending the readers' subscription for one year by sending us the names of two new subscribers and \$2 still holds good.

To the farmers of Canada, our friends, one and all, we extend our best wishes for 1900, and bespeak a continuance of their generous support.

### Woman's Influence on the Farm.

BY AGNES BURNS SPENCER. "DORSET FARM."

All are familiar with the adage that "The hand that rocks the cradle rules the world." If this be true, how she rocks must be a matter of infinite importance. If she galls under her destiny and rocks with a careless hand, disastrous will be the consequences. If, on the other hand, she accepts her mission with true womanly dignity, determined with God's help to make her life's work a success, then wide and far-reaching will be the result for good. To what extent will never be known till the great day of the final audit.

Since her influence on the world is acknowledged to be so powerful for good, has she not a specific influence on farm life? Of all places that give promise of happy homes, none stand out more prominently than the farm. Surrounded by pure air and healthful influences, no factory smoke to obscure the ever-shifting panorama above, nor distracting sounds to mar the sweet melody of the birds and breezes, there is as well the promise of the wherewithal to supply every temporary need. That the highest results be obtained, it is desirable that the wife and mother look at her duty from a high standpoint, cultivate in her home true principles, sweet sympathy and hearty co-operation. To promote harmony and love of home, the mother will find a helpful factor in keeping herself in touch with the operations on the farm, interested in the growth and prospects of the crops, increase in the flocks and herds, rejoicing in the successes and sharing gracefully and uncomplainingly inevitable losses without casting reflection on the management or lack of judgement in any one. At all times upholding the dignity of the calling as one of the most honorable of all time-honored occupations; be it never forgotten that the great majority of the world's best benefactors have been men and women who received their early training on the farm. This, coupled with training her children in habits of industry, self-reliance and the fear of God, will scarcely fail to be attended with good results. From these homes will go forth strong-minded, self-reliant men and women. Such the world has always called loudly for, and never needed more than to-day.

On the other hand, let any mother make for her keynote the drudgery, hard-work and small compensation of farm life, holding up the city as the Mecca

of everything desirable, introducing into her home city customs to make her home more "attractive," and the results will be disappointment and discontent, as infectious as the plague. Farewell, then, all peace or happiness. Her children will look through their mother's eyes, and see in the city delusive "Sweet fields of Elysian bliss." Soon for them their country home will lose its charm, which may induce them to seek employment in the city at low wages, their nearest approach to a home—a boarding-house. Mothers, be careful not to disparage your country homes, lest your children be led to leave pure and wholesome influences, and be brought in contact with surroundings, the result of which may steal away your nights of rest. I venture to say that the names of few of those who leave home in that way will ever rank among the world's benefactors.

Unfortunately, too many farmers' wives work too hard through the scarcity of proper help. But for this there is an alternative, — simplify the machinery of the home. In the great majority of homes the seeming necessities are simply the result of slavery to custom. Under other circumstances this conformity might be all very well. But we must deal with facts and existing conditions, and as the proper help is hard to obtain, the majority of farmers' wives are fighting this battle single-handed.

The tendency is, and has been, to drift away from "sweet rural simplicity," but the nearer farm life conforms to that desirable standard, the more satisfactory will be the results. What matter if the home is "Puritanic" in plainness, if that will preserve the bloom on the mother's cheek, keep her steps elastic, and her spirits buoyant, an over-worked woman can never rise to her possibilities, either as a mother or a useful member of society. House-cleaning in many homes has become simply a calamity. It is no doubt satisfactory to know that the house is "O, so clean," but will that compensate for weeks of being "too tired," or an attack of "neuralgia," that perhaps may never be forgotten? If not, the clean house has been bought at too high a price.

If every farmer's wife and daughter made it a rule to work a portion of each day in the open air, caring for poultry, gardening, or any light occupation suited to her strength, the result would be healthier, better, and stronger women, and infinitely better able to fulfill their highly-important mission. The influence upon their offspring would be highly beneficial, and attended with good results for future generations. I venture to say that among the Jewish maidens who helped to care for their father's flocks and herds, neuralgia and nervous prostration were unknown; and witness the permanence and virility of that scattered, persecuted race.

The cultivation of flowers in and around the home furnishes a healthful recreation, as well as a desirable decoration. Unfortunately through the busy life on the farm it is too often neglected. Horace Greeley says: "The best investment a farmer can make for his children is that which surrounds their youth with the rational delights of a beautiful and attractive home. The dwelling may be small and rude, yet a few flowers will embellish it. Hardly any labor done on the farm is so profitable as that which makes the wife and children fond and proud of their home. The cultivation of flowers is a fitting employment for a patriotic and home-loving people to beautify the land of their affection and adorn their homes."

We do not claim for music what the ancients did,—the power to cure diseases; still there are few who are not influenced by it, and it should find a place in every home. When could its sweet and soothing strains, and joyful songs be more welcome than in the farm-house, on the evenings of the days which have been filled in with hard work and perhaps a little discouragement. Cultivate also in your children and friends a love for good literature, with its pure and elevating influence upon thought and conversation.

Sisters, you too have an important mission. If duty tells you your place is in your country home, there stay. Run not away with the idea that the future of India depends on you as long as your sweet helpful influence is called for in the home. Your remuneration may not seem a fabulous one, but duty faithfully performed never yet was un-rewarded. Happiness—contentment—comes only through the channel of duty which gives a peace of conscience that nothing can take away. As William Henry Channing says: Let us "live content with small means, seek refinement rather than fashion; to be worthy, not respectable; and wealthy, not rich; to listen to stars and birds and babes and sages with open heart; to study hard; to think quietly; act frankly; talk gently; await occasions; hurry never; in a word, to let the spiritual unbidden and unconscious grow up through the common."

Farmer's wives, mothers and daughters wake up to your possibilities! In your hands lies the destiny of our beloved country. Emphasize in your homes the nice distinction between right and wrong, inculcate reverence and the fear of God. This coupled with woman's gentleness will prove important factors in the fulfilment of your lofty mission. As one after another drops through the bridge, let the ranks be filled with better men and women than even in the past. Then will the growth of this infant nation be on so substantial a basis that beloved Canada will tower proudly above all others. The eyes of the world will recognize that within her borders reigns that "righteousness that exalteth a nation." Then, and not till then, shall we have pure politics and righteous Government.

**Balgreggan Ranch, Millarville, Alberta.**

Among the foothills of the Rockies, in Southern Alberta, where streams of cold, sparkling water come rushing down from the regions of perpetual snow, where the most nutritious grasses abound, and where the "chinook" winds counteract the northern latitude, there are many ideal locations for the raising of stock with a minimum of profit. Such an ideal spot is that selected by Mr. John A. Turner for his Balgreggan Ranch at Millarville. Some 30 miles to the south-west of Calgary, in the valley of the Sheep Creek, with a warm southern exposure, and surrounded on north and west with sheltering hills, nestle the little clump of unpretentious buildings and corrals. Our visit to Balgreggan Ranch fell on one of those lovely autumn days when all nature seemed at rest under the influence of the soft, warm sun and the deep blue of the sky. The grasses on hillside and in valley had "cured" to a dull, brownish tinge, brightened here and there with the scarlet and yellow of some shrub in the glory of its autumn dress. On the creek bottoms, and here and there on the north and east slopes of the hills, clumps of poplar and spruce add to the beauty of the scene, while away to the west, piled

Mr. Turner in his stock-breeding operations, in which he has been engaged since 1886, confines his attention to quality rather than quantity, his specialties being Clydesdale horses, Shorthorn cattle, and Shropshire sheep, and a right good combination of breeds it is. About 100 horses in all are kept; a few of these are light horses, which are crossed with Thoroughbred and Hackney blood, but the Clydesdale is the main issue. Among the mares upon which this stud is founded might be named such as: Era (2277), bred by D. & O. Sorby, Guelph, Ont., sired by Grandeur (6814), out of Lady St. Clair, by St. Clair Erskine, that as a filly won many prizes at Toronto, London, and Montreal; Sundown (2370), another Grandeur filly, out of the celebrated mare Sunbeam of Cults (1925), by Henry Irving of Drumflower (4440); Rosy Blyth (1130), by imported Perfection (3055), and her daughter, Balgreggan Princess, by Balgreggan Hero; Black Bess, by imported Fitzmaurice; Lady Seymour, by imported Lord Primrose out of Lady Cecil, imported; Victoria, by imported Scotchman, out of a mare by imported Samson; and such mares by Balgreggan Hero as Jennie's Heroine, out of a mare by imported Tam o'Shanter; Hero's Jennie, out of a Fitzmaurice mare, and May Blossom, out of Black Bess, by Fitzmaurice.

Balgreggan Hero, imported [1591] (8446), by Darnley's Hero, by Darnley (222), three times winner of the sweepstakes at the Winnipeg Industrial, and a prizewinner at the World's Fair, Chicago, in 1895, was retained in this stud for a number of years, and did excellent work. A horse full of quality and action, and of rich breed-

has been doing duty in the stud this past season. He has numerous first prizes to his credit, won as a colt at Ontario shows.

The small Shorthorn herd is headed by Barmpton =26569=, bred by John Davidson, Ashburn, Ont.; sired by Village Boy 9th, out of Snowflake 3rd, by Field Marshal. The cows are a very well-bred lot, several of them being sired by the imported Duke of Lavender.

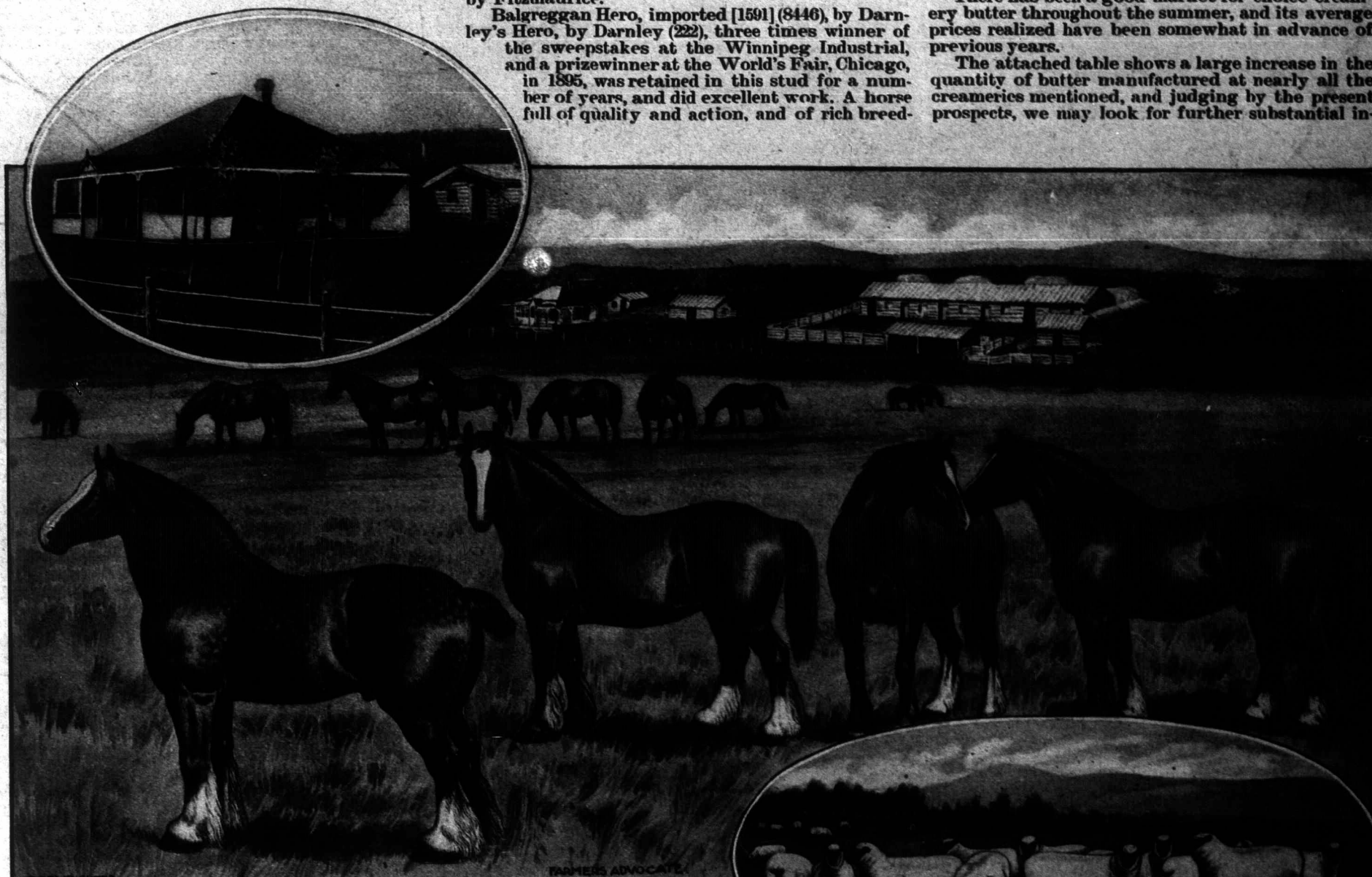
A very choice, though small, flock of Shropshires are also kept. They are large, well bred, and with lots of character. Quality, quality, quality, seems to be Mr. Turner's motto all through, even to the poultry yard, where an excellent flock of Brown Leghorns is maintained to furnish the fresh egg for breakfast.

**Output for 1899 of the Government Creameries in the Northwest Territories.**

With regard to dairying, the season just passed has in many respects been an improvement on its predecessors, as shown by the following statement furnished us by C. Marker, Superintendent of Dairying in Alberta.

There has been a good market for choice creamery butter throughout the summer, and its average prices realized have been somewhat in advance of previous years.

The attached table shows a large increase in the quantity of butter manufactured at nearly all the creameries mentioned, and judging by the present prospects, we may look for further substantial in-



REPRESENTATIVE VIEWS OF BALGREGGAN RANCH AND ITS STOCK. PROPERTY OF MR. JOHN A. TURNER, MILLARVILLE, ALBERTA, N.-W. T., CAN.

range upon range, are the everlasting hills, backed by the mighty giants of the Selkirks with their snow-capped peaks. Along the Sheep Creek valley there is a continuous settlement of "small ranchers," as they call themselves, who give attention to producing good stock rather than much stock, and who provide a supply of fodder to carry the stock through any emergency. The settlement has its church, school, etc.

Balgreggan Ranch consists of 640 acres of fenced land, divided into two pastures, and a field, part of which is irrigated, for the growing of oats and green feed. Sheep Creek forms the southern boundary of the ranch, and across the creek, extending away to the southward, is open range country, affording almost unlimited pasturage of the richest quality. During a day's ride through these valleys many hundreds of cattle and horses belonging to the Sheep Creek ranchers were seen, and the superb condition of both horses and cattle, old and young, was ample evidence of the richness of the grass and the suitability of the district for ranching, if such proof were needed.

The buildings on Balgreggan Ranch may be said in truth to be "homemade," the proprietor having built them himself, the stable and corrals out of spruce logs cut in the neighborhood. The box stalls are lined throughout with shiplap, and filled in with sawdust, which makes them very warm and comfortable. The residence is a neat and comfortable frame cottage, nestling right under the brow of a hill.

ing, he has imparted in a remarkable degree to his offspring his best qualities, so that whether they be pure-breds or grades, the get of Hero are characterized by *quality*—clean, hard bone, the best of feet, and prompt, clever action—horses for which, in fact, there is always a ready demand.

Unable to supply the ever-growing demand for Clydesdale stallions, Mr. Turner made a careful selection from the stud of D. & O. Sorby, Guelph, Ont., about a year ago, taking mostly yearlings, among these being Guelph Grandeur, by Grandeur, out of imported Lady Fleming; Prince Stanley, by Grandeur, out of Miss Stanley, a daughter of the famous \$2,000 mare, Lillie Macgreggor, the sweepstakes mare at the World's Fair; Sonsie Lad, also by Grandeur, out of Sonsie Lass, by Second Choice; Enterprise, another Grandeur colt, out of imported Venus, by Queen's Own; and Grand Prize, full brother to Guelph Grandeur, mentioned above. These youngsters, several of which have lately been sold, have made remarkable development. With the range run for exercise and a light ration of oats to supplement the nutritious grasses, they have made growth of bone and muscle, and cannot help but give a good account of themselves in the stud later on. The stallion in the illustration is Tofty 2nd [2457], dark chestnut, a thick, clean, tidy horse, but a trifle undersized. He is by Tofty (imported) (9452), out of Nell [2529], by Sir Walter (imported) (8272), grandam by Tannahill [1205], and

crease in the future. The season's butter was all sold and shipped to the west; to points in British Columbia, China, Japan, and the Yukon Territory. The butter shipped to the three last named places was packed into sealed tins, holding 10, 5, 2, and 1 pound each.

While the above result is a gratifying one, it must be admitted, at the same time, that there is yet a great deal of room for improvement. Considering the number of people who are engaged in dairy farming in Alberta, and the number of milch cows kept, the average production is yet very small.

The output of butter for the eastern division of the Northwest Territories, under the superintendence of Mr. J. W. Mitchell, amounted to 252,500 lbs. for the past season, making a total output of creamery butter from the Territories of 480,463 lbs.

The following is a comparative statement of the output of butter at the several Government creameries in Alberta (western division) during the summer seasons (May-Nov.) of 1899, 1898, and 1897:

Creameries.	1899.	1898.	1897.
Calgary.....	24,742	19,389	14,071
Innisfail.....	85,958	57,717	38,621
Red Deer.....	62,142	42,878	36,148
Tindastoll.....	14,655	.....	.....
Wetaskiwin.....	52,144	27,136	17,691
Edmonton.....	17,322	17,068	27,364
Totals of season.....	236,963	164,188	127,895

### A Southern Manitoba Nursery.

PINE GROVE NURSERY, NELSON, MANITOBA: A. P. STEVENSON, PROPRIETOR.

As year by year Manitoba's agricultural future becomes more permanently established, as land values increase, and as *home-making* on our prairies progresses—home-making in the real sense of the word—horticulture received more and more attention. Here and there over this wide domain, with its varied conditions of situation and soil, men have been carrying on more or less extensive experiments in the growing of fruits, shrubs, and flowers. To these men, and to the valuable work of our experimental farms, must we look for knowledge and guidance as to the most suitable varieties and the methods most likely to bring success. It is no disparagement to the noble work of those who have devoted years of patient toil along these lines, to say that Mr. A. P. Stevenson has achieved greater success along practical lines than any other man in the Northwest.

A pioneer of the pioneers, homesteading on his farm on Nelson Creek in the spring of 1874, he two years later, in a very humble way, began his

specimens recommended as "hardy" have been carefully planted, nurtured, and watched over like a beloved child, only perhaps after years of nursing to be condemned as worthless and grubbed out root and branch and cast onto the brush-heap. But, in spite of all the disappointments and failures, success in a wonderful degree has crowned Mr. Stevenson's efforts.

The comfortable home is surrounded with garden and lawn, sheltered and beautified with hedges of lilac, honeysuckle, Scotch pine, and native spruces. Specimens of these and many beautiful and rare (in Manitoba) trees and shrubs and flower-beds provide a mass of bloom of ever-changing color throughout the flowering season.

In the nursery only such stock is propagated as has proved hardy and suitable for general planting. In small fruits, the result of Mr. Stevenson's experience of nearly a quarter of a century places the following above all others of the respective varieties:—In red currants, Raby Castle, North Star, and Stewart's seedling; in white, nothing has

as the canes do not grow so high and are of a more sprawling habit than the Hillburn.

In strawberries, the Crescent and Wilson are of course the main stand-bys, with several other sorts for home use.

Out of the many hundred varieties of plums, Mr. Stevenson has got the list boiled down to the Cheney, one of the very earliest in ripening, of good size and quality, and a large yielder; with the New Ulm in second place, the latter being one of the largest plums, and very early. Not one native seedling has yet been grown that is considered equal to what grows in the neighboring woods and along the banks of creeks.

In crab apples, the Transcendent is pre-eminently the best variety, being hardy, and a good bearer of excellent fruit; the Hislop and Virginia coming next, but a long way behind.

In standards, only a few of the hardiest apples of Russian origin can be considered perfectly hardy, even in this favored location. In 1898, about a barrel of apples in all was grown, and nearly as many this year. The hardiest and most promising varieties grown, such as the Ostrekoff and Hybernal, while not possessing the flavor and qualities



PHOTOGRAPHIC VIEWS OF PINE GROVE NURSERY, PROPERTY OF MR. A. P. STEVENSON, NELSON, MANITOBA, CANADA.

experiments in small-fruit growing. Of course, wheat-growing and mixed farming have always been the mainstay of support, and success has been achieved along these lines too, some of the best wheat this year going into Morden coming off this and adjoining farms, with, in Mr. Stevenson's case, a yield in some fields of close upon 30 bushels per acre. Pine Grove Nursery is most favorably situated, some eight miles to the north-west of Morden, under the sheltering brow of the Pembina Mountains, from which stretches a fertile plain running north to Carman and south-east to Emerson, which is unsurpassed for fertility and productiveness by anything on the continent. Mr. Stevenson's farm comprises three quarter-sections; the home, some glimpses of which are given in the pretty photo-engraving in this Christmas issue, is located on the creek banks, sheltered on the north and west by heavy growth of oak, elm, maple, ash, and other native trees. The eight acres now occupied by garden and nursery is a rich deep black loam, at one time covered with timber and scrub.

With an ardent love for horticulture, and a dogged Scotch perseverance and determination to succeed, hundreds, yes thousands, of varieties and

yet been introduced that surpasses the White Grape; the Black Naples and Lee's Prolific are by all odds the best black; while in gooseberries, nothing surpasses the Houghton and Smith's Improved. In red raspberries, the Turner has been regarded as the standard of hardiness, and in flavor of berry and as a yielder it is difficult to improve upon; however, the experimental farms are now strongly recommending the Dr. Reider, and this variety is now receiving Mr. Stevenson's attention; as a shipper, the Sarah, originated by Dr. Saunders, of the Central Experimental Farm, is one of the best, a fine, large, firm berry, and, so far, perfectly hardy; while for size and firmness of fruit, nothing perhaps surpasses the Kenyon, and this too has been hardy. In the yellow raspberries, the Caroline is the only variety now considered worthy of attention, it having displaced the Golden Queen, which have all been added to the brush heap. Shaffer's Colossal, a purple raspberry of large size and delicious flavor, but not a good shipper, is also worthy of special attention. In blackcaps, the Hillburn is perhaps the best medium berry, and the best shipper; while for large, juicy berries, suitable for home use, the Older is unsurpassed, it being more easily managed,

of a dessert apple, are of good size, and are fine cooking apples. All apple trees now propagated at Pine Grove are grafted on roots grown from the seed of fruit grown at home, thus ensuring hardy, vigorous root stock, and as very few have as yet succeeded in growing even crabs, Mr. Stevenson has as yet a practical monopoly of this most commendable system.

In trees and shrubs, the native spruce is much in favor, they being of much better color than the Norway, which grows light and rusty-looking, especially toward spring. The balsam and Scotch pine are also favorites, as is also the tamarac. In shrubs, the most popular are the lilac, honeysuckle, spiraea, mock orange (*Philadelphus coronarius*), caraganas, etc. A rose which has proved perfectly hardy, and is a profuse and long-continued bloomer, and being without a known name, has been christened by Mr. Stevenson the "Banshee" rose.

One thing that Mr. Stevenson is very emphatic about is the positive necessity of providing adequate shelter before any success can possibly be achieved in the growing of small fruits or ornamentals.



**Alva Farm.**

Among the many notable farm homesteads illustrated in this issue will be found that of the Hon. Sydney Fisher, Minister of Agriculture for the Dominion, which is situated at Knowlton, a station on the Canadian Pacific Railway, in Brome County, in the Province of Quebec, and about seventy miles east of the City of Montreal. The farm buildings, which have undergone considerable improvement the present year, were erected a good many years ago, and are less pretentious in appearance than many of more modern design, but are well arranged for the comfort and healthfulness of the animals, and for convenience and economy of labor in feeding and watering them, ample room in the passages as well as abundant light and sufficient ventilation being provided in the basement stables where the cattle are kept. The stables are lighted by electricity at night, when required, from the village plant, and water is conveyed in pipes from springs in a hillside on the farm, into troughs before the

a short rotation of crops, oats and peas being sown on fall-plowed sod, followed by corn and roots and seeded to clover and timothy with the oat crop the following spring, hay being cut for two years, when the sod is again plowed for grain crops.

The leading feature of the farm operations is dairying, for which a choice herd of registered Guernsey cattle is kept, a cream separator being run by tread power, buttermaking being the specialty—the butter going to city patrons, and the skim milk used for rearing calves in so far as needed, the balance, with the buttermilk, being fed to pigs, of which Chester Whites are kept, and the pork sold at good prices to local butchers.

The Guernsey herd, of some 40 head all told, is headed by the excellent young bull, *Golden Lad*, portrayed in the picture, whose calves, now coming, are strong and healthy and give good promise for future usefulness in the dairy. The milking matrons in the herd are typical of the breed, showing all the indications of strong constitution and capacity for dairy work, while their richly-colored skins betoken

extravagant expenditure has been made, nor any fancy frills put on for display, nor fancy prices paid for stock, and there is nothing about the farm proper which the average farmer of moderate means could not profitably afford to have and keep, the object being to make the farm pay its own way, which we are assured it does.

Mr. Fisher is thoroughly practical in his views and methods of farming, giving personal attention, in so far as his public duties permit, to even the details of the management of the farm, and the breeding, feeding and care of the stock, for which he has a real liking, and of which he has, by careful study and close observation, become a very good judge. His extended experience as a practical farmer and stock-breeder, and his intimate association with leading farmers and stockmen at the agricultural exhibitions and farmers' and breeders' association meetings in all the Provinces, has given him a very thorough knowledge of their work, their needs, and their difficulties, and a real interest in seeking to provide for the removal of the latter, since he is one of themselves. He has had gratifying success as a result of his efforts to secure more favorable transportation rates and improved facilities for placing perishable farm products on the British market with despatch and in a condition to attract the attention of buyers and to secure the best prices, but he fully realizes the importance to the farmers of the Dominion of not only securing still further advantages in all these directions, and the opening of other foreign markets, but also the extension of our home markets, and the encouragement of interpro-



VIEWS OF THE HERD AND FLOCK AT "ALVA FARM," THE HOME OF HON. SYDNEY FISHER, DOMINION MINISTER OF AGRICULTURE, KNOWLTON, P. Q., CANADA.

animals, and is on tap in every department of the buildings.

The family dwelling, where Mr. Fisher's aged parents spend the summer months with him, is charmingly located on a point of the farm overlooking Brome Lake, a beautiful sheet of water, some three miles wide and five miles long, surrounded by well-wooded hills and presenting a very pleasing landscape view. The beautiful lawn and well-kept grounds, protected by shelter belts of evergreen and other trees, and bordered with neat hedges of spruce and hemlock, runs down to the shore of the lake, and the whole establishment has an air of comfort and retirement which can only be secured in a country home and is seldom found amid more pleasing and congenial surroundings.

The farm, the nucleus of which was purchased in 1873 and now comprises some 400 acres, about one-half of which is yet in woods of second growth and about 100 acres in rough permanent pasture, being stony and rough, leaving the arable portion at about 100 acres, which is systematically farmed on

the large production of butter for which the breed is noted. The handsome group of heifers now coming into use are principally the offspring of the bull *Nercus*, winner of first prize at Toronto and Ottawa in 1897, in Mr. Fisher's hands, and first prize at the New Brunswick and Nova Scotia Provincial Exhibitions in 1898 and 1899, and also sweepstakes at the former show this year.

A choice flock of pure-bred Shropshire sheep has been added to the farm stock in the present year, the ewes having been purchased from the well-known breeders, D. G. Hammer & Sons, Burford, Ont., and the ram from the equally widely-known importer, Mr. Robert Miller, of Brougham, Ont. Grade sheep have been kept for several years previously, for the double purpose of growing mutton and of clearing the rough pasture land of weeds and briars, and Mr. Fisher approves of keeping sheep for both purposes, and is of the opinion that more sheep could be profitably raised by the farmers in most if not all of the Provinces.

In the conduct and operations of this farm no

vincial trade in improved live stock and its products as well as of seeds, feeds, fruits, poultry and other products of the farm. With this end in view, he has surrounded himself with a staff of able, practical and experienced officers, fully conversant with the importance of the work, and trusts that much good will accrue to the country as a result of their labor.

**Worth Many Times Its Price.**

To the Editor FARMER'S ADVOCATE:

DEAR SIR,—I take this opportunity, though somewhat delayed, of thanking you for the kind advice which you gave me some time ago. I am more than pleased with your paper, and know that the advice received through it will repay me many times the price of the subscription.

Yours truly, ALPHEUS A. DEAMUDE,  
Haldimand Co., Ont., Dec. 10th, '99.

### The Greenwood Herd of Shorthorns.

It was back in the year 1867 that Mr. Arthur Johnston, of Greenwood, Ontario, bought his first Shorthorn cattle and laid the foundation of his herd, which has long since taken high rank among the very best in the Dominion, and gained a continental reputation. For one not to the manor born, nor trained in early youth in the care of fine stock, he has been eminently successful as a breeder of his favorite class of cattle, and has made an enviable record in the work of building up a high-class herd and producing prizewinning animals in the keen competition met in the showings at the principal exhibitions in Canada and the United States in the last twenty years.

By careful observation, and an intelligent study when a young man, of the science of stock breeding and feeding, and of the history of successful breeders, he became in a surprisingly short time one of the most accomplished and discriminating judges in the ranks of Canadian breeders. Few men in the business have as keen insight in gauging the probable outcome of an animal seen in thin condition, or have as true an eye for symmetry of proportions, as fine a sense of touch in judging of quality of flesh, or as correct taste in estimating what is known as character in a breeding animal, and few have been as successful in mating animals to repro-

duce better than themselves, the crucial test which reveals the skill and genius of a breeder; and, moreover, few have so well and judiciously directed the feeding, care, and development of young animals so as to bring out their best possibilities, yet leaving them in condition to go on well when sold and to give satisfaction to the buyer.

Mr. Johnston has steadily stuck to the Shorthorn ship through storms and sunny weather, and, acting on the assumption that the best are as a rule the cheapest, has constantly kept his herd up to a high standard of excellence, with the result that in the darkest days of business depression, when many were well-nigh begging for buyers, he could sell his stock readily at prices which were fairly profitable, and quite in advance of those obtained by most breeders.

Mr. Johnston has taken a prominent part and place in the work of the various organizations for the advancement of the pure-breed stock industry in Canada, has been from its inception a director of the Dominion Shorthorn Breeders' Association, and was for three terms honored with its presidency.

It was in 1874 that he made his first importation, selected in person from the leading herds in Scotland, when, amongst others, he brought out the fine cow, Priscilla 7th, dam of the well-known cow of that name which, sold to Mr. J. H. Potts, of Illinois, was the leading figure in the group of females in his great show herd which, together with the famous Duke of Richmond at its head, made a record as prizewinners in the United States probably unequalled by any other herd of any date. Continuing his importations from year to year from that date,

he brought out what were considered large importations in those days, including as many as twenty animals four years in succession, and in one year twenty-six. These were selected from leading families in the herds of the best Scotch breeders, such as those of Messrs. Cruickshank, of Sittyton; Campbell, of Kinellar; Duthie, of Collynie; Marr, of Upper Mill; Bruce, Shepherd, and many others with whom he has for many years enjoyed the most intimate and cordial acquaintance, and whose reputation he has largely extended by the introduction of a high class of cattle into this western world.

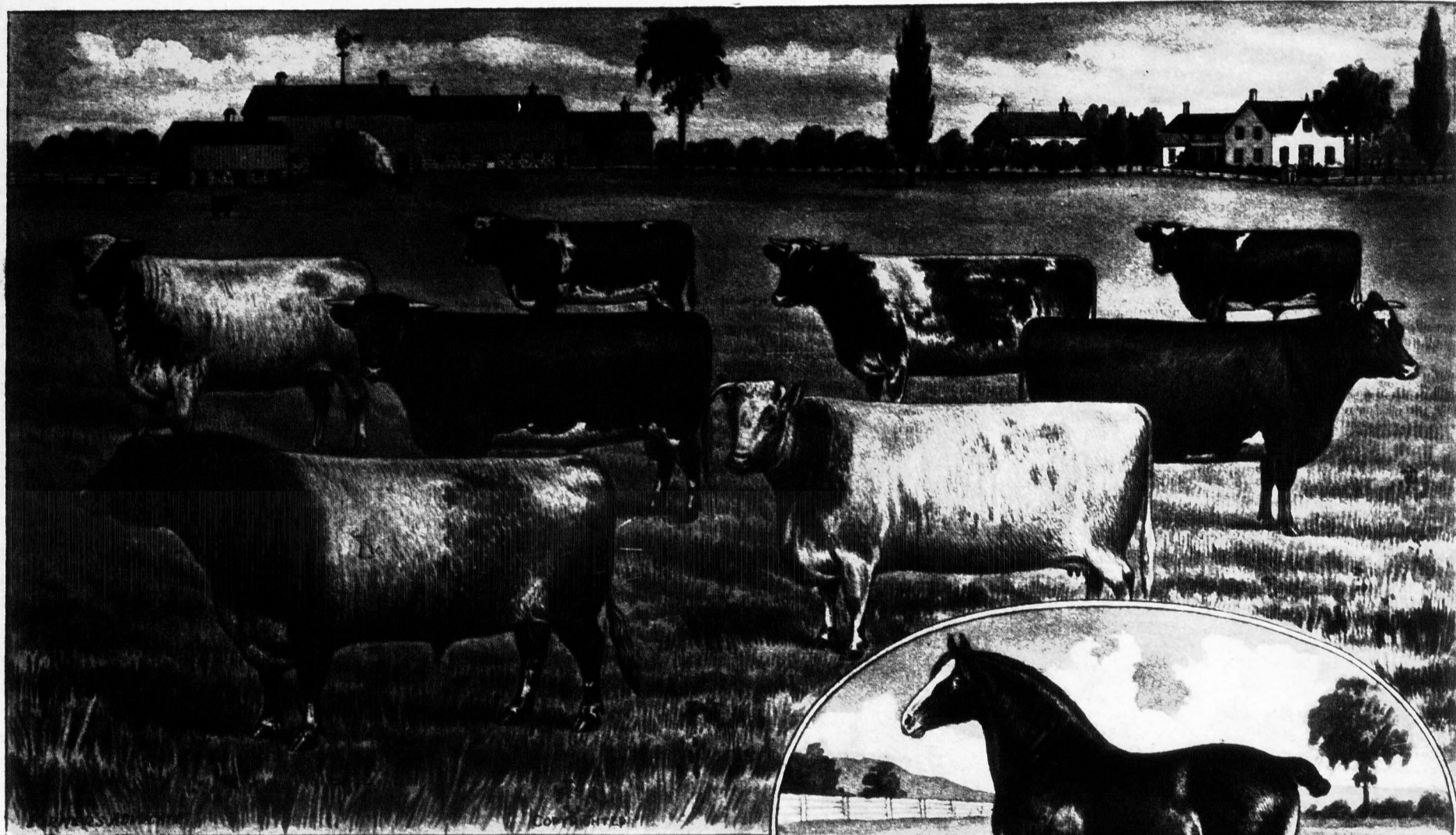
Among the many noted bulls which have been used in the building up of the Greenwood herd, brief reference may be made to a few, among which was imp. *Scotsman 2nd*, bred by the Duke of Buccleuch, a bull of magnificent presence, a prizewinner at Provincial Fairs, and a capital sire. Following him a few years later came imp. *Eclipse*, bred by Mr. Duthie, a winner at the Highland Society Show, where he stood next in the prize list to the Famous Field Marshal, in the best ring of two-year-old bulls ever seen in an Aberdeenshire show. The most outstanding sire employed, and the one which gave the herd its greatest reputation, was the grand Cruickshank Victoria bull, imported *Indian Chief*, by Cumberland, his dam by *Pride of the Isles*, and

with three different bulls, and the cow that won the female championship two years in succession was also sold from the Greenwood herd.

As additional evidence of the power inherited by Indian Chief through his illustrious ancestors to transmit his excellencies to his progeny, it may be noted that in 1885, at the Toronto Exhibition, one of his sons, *Mina Chief* =13670=, made a record never before or since equalled in his class in Canada, when his heifer calves won the first, second, third and fourth prizes, and a bull calf by the same sire won the first prize, and four of these at the same show won the first prize for the best four calves bred and owned by the exhibitor.

In 1891, at the Toronto Exhibition, the first and second prize aged cows, the second and third prize three-year-old cows, and the first prize two-year-old heifer, were all sold from the Greenwood herd to their exhibitors. These are but a few out of a long list of honors which might be cited, if necessary, to prove the prominence of the herd in this regard.

The principal sires used in the herd since the death of Indian Chief have been the imported Kinellar-bred bull, *King James*, by Royal James, and imported *Royal Sovereign*, by Emancipator, bred by Mr. Alex. Campbell, Deyston, Aberdeenshire. This bull, now in service in the herd, is a rich red, coming 2 years old in January, a big, mas-



MR. ARTHUR JOHNSTON'S SHORTHORNS AND CLYDESDALES, AT GREENWOOD, ONTARIO, CANADA.

duce better than themselves, the crucial test which reveals the skill and genius of a breeder; and, moreover, few have so well and judiciously directed the feeding, care, and development of young animals so as to bring out their best possibilities, yet leaving them in condition to go on well when sold and to give satisfaction to the buyer.

Mr. Johnston has steadily stuck to the Shorthorn ship through storms and sunny weather, and, acting on the assumption that the best are as a rule the cheapest, has constantly kept his herd up to a high standard of excellence, with the result that in the darkest days of business depression, when many were well-nigh begging for buyers, he could sell his stock readily at prices which were fairly profitable, and quite in advance of those obtained by most breeders.

Mr. Johnston has taken a prominent part and place in the work of the various organizations for the advancement of the pure-breed stock industry in Canada, has been from its inception a director of the Dominion Shorthorn Breeders' Association, and was for three terms honored with its presidency.

It was in 1874 that he made his first importation, selected in person from the leading herds in Scotland, when, amongst others, he brought out the fine cow, Priscilla 7th, dam of the well-known cow of that name which, sold to Mr. J. H. Potts, of Illinois, was the leading figure in the group of females in his great show herd which, together with the famous Duke of Richmond at its head, made a record as prizewinners in the United States probably unequalled by any other herd of any date. Continuing his importations from year to year from that date,

his grandam by Champion of England, the most potent power in the evolution of Cruickshank cattle, a combination of the blood of noted sires which well accounts for the phenomenal success of Indian Chief as the progenitor of prizewinners in greater numbers and of higher rank than those of any other in his day, or, perhaps, in the history of the breed in Canada, and the evidences of whose prepotency are seen to the present day in shining numbers in many herds throughout the United States and Canada, and in the proud positions taken by his descendants in the prize lists at the leading shows in both countries, one of his sons the present year carrying the championship of the New Brunswick and Nova Scotia Provincial Exhibitions, while a daughter of one of his sons was the second prize cow and one of the first-prize herd at the Winnipeg Industrial, while the records attest that for three years in succession—1891, 1892 and 1893—of the bulls winning the championship honors as the best of any age in the Shorthorn class at the Toronto Industrial, Canada's greatest show, all three were bred in the Greenwood herd, and two were sons of Indian Chief, a record never before or since equalled by one breeder in the Ontario Provincial or the Toronto Industrial Exhibitions. It is also in evidence that in 1893 and 1894 the cow which won the silver medal championship trophy as best Shorthorn female, any age, was sold by Mr. Johnston to her exhibitor. Thus, the Greenwood herd furnished the Toronto champion bull three years in straight succession,

sive bull, level and true in his lines, with faultless conformation, a handsome head, smooth shoulders, a strong, well-fleshed back, long, level quarters, and standing well on strong, straight legs. He is an excellent representative of one of the best Scotch families, with five straight Sittyton-bred bulls in his pedigree, and his sire was a prizewinner at the great Perth show and sale, where he was the highest-priced bull of his year.

Included in the importation of 1899 are three splendid young bulls, prominent among which is the red *Mystic Archer*, a year old last March, bred by Mr. Duthie, sired by Scottish Archer, a son of Cumberland, sold for 300 guineas, his dam a Marr Missie by the famous William of Orange, and his grandam by Athabasca. Such a trinity of eminent Cruickshank sires is seldom found in such close combination, and can hardly fail to prove potential in breeding wherever it is found. *Mystic Archer* is of the same family, and nearly the same blood, as Marengo, the Royal champion of last year, and is full brother to Lord Lovatt's great prize bull, *Merry Archer*, while in personal appearance he is said to strongly resemble Indian Chief at the same age. Standing well on very short legs, he is long and level, his head is full of Shorthorn character, his heart-girth full, and the quality of his flesh and hair ideal. He is a valuable contribution to the list of

good bulls in America. *Merryman* (portrayed in the picture), a red yearling, calved in January, 1898, and sired by the Duthie-bred Reveler, is a big, handsome bull with very level lines and well-sprung ribs, smooth, evenly-fleshed and well proportioned, and showing four straight Cruickshank crosses on the grand old Matilda tribe, famous for their milking propensities. He is an all-round good bull, and will do good service wherever he goes. Last, but not least, of the bulls in the importation is the roan 2-year-old *Chief of Stars* (shown in foreground of engraving), bred by Mr. Gordon, of Newton, who is said to be easily the third breeder of Shorthorns in Scotland, and got by Star of the Morning, one of the most famous of living sires. His dam is by a son of the Royal champion, Mario, and is of the favorite Cruickshank Clipper family, from which came Corner Stone, the Highland Society champion of this year, and many of the most successful sires in the Sittyton herd. He is low-down and level, with a strong, masculine head, showing much character, a grand quality of flesh and hair, straight top and lower lines, and great big thighs. He should make a very impressive sire, and it is not surprising that it is the purpose of his owner to retain him in the herd.

Prominent among the females imported this year and last may be mentioned the red two-year-old Gypsy Girl 9th, one of Mr. Marr's Goldie family a first-prize winner at the Banff show in Scotland this year, a typical Scotch Shorthorn, smooth in all points, and promising to go on as a show animal. Mabel 2nd, a beautiful roan, coming three in February, of the favorite Mayflower family in the herd of Mr. Bruce, of Heatherwick, is a young cow of fine character and promise, nursing a beautiful heifer calf of a few weeks old, by a son of Scottish Archer. Golden Wreath, a smoothly-turned, well-fleshed roan two-year-old, of the Cruickshank Brawith Bud tribe, is very attractive. She is by the Kinellar-bred Royal Prince, and her dam by Touchstone, the sire of Corner Stone. Two of Mr. Marr's Princess Royal family, namely, Princesses Thule 3rd and 5th, are handsome and robust representatives of that excellent tribe; sired by Denmark and Maximus. Martha 3rd is one of the Cruickshank Mysies; thick-fleshed, smoothly-turned, and with a well-packed back; sired by Mr. Gordon's Mirabeau, and her dam by Mr. Cruickshank's Vice Chancellor. The large roan cow in the illustration is Strawberry 4th, of the Sittyton Secret tribe.

There are 2 others of the Sittyton Secrets, a red and a roan, 2 and 3 years old respectively, and three of Mr. Manson's Killbean Beauties, full of Sittyton and Upper Mill blood, and all creditable to the families they stand for. Four of Mr. Bruce's Mayflowers are in the herd, including the grand old imported cow, Mimosa, by the Cruickshank sire, Stockwell, massive and thick-fleshed. She is the dam of the great show bulls, Robert the Bruce, sold for \$350, and head of the first-prize herd at the Nova Scotia Provincial Exhibition, and of Silver Chief, the sweepstakes winner at St. John and Halifax the last two years. Two of her daughters, a roan 6 year-old cow, Mayflower 14th, of great substance and fine quality, and a red yearling, Mayflower 17th, by imported King James, dam by Sittyton Yet, are in the herd, the latter a straight, deep-bodied, thick-fleshed and well-haired heifer of fine promise. Sunrise, a red 7-year-old cow, is of the same family, and a daughter of the beautiful cow, Sunray, sold to Mr. Gerlaugh, of Ohio. Sunbeam, a red yearling heifer, by imported King James, is also of the same family, a granddaughter of Sunray, a very pretty, level and well balanced heifer. The old matron, Mimosa, is nursing a red bull calf by imported King James, which is very smooth and well formed, and promises to keep up the character of his dam for producing show bulls that win. Space permits only a mere mention of representatives of other noted families represented in the herd, of which there are two of Mr. John Marr's Floras, two Kinellar Clarets, one Cruickshank Lancaster, four Sittyton Nonpareils, eleven Cruickshank Duchesses of Gloster, four Kinellar Minas, two Cruickshank Lady Fannies, four Sittyton Lovelies, three Kinellar Clementinas, two Crimson Flowers, and seven of the fine old Syme tribes, all of which are Scotch and Scotch topped with superior imported bulls. It is doubtful if so many high-class representatives of so many of the best Scotch families can be found in any other single herd in America.

The handsome and typical 2-year-old Clydesdale stallion, Balmedie Marquis, shown in the picture, was imported by Mr. Johnston this year. He is an all-round good one, and has action almost equal to a Hackney, and his breeding is right. He was bred by Mr. Lumsden, of Balmedie, Aberdeenshire, and sired by his Highland Society prize horse, Royalist, and Royalist was sired by the great Darnley, and out of a Prince of Wales mare, Lady Marjorie Erskine, also a Highland Society prize mare. Balmedie Marquis' dam was sired by the Highland Society prize horse, Mains of Airies, and Mains of Airies was sired by Prince of Wales, and out of a Darnley mare.

#### Up Goes the Price of Wool.

An American exchange points out that the advance in the price of wool since May last, averaging nearly 40 per cent., will put \$20,000,000 in the pockets of the holders of the 1899 clip, and promises full value for the next clip.

### The Present Aspects and the Outlook for Pure-bred Flocks in England and Elsewhere.

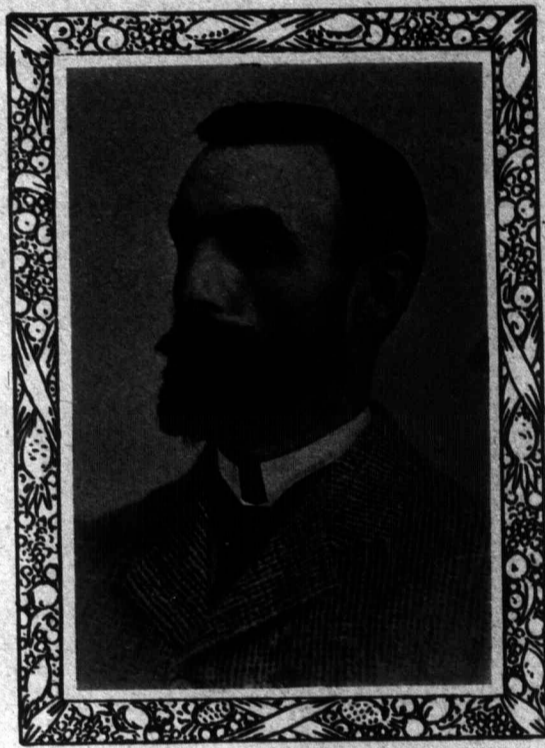
BY ALFRED MANSSELL, SHREWSBURY, ENGLAND.

Having been intimately associated with sheep husbandry for a period of years longer than one cares to chronicle, and having during most of those years given the subject much thought and attention, the writer is of opinion that so far as it is possible to forecast the future, the outlook for breeders of pure-bred sheep was never brighter than at the present time, for we have it upon the highest authority that the sheep population of the whole world has decreased nearly 50,000,000, or nearly 10 per cent., during the last seven years.

These figures, though mainly affecting the price likely to be obtained for sheep bred for the block and the wool market, must, in a large measure, react on the breeders of pure flocks, because the more remunerative the making of mutton becomes, and the better the price obtained for wool, the more money the ordinary farmer will have to expend in the purchase of flock rams.

Though it cannot be said that the numbers of sheep exported from Great Britain this season compares favorably with the figures of 1897 and 1898, this decrease is wholly accounted for by the falling off in the sales for Argentine, caused, probably, by the result obtained by the use of inferior rams imported in former years when the demand was of an abnormal character and Argentine breeders believed they were getting good animals because they possessed the magic word "imported."

This lessened output to South America does not



MR. ALFRED MANSSELL.

mean that the demand for British stud sheep is not in a flourishing state, because, with this single exception alluded to, the exporters have been quite up to the average, and in several cases high prices have been paid, and Australia especially has shown that the shortening of the quarantine period has had a good effect and given a stimulus to the importation of new blood.

There are some who think that with the numerous existent pure flocks, and others in the course of being established in all parts of the world, that the demand for British sheep must eventually be upon a somewhat small scale, but a little reflection will convince the practical man that if those newly-formed flocks are to be successful and good representatives of their respective breeds, they will ever and anon require new blood of the highest class, and acknowledging this truism, it rather points to an increased demand for the "best," as probably the home breeder will see the foreigner buying a better type of sheep than formerly, and if so, he will find him a determined competitor to shake off when really high-class rams and ewes appear in the sale ring.

This has been the case with horses and cattle for some years past, and to a certain extent with some breeds of sheep, and no doubt sooner or later the "tops" in both males and females will command higher prices than hitherto.

Anyone who is conversant with the difficulties and disappointments in breeding, and the absolute necessity, if successful results are to be achieved, of introducing good sires (never too numerous) regularly and systematically, and not in an intermittent and half-hearted way, will at once realize that prices must rise in proportion to the number of pure-bred flocks of any particular breed there are in existence and that have to be provided with suitable sires. Even admitted that other countries will eventually produce sheep of the highest class, it is found in practice that the type and prominent

characteristics in sheep undergo considerable change when removed to different climes with great varieties of soil and other climatic influences, and it will ever be necessary from time to time to go back to the original stock to preserve the character and valuable characteristics of the breed and to correct the tendency to atavism or mediocrity.

There are, moreover, vast countries, including Russia and South Africa, where the various British breeds of sheep are represented by infinitesimal numbers, but Russia has already begun to move in the direction of improving her sheep from a mutton point of view, and should a movement of this sort once take possession of her people, that vast country will open up a great field for the breeders of stud sheep.

In South Africa, when the sword is returned to its scabbard and the squeal of the plow is heard, rather than the bomb of the mighty guns, and when peace, harmony and good government shall take the place of tyranny, oppression and unrest, the breeding of sheep will receive its due attention and be largely resorted to, owing to the fact that their herds of late years have been devastated by rinderpest to such a ruinous extent that agriculturists will turn their attention to some other class of live stock rather than run the risk of a second loss with cattle. This continent is, moreover, admirably adapted for sheep, as they are to a large extent immune to the disease peculiar to horses and cattle in South Africa. These several facts seem to point to a good market in South Africa for pure-bred sheep at no distant date, as the native breeds are admittedly a poor, scrubby lot; but when the work of improvement does begin, it is hoped breeders will profit by mistakes made with some other countries and not bring discredit on the breed with which they are connected by selling for "export" animals of an inferior class. When this course is pursued, an immediate profit is obtained, but with disastrous results for the future prospects of the breeds so badly represented in the first instance.

So far as Great Britain is concerned, sheep-farming has ever been the sheet anchor of the tenant farmer, and its "golden hoof" has kept many and many a man from disaster.

The growing of barley, the most remunerative of all cereal crops to an English farmer, is made profitable by the by-product of the sheep in the shape of manure, and the two industries go hand in hand, and are inseparable upon well-farmed holdings. To compete with the enormous importations of live sheep and mutton in the carcass, the English farmer must keep a special eye on quality and early maturity, and for this purpose he must procure males of the highest class. This will in the future be a special factor with the man who breeds for the butcher, the result of which will be a better demand for the best sires and such as can be classed "good farmers' sheep," with a corresponding decrease in the value of scrubs, as practical men who only sell fat lambs and wethers are now fully alive to the importance of using superior rams.

The future of British sheep in other countries will, to a large extent, be governed by the results to be obtained by the use of English rams on Merino and Merino grade ewes in breeding wethers and fat lambs for export, either as live sheep or in the carcass, and the present trend of things augurs so well that its general adoption is practically assured, as Australian, New Zealand and River Plate mutton bred in this way commands top prices on the London market.

This means an immense demand for the ordinary flock rams for the big sheep runs and ranches, and should encourage breeders to keep up the standard of their flocks by regularly introducing good blood from the mother country.

Another point which deals with the future is the tendency for countries as they become older and adopt a more luxurious style of living to consume more mutton, probably to a large extent fostered by the superior article which follows in the wake of improvement in live stock. Anyone who has travelled much in new countries must have been struck with the superior quality of the beef served in the hotels and elsewhere as compared with the mutton, but of all the rapid changes which are now taking place in all parts of the world, it is believed that the increased consumption of mutton in the near future will be one of the most remarkable features of the times.

In Canada and the States, and in other large countries as they become more settled up and subdivided, sheep husbandry will be ever on the increase, as it is the nature of things that comparatively small holdings are more economically, and, therefore, more profitably, worked on a system of mixed farming in which a good flock of sheep takes its proper position as a mutton, wool and manure producer, which has no rival. In large ranches, where care and attention is practically impossible, cattle may be more suited to the circumstances than a flock of sheep, but given facilities for management, no farming (except under special conditions) can be considered up-to-date which does not embrace one of the most profitable branches of agriculture.

Without taking too optimistic a view of the future, one can safely predict a profitable career for those breeders of stud sheep in all parts of the world who bring judgment, care and attention to the development of their business.

Cordially greeting the readers of the FARMER'S ADVOCATE, and wishing them a bright and prosperous year in 1900, the writer concludes with a Merry Xmas to his many friends in Canada and the States.

### The Oak Lodge Yorkshires.

The favor in which Yorkshire swine are held in Canada for the production of high-class bacon is due in no small degree to the conduct of the Oak Lodge herd of Mr. J. E. Brethour, at Burford, Ont. This is true not only for the ideal type of animal sent out from there in large numbers during these late years, but for favor created for the breed ever since this pioneer herd set the standard some fifteen years ago. At that time the special bacon type was not as much thought of as now, but the characteristics sought particularly in the foundation stock, and maintained ever since, have been strength of constitution, prolificacy, thrift, early maturity, easy feeding, and a superior quality of flinty bone. On a foundation of this sort laid in the best stock that could be secured in England, the home of the breed, the present herd has been developed by its proprietor, Mr. J. E. Brethour. During all these years, judicious mating, careful selections, and introductions of most suitable blood have been made until the name "Oak Lodge Yorkshires" is synonymous with the highest type of bacon pigs. As time has gone on, the herd and the demand for its produce have grown until its management, with the necessary attention to details, has led Mr. Brethour to take in a partner in the person of Mr. C. F. Saunders, whose farm is adjacent to Oak

greatest victories with animals of his own breeding, and it is among these that the best specimens of Oak Lodge herd are to be found at the present day. It may be mentioned that for seven years representatives of Oak Lodge herd have won at the Toronto Industrial the first herd premium for best boar and two sows; and in the fall of 1899 they won all the herd prizes available at the large Ontario shows, including first and second at Toronto, and firsts at London, Ottawa, and Brantford. In addition to these, Oak Lodge specimens won eight firsts at Toronto, seven at London, six at Ottawa, eight at Brantford, besides numerous seconds and thirds; and for three seasons the sweepstakes award over all breeds at the Provincial Fat Stock Show for ideal bacon pigs.

The herd, which at present numbers some three hundred, is well represented by the six typically portrayed animals shown in the illustration. Oak Lodge Conqueror, facing outward at the right-hand side of the illustration, Mr. Brethour considers is the best boar he has ever owned, as he not only won first in every competition entered in 1899, besides first for boar and get at Toronto, and sired the sweepstakes bacon pigs at the Provincial Fat Stock Show of 1898, but he is a valuable sire inasmuch as his get are strong, like himself in type, and very uniform. Ruddington Lad, represented at the bottom left-hand corner, won the championship

mangels, sugar beets, and artichokes come in for the fall and winter months. The last-named crop has had only one season's trial, but it was so satisfactory that a greater area will be grown in succeeding seasons. The one and a quarter acres grown fed fifty well-grown pigs for seven weeks, with very little grain food in addition. The pigs relished the tubers and did remarkably well. Under the new partnership arrangement, with its increased and improved facilities, the business at Oak Lodge, which has doubled in the last five years, amounting to \$5,000 for breeding stock sold in 1899, a still greater extension and even better things, if such is possible, may be looked for.

### Teaching Geography to a Professor.

Canadians are rather touchy on the subject of climate, as Rudyard Kipling discovered when he somewhat thoughtlessly dubbed the Dominion Our Lady of the Snows. When Arthur Stringer (of London, Ont.), the young Canadian poet and author, first went to Oxford he carried with him letters from Professor Goldwin Smith, of Toronto, to Professor York Powell, the distinguished historian of Christ Church.

This old Oxford don, like one or two other Englishmen, had very vague ideas about Canada, and somewhat surprised the young stranger by inquiring if he got along nicely on English roast mutton



REPRESENTATIVE GROUP OF "OAK LODGE" YORKSHIRES. PROPERTY OF JOSEPH E. BRETHOUR, BURFORD, ONT., CANADA.

Lodge. This step has been taken in order to cope with the increasing business and give the breeding and growing stock the best possible attention. On Mr. Saunders' farm extensive buildings of the most suitable design will be erected and equipped in everything that will be of advantage to the business. While Mr. Brethour will continue to conduct the correspondence, he will give the charge of the pedigree and a portion of other management into the hands of his partner. As before, special care will be taken to procure healthful conditions for the growing stock by the use of portable pens and outdoor life. In this way the greatest development of the highest quality will be secured throughout the entire herd and its produce, so that as time goes on culling will become less and less necessary, as practically all the stock produced will possess a high standard of vigor as well as the ideal form. In ordinary hands such a general state of perfection could not be expected, even under the most favorable conditions; but Mr. Brethour's experience, thoroughness, ambition, and practical knowledge of the science and art of breeding are such as to lead to this conclusion. In evidence of Mr. Brethour's abilities, reference might be made to the fact that while he has always imported the best obtainable stock in England, he has secured his

award, as well as the Gold Medal, at the English Royal Show, 1898. Oak Lodge Challenge, the boar in the center background, was shown at the larger Canadian shows for two seasons, and has never been defeated. Lady Mollington 13th, facing in from the left-hand side of picture, won first at Toronto, London and Ottawa in 1899, and stood second to her pen mate in 1898, soon after being imported from England. Oak Lodge Mite 6th, at the upper right corner, stood second to Lady Mollington 13th in '99 at Toronto, London, and Ottawa. Oak Lodge Cinderella 30th, the sow in the foreground, won first as a yearling at each of the three large Ontario shows in 1899, the only season she has ever competed. At present she is nursing a litter of ten grand youngsters by Conqueror. The families represented in the herd are Cinderella, Buttercup, Pride, Fashion, Marion, Victoria, and Primrose; so that Oak Lodge herd is really a combination of herds or families of the highest type and breeding.

A word regarding the feeding of the stock will be of interest. Such crops are grown and arranged to come at such seasons as to provide green food at all times of the year. Lucerne, red clover, oats and peas, tares and corn largely constitute the green roughage during the summer and fall; while

after living so long on frozen seal meat. The young poet gravely protested that he perhaps missed his whale-blubber a little, but the next day cabled home, and in less than a week the finest basket of autumn peaches ever grown in Ontario, carefully packed in sawdust, was on its way to Oxford. A short time afterward the young author was again dining with the Regius Professor of Oxford, and that gentleman produced at the meal a fruit dish loaded with tremendous peaches.

"Most extraordinary," said the old professor, "but these peaches were sent to me to-day, and I'm blessed if I know who sent them. From the south of France, I suspect, so I saved a few of them for you, Stringer; they will be such a novelty, you know!"

The Canadian very quietly took a steamship company's bill of lading from his pocket and handed it to the professor. The professor gazed at the bill, then at the fruit, then at the poet.

"I had some whale-blubber, too, Professor," said that young man, "but I simply had to eat that. These other things were grown on my uncle's farm in Kent County, Ontario, you know. He has 200 bushels of them every year, and he sent me over a basket of little ones along with the whale-blubber." —Saturday Evening Post.

### The Stock Farm of J. A. S. Macmillan, Brandon, Man.

The Brandon district has long been celebrated as one of the leading wheat centers of the West. Its central location and convenient railway facilities conduce to make it a favorable location also for the breeding of pure-bred stock.

Two and a half miles south of the city is located Mr. J. A. S. Macmillan's sheep ranch, comprising perhaps the largest and most important Shropshire flock in Western Canada. Established in the fall of '92 by the importation of 200 ewes and 3 rams, selected personally by Mr. Macmillan from some of the most celebrated flocks in England, such as those of Mansell, Inge, Barrs, and others, from time to time rams of the very best blood have been imported to head the flock, and it is needless to say that quality and excellence have been maintained at a high standard. At the present time the rams in service are Brandon Jack 248,98687, bred by Mrs. Barrs, Odstare Hall; lambed in '95, and imported by Mr. Macmillan in April, '97; sired by Noble Briton 8143, by Nottingham Royal; dam by The Dean 2356. Brandon Jack is a deep, low-set, well-covered ram, of beautiful quality, handsome, masculine head, and strong, well-packed quarters, and as a sire has been particularly prepotent in quality. Brandon Bill 98668, another of Mrs. Barrs' breeding, also imported in '97, is a big, strong, active, outstanding sheep, and when in show fit a strong competitor in the best of company. He is by Odstare Pilot, by Lord Broughton, his dam by Ace of Trumps. The other ram at

about 350 acres being ready for wheat this year. Mr. Macmillan's wheat average this past year on some 180 acres was 18 bushels of No. 1 hard.

As a foundation for a herd of Shorthorns, 5 neifers have recently been purchased, Minnie Mine, Miss Aberdeen, Coral of Hayfield, Bessie of Hayfield, and Queen Esther, all by the John Miller bull, Aberdeen 2nd =21643-, by imported Aberdeen, out of Rose Monrath 5th. They are a good, straight, clean bunch of heifers, and should make a nucleus for a good herd.

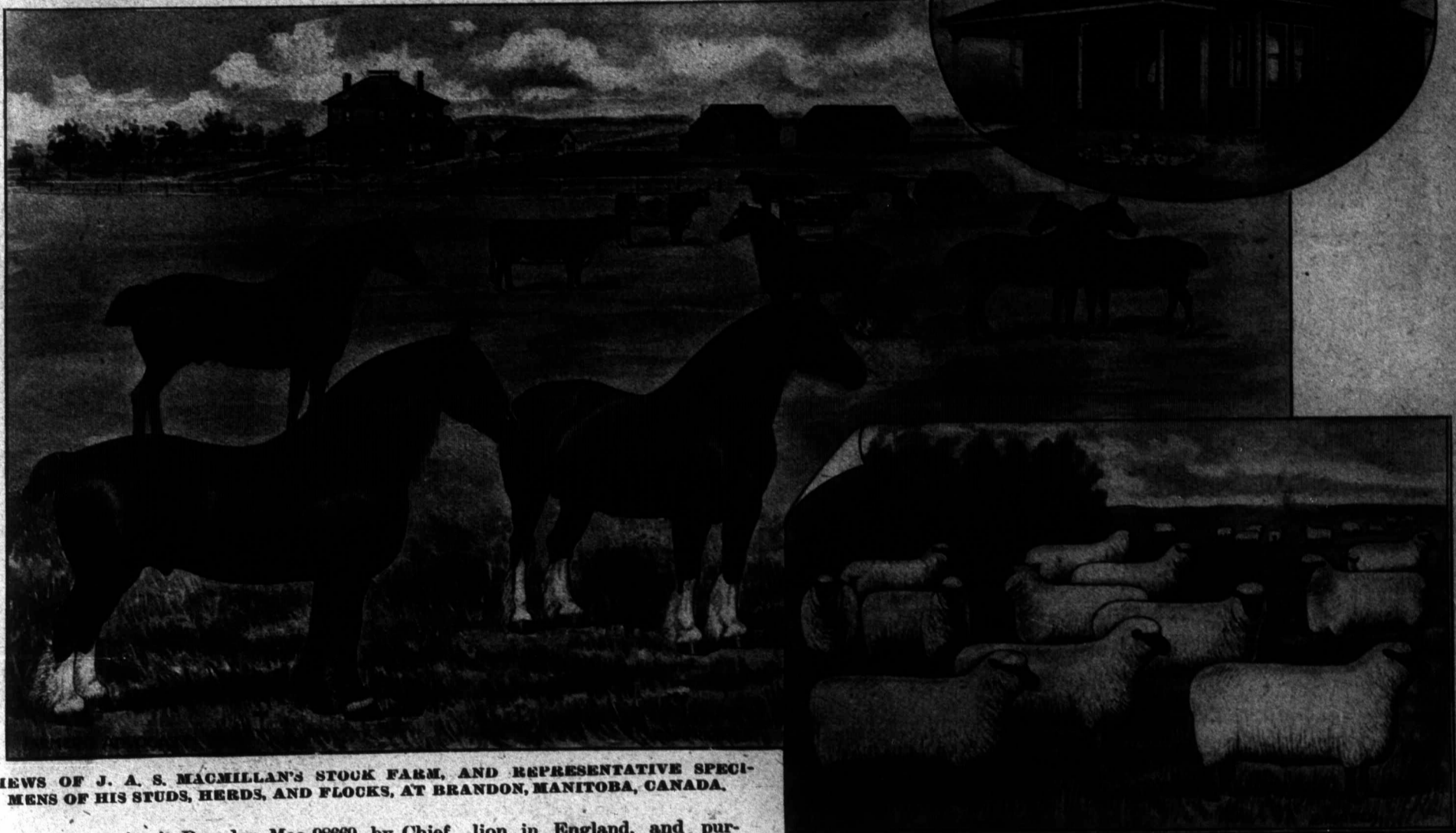
In this issue we present a very attractive illustration of Mr. Macmillan's new farm dwelling house, together with representatives of his Shropshires, Shorthorns, and stallions. The residence, as will be seen by the illustration, is an almost square frame building, on stone foundation, planned inside for comfort and convenience, and is in many ways a model farmhouse. It is the intention to erect a permanent horse and cattle barn at an early date. This part of the farm having only recently been acquired, there has not been time yet to erect suitable buildings.

Apart from the substantial benefit derived from the valuable importations of Shropshires made by Mr. Macmillan, perhaps in a more marked degree have his pure-bred stallion importations benefited the district. Portrayed in the illustration is the beautiful imported Hackney stallion, Prince Danegelt 4957, a beautiful bay with four white fetlocks, standing 15.3, and a strong, handsome horse, with lots of clean bone and good action. His sire is the noted horse, Danegelt 171, champion Hackney stal-

lion in England, and purchased by Sir Walter Gilbert for \$25,000, he being the sire of such noted Hackneys as Ganymede, May Royal, Royal Danegelt, and many others. The Prince is out of Sand Hill Nance, by Domino, granddam by Fireaway. He has been sweepstakes winner at Winnipeg Industrial and Brandon Summer Fairs on several occasions. His colts have also been prizewinners, and his services have been largely patronized by the farmers throughout the Brandon district. An illustration is also given of the imported Shire stallion, Nailstone Morning Star 2nd (15741), a bay with two white fetlocks, standing 16.1 hands high, with exceptionally good limbs, and a clean, free mover; a horse that meets the popular demand and has been favored with an immense patronage, his sire, Nailstone Morning Star, being one of the greatest sires in England, his progeny having won many prizes at the leading agricultural shows and commanding high prices. The dam of Nailstone Morning Star 2nd is Meecham Poppett, by the celebrated Shire, Big Ben.

### Glenhurst.

A standard herd of superior Ayrshire cattle is that of David Benning & Son, of Williamstown, Ontario, whose 230-acre farm of rich clay loam land is situated two miles from Summerstown and five miles from Lancaster, both of which are stations on the main line of the Grand Trunk Railway some fifty miles west of Montreal. Heavy crops of hay, oats, barley, corn and roots are raised, all of which are fed on the farm to produce milk, which is the main source of revenue, and which is also the mainstay of the farmers of that district, which is widely known as one of the principal cheese factory and creamery districts in the Dominion. The old farm buildings at Glenhurst, which had given shelter to a long list of noted animals in the years gone by, have



VIEWS OF J. A. S. MACMILLAN'S STOCK FARM, AND REPRESENTATIVE SPECIMENS OF HIS STUDS, HERDS, AND FLOCKS, AT BRANDON, MANITOBA, CANADA.

present in service is Brandon Mac 98669, by Chief Proctor 7383, by Proxy, dam by Emerald Duke 4511. This ram was also imported in '97 from the flock of Mrs. Barrs. This flock has been well represented at the Winnipeg Industrial and Brandon Fairs for a number of years, and has been successful whenever shown in carrying off a very large percentage of the principal prizes. Sales have been made to all parts of the Province and Territories, including some large consignments to Alberta, also to Sycamoose and Pindar Island, British Columbia, besides some 60 ewe lambs to the United States, selected personally by Prof. J. A. Craig for his sheep ranch in Wisconsin.

The home farm comprises a half-section of land, about 200 acres of which is under cultivation, and the balance, fenced with Page wire, is reserved for pasturage. It is the intention, however, to seed down more land to some of the cultivated grasses, so as to provide more changes of pasture. During the winter the principal feed consists of green oat sheaves, with a liberal supply of chaff. Very little hay is fed. A considerable acreage is devoted to turnips for winter feeding, and rape for fall feeding. A small patch of about five acres near the corral was seeded two years ago with blue grass and white clover, and this has furnished a very choice bit of pasturage for lambs, and so far has proved quite hardy. This winter the flock consists of about 400 head; of these, 100 head are grades, which are being fed for the butcher. About 100 pure-bred ewes are being bred. In addition to the home farm, Mr. Macmillan has a half interest in a section of land five miles south of Brandon, which will be devoted principally to the growing of grain,

lion in England, and purchased by Sir Walter Gilbert for \$25,000, he being the sire of such noted Hackneys as Ganymede, May Royal, Royal Danegelt, and many others. The Prince is out of Sand Hill Nance, by Domino, granddam by Fireaway. He has been sweepstakes winner at Winnipeg Industrial and Brandon Summer Fairs on several occasions. His colts have also been prizewinners, and his services have been largely patronized by the farmers throughout the Brandon district. An illustration is also given of the imported Shire stallion, Nailstone Morning Star 2nd (15741), a bay with two white fetlocks, standing 16.1 hands high, with exceptionally good limbs, and a clean, free mover; a horse that meets the popular demand and has been favored with an immense patronage, his sire, Nailstone Morning Star, being one of the greatest sires in England, his progeny having won many prizes at the leading agricultural shows and commanding high prices. The dam of Nailstone Morning Star 2nd is Meecham Poppett, by the celebrated Shire, Big Ben.

The Clydesdale stallion, Burnbrae 8378, a beautiful portrait of whom appears in the illustration, is one of the best stallions that has come to the Province. He is a big, toppy, handsome bay, with four white legs and white blaze. He has for sire the imported Rosewood (7207), a grand, heavy-boned horse, and a second-prize winner at the World's Fair, Chicago, in 1893, he by Macfarlane (2988), by Macgregor (1487). The dam of Burnbrae is Young Bloom, by The Regent (5408), running back to Prince of Wales (673). Burnbrae is developing into one of the big, massive sort, with strong back, good

recently been replaced by new substantial and commodious structures, planned for the comfort and healthfulness of the cattle, and for convenience and economy of time and labor in feeding and caring for them.

The new barn, which is 40x80 feet, with a cross section 36x30 feet, and covered with metallic shingles, is well arranged for convenience of storing the crops and feeding the stock, there being two driveways for unloading grain or hay, one between the two sections, and the other in center of the narrower one, in which is the horse stable; while the cattle occupy the wider wing, which has two rows of stalls the full length, the cattle facing a passage on each side, with a wide space between them, in rear of the cows, down the center of the building. The floor is cement concrete, and water is provided in troughs in front of the stalls, supplied from a well, from which it is pumped into a tank in a mow overhead by a power windmill, which is also used for grinding and cutting feed.

Mr. Benning, Sr., is one of the oldest and most successful breeders of Ayrshires in Canada, having been in the business nearly forty years, and his stock has stood high in the estimation of discriminating breeders, who have sought to secure the blood of his herd by the purchase of bulls of his breeding, which have headed many high-class herds; while his cattle and their produce, in his own hands and those of others, have made an enviable record as prizewinners at the leading shows in Ontario and Quebec in recent years. He

has been a strong advocate of maintaining size and capacity for dairy work in his herd, as well as up-to-date breed type and style, and with this end in view he breeds his heifers to produce their first calves at not younger than three years; and the result is seen in the massive, deep-bodied matrons of the herd, which give evidence of robust constitution and capacity for working up large quantities of rough forage into milk, and producing strong and healthy offspring. To this fact, combined with rare judgment in the selection of suitable sires bred from similar sources, may be assigned the success which has crowned the life-work of the founder of this herd, which at present numbers some fifty head, and has had as its chief stock bull in the last few years, *Saladan 6059*, by the famous imported *Silver King 1125*, and out of imported *Docey 2010*. A lusty lot of heifers and young cows by this excellent sire, showing fine type and character and giving rich promise of usefulness, graced the pastures on the occasion of our visit, while a capital coterie of calves were seen in the stables, sired by imported *Caspian of St. Ann's 8895*, the last bull in service, a son of *Sloth of Hillhouse* and of *Daisy of Bardagh*, whose progeny promises to prove such as one would expect from his breeding and the source from which he came, his dam having been a first-prize winner in Scotland three years in succession,

illustrating the home of the herd, and is a typical Ayrshire of the honest earning sort of which Sandy in his enthusiasm said: "Gin ye pit the meat tae her ye need never rise." Floss of Glenhurst, a yearling of the same family, by *Saladan*, and out of *Floss 3897*, is also included in the engraving, and is a heifer which wears the insignia of the tribe in her face and form, and wins favor at sight, for a bonnier beastie of her sort is seldom seen in any company. A group of half a score of beautiful heifers bordering on two years old, now being bred to the imported bull, will, if retained in the herd, soon supplant the older cows, and give indications of filling their places worthily and well, while younger ones galore are fast filling the boxes in the new byre, as these Ayrshires breed like rabbits.

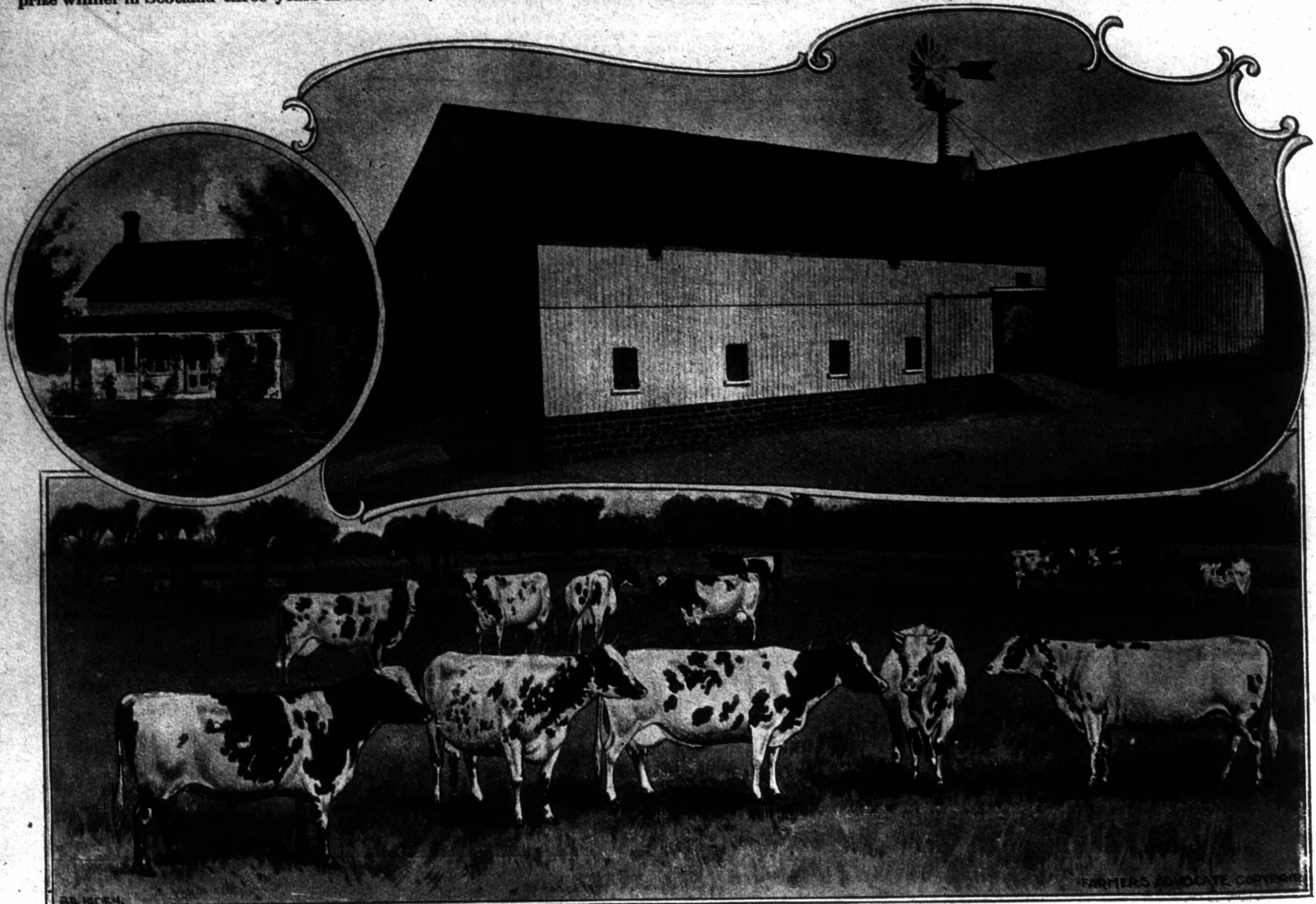
A choice little flock of pure-bred Leicester sheep of high-class breeding is also kept on the farm; and a capital lot of registered Berkshire swine of up-to-date description show up in fine condition, as does everything on this well-kept farm.

#### The Trout Creek Shorthorns.

Prominent among the leading present-day herds of Shorthorn cattle in Canada is that of Mr. W. D. Flatt, maintained on his fine farm near the City of Hamilton, Ont. Mr. Flatt has always had a strong

public sale of imported Scotch-bred bulls in March, 1898, he pluckily followed to a finish the competition for possession of the handsome and substantial red bull, *Golden Fame*, and on a bid of \$720, the highest price for many years previously paid for a bull in Canada, secured what was acknowledged by most of the breeders present to be the best bull in the sale. It was a bold bid for a young breeder to make, but those who know him now are quite willing to believe that he was prepared to follow the price into the four figures if necessary, and the sequel has shown that it was a wise and judicious transaction on his part, as it placed him at once in the front rank of enterprising breeders, and gave him as a head for his herd a sire which, from his rich breeding and striking individuality, was reasonably sure to make his mark as the progenitor of superior stock, an estimate which is being amply justified by the character of his calves in the herd, which for symmetry, style, depth and width of frame and quality of flesh and hair, fill the bill to satisfaction.

*Golden Fame* has grown into the grand bull that he promised to make when at the joint sale in Scotland that astute breeder, Mr. Duthie, of Collynie, who knew and admired his dam and all his family connections, was one of the last to bid for him, and was loath to see him leave Great Britain. Bred at Kinellar, the Aberdeenshire Mecca, from



GLENHURST AYRSHIRES AT HOME. THE PROPERTY OF DAVID BENNING & SON, WILLIAMSTOWN, ONT., CANADA.

and the dam of his sire the champion milch cow at Kilmarnock and Ayr. The stock bull at present in service is *Carrick Lad of St. Ann's*, a strong, lengthy, level and finely-formed bull of good quality, sired by imported *Napoleon of Auchenbrain*, winner of first prize and the championship at the Toronto and London Exhibitions in 1898, and out of imported *Anne of Barcheskie*, one of the grandest cows of the breed on the continent, and bred in the purple. Coming from such celebrated ancestry, he possesses individual merit of a high order by inheritance, and his progeny can hardly fail to prove the prepotency of his famous forbears. Among the deep-milking matrons of the herd is the grand old cow, *Floss 2011*, dam of *White Floss 5061*, a cow which has made an enviable record as a prizewinner in the keenest competition both in Canada and the United States. The old dame—now in her fourteenth year—is a model dairy cow, roomy, and right in dairy conformation, with a grand vessel and with prominent milk veins running forward to her armpits and spreading like a network over all her undersurface; while her daughters and granddaughters growing up show all the indications of following in her footsteps as workers in the dairy. *Pessara*, full sister of *Floss*, younger in years, but built on similar lines and bearing the family likeness in style and character, is prominently portrayed in the picture

natural liking for high-class animals. He loves a good horse, and has owned many which have won the coveted prize ribbons at the shows in his own district, as well as at some of the leading shows of the Province. When quite a young man, some twenty years ago, at home on his father's farm, which he now owns, he had a strong fancy for Shorthorn cattle, and a superior pure-bred bull of the breed was kept for use in the herd of grade cows, and his influence in improving the general cattle stock of the neighborhood and producing animals that were rapid feeders, maturing early and finding ready sale at top prices, gave the young man his first desire to some day own a high-class herd of Shorthorns, but other business interests called him away to other fields of enterprise for some 20 years of successful effort, when the old-time ambition to indulge his fancy returned to him, and he turned his attention to the improvement of the farm and establishing a herd of his favorite cattle. Starting with the motto, "The best is not too good," he determined to have that kind, and by following that ideal he has succeeded in an unprecedentedly short time in taking high rank among the leading breeders of the continent, finding himself in possession of a herd which is the admiration of all who are privileged to see it. Mr. Flatt first came into prominence as a stockman when at Mr. John Isaac's

which has come more prizewinners in Canada than from any other source in the last 20 years, sired by *Emancipator*, a prize bull at the Perth show and sale, the second highest priced bull in his year, his dam by *Sittyton Sort*, who was by *Gondomar*, dam by *Gondolier*, and grandam by *Roan Gauntlet*, no better breeding can be found, while as his maternal ancestry he claims the famous *Golden Drops*, which have produced so many of the best of the breed. That *Golden Fame* is not easily duplicated in any country, Mr. Flatt discovered when he visited Great Britain this year prepared to pay twice his cost for a better, and failed to find one good enough to displace him as head of the herd. By paying the price he gave for *Golden Fame*, Mr. Flatt advanced the interests of every breeder of Shorthorns in Canada, as it proved the prelude to better prices all along the line, and he followed it up, encouraged by the active demand and upward tendency of values for beef cattle and breeding stock, buying the best he could secure from many high-class herds until within a year, by informing the world through the press that he was in business to stay, he found his work appreciated and his herd drawn upon for foundation stock by new beginners, and for show animals by old and experienced breeders needing special numbers to strengthen their herds for the competition at leading shows in Canada and the United States,



REPRESENTATIVES OF TROUT CREEK SHORTHORN HERD. OWNED BY W. D. FLATT, HAMILTON, ONTARIO, CANADA.

a young bull selected from his herd winning first prize at the Winnipeg Industrial Exhibition in 1898, and heading the first prize herd under 2 years old shown by Hon. Thomas Greenway, Premier of the Province, while in 1899 a cow sold to Mr. N. P. Clark won the championship over all beef breeds at the Minnesota State Fair. Two 2-year-old heifers sold into the State of Ohio, shown eight times this year, were awarded first and second prizes at six of the eight shows where they competed, and two cows sold to Wisconsin won the first and second prizes in their class at the State Fair, while numerous first prizes have been won at county and district shows by animals purchased from the herd.

Not satisfied with even such extraordinary success as he had attained in so short a time, Mr. Flatt's ambition led him to visit the fountain-head of Shorthorns this year, determined to secure some of the best that could be bought, and with the counsel of experienced judges he made selections from leading herds in Great Britain, which, together with other consignments sent out later in the year, placed him in possession of probably, and we think we may safely say certainly, the largest number of imported cattle ever added to any single herd of Shorthorns in America, in one year total-

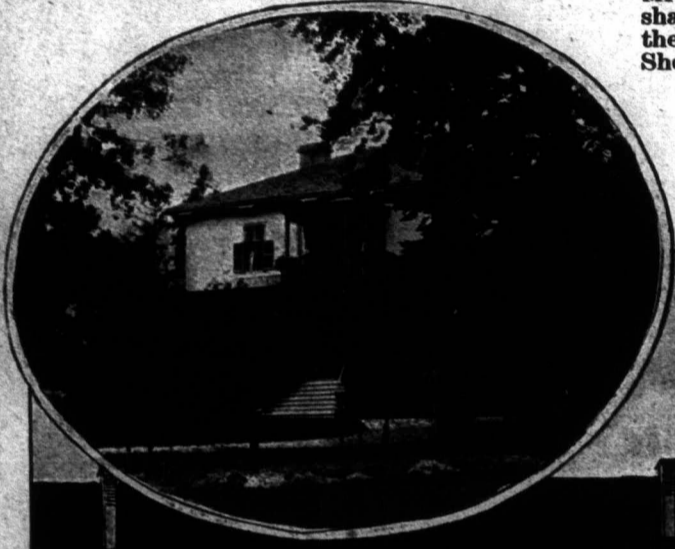
first-prize winner in England, and her sire the winner of 21 prizes and six championships up to date; *Lady Douglas*, a roan 4-year-old cow, by Lord Douglas, a son of the Cruickshank bull, Gravesend, and of Lavender 46th, by Dunblane, won six first prizes in Scotland, and she is of the same family as the Royal champion, Challenge Cup; *Pure Cream*, a roan yearling, by Nonpareil (by Emancipator, the sire of Golden Fame and out of Nonpareil Bud, by Sittyton Sort), is a superb daughter of Imp. *Butterine* (who is also in the herd), by Master Mason, by the great William of Orange, and her grandam by Touchstone, the sire of the Highland champion, Corner Stone; *Nonpareil 33rd*, by Clan Alpine, sire of Mr. Duthie's 300-guinea bull at the October sale of 1896, with First Consul and Gravesend at the top, is a good type of that noted family; a charming heifer coming 3 and nursing a lovely heifer calf by a son of Scottish Archer, is *Mabel 2nd*, of Mr. Bruce's (Heatherwick) Mayflower tribe, a full sister to Lord Baring's 73-guinea heifer, and of the same family as Mr. Forbes' yearling bull that sold at auction recently for \$1,000; the two great Maritime Province prize bulls, Silver Chief and Robert the Bruce, are of the same family; *Gypsy Girl 9th*, a red 2-year-old heifer of Mr. Marr's Goldie tribe, with five crosses of Cruickshank bulls in her pedigree, and tracing to one of the oldest Sittyton families, won first prize at Banff Show in Scotland in July, 1899, and is a show heifer in any company in any country, smooth, straight, and full at every point, and said to be sure in calf. *Craibstone Shepherdess* is a handsome red yearling coming two in February, of the famous old Miss Ramsden family, with four straight Cruickshank

the best class of Shorthorns, for the probability is that as long as grass grows and water runs the cosmopolitan red, white and roan will be wanted, and will be in conspicuous evidence.

### Belvedere.

THE HOME OF MRS. E. M. JONES AND HER JERSEYS.

On the outskirts of the pretty and prosperous town of Brockville, commanding a charming view of many of the Thousand Islands which bedeck the noble St. Lawrence River, is Belvedere, the beautiful home of Mrs. E. M. Jones, whose name is familiar to all readers of the FARMER'S ADVOCATE as a writer on practical dairying particularly, and whose contributions in the realm of romance and other lighter literature have received gratifying recognition. Belvedere is not only beautiful for situation, but is beautiful in itself with its spacious grounds, its grand old trees and wealth of shrubbery and vines; while within the commodious dwelling are found all the evidences of culture and refinement, and the absence of any indications of extravagance or unnecessary display. It is, however, from the reputation of her far-famed herd of high-class



GLIMPSES OF BELVEDERE, THE HOME OF MRS. E. M. JONES, AND HER FAVORITES, AT BROCKVILLE, ONTARIO, CAN.



ing ninety-one head, and these of a uniformly high order of individual merit and of the most approved modern type and breeding, making the present Trout Creek herd to number 125 head in all, of which about 100 are imported animals.

The limits of space utterly forbid even the briefest reference to any considerable number of individual animals, and we can only afford to say in brief that among the many notable animals included in the importations of this year, and found in this herd, are the grand young bulls, *Precious Stone*, bred by Mr. Gordon, of Newton, sired by Touchstone, and thus half-brother to Corner Stone, the champion at the Highland Society's Show this year; *Master of the Clan*, bred by Mr. Duthie, of Collynie, and of the favorite Upper Mill Missie family, and *Yeoman of the Guard*, *Proud Crescendo* and *Beau Marengo*, bred by Mr. Philo L. Mills, of Ruddington.

Among the females may be mentioned the grand show cow, *Red Ruth*, of the favorite Cruickshank Clipper tribe, by the famous Star of the Morning, herself a first prize winner in Scotland, and own sister to Starlight, the Royal champion of 1890, and of the same family as Corner Stone, the Highland Society champion of 1899; *Red Ruth's* robust red yearling daughter, *Naomi's Sister*, by the Royal champion, Marengo, is extraordinary in the plentitude of her development and quality, and is worthy of her phenomenal parentage; *Mario's Heiress*, a roan 2-year-old, also by Marengo, her dam by Star of the Morning, and her grandam by the Royal champion, Mario, by Field Marshal, was herself a

crosses; and *Sensation*, a short-legged, thick-fleshed, 2-year-old heifer by the Marr-bred Merry Mason, belongs to the same grand old tribe of Kilblean Beauties as Count Beauty, bred by Mr. Duthie, and winner in 1890 of first prize at the English Royal and the Highland Society's Show, besides many other first and championship prizes.

But a halt is called; and we can only add that among the many popular families represented in the herd there are: Nine Miss Ramsdens, five Nonpareils, six Crimson Flowers, four Heatherwick Mayflowers, five Marr Missies, four Minas, two Brawith Buds, two Augustas, three Cruickshank Clippers, two Kilblean Beauties, three Clarets, two Urys, two Duchesses of Gloster, three Roses of Strathallan, and many others equally reliable and valuable as breeders. With such a combination of good things the future success of the Trout Creek herd seems assured, and if enterprise, energy, persistent effort and faith in the future of the breed and the trade are requisites to success, Mr. Flatt is well endowed with all these, together with a broad, liberal mind which leads him to seek not only his own but the general good of the fraternity, recognizing that in a field so vast as that open to breeders of beef cattle on this continent, no "pent-up Utica" need restrain the enterprise of producing

Jersey cattle, and their signally successful career in scoring records in the showing and in practical tests for butter production, that Mrs. Jones' name has become so widely known, and in presenting to our readers these views of the famous Belvedere herd it may not be out of place to make some mention of the great cattle which have won for their owner a continental fame.

The first five animals in the original herd were from the best old New England importations, one of them, indeed, being from the Island of Jersey direct; and a grand old cow she was—Mulberry, imported. At that time Jerseys were comparatively unknown in Canada, and one might say quite so in Ontario.

It is true that Romeo Stephens then had the St. Lambert herd, at the little village of that name opposite the City of Montreal; but, being a man of great wealth, he did not put them before the public; many of the animals were not even registered, and many were given away to Mr. Stephens' friends.

Mrs. Jones was quite familiar with these cattle and their wonderful milking capacity, because, when a schoolgirl in Montreal, she had visited Mrs.



Stephens (who was a friend of her family) and enjoyed the country surroundings, so like her own home.

Remembering this impression of years before, Mrs. Jones then went to St. Lambert and selected the bull, Rioter's Pride, son of Stoke Pogis 3rd and Pride of Windsor, the two greatest animals in the St. Lambert family. This was indeed going to the fountain-head.

The cows chosen were: Primrose of St. Lambert (that died of milk fever), Charity of St. Lambert and her daughter, and Primrose Sheldon. Later, from Mr. Reesor was purchased the famous Diana of St. Lambert, and her bull calf, which Mrs. Jones sold as a yearling for \$3,500; Diana also died of milk fever. Charity of St. Lambert Mrs. Jones sold at Kellogg's sale in New York for \$2,750, and the number and value of her descendants can hardly be estimated. She was the dam of the famous Bachelor of St. Lambert. Mrs. Jones next bought Canada's Sir George, paying \$1,500 for him when a few weeks old, and she thinks him one the cheapest she ever bought. One of the best judges on this continent pronounced him the best dairy bull of any breed that he ever saw, and he was one of the most beautiful animals that ever stepped into a showing. Before he was 33 months old he took 1st prize as calf at Toronto Industrial and the Provincial Fair at Ottawa, 1st prize as a yearling at the Provincial at Kingston in 1888; while in 1889 as a two-year-old he won first prize at Toronto, and headed first prize herd, Toronto; first prize at London, and headed first prize herd, and won the sweepstakes as best bull any age. Canada's Sir George was pure St. Lambert, and his dam, Allie of St. Lambert, milked 57 lbs. a day, and made 26½ lbs. butter a week. He was half-brother to Mr. Cogswell's great Exile of St. Lambert, that has such a grand array of tested daughters to his credit, but was a handsome bull, and of superb constitution. He now had to share the honors of the prizering with Massena's Son, whose dam was Mrs. Jones' favorite cow, and no wonder. In her 16th year, Massena made 654 lbs. of butter within the 12 months, and then dropped a heifer calf; and when younger her former owner claimed (and justly) 900 lbs. a year for her. Besides these, Mrs. Jones had one of the greatest bulls of his day in Signal of Belvedere (a grandson of Old Signal), son of Miss Satanela 2nd, that milked, for Mrs. Jones, 47 lbs. a day, and made for her, on second calf only, 20 lbs. 6 oz. butter in one week. This cow was the best of the three with which Mrs. Jones won the silver tea set (donated by the FARMER'S ADVOCATE) at London for three best dairy cows of any breed. The competing cows showed a profit of 17 per cent. above value of food consumed, while Mrs. Jones' showed a profit of 47 per cent.

At the Kellogg sale in New York, a magnificent solid silver cup was offered for the owner making the best price on five animals; 350 Jerseys were then sold, many of them owned by the wealthiest men in the States, but Mrs. Jones won the cup, amid the wild enthusiasm of our American friends.

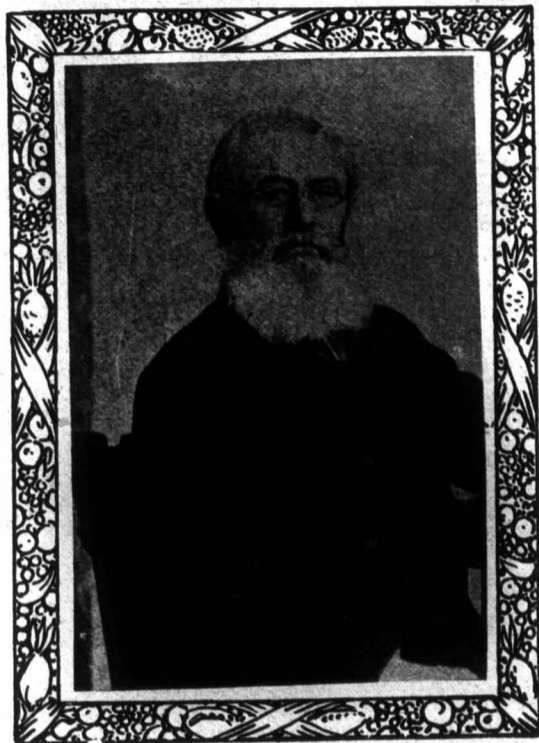
Some years ago, Hon. Jno. Dryden bought a cow from Mrs. Jones for the Agr. College at Guelph, and during a year about a dozen cows were carefully tested, all feed being weighed and charged against them. Mrs. Jones' cow headed the list, making more cheese and more butter, and at less cost, than any other—420 lbs. butter within the year. Mrs. Jones had purchased from Nova Scotia a bunch of Jerseys (the above cow being one of the them), that were really of the same blood as the St. Lambert. They reached Belvedere mere skeletons, but with good care developed most wonderful dairy qualities. A bull from the best of these cows, Liliun's Rioter, was then placed at the head of the herd, and made the following brilliant prize record. When not 6 months old he won: 1st as calf at Montreal, 1891; 1st prize at Toronto and Ottawa in 1892. In 1895 he won 1st prize and sweepstakes, and headed 1st prize herd at Toronto, Montreal, Ottawa, and the Provincial Dairy Show at Gananoque; and was then sold at a large price. Liliun's Rioter was a golden-fawn color of unrivalled beauty and richness, and in all that family Mrs. Jones has not had one female that is not a great dairy cow. The bull now in use, Prince of Belvedere (illustrated in engraving), is sired by Signal of Belvedere (mentioned above), while his dam, who was nearly full sister in blood to Liliun's Rioter, milked 45 lbs. a day, and made 17½ lbs. butter in a week. In her 15th year she made, on ordinary feed, 340 lbs. splendid butter in 11 months.

Three years ago, Mrs. Jones sold the bulk of her herd, but retained a few of the best, including Prince of Belvedere (illustrated in the accompanying engraving), and such cows as Lady of Belvedere and Lady Leeds, cows of enormous capacity; Marian of Belvedere, a worker the year round; Darling of Pinehurst, 45 lbs. milk a day, with immense udder; and Lily May 2nd, now advanced in years, but an ideal dairy cow, and dam of some of the best stock. A yearling bull, g. son of Lily May, is something extra; and two golden-fawn heifers, about 8 months old, one from Lily May and one from Hilda of St. Lambert, would be ornaments in any herd.

The reason we have dwelt at length upon Belvedere is because the establishment there has been of more real practical use than any place of the kind before. Here are no costly appliances, no fancy fixtures, no artificial care, but good, plain and PAYING business management. As a fine old farmer said to his wife, when on a visit there: "Golly, Maria, Mrs. Jones ain't got a single thing that we can't have too." This it is that has made Belvedere

an object lesson for the whole Dominion, and proved that it is within the power of anyone to make dairying pay.

All her life, Mrs. Jones has labored to teach people how to make the most butter, the best butter, and, above all, butter produced at the least cost. Letters poured in upon her, asking how she did all this; so she wrote the little book, "Dairying for Profit," which tells the whole story in such a bright and helpful way that thousands and thousands of copies have gone all over the world, various governments distributing it for the benefit of the people.

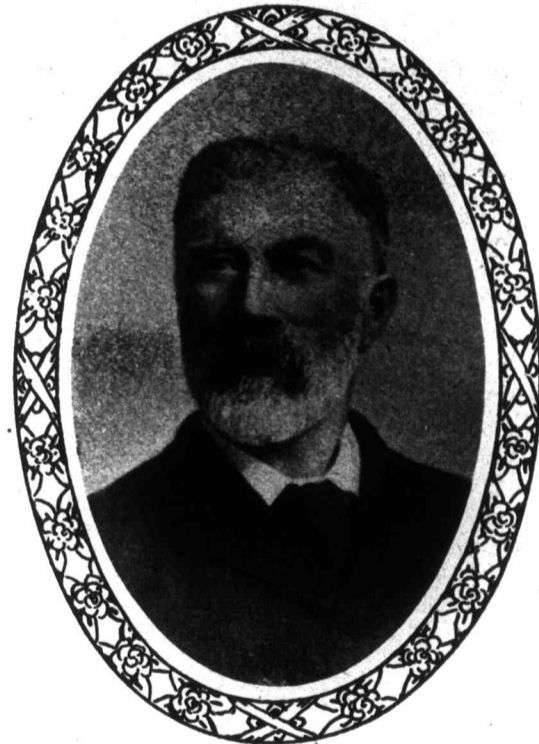


ANGUS HENDERSON.

Born 1834, in Kildonan, Man., within one mile of the place where he has farmed ever since.

Hardly a day passes that Mrs. Jones does not receive letters of thanks from people who have derived help from it; and, strange to say, it is fully as much enjoyed by people who have nothing to do with cows—bankers, railroad men, lawyers and clergymen are all equally interested.

Mrs. Jones was one of the judges of butter at the World's Fair, Chicago, where she won golden opinions. She still has 26 head of Jerseys, large and small, and her surplus butter sells for the highest price ever made in Canada, the year round. She will never, she thinks, exhibit her cattle again, as



DONALD McIVOR.

Born 1829, Lewis Island, Scotland; emigrated via Hudson's Bay in 1847, in Hudson's Bay Company's service. Has been farming in Red River Valley for over 37 years.

increasing years and family cares prevent, and she could not add to her reputation; but her interest in stock and dairy matters is keener than ever.

**Pioneer Agriculture in the Red River Valley.**

BY J. J. GUNN, LOWER FORT GARRY, MAN.

The history of agriculture in Western Canada is older than most people suspect. Long before the district of Assiniboia—which extended from Dancing Point on Lake Winnipeg to the watershed of the Missouri and Mississippi, and from the head waters of the Winnipeg River to those of the Assiniboia—

was, "in consideration of ten shillings of lawful money of Great Britain," conveyed by the Hudson's Bay Company to Lord Selkirk, for the professed purpose of establishing an agricultural colony, seed time and harvest had been more or less regularly observed in the land. On the 17th of May, 1801, Alexander Henry, a partner in the Northwest Fur Company, planted at the mouth of the Pembina River potatoes which had been grown at Portage la Prairie the previous year. On October 20th, 1802, he writes: "I took in my potatoes, 420 bushels, the produce of seven bushels, exclusive of the quantity we have eaten and what the Indians must have stolen, which must be at least 200 bushels more. I measured the circumference of an onion, which was twenty-two inches. A carrot was eighteen inches long, and at the thick end measured fourteen inches in circumference. A turnip with its leaves weighed twenty-five pounds."

It is a long hark from then till now, and the improvements in methods and means have been legion, but how many will lay claim to having improved on Mr. Henry's results?

In 1804, Mr. Henry also had cucumbers, melons, squashes, and maize, and two years later, oats. But while this is unquestionably the earliest record of agricultural operations in the land, the writer lays no claim to the honor of having introduced agriculture into the country. On the other hand, he tells that when visiting the head waters of the Missouri in 1806 he found among the Mandans and "Big-bellies," "plantations in every direction," Indian corn, beans, squashes, and sunflowers being grown. The women worked in the fields, and he adds: "Their hoes are nothing more than the shoulder-blade of a buffalo, to which is fastened a crooked stick. . . . They keep their corn in holes, which contain twenty or thirty bushels. . . . I was really surprised," he remarks, "to see what quantities they had still upon hand, and I am very confident they had a sufficient stock to serve them at least twelve months without any supply of flesh or anything else."

The Mandans are believed to have occupied the Red River country at a period not long anterior to the above dates, and doubtless to them belongs the honor of having been the first tillers of our fertile prairie soil. Still, it may well be assumed that their farming operations were quite as subordinate to other pursuits as were those of the fur-traders; and only at the advent of the Selkirk colonists do we first meet with the agriculturist pure and simple. The traders improved on the methods of the Indians by introducing hoes and spades; but it remained for the Selkirk settlers to evolve, after ten or twelve years of experimenting, the plow that was still king of the fields in the seventies, and the harrow that went with it. The latter began its career as a triangular frame with wooden pins for teeth. After a while a crossbar was added, and in course of time it was converted into a square, generally of three or four bars with as many cross-slats mortised through; then iron teeth drove out the wooden ones, and occasionally one might have been met with having a coat of paint even. It was always drawn by one corner, and remained a one-horse or one-ox implement to the last. A sight common in the fields of Assiniboia, when a man wished to double his harrowing power, was two harrows, two oxen and a boy strung out one behind another across a field. One drawback to this arrangement was that when the rear ox objected to walking as fast as the first, the harrow of the latter left but a slight impression on the land. The plow, though somewhat clumsy, was a serviceable implement. Excepting the share, coulter and bridle, there was no iron used in their construction. Beam, handles and mouldboard were all wood, and they were held together by pins of the same material. It sometimes happened that the mouldboard fell off in the furrow if the weather was dry, but by soaking the pins in water for a few minutes before replacing it, this accident could generally be prevented from happening again that day.

These, with the oft-described Red River cart and the sled, in neither of which iron had a place, comprised the whole list of implements used by the farmers of Assiniboia, excepting of course scythes and sickles. The sled was no more than two oak planks eight feet long and about one deep, shaped at one end, and with four bars mortised through. The shafts—for this, too, was a one-ox affair—were made of a couple of saplings, with a bar at the rear end by which they were fastened to the front bar of the sled with a few twists of "shaganopy." It served its purpose very well as long as nothing better was known, but that it was not the best was evidenced by the speed with which it disappeared when the present form of sleigh came in with emigration. Its greatest drawback was the amount of ferrierty it required to turn in when the snow was deep.

The farms all fronted on the rivers, running back two miles, and varying in width from one to ten chains; and pushing farmers often had fields of from two or three to twenty acres at intervals, wherever the land was suitable, along the whole length of their lots, and even beyond. As pigs—as well as all other stock—were allowed to run at large, and, as a matter of fact, made good use of the license, each of these fields was invariably surrounded with a fence of nine or ten rails.

The crops were harvested almost entirely with the sickle. Cradles were occasionally used, but they were not in general favor, as it was thought they wasted grain—which no doubt they did, as the "No. 1 hard" was always allowed to peep out from its

enveloping husks before it was cut, which made the most careful handling necessary. Labor was plentiful and cheap, and a score of men, women and children might often be seen at work together in a five-acre field. Indian men and women were frequently employed in this way. The pay was always according to the amount of work done, one shilling being paid for a hundred sheaves cut and placed on straw bands ready for binding. A few "rake-off" and "fork-off" reapers found their way in during the sixties, but they were regarded as holy horrors, and pretty generally shunned by "ower canny" and frugal settlers.

Then came into requisition the agricultural form of the far-famed Red River cart. This differed from the freighter's cart in having the shafts longer both fore and aft, and having "uprights" at either end like those of a modern hayrack. The side rails of the freight cart remained to carry the load over the wheels. One hundred sheaves were considered a fair load for one of these carts. Many farmers had fields—parks they called them—as many as three and four miles away from their homes, on the "common," as the land behind the river lots was called; and in hauling the grain from these fields, for it was invariably stacked at home, frequently as many as ten or fifteen carts were used; and no feature of all their operations was so entirely peculiar to the farm-life of Assiniboia as these long processions of loaded carts, with their never-failing accompaniment of wail and groan and squeak. All grain was stacked before threshing, and stacked in the most careful manner, the stacker placing every sheaf with his hands, and crawling over them on his knees from bottom to top, and from circumference to center of the stack. This method of stacking may have originated from the scarcity of forks—a farmer's complement of these usually consisting of one iron one made by the nearest blacksmith, and containing iron enough for at least five of the modern article, and a number of others procured from some convenient willow-bush. But it survived the advent of the modern pitching fork for many years, and only went out when buffalo-skin trousers did, and Canadian thistles came in.

As to threshing: Of course, the "stick-and-a-half" monopolized the field for many years, accompanied by its inevitable associates, the sieve and the four winds of heaven; but two-horse tread-power mills were brought in from the States at a comparatively early date, and remained in general use until some time after the "transfer." Almost all the threshing was done in winter time, and the grain was usually stored in the garrets of the one-story farmhouses.

Grist mills ran, in Assiniboia, through every stage, from the pair of flat-stones brought from Scotland by the Selkirk colonists, up to pretentious steam mills, with imported machinery throughout. Between these two extremes were many curious and comical makeshifts, some of them almost as dangerous as they were useful; but also many substantial and serviceable mills, run by wind and water. Generally the flour was good, in the very best sense of the word; not so white as your "patents," but not milled to death either.

Perhaps in no respect were the farmers of Assiniboia more peculiarly situated than in the matter of markets. Previous to 1826 the great question was how to procure enough to eat? A surplus of grain was not yet dreamt of. But after that date prosperity became the rule, and garrets become loaded with wheat, for which there was no market. True, the Hudson's Bay Company had promised to purchase from the settlers all the produce necessary for the carrying on of their business. This market, long looked for, differed greatly from any known either before or since. There were no grain standards, no grades, and no inspectors, and the only regulation was one to the effect that no more than eight bushels of wheat should be purchased from each farmer in any year. As might have been expected, the mixing that took place brought down the average. No. 1 hard, No. 2 frosted, and all sorts of aggregations of wheat, plaster and filth that the lazy and shiftless brought along, were all thrown in one heap on the warehouse floor, and all paid for at the same price, and so it was with everything—all that offered was taken. This seemed lovely, and put the people in such good humor that the company began to repent of its liberality, and almost immediately—in 1829—the prices of produce were reduced as follows: "Flour from 16s. per cwt. to 11s. and 6d.; wheat from 7s. and 6d. per bushel to 3s. and 6d.; barley from 5s. to 2s.; potatoes from 3s. per bushel to 6d.; beef from 6d. per pound to 2d.; butter from 1s. per pound to 7d.; cheese from 6d. per pound to 4d.; pork from 6d. to 2d. (Gunn: History of Manitoba.)

This was bad enough, but worse was yet to come. The quality of the produce so indiscriminately and injudiciously purchased began to be reported upon by the unfortunate consumers, with the result that the whole list was declared unfit for food, and the market closed against it.

This did not last long, however, the market being shortly reopened, but at first only to such as were indebted to the heirs of Lord Selkirk. When these debts were satisfied, others were allowed to sell; and in 1835 we find the old rule in force again, permitting every farmer to market eight bushels of wheat per year; this, at 3s. and 6d. per bushel, or 87½ cts., would bring seven dollars! And that was the total of cash that a grain-grower in Assiniboia could make his farm realize at that time and for many years after. Yet at that very date land was charged for at the rate of \$3.10 per acre!

"Hunters and trip-men [boatmen] were favored with a market for four bushels at 3s. 6d. per bushel; importers and mechanics could sell no grain at the company's stores." (Ross: Red River Settlement.)

Some time later the company again began to purchase limited quantities of flour, each farmer being allowed to sell just as much as his neighbor and no more. The precaution was taken, too, to have every delivery of this article accompanied by the miller's certificate, setting forth that it was manufactured from "good prime wheat." That is what they called No. 1 hard in those days.

The farmers' meat market was not even so extensive as that for grain; the hunters competing for it with the ever-plentiful pemican and buffalo dried-meat. It may be said that beef and pork were never killed till winter had fairly set in, and the practice was for every farmer who expected to have a carcass of either to dispose of, to send timely notice of the fact to the man in charge at Fort Garry. If the quantities so offered were in excess of what was required—and they usually were—lots would be drawn to decide which of the applicants should be purchased from.

To the traders of the Northwest Company belongs the honor of having first introduced live stock into the country. When, or how, the first importations were made it would be interesting to know. Most likely the first cattle came as calves all the way from Eastern Canada in the birch canoes that were the sole means of transport used by that company; at any rate, they were able to furnish the Selkirk Colony, in the spring of 1813, with four cows, a bull, pigs, fowls, etc. In 1822 a drove of cattle was brought in from the States and sold as high as \$100 per head. There was money in that, so another drove of 500 followed the next year, which brought prices down to from \$25 to \$35 per head. Still another lot were brought in the following year, and then importations seemed to have stopped; and about ten years later Assiniboia farmers were, in their turn, taking cattle southward to sell, together with leather, pemican, etc., which they exchanged at St. Paul for dry goods and other manufactures. At later dates the Hudson's Bay Company brought over stock bulls from England. These, it is said, were of



INDIANS AT REGINA, N.-W. T., FAIR.

the Durham and Ayrshire breeds, and their influence was so great on the stock of the country that in the herds of the more careful farmers it was noticeable up to quite recent years.

Horses of some sort seem to have been plentiful among the Indians about the beginning of the century, and quite easily obtainable, so at a comparatively early date there was no lack of horse-flesh among the farmers of Assiniboia, but they seem to have been looked upon as being a necessary part of the hunter's or freighter's equipment rather than the farmer's—at least this was so to a great extent—and many men who had bands of these horses roaming about the prairies tilled their fields almost entirely with oxen. Perhaps a few would be taken in during the winter to help pass the long and leisure-filled months with driving and racing, while, as often as not, the greater number were left out to dig their living from under the snow. Still, when the Hudson's Bay Company imported from England the celebrated stallion, "Fireaway," his services were eagerly sought after. The impression he left on the stock of the country is claimed to have been wonderful. If one wishes to get a really tall yarn out of an old-timer, one has only to draw him out on the merits of the Fireaway stock, and it is a fact that when "Manitoba" was first printed across the map there was to be found all over the west any number of horses, rather oversized, but strong, fleet, intelligent, and as tough and enduring as steel.

#### The Czar's American Driving Teacher.

George J. Fuller, the trotting-horse expert, who sailed for Russia a short time ago, will have the pleasant task of teaching the Czar how to manage the trotting horse. He has been especially engaged by the Russian Government to instruct the Army and the Russian family. Mr. Fuller is a veteran of the Civil War, and is well over sixty years old. He said to a sportsman before leaving: "I know nearly every trotting horse in the country, and I think they all know me."

#### Famous Rings.

The smallest wedding ring was that used at the marriage of Mary, daughter of Henry VII., to the Dauphin of France, son of Francis I. The Dauphin was born February 23, 1518, and, as a matter of state policy and to bring about a union with England, he was married, according to the custom of the time, when eight months old, to a princess, who was two years old. She wore a cap of black velvet, covered with jewels, and a dress of cloth of gold. Cardinal Wolsey handed the ring and performed mass.

#### The Index of 1899 Articles.

Notwithstanding the fact that this issue of the FARMER'S ADVOCATE reaches the large size of 80 pages, which is more than three times that of ordinary numbers, the extraordinary demands upon our space are such that in order to accommodate the many able contributions received from various writers, we are compelled to hold over till our January 1st number the annual index of the articles and engravings published during the year. We make this announcement because large numbers of our readers preserve their papers, by binding or otherwise, for future reference, and to such a good index is invaluable. It will, therefore, appear complete in the next issue.

#### The Cargill Herd of Shorthorns.

Prominent amongst the many Canadian breeders of Shorthorn cattle who have displayed commendable enterprise in keeping their herds up to a high standard of excellence in breeding and individuality, are the firm of H. Cargill & Son, of Cargill, Ont., who now own, without exception, the largest herd of imported Scotch-bred Shorthorns on the continent of America. The herd was founded on good material nearly 15 years ago by the purchase, amongst others, of two choice cows of the Rose of Strathallan family, descended from the grand old cow of that name, imported from Scotland in 1870, a winner at the Highland Society's Show. The high price of \$2,200 was paid for these two cows, one of which was a daughter of the peerless Rose of Strathallan 2nd, a championship winner at the Provincial Fair.

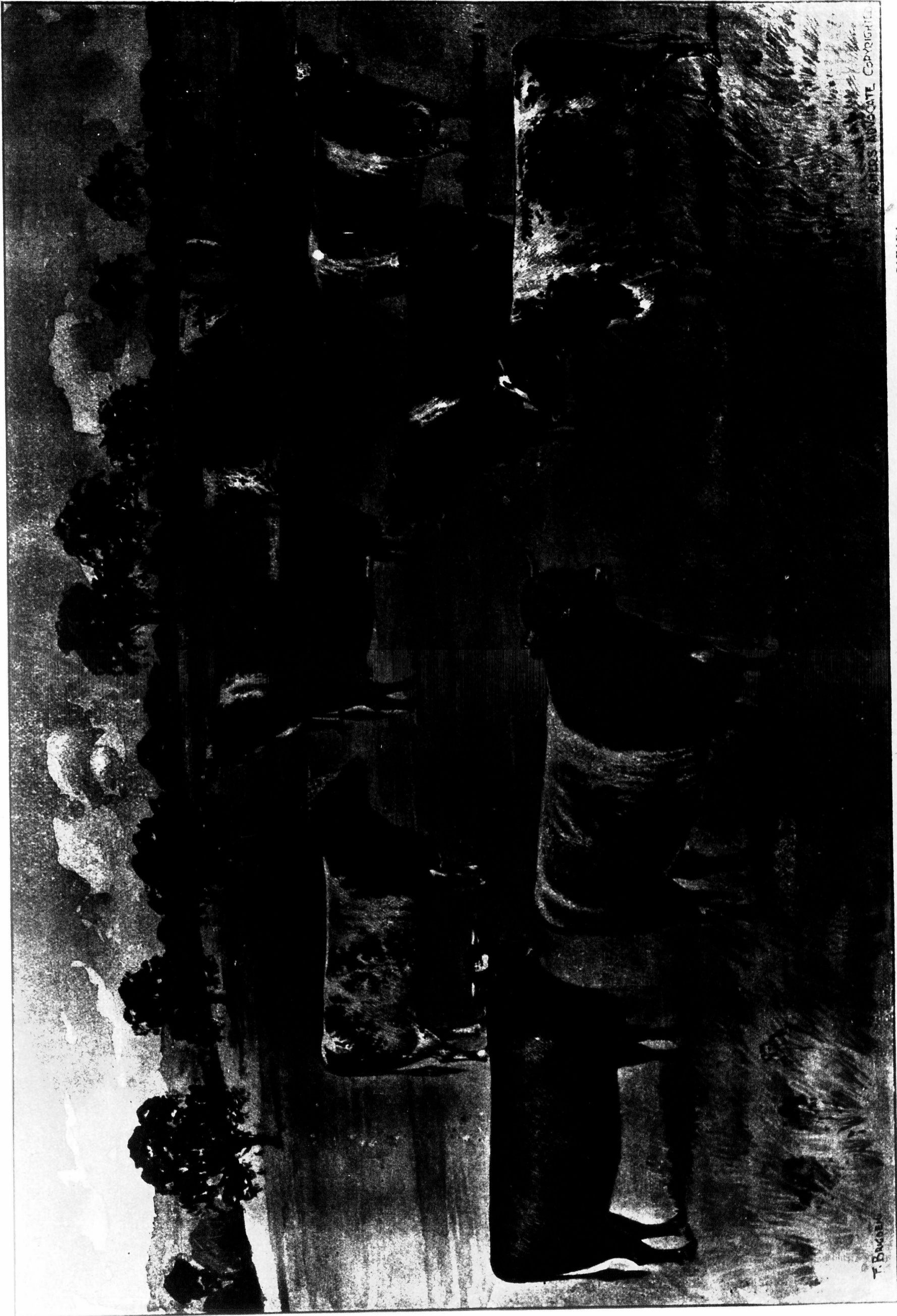
In 1895 the herd was strengthened by the purchase of six of the best of the imported Duthie and Marr bred cows in the dispersion sale of the herd of Mr. D. D. Wilson, of Seaforth, of which two were daughters of the Collynie-bred sire and show bull, Pride of Morning, winner of the Highland Society breed championship at Aberdeen in 1894, and the gold medal offered by the Duke of York for the best Shorthorn animal in the show.

Among the high-class imported sires used in the herd during these years may be mentioned *Albert Victor*, of the Kinellar Golden Drop family; the Collynie-bred *Saladan*, by Vice Chancellor; *Rantin Robin*, also bred at Collynie, from the favorite Lancaster tribe, and his dam by the famous Field Marshal; and last, but not least, the present head of the herd, *Royal Member* (64741), bred at Kinellar, sired by the Cruickshank bull, *Royal James*, by Cumberland, and of the Nonpareil family, one of the best of the old Sittyton tribes. He is one of the very best bulls in America. Weighing over 2,500 lbs. in working condition, he is yet smooth in all his parts, thick-fleshed, low-set, deep-bodied, and standing straight on well-placed legs. He is active and useful as ever, though 7 years old, and many of the cows in the herd are now in calf to him.

In the summer of 1898, Mr. W. D. Cargill, the junior member of the firm, visited Scotland, and made a selection of 20 head of choice animals from a number of standard Scotch herds, among which was the excellent roan 2-year-old bull, *Orange Duke* (71092), now in service in the herd, bred by the Duke of Richmond and got by the Marr-bred *Musgrave*, a rich-bred *Missie* by the Sittyton *Clipper* bull, *Criterion*. The dam of *Orange Duke* was by *Strongbow*, bred at Sittyton and used three seasons in the herd, and whose dam was by the famous *Champion* of England.

While in Scotland last year, Mr. Cargill was fortunate in negotiating arrangements with that excellent judge and breeder, Mr. Sylvester Campbell, of Kinellar, Aberdeenshire, for the selection and shipment in successive consignments of the best that could be bought, with the result that during the present year to date no less than 76 head of imported cattle have been received direct from Scotland, selected from many of the best herds in that country.

Included in these importations were twenty heifers in calf, selected from the noted herds of Mr. Duthie, of Collynie, and Mr. Marr, of Upper Mill, ten from each, and embracing representatives of many of their best families, a privilege rarely if ever granted to any other. These are a very valuable acquisition to the herd, and are to be retained as breeding cows, from which stock bulls will be sold. They are uniform in type and quality, but a selection of thirty heifers in calf from other leading Scottish herds are of similar pattern, and individually quite as good, while their breeding is on similar lines, being rich in the blood of the best sires used in the leading herds. Of the 63 females in the importations of this year over fifty are in



THE FARMER'S ADVOCATE. COPYRIGHTED.

A REPRESENTATIVE GROUP OF SHORTHORNS IN THE HERD OF MESSRS. H. CARGILL & SON, AT CARGILL, ONTARIO, CANADA.

T. BERGEN

call to high-class herd bulls in Scotland, among which are *Scottish Prince*, of the Princess Royal family, bred by Mr. Duthie, and sired by the Marr-bred Captain Ripley, whose dam was by William of Orange; the Collynie-bred *Pride of the Realm*, by *Pride of the Morning*, dam by *Dandelion*, a Missie bull by the Cruickshank Athabasca, and grandam by William of Orange; *Pride of the Roses*, by *Pride of the Morning*, and of the Kinellar Rosebud tribe; *Count Sunbeam*, bred by Mr. Duthie, got by Count Arthur, a Cruickshank Victoria bull by Count Lavender, and *Spicy King*, of the Upper Mill Goldies, by *Spicy Robin*, dam by William of Orange. From such rich breeding the produce should rank among the best of the breed.

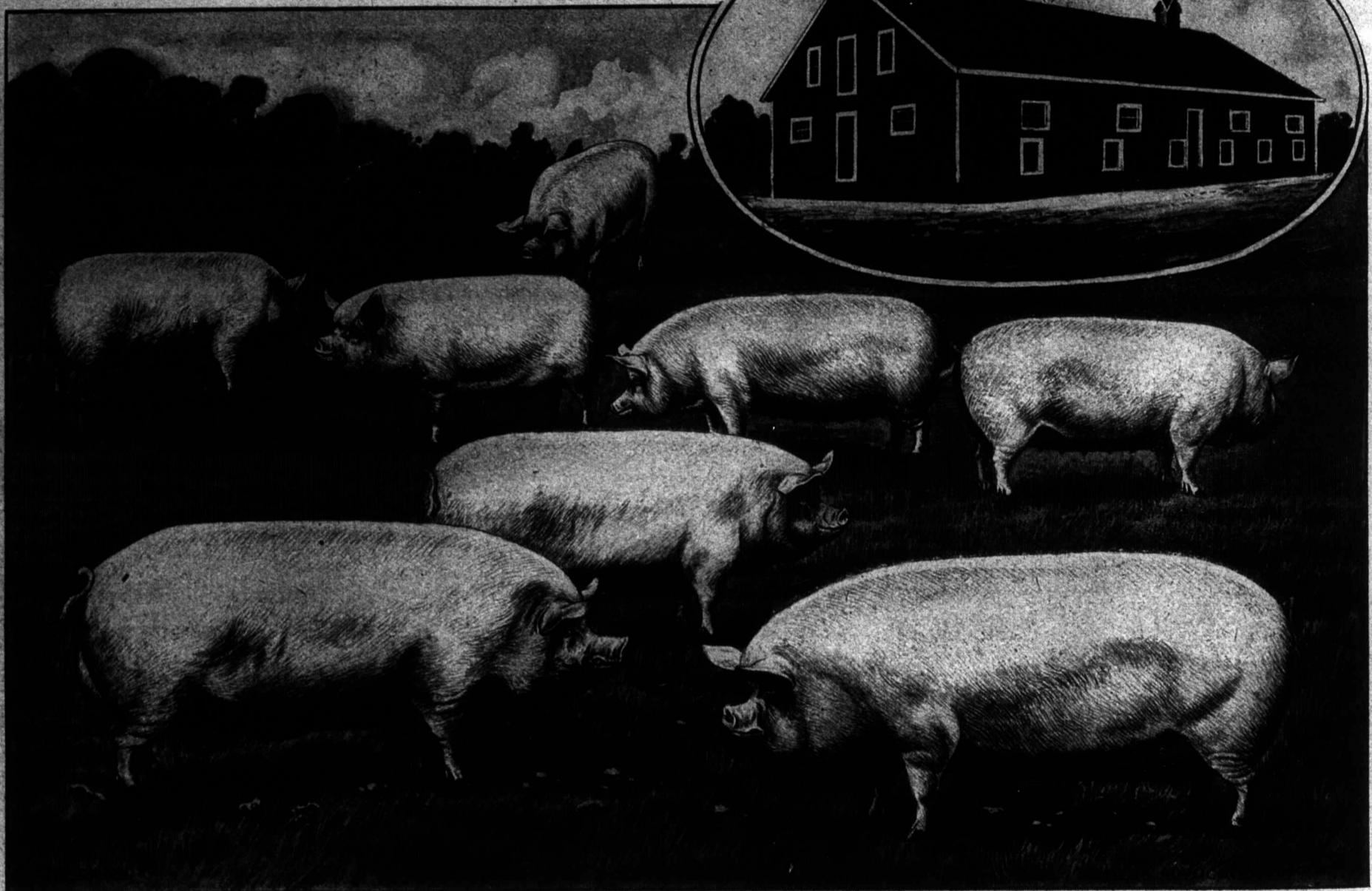
Prominent among the thirteen choice young bulls imported this year is the \$1,500 *Golden Drop Victor*, of the Golden Drop family, bred by Mr. Duthie, and bought at the joint auction sale from the Collynie and Upper Mill sale in October last, of which the *Aberdeen Free Press* said: "There was a lot of speculation as to what figure the massive, shapely, deep-chested, red calf, *Golden Drop Victor*, would make; a troop of judges were in the hunt, Gordon, of Newton, and Durno, of Jackson, being conspicuous stayers, but Mr. Campbell, acting for Messrs. Cargill, was 'in at the death,' and claimed a great bull at 200 guineas." Others of the baker's

#### The Summer Hill Yorkshires.

One of the largest and one of the very best herds of Improved Large English Yorkshire swine in America is that owned by Mr. D. C. Flatt, of Millgrove, Ontario, and kept on his Summer Hill Farm, five miles from the City of Hamilton, where he gives his personal attention to all the details of the breeding, feeding and management of his extensive herd, and where he has been signally successful in producing the ideal bacon hog. The farm buildings, which are among the most attractive, commodious, conveniently arranged, and comfortable in the Dominion, and which were well illustrated in the last Christmas number of the *FARMER'S ADVOCATE*, have been added to during the past year by the erection of the fine new piggery shown in the engraving in this issue, which is the most complete building of the kind we have seen anywhere. It is 35x70 feet in dimensions, of attractive design, on stone foundation, the walls of matched lumber, inside and out, over tar paper on inner

herd. He is remarkably true to the best characteristics of the breed, has a handsome head, well-sprung ribs, a strong back, long quarters, full, tapering hams, and the best of legs and feet, on which he stands plumb and straight; and he has proved a very satisfactory sire, his pigs coming uniformly good and going on well. Some twenty-five high-class sows were added in 1898, among which was the grand imported sow, *Royal Duchess 2nd*, a first-prize winner at the English Royal Show at Birmingham, and one of the best representatives of the breed; she has proved a regular breeder of large and strong litters of the proper type, and her produce has done much to build up the herd.

Finding that the demand for pigs from his herd was greater than he could supply, Mr. Flatt, early in the present year, made a large importation of Yorkshires, comprising about 40 young sows and boars, as well as a few more mature sows in farrow to noted English boars, selected from leading herds in Great Britain, but mainly from the far-famed Holywell Manor herd of Mr. Sanders Spencer, the champion of the Improved Yorkshires in England,



YORKSHIRE SWINE AT SUMMER HILL FARM. PROPERTY OF D. C. FLATT, MILLGROVE, ONTARIO, CANADA.

dozen of grand young bulls are: *Count Amaranth*, bred by Duthie, and bought by Mr. Campbell at the 1898 sale for 100 guineas, and used in his herd, sired by Count Arthur, and his dam of the same family as Field Marshal; *Prince Cruickshank*, by the Sittyton-bred Emperor; *Count Sarcasm*, by Count Arthur; *Prince William*, by Reveller, by Allan Gwynne, a son of Star of the Morning; *Orange Chief*, by Orange Duke; *Count Rufus*, by Beau Ideal, by Chamberlain, bred by Mr. Duthie; *Beauchamp*, by Prince of Archers, bred at Collynie; the red *Prince Bosquet*, by Cruickshank's Wanderer, dam a Princess Royal, with Athabasca for her sire and Heir of Englishman for grandsire; *Fashion's Favorite*, by Prince of Sanquhar, of Duthie's breeding, and dam by Cruickshank's First Consul; and *Lord Strathbogie*, by the same sire, and from a Sittyton Secret dam with five excellent Cruickshank crosses.

Including the importation of last year, and that of the present year, the Cargill herd now numbers over one hundred head of imported animals, and is unexcelled on this continent for richness of breeding and individual merit. The owners have the best of facilities for handling a large herd, and we have no hesitation in recommending them as upright and honorable business men, who may be confidently depended upon to fairly represent their stock and do the square thing in every deal.

boarding, making it warm and dry, while the large double windows give abundance of light, and ventilation is well provided for by means of the cupolas. The pens are roomy, and the passages wide and well-kept; the sleeping places in each pen are raised some four feet above the floor, and the pigs go up a sloping slatted walk to their bedrooms, where they are always dry and comfortable, while numerous yards on either side afford ample room for exercise. Mr. Flatt having decided in favor of the Improved Large Yorkshire as the breed in his estimation most prolific, the sows producing large litters, and the most generally conforming to the bacon type, resolved to make their breeding the leading feature in his farm-stock operations, and to be content with nothing less than the best of the breed obtainable.

With this determination he secured, amongst others, in 1898, the phenomenal young boar, *Look Me Over*, bred straight from imported stock, unbeaten in the competition at the leading shows in that year, winning the first prize at the Toronto Industrial and the Ottawa Central Exhibitions, as well as at a large number of local shows. He is still retained in the herd as one of the stock boars, his owner's agent having failed to find a better in Britain, though some of the best that could be bought there have since been added to the

whose herd has probably won more prizes and furnished more prizewinner than any other of the breed in the world, and who has exported breeding stock to many countries in Europe and America, and indeed to almost every country on the globe. Many of those in the first importation were of the favorite Haskett family, which have made an extraordinary record as prizewinners in the Old Country, and which conform so uniformly to the best bacon type, among which may be mentioned the grand trio of breeding sows, *Josephine 5th*, *Lady Haskett 2nd*, and *Lady Minto*, which have raised large and thrifty litters of typical pigs, and for which the demand was so great that Mr. Flatt determined to make a second importation in the same year, in which were some twenty head, besides those farrowed en route and in quarantine, and which were selected principally from the superior herd of Mr. Philo L. Mills, of Ruddington, who has been very successful in winning prizes at the leading English shows. In this importation came the grand young boar, *Ruddington Lad 3rd*, winner of the third prize at the Royal Show in 1898, and first at Lincoln, his sire, *Ruddington Lad*, winning first at the Royal, and the gold medal for the best pig in the white breed classes; also the typical young boar, *Forest Ranger*, by *Bottesford Ranger 3rd*, sire of the first and second prize pens at the Royal. Among the many fine sows in this importation may

be mentioned *Miss Hollingworth 58th*, of Mr. Mills' favorite family, own sister to the first-prize sow at the Royal last year; *Fanny B.*, sired by Ruddington Lad, the Royal champion, and in farrow to Duke of Rutland, who was in a first-prize pen of three at the Royal; *Fanny C.*, by the same sire, and in farrow to the same, and out of *Miss Hollingworth 39th*, the dam of many first-prize winners; *Fanny F.*, by Ruddington King David 8th, the sire of the champion boar, Ruddington Lad; and *Fanny P.*, by Tichbourne, and in pig to Ruddington Lad 2nd, own brother to Mr. Flatt's imported Ruddington Lad 3rd.

Including the produce of the sows in these two importations, Mr. Flatt had something over 65 imported animals in his herd, probably the largest number in any one herd on this continent. There are now about 50 breeding sows in the herd, 25 of which are imported, and, being bred from such noted prizewinning ancestry, they are of the most approved breeding and type, while, with the high-class sires in service in the herd, their produce must rank well up to the highest standard of excellence for the breed, there being at present three imported stock boars, both in service, as well as two Canadian-bred boars, first-prize winners at Toronto Exhibition in 1898 and 1899.

business of the farm is the production of milk, for which a steady and excellent market is found in the Capital City. A large stock of grade Ayrshire and Shorthorn cows are kept, but in connection with these a standard herd of about forty pure-bred Ayrshire cattle is maintained, as well as strong herds of Berkshire and Tamworth swine, and a few Chester Whites and Poland-Chinas. Nearness to the Government Farm affords the advantage of the use of the high-class sires kept at that establishment, and is favorable to the carrying of more breeds than is easily practicable under ordinary circumstances, and the benefit of this privilege is readily seen in the excellent class of young stock found at Maple Cliff.

The stock bull at the head of the Ayrshire herd at present is imported Duke of York 2nd—2301—(shown in the illustration), bred by the late Francis Young, Balnowlart, Brallantrae, Scotland; sired by Duke York of Hillhouse; dam Clara 3rd of Balnowlart, a Royal and Highland Society winner, who has given as high as 62 lbs. of milk per day. Duke of York 2nd won the first prize in a strong class as a yearling at the Toronto Industrial Exhibition, 1898, and second at the Canada Central Exhibition, Ottawa, 1899, as a two-year-old. He is a bull of fine character, large, lengthy, level, and of true dairy type and conformation, and coming from such

would delight the eye of the most critical dairyman. Among these is *Maple Cliff Lass*, winner at Ottawa in a class of twenty-two exceptionally good ones; *Gloxina* of Maple Cliff, and *Gold Princess*. These heifers and a choice lot of heifer calves of different ages in months, promise well to build up the stock and improve it. A capital bull calf by *Gold King*, and out of *Primrose* of Havelock, won second at Ottawa as under six months, and a charming heifer calf bought at Drummond's dispersal sale, and sired by *Kelso Boy*, won fourth at Ottawa in a strong class, and is exceedingly promising.

THE SWINE.

About 100 head of hogs of various ages are usually found on the farm, being fed largely on roots and hotel swill, with a little shorts or meal added, and are kept mainly in paddocks, with movable pens for shelter. In this way they are kept healthy, strong on their legs and feet, and in the best possible condition to be useful as breeders, and to go on well when changed to new quarters or conditions. The Tamworths in this herd have proved themselves among the best of the breed, having won a large share of the best prizes at the Ottawa Exhibition in the last three years. The two-year-old stock boar, *Red Fellow*, won first as under a year, as a yearling, and second as a two-year-old, and is a very fine pattern of a typical



Mr. Flatt's sales during the past year have been most satisfactory, totalling over 300 head, and distributed over a wide extent of territory, going into all the Provinces of the Dominion and many of the States, and giving in nearly every case entire satisfaction, many of the animals winning prizes in the hands of their new owners at leading Provincial and State fairs, his own herd having won 100 awards with 105 exhibits at 7 shows in 1899, including the Toronto Exhibition, Canada's greatest fair. Not satisfied with present attainments, and determined to cater to the wants of his customers by supplying only the best that can be procured, he purposes making other importations in the near future in order to supply his ever-increasing trade and to keep up the standard of his herd to the first rank.

Few men in the business have risen so rapidly to the front rank as a breeder, and few have equal facilities for importing and doing an extensive business, or as sound a foundation stock to build on and breed from, and few have as good and safe a system of private records and identification, while none has a more earnest purpose to deal fairly and honorably with all men, and to give good value in every transaction.

Maple Cliff Dairy and Stock Farm.

At Hintonburg, a suburb of the City of Ottawa, and in close proximity to the Dominion Central Experimental Farm, is Maple Cliff, the well-equipped dairy and stock farm of Messrs. R. Reid & Company, of which Mr. J. C. Smith is the active partner and director. The farm comprises about 350 acres, a considerable portion of which is kept regularly in pasture and hay, while the principal crops grown are coarse grains, corn, and roots, which are fed on the farm, the manager being fully persuaded that liberal feeding pays. The main

MAPLE CLIFF STOCK AND DAIRY FARM OF REID & COMPANY, HINTONBURG, ONTARIO, CANADA.

noted parents, can hardly fail to prove a successful sire of superior dairy stock. The previous stock bull in service was *Gold King*, by imported *Chieftain* of Barcheskie, and having for his dam the noted *Nellie Osborne*, imported, the first-prize cow and champion female of the breed at the World's Fair, Chicago. She has repeatedly won equal honors since at leading shows in Canada, and was admittedly one of the very best Ayrshires that has ever come from Scotland.

Prominent among the strong coterie of cows in milk are: *Lady Maggie*, by *Golden Guinea*, and *Beauty 2nd*, by *Highland Laddie*. These are typical dairy cows, with good constitution, fine character, and shapely milk-vessels. *Minnie Mac*, by *Golden Guinea*, and out of *Sarah* of Burnside, won second prize as a two-year-old at Ottawa; and *Wilhemena* of Burnside, by *Lord Nelson*, out of *Jessie* of Burnside, is a big milker, having given 58½ lbs. milk per day in January. *Silva*, by *Cherry Prince Jr.*, dam *Lily 4th*, is a large milker, as one would expect from her appearance. A beautiful bunch of half a score of sonsie yearling heifers by *Gold King*, and out of cows of strong breed character and performance,

bacon hog. *Amber Prince*, by *Amber Luther*, won first prize as under six months at Ottawa this year, and *Amber King*, a yearling, out of *Maud*, won first in 1898 and 1899. The sow, *Delilah*, sired by *Oak Hill Hugo*, and out of *Maud*, won second at Ottawa this year as a yearling. *Hilton Lady*, a yearling, by *Spruce Grove Model*, was first at Ottawa. Indeed, this herd of Tamworths stands high in quality, having won all the firsts, save three, that were offered in the class at Ottawa in 1899, besides four seconds and the herd prize. The Berkshires are headed by the excellent boar, *Columbus 5th 4414*, by *King Highclere*, a Toronto first-prize winner more than once, and he shows strongly the characteristics of that famous family, which have won so many high-class prizes in Canada and the United States in recent years. Among the breeding sows a prominent figure is *Spanish Queen 6353*, by *Khedive*, bred by *J. G. Snell*, dam *Model Lady*, by *King Highclere*. A fine lot of young sows and boars of both spring and fall litters, of both breeds, bred from such stock as described, are worthy of attention, and look like giving satisfaction wherever they go.

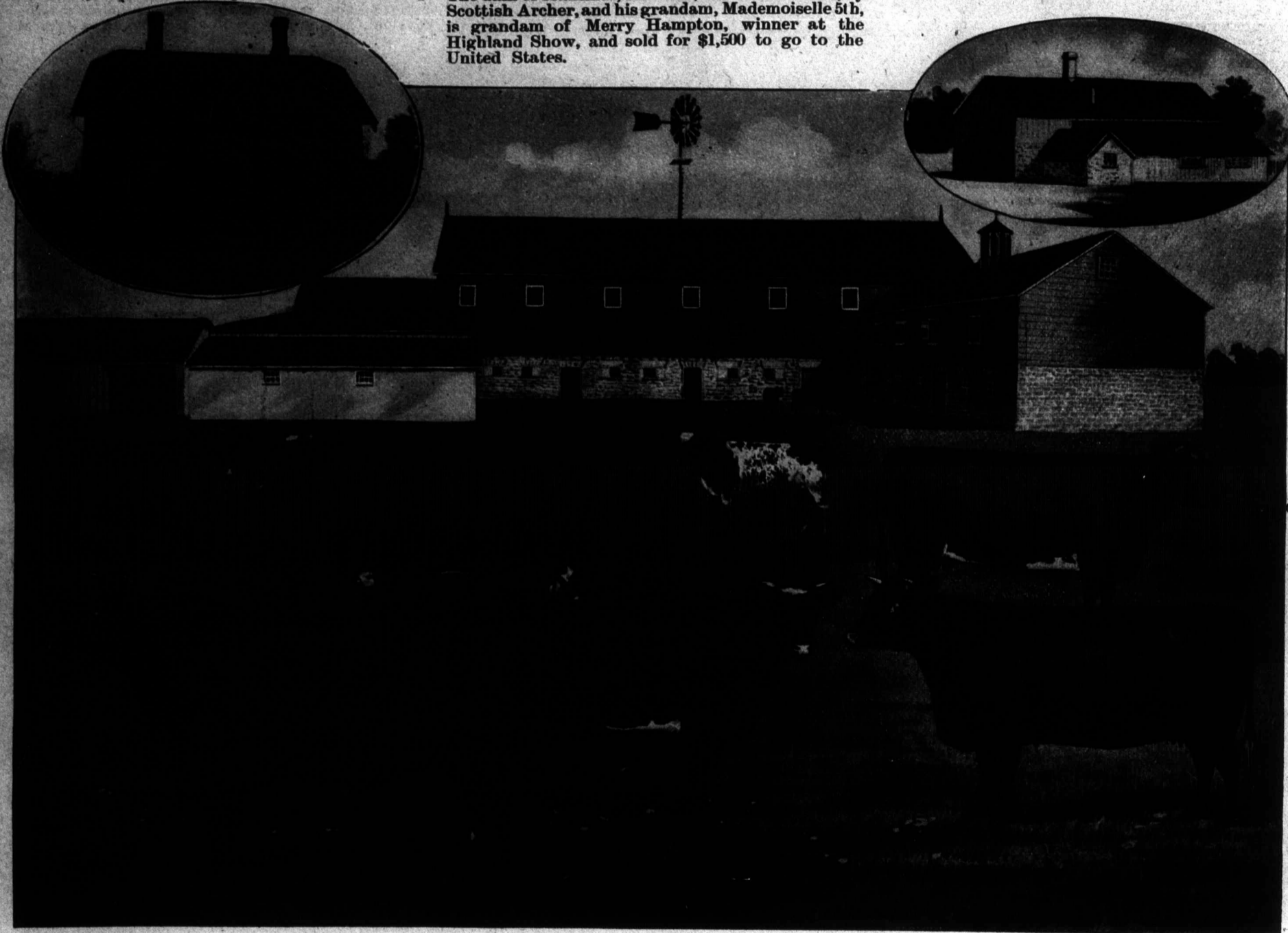
### The Freeman Herd of Shorthorns.

The large and strong herd of Shorthorn cattle owned by Messrs. W. G. Pettit & Son, of Freeman, Ont., and kept on their beautiful farms close to Burlington Junction, near the City of Hamilton, has been established nearly 25 years. The senior member of the firm was one of the most active promoters of the Dominion Shorthorn Breeders' Association, having been almost from its inception one of its board of directors, and is considered one of the very best judges in the country, having frequently been called upon to act in that capacity at the leading exhibitions in the Provinces. He is also a careful breeder and a close student of the herd books and of the pedigrees of cattle. The herd, founded on selections from descendants of the best of the earlier importations, and supplemented from time to time by the purchase of those of more recent importations, has been kept up-to-date by the use of high-class sires of the most approved breeding and modern type, among which may be cited *The Premier* =8114=, by the imported Cruickshank bull, *Premier Earl*; dam imp. *Fame*, by Arthur Victor. *Grand Fashion* =15404=, by Hospodar, bred by Mr. Cruickshank, and so highly prized that he was purchased for exportation by a leading

quent recurrence of the names of those noted sires, Field Marshal and William of Orange, whose blood adds value wherever found. There are in the importation five substantial and smooth red heifers by the Duke of Richmond's New Year's Gift, by Knight of the Garter, and out of dams of the Jealousy, Mysie, Minerva, Lilly of Towie, and Lady Anne families, in whose blood lines are found representatives of most of the best tribes in all the leading Scotch herds. Three are daughters of Hall Mark (67164), by Royal Robin, bred by Mr. Duthie, of Collynie, and out of Augusta 7th, dam of H. M. the Queen's steer, which won the 100-guinea championship plate at the Smithfield show in 1889. These are out of Brawith Bud and Sittyton Secret dams, and are models of the type of those favorite families. Two are by Gold Casket, bred by Mr. Bruce, and sired by Cap-a-pie, winner of second prize at the Royal Northern Show, and others are by Reveller, bred at Upper Mill, out of a Star of the Morning dam. One is by Star of Lancaster, whose sire was by Star of the Morning; one by the Kinellar-bred *Topsman*, by Gravesend; one by Casimir Perier, by the Cruickshank bull, *Sovereign*, and one by *Maximus*, of the Marr Missie family, from which came *Marengo*, the Royal champion of last year. The dam of *Maximus*, *Massena*, was also a Missie, by *Scottish Archer*, and his grandam, *Mademoiselle 5th*, is grandam of *Merry Hampton*, winner at the Highland Show, and sold for \$1,500 to go to the United States.

bred by Mr. Black, of Bartholchapel, Aberdeenshire, and sired by the Marr-bred Captain Ripley, who was by Captain of the Guard, and whose dam was by William of Orange. Captain of the Guard was bred by Mr. Cruickshank, and was used for several seasons in the herd of Mr. Deane Willis, where he left many prizewinners, including the champion group of five bull calves at the Birmingham Show. With such a combination of good blood and individual excellence, the Freeman herd, now numbering about 100 head, is well equipped for producing the kind of cattle which the trade demands, and it is safe to predict that in the hands of its enterprising owners the standard will be well maintained. Few men in the business have better facilities for handling a large herd, or better taste and judgment in breeding and feeding cattle, and none are more reliable or more worthy of confidence.

An excellent flock of registered Shropshire sheep is also kept on the farms. The flock is founded on first-class importations from leading English flocks, and has been kept up to a high standard by the use of only first-rate imported rams.



IMPORTED SCOTCH SHORTHORNS, REPRESENTATIVE OF THE HERD OF W. G. PETTIT & SON, FREEMAN, ONTARIO, CANADA.

Scotch breeder; and *Indian Statesman* =23004=, by imp. *Indian Chief*, a Sittyton Victoria bull, one of the most noted sires in America, and from a *Duchess of Gloster* dam, one of the best of the Cruickshank tribes. Last year two excellent cows of the Sittyton Buckingham family, *Mina Buckingham* and *Gwendolyn*, tracing to imp. *Airy Buckingham*, by Master of Arts, were added to the herd.

During the present year the herd has been reinforced by an importation of 20 head of high-class Scotch-bred cattle, two bulls and eighteen heifers in calf, selected by Mr. George Campbell, of Kinellar, Aberdeenshire, from a number of well-known herds in Scotland. These are a uniformly good lot of the most approved type and breeding, being of good size and quality, smooth, thick-fleshed, and showing all the indications of strong constitutional vigor. In color, 15 are red and 5 are roan, and in breeding they represent many of the best and most popular Scotch families, 7 of the heifers having straight Cruickshank pedigrees of the Brawith Bud, Secret, Mysie, Matilda, and other equally meritorious tribes, while all are deeply bred in the blood lines of the Sittyton, Kinellar, Upper Mill, Collynie, and other noted herds, a striking feature in their pedigrees being the unusually fre-

These heifers were bred before leaving Scotland to high-class bulls, of which one is the Collynie-bred *Count Amaranth*, whose dam is of the same family as Field Marshal, and whose sire, *Count Arthur*, is a Sittyton Victoria, by Count Lavender, so well known in the hands of Mr. Deane Willis. Another of the sires to which a number were bred is *Star of Maud*, also bred by Mr. Duthie, and of the Cruickshank Clipper tribe, got by *Star of Morning*, and his dam by the Royal champion, *Mario*, by Field Marshal.

Two excellent young bulls were included in the importation of 1899, and are now in service in the herd. *Matabele Chief* (73029), the older of the two illustrated in the engraving, was 2 years old in June last, and is a rich red in color, with plenty of substance and lots of style, standing well on short legs, straight on his top and lower lines, and well filled in all his parts. He was bred by Mr. Wilson, of Pieriesmill, Aberdeenshire, and sired by *Senacherib*, by the Sittyton-bred *Sovereign*; dam *Sensation*, a daughter of *Roan Gauntlet*; grandam *Pride of the Isles*. The younger bull, *Red Light*, is coming 2 in January, and is a big, massive, deep-bodied bull, showing strong character, and belongs to the noted *Gordon Castle Lustre* family. He was

### Securing Extra Copies of this Beautiful Number.

Judging from last year's experience, there will be a great demand for additional copies of the present Christmas number of the FARMER'S ADVOCATE. In order to provide against this, we have printed a limited number more than required to supply our regular and new subscribers. To non-subscribers the price is 50 cents per copy. However, any subscriber whose subscription is already paid up for 1900, or who sends in his renewal, may at the same time secure extra copies by remitting for the number desired at 25 cents each. Nothing more attractive or valuable could be sent out this season to an absent member of the family or friend. Or without any outlay of cash whatever, one copy may be obtained very easily as a premium for the name of each new subscriber sent us, accompanied by the subscription price (\$1). We would advise our friends to lose no time in making provision by one or the other of the above plans to secure copies of the paper before the supply runs out.

**A Gold Medalist's Gold Medal Stock Farm.**

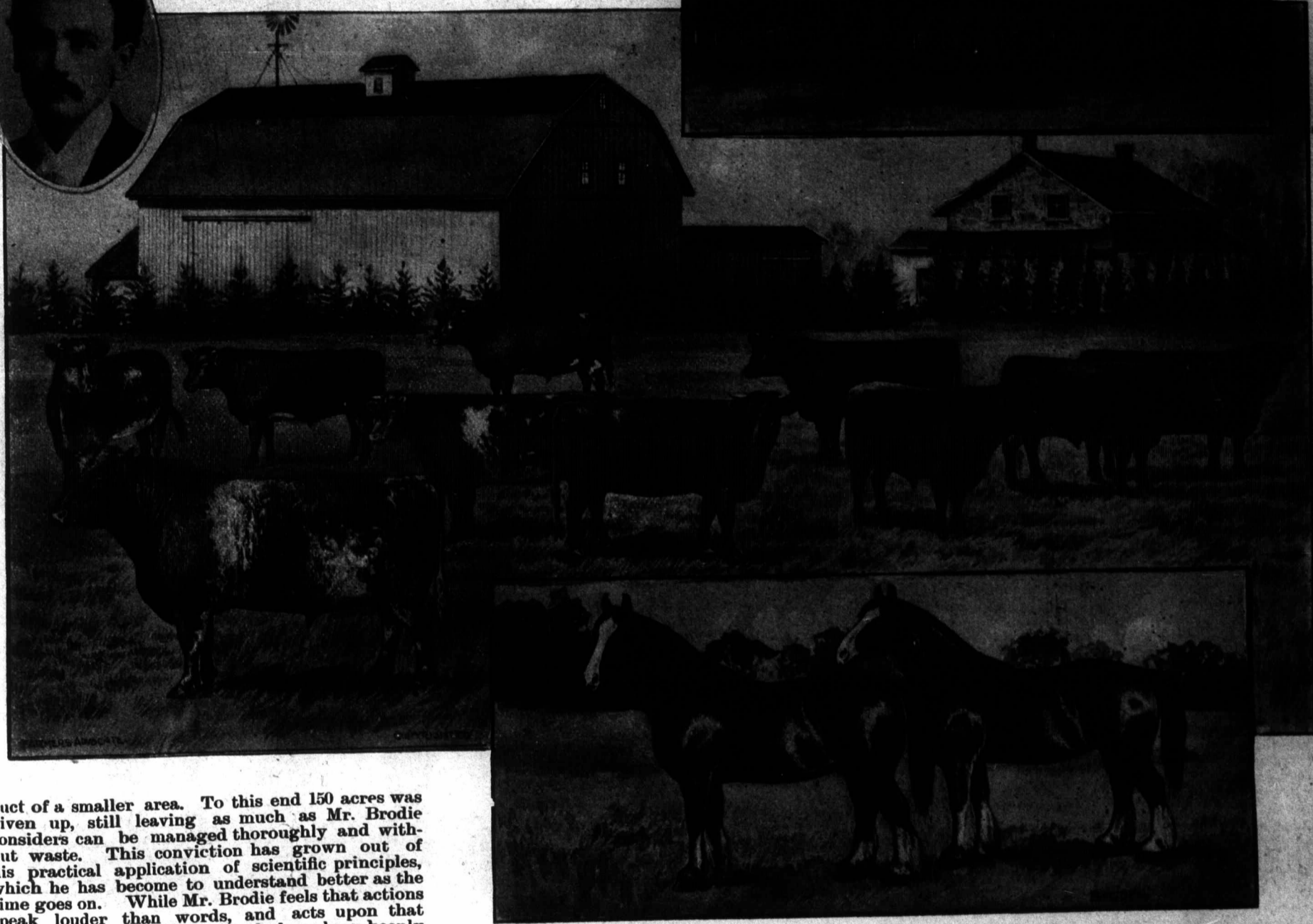
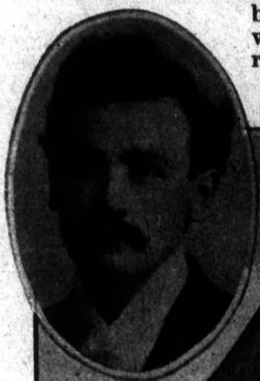
The terms "Scientific Farmer" and "Successful Farmer" are becoming more and more to be recognized as synonymous terms. To have said so in almost any audience but a few years ago would generally have aroused vigorous opposition, due, doubtless, to a mistaking of terms or their misapplication. Book-farming followed to the letter can hardly fail to prove a dismal failure, but scientific agriculture must succeed where good natural resources find a place. In the vicinity of Bethesda, in the riding of North York, York County, Ont., good farms and good farming can be seen, and the best and most profitable farming at the home of a "Gold Medal" graduate of the Ontario Agricultural College. We refer to the home of Mr. G. A. Brodie, B. S. A., a view of whose property and stock are herewith portrayed. It was in 1891, when not long from his *alma mater*, Mr. Brodie's farm was awarded a gold medal by a staff of qualified judges appointed by the Agriculture and Arts Association of Ontario in a provincial district contest. At that time Mr. Brodie had two hundred acres under his charge, which was increased to 250 acres for a number of years until 1890, when it was felt that more satisfactory results would follow the con-

Gloucester, Miss Ramsden, and Duchess of Woodhill, etc., represented. The present head of the herd is the eighteen-months roan bull, Roan Stamp 30311, by Bright Stamp, a son of Sittyton Stamp, and out of Gay Lass 30161. He is a rare good one, being thick-fleshed throughout, with plenty of style and substance.

This class of stock Mr. Brodie finds difficult to secure and still harder to hold, which has almost decided him to launch right out and introduce a first-class importation of the most fashionable strains. The trend of the times indicates that such a transaction would prove a safe and popular venture, since Ontario is becoming more and more to be recognized as the breeding ground of the very best stock for the continent. In the meantime, however, his stables are not allowed to stand only partially filled, as a fine lot of young bulls have been selected from a number of the best Canadian herds.

A number of these which are portrayed in the illustration include the red Royal Standard 30638, by Northern Light; Woodhill 30080, by Charles 4th, and out of a Duchess dam; Isabella's Allan, by Allan 18434, a worthy grandson of the noted Indian Chief, containing Mina and Lavender blood. This grand Ruby youth that has come down through Isabella and Rose of Strathallan families,

each year, the farm is maintained in "Gold Medal" condition. While a scientific rotation is adhered to, no fixed rule is followed, as in his judgment variations are seen to be advantageous. A field of roots is always grown, usually about twelve acres. In the course of preparation the land is well manured for this crop, which is followed by a cereal crop seeded to clover, either red or lucerne, which generally produces a crop of hay, a yield of seed and one or two summers' pasture. The value of lucerne has risen in Mr. Brodie's estimation year by year, as has the mixing of grains, such as oats, wheat, peas, barley and flax, which he finds to yield much heavier and of better feed than any of these crops grown alone. Had we more such leaders as Mr. Brodie, furnishing evidence of scientific, wide-awake farming, distributed over Canada at no great distance apart, the followers in agriculture would have patterns to guide them to a successful career, thus elevating the occupation of the farmer to a higher plane than it has yet attained in any country.



THE HOME AND HERD OF G. A. BRODIE, BETHESDA, ONTARIO, CANADA.

duct of a smaller area. To this end 150 acres was given up, still leaving as much as Mr. Brodie considers can be managed thoroughly and without waste. This conviction has grown out of his practical application of scientific principles, which he has become to understand better as the time goes on. While Mr. Brodie feels that actions speak louder than words, and acts upon that principle, his successful methods have been keenly observed, which has led to a demand for his services on the Farmers' Institute staff, where he has given valuable service. In this way he has been enabled to break down strong prejudices against the college, which are, fortunately, growing less formidable.

From the commencement, pure-bred cattle breeding has been followed, and at the very outset of his operations after leaving college he established his present herd of Shorthorns with a consignment of thirteen animals, including Strawberry, Duchess, May, and other highly-esteemed families. To these have been added choice things of fancy breeding at various times, which with the natural increase from the services of such sires as Gay Lad, Athelstane, Kinellar Sort, Northern Light, Roan Stamp, Sussex, and others of equal merit, many grand beasts have been produced. At times the herd reached fifty head, but frequent sales prevented it from passing the half-hundred mark. Early in 1898 the keen demand for good stock reduced the herd considerably, and when a portion of the farm was given up the herd was reduced to fifteen animals of choicest breeding, but since then additions of fashion and merit have been made. In this, as in all Mr. Brodie's dealings, shrewd business judgment has guided the selections, as we see such families as Isabella, Duchess of

with such sires in his pedigree as Sussex, Barmpton and Royal Duke of Gloucester, is one of the favorites, as his evenness and becoming style harmonize well with his worthy pedigree.

Mr. Brodie may be termed a many-sided farmer, as by his training, practical experience and keen business judgment, he is able to embrace any opportunities that present themselves. During the past year he has fed off nearly two hundred pigs that he has been able to purchase, by watching opportunities, much cheaper than he could raise them. They were secured when able to shift well for themselves, and fed on mixed grain and succulent rations in roomy yards until nearly ready for the bacon trade, then housed and finished. Mr. Brodie aims to have very few pigs on hand when cold weather arrives, since he does not favor close confinement and realizes that even animal heat cannot be produced without expensive fuel. At times when fodder is plenty and lambs accessible, Mr. Brodie's fields are devoted to mutton production, which with his wise system of cropping, cultivation, etc., and the quantity of manure he is able to apply

**Great Britain's Egg Supplies.**

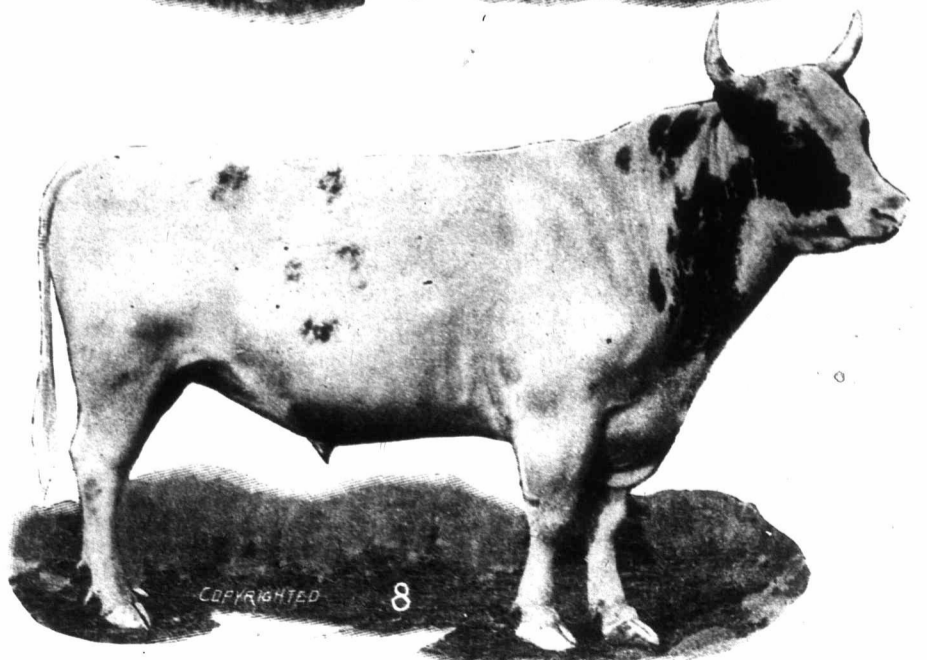
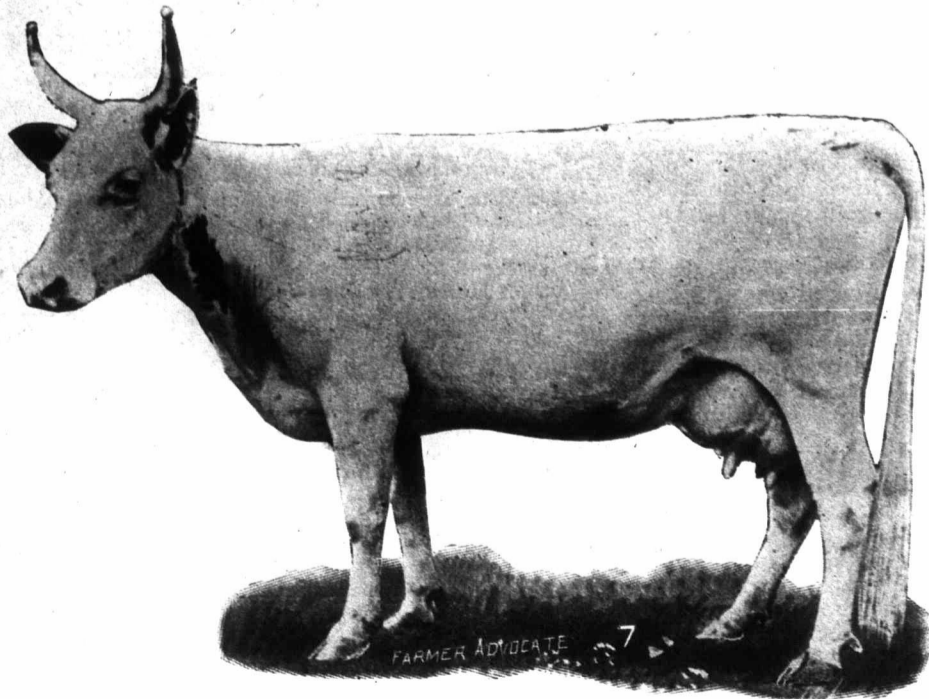
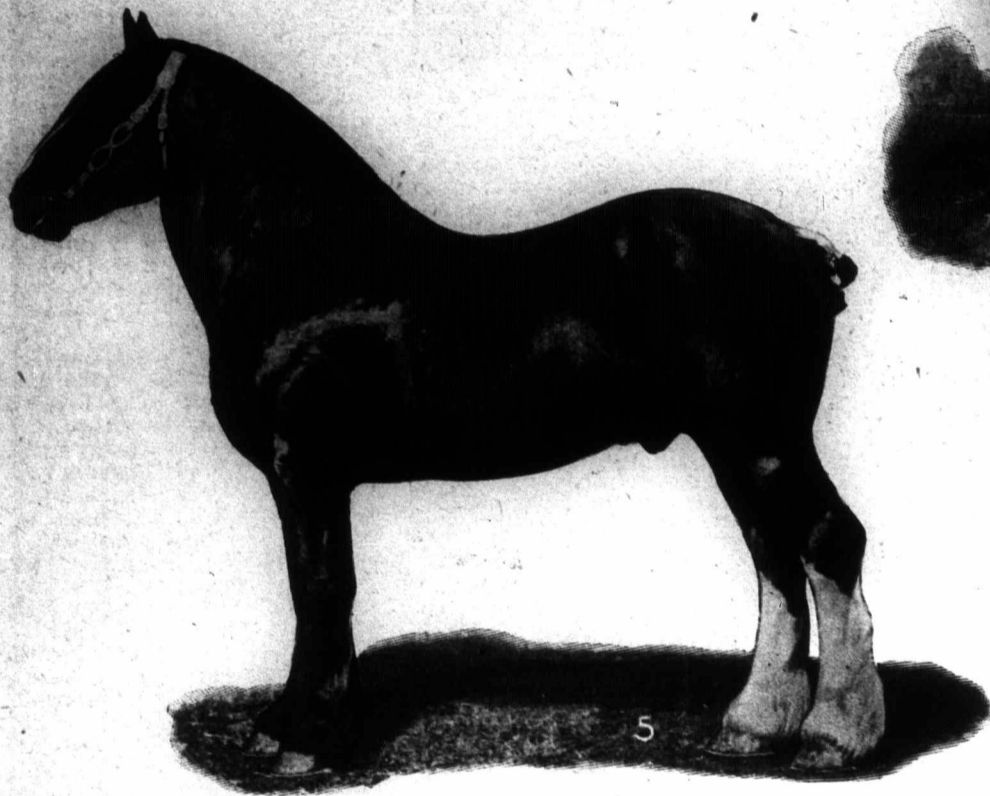
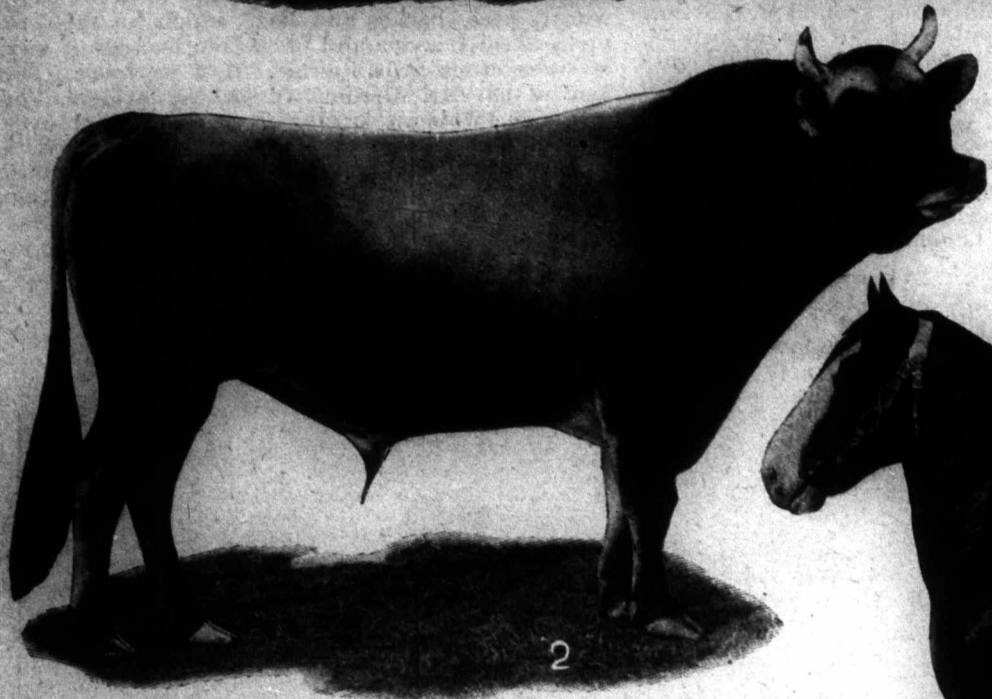
The official returns of the Board of Trade disclose a continued increase in the imports of foreign eggs into Great Britain. During the first 10 months of the current year the value of the eggs imported amounted to no less than £4,100,000! These statistics show that at the present time close on 9 out of every 10 eggs consumed in the united kingdom are imported from abroad.

**Why Are Orchards Barren?**

"(1) Lack of good tillage, particularly in the first few years of the life of the plantation; (2) lack of humus and fertilizer; (3) uncongenial soils and sites; (4) lack of systematic annual pruning; (5) lack of spraying and of attention to borers and other pests; (6) bad selection of varieties; (7) trees propagated from unfruitful stock."—Prof. L. H. Bailey.

**Increase Circulation.**

We desire our subscribers to assist us in doubling the circulation of the FARMER'S ADVOCATE. Send us all the new subscribers you can, and take advantage of our liberal offer.



SOME OF THE CLYDESDALES, JERSEYS AND AYRSHIRES AT THORNCLIFFE FARM. OWNED BY ROBERT DAVIES, TORONTO, CANADA.



### Thorncliffe.

Prominent among the principal pure-bred stock breeding establishments of the Dominion is Thorncliffe, the farm of Mr. Robert Davies, of Toronto, situated just outside the city limits and close to Leaside Junction, a station on the C. P. R. The 400-acre farm is admirably adapted to the specialty of stock-raising, being well watered by a stream, in the valley of which are extensive permanent pastures, while the arable portions, of about 300 acres in extent, of rich loamy soil, kept in a fine state of fertility by the growing of clover and liberal application of manure from stock fed on the farm and from city stables, produce heavy crops of wheat, hay, oats, corn and roots, all of which, except the first, are fed on the farm. The farm, under the general superintendence of Mr. George Davies, with capable foremen at the head of each department, is admirably managed, everything being kept in first-rate order, the plowing, the drilling, the care of the stock, and everything about the premises indicating that the men, in charge take pride in their work, while the relations between employer and employees are evidently of the most satisfactory character. The farm buildings are capacious and conveniently arranged, the main barn being 75x100 feet, with several extensive annexes and affording accommodation for a very large stock. The specialties in live stock receiving attention in the establishment are Clydesdale and Thoroughbred horses, Ayrshire and Jersey cattle, and Yorkshire and Berkshire pigs.

### THE HORSES.

The Clydesdales are perhaps the strongest feature of the farm stock, though an excellent collection of Thoroughbred brood mares and colts are kept, and the famous stallions, Admiral and Mikado, the World's Fair champion, have for several years been in profitable service, but have recently been sold to avoid inbreeding, so many of their offspring being now in the stud. Of Clydesdales, a grand collection are in stock; indeed, it is doubtful if a larger number of equal merit can be found in any one stud in America at the present time. Our limit of space will not allow of individual mention of a tithe of the number deserving favorable notice, but among those we may refer to the five-year-old brown stallion, *Border Riever*, bred by Lord Polwarth, St. Boswells, winner of first prize and sweepstakes at the Canadian Horse Show at Toronto in 1898, having also won numerous prizes as a colt in Scotland, and first as a two-year-old at Toronto Industrial Exhibition. He was sired by Prince of Millfield, his dam being Connie Nairn, and he has proved a very successful breeder, as the young things in the stud sired by him abundantly prove, and he made a very profitable season this year. *Lyon MacGregor*, by the late famous MacGregor, and his dam by Lord Erskine, was imported in 1897, and is a bay in his three-year-old form and probably the best living son of his illustrious sire, having been a prizewinner in Scotland and never been beaten in his class in the showing in Canada. He gained the first prize as a three-year-old at Toronto Industrial Exhibition, and first and championship at the Canadian Horse Show at Toronto, 1899. He is large and smooth, with clean flat bone and big feet of the best quality. *Prince of the Glen* is a great big two-year-old bay son of the champion Prince of Quality and of imported Edith, with knee and hock action like that of a Hackney. He won first prize at Toronto spring and fall shows, also at London and Ottawa, in 1898, and promises to make one of the largest and best of the stud. *Baron's Model*, imported as a yearling in 1898, is a son of Baron's Pride, the most successful Clydesdale sire in Scotland in many years, his sons and daughters having won this year nearly all the championships in sight at the principal Scotch shows. *Baron's Model* came out a thin, raw colt last year, but with grand legs and true outline, and he has developed into a big, massive, handsome two-year-old, full of spirit and dash, and with a strong back, free action and the best of limbs and feet. He will surely make his mark as one of the best in the Dominion. *Prince Royal*, by Prince of Quality and from imp. Lily, 1st prize mare at the World's Fair, Chicago, is another big, smooth three-year-old, with excellent quality of bone, a capital twist and all the properties of a high-class horse. Among half a hundred excellent mares and fillies, we have only space to refer briefly to a few, among which are the three recently purchased at Col. Holloway's sale, *Lady Tarbrooch 4th*, by Cedric, and *Princess Maud* and *Queen Esther*, by Prince of Quality. These are short-legged, blocky, broad fore and aft, and standing square on capital timber. A number of big, useful breeding mares are doing daily work on the farm and paying their way, while a coterie of weanling colts and fillies, principally the get of *Border Riever* and *King's Own*, a few wonders of weight and development for their age, a pair of them tipping the scales at 1,700 lbs. and looking well-nigh like finished horses already.

### THE DAIRY HERDS.

Proximity to the city gives special advantages in the prosecution of a cream and milk trade, the former being the principal branch of dairy work at Thorncliffe, though a well-equipped creamery is maintained and buttermaking carried on when cream is in less demand, a De Laval separator of the capacity of 600 lbs. an hour proving very satisfactory.

### THE AYRSHIRES.

At the head of the Ayrshire herd stands the fine imported bull, *Oliver Twist of Barcheskie*, winner of

first prize at the Western Fair at London in 1898, beating the first-prize winner at Toronto the previous week, and second prize at Toronto in 1899 in very strong competition. To breed to the daughters of *Oliver Twist*, the yearling bull, Lord Bute of Isaleigh, has recently been purchased. He was imported in dam, and is a son of Yellow Prince, a noted sire in service in the herd of Mr. McAlister, in the North of Scotland, and his dam, imp. Lady Bute, is a great milker, giving 40 lbs. a day the present season. Five imported cows and their offspring, besides an excellent collection of Canadian-bred Ayrshire cows and heifers, and a strong contingent of heifers and calves sired by the imported bull, *Oliver Twist*, make up a very superior herd of this excellent dairy breed, some of the cows being exceptionally heavy milkers, giving 50 to 62 lbs. daily of high-testing milk, and breeding regularly and well.

### THE JERSEYS

are a very select herd, being founded on an importation from the Island of Jersey, of choice young cows selected from the best herds, and including the typical Jersey bull, *Distinction's Golden*, a son of the famous Golden Lad, whose progeny have won more prizes and sold for higher prices on the island and in England than those of any other sire in the last few years. The dam of *Distinction's Golden* was the champion over the Island this year, and has won four championships in all. The first prize for four animals sired by one bull at Toronto Exhibition was won by the progeny of *Distinction's Golden*. The imported cows are of beautiful type, and carry all the indications of capacity for superior dairy work, having large and well-balanced udders and robust constitution, while the St. Lambert section of the herd comprises a number of big-bodied, deep-ribbed cows of great capacity and heifers of rich promise, the bull at head of this division being *Ida's Rioter Ideal*, by *Ida's Rioter 30th*, by the noted *Ida's Rioter* of St. Lambert, and out of *Cheerful*



MR. JOSEPH THOMPSON.  
A horseman of the Old School.

*Pogis*, who has a record of 214 lbs. and has recently been sold for \$500. *Thorncliffe* supplied the first-prize Jersey cow in strong competition at the Toronto Industrial Exhibition, 1899. She is *Emerald's Daisy*, by *Joy of St. Lambeth*, and is a model dairy cow with a very large and shapely udder and rich secretions.

A pretty and promising coterie of calves by *Distinction's Golden*, and some from the St. Lambert cows by sires of the same strain, are found in the stalls, and the herd as a whole is one of the best we have seen.

### SUMMARY OF ILLUSTRATIONS ON OPPOSITE PAGE.

1. Four first-prize Jersey calves, Toronto Exhibition, 1899; sired by imp. *Distinction's Golden*.
2. Imported Jersey bull, *Distinction's Golden*, sire of four animals winning first prize as progeny of one bull at Toronto Exhibition, 1899.
3. *Emerald's Daisy*, first-prize Jersey cow at Toronto Industrial Exhibition, 1899.
4. Imported *Baron's Model*, two years old, by champion horse, *Baron's Pride*.
5. Imported *Lyon MacGregor*, sweepstakes Clydesdale stallion, Toronto Industrial, 1899.
6. *Prince of the Glen*, two years old, first-prize as foal, yearling and two-year-old at Toronto Exhibition.
7. Imported Ayrshire cow, *Clara 3rd of Balnowlart*; butter test 194 lbs. in seven days.
8. Imported Ayrshire bull, *Oliver Twist of Barcheskie*, second-prize bull at Toronto Exhibition, 1899.

### A Veteran Horseman Still on Deck.

Of the men who in the last three-quarters of a century have handled entire horses in Canada, perhaps the oldest now living is Joseph Thompson, whose portrait, taken in his eightieth year, appears in this issue. To those who used to meet him on the road in the days of his early manhood, his sunny smile and cheery greeting seem like a dream of the long-ago, and those who remember the temptations which beset the pathway of men of his vocation in those early days will be disposed to compliment him on coming so safely through his experiences, and on the enjoyment of a serene and healthy old age.

Joseph Thompson, whose friends familiarly call him "Joe," first saw the light of day at Duggelby, near Malton, Yorkshire, England, on July 29th, 1820. When 8 years old he came, with his parents, to Waddington, N. Y., and remained there until 20 years of age, when he came to Canada, and has made the counties of York and Ontario his home ever since. He was first engaged with George Simpson, brewer, of Aurora, and after that commenced his marvellous career of groom and owner of stallions, by travelling for four seasons the Thoroughbred horse, *Blacklock*, imported by George Simpson.

His next engagement was travelling the celebrated *Grey Clyde* [170], imported in 1842 by the late A. Ward, of Markham, and continuing with him for 3 years, and when sold to Kilgore & Cushman, of Kentucky, Joe delivered him there, no small undertaking in those days. *Grey Clyde*, born in 1837, was the wonder and admiration of his day, and laid a splendid foundation for the pedigree of many an animal recorded in both Canadian and American Stud Books. The next he travelled Nottingham, a Pennsylvania-bred horse, and then for another season he travelled the counties of York and Peel with Grand Exhibition, the blind horse owned by Stephen Powell, Lewiston, N. Y., a prizewinner at the Paris Exhibition, and said by those who remember him to have been a grand type of an English coach horse.

At the close of this season he imported *Merry Farmer* [193] for Mrs. A. Ward, of Markham, and continued with him for two years after. About the summer of 1855 he struck out for himself, and left Scotland with a yearling and a three-year-old colt, both of which died on the voyage out, and Joe's usually smiling face was longer drawn as he told the tale of his heavy loss; but, nothing daunted, he again tried, the following summer, and left Scotland after venturing everything he possessed in *Lord Raglan*. This fine horse died when near Quebec, and again our hero came home with only the bridle and blanket.

Most men would have quietly given up the struggle, but with indomitable pluck he again tried his luck, and this time successfully landed *Loudoun Tom* [127], bred by Mr. Fawkes, Dumfriesshire, Scotland, and as time passed by this splendid breeding horse helped Joe to square himself with the world, and when *Loudoun Tom* died he as pluckily as ever determined to try again, and this time he imported the celebrated *Clydesdale, Netherby* [126], also bred by Mr. Fawkes. The late *Simon Beattie* was at Outertown, the home of Mr. Fawkes, negotiating for *Netherby* when a short note from Canada arrived, stating that *Loudoun Tom* was dead and that Joe would leave shortly for Scotland for another horse. The bargain was almost concluded between Mr. Beattie and Mr. Fawkes for this wonderful colt, when Mrs. Fawkes interfered by stating, in a good-natured way, that *Netherby* could not be sold until Joe Thompson had refused him.

*Netherby* soon became the talk of all the countryside, his progeny proving phenomenally good and selling for the highest prices, and when this really wonderful horse was sold to Jonathan Porter, of Oshawa, the dark clouds had all rolled away from Joe's sky, as *Netherby* had left his late owner a fair competence—imagine 210 colts in one year, and the record nearly equalled for a number of years in succession. *Annandale* [513] was next, followed by *Stirling* [204], and *Glancer* [197], both sold to Mr. Robert Ogilvie, of Wisconsin, breeder of the celebrated *McQueen*. After these, *Hercules* [236], and *Thistleford* [279]. *Hercules* died, and then *Thistleford* was sold to Geo. Story, of Ohio. Prizes galore were won by all these horses on many a hard-fought field, but it was at the Dominion Exhibition at Ottawa that Joe capped the climax of his victories when he won the championship of the class and had the honor of receiving from the hands of the Queen's daughter, Her Royal Highness the Princess Louise, the Dominion medal of merit. It was an impressive occasion in the Senate Chamber in the Parliament buildings, the Marquis of Lorne and the Princess seated on the throne, the galleries filled with the *elite* of the city, the successful exhibitors called up one by one to receive their trophies. The stockmen, not expecting such a ceremony, were not in "full dress," and had no time to practice the "goose step" required for retiring properly from royalty, but washed their faces, combed their hair, and made themselves as presentable as possible under the circumstances. It was a trying ordeal, which was intensified by the rounds of applause from the galleries as the sons of the soil in turn marched up the broad aisle; but not one was so rapturously applauded as Joe Thompson as, in his horseman's jacket and with his hat under his arm, he faced the music and received from the Princess at once a medal and a kindly smile, which latter none knew better how to return than he, and if he failed to back out, bowing, all the way to the door, we may be sure he was forgiven.

Joe now felt the weight of years coming on, and wisely decided to quit the business, and now, in the village of Columbus, in his own home, presided over by Mrs. Murray, a sister of the late *Simon Beattie*, he spends his declining years reading the war news and talking politics, none envying his good fortune, as everyone familiar with his history knows that it cost him many an anxious venture and many a struggle, and the editor, who has known him well-nigh fifty years, and admired his judgment and his courage, tenders congratulations on his peaceful evening of life, with the wish that he may live to look a little way into the twentieth century.

**Riverview Farm**

AND THE SMITH'S FALLS POULTRY COMPANY.

About two miles from the corporation limits of the bright and prosperous manufacturing town of Smith's Falls, on the line of the Canadian Pacific Railway, and 46 miles west of the City of Ottawa, is the fine stock and dairy farm of Mr. J. M. Clark, who has long been at the head of a successful hardware business in the town, and whose son, Alexander, efficiently superintends the farm. Riverview farm comprises 100 acres of rich clay loam land varying to sandy loam, conveniently located on a good road, and near to a railway station, which facilitates the shipping of stock and produce, and makes farm life more pleasant. The farm lies beautifully, sloping gently from two or more directions, the buildings being placed on the highest land overlooking the Rideau River and Canal, and commanding a charming view of varied landscape, making the farm a delightful summer resort for the family from the town.

Generous crops of wheat, barley, peas, and corn are grown, and all but the first-named are fed on the farm to the dairy and other stock, while bran

as a private enterprise, but a number of the neighboring farmers are now patronizing it, paying for the manufacture, and with satisfactory results. An Alexandra separator, with a capacity of 1,500 lbs. an hour, is used, and a churn of corresponding size. The butter is made into one-pound prints, and finds a ready market in the town and the City of Ottawa, the price this season being steady at 25 cents per pound.

**THE POULTRY PLANT.**

Convinced of the growing importance of poultry-raising as a profitable adjunct of the farm, and having had satisfactory experience on a limited scale with poultry at Riverview, Mr. Clark having secured the co-operation of Mr. Uriah McKim, a practical, enthusiastic and capable poultry manager, early in the spring of the present year, organized the Smith's Falls Poultry Company, with Mr. McKim as managing director, and having purchased a suitable piece of land, some ten acres in extent, on the outskirts of the town, building, on a well-considered plan, was commenced in June, and already considerable progress has been made in the enterprise, a house for the manager and two large poultry houses having been erected as a part of the general plan, which will be extended as the growing capacity of the business requires. Two incubators and brooders, with a capacity of 220 each, were in operation, which it is intended to increase to six next spring. About 700 chickens were in stock at the time of our visit, mostly of mixed varieties; but a collection of pure-bred fowls for breeding purposes is being

confidently believed that the scheme will prove a gratifying success financially, as well as an interesting and pleasurable occupation. The markets for poultry and eggs are increasing and extending so rapidly that the probability is that the demand will be practically unlimited, and in no country are conditions on the whole more favorable for the successful prosecution of this industry than in Canada.

**Prairie Home Stock Farm.**

With an abounding confidence in the agricultural future of Manitoba, the Hon. Mr. Greenway has within recent years added largely to the acreage of his farm at Crystal City. Last season the acreage under crop totalled some 700 acres, and sufficient breaking has been done to extend this to 1,000 acres of crop in 1900. In wheat last year there were 250 acres, which yielded in the neighborhood of 28 bushels per acre; 300 of oats yielded about 75 bushels, and 250 in barley yielded about 40 bushels per acre. About 130 acres have been seeded down with timothy and Brome grass; 100 acres of this was seeded along with barley, and the balance with oats; that with the barley being much the best catch. The general system now followed is to apply all the fresh manure that can be got direct to the land, spreading it thinly, and plowing for a crop of barley. Land thus manured is found to ripen wheat at least ten days earlier than similar land without manure, and this year wheat land so treated returned a yield of 30 bushels per acre.

In order to thresh this big crop expeditiously, a 20-horse power steam threshing outfit was purchased last season, the separator equipped



VIEWS OF THE SMITH'S FALLS POULTRY COMPANY'S POULTRY YARDS, AND OF RIVERVIEW FARM AND DAIRY BUILDINGS. OWNED BY MR. J. M. CLARK, SMITH'S FALLS, ONTARIO, CANADA.

and other concentrated foods are purchased to some extent to make up for the wheat which goes off. The leading feature of the farm is dairying, and the principal stock kept are high-grade Shorthorn cows, selected and bred for milking qualities, while a registered Shorthorn bull of milking strain is kept for service in the herd. The main barn is a large and well-finished structure of modern plan, 36x72 feet in dimensions, with basement stables the full size, and storage room for roots. A power windmill on the barn grinds and cuts feed for the stock, and pumps water from a well to a tank in the barn, which supplies the dairy and the stock, the water being conveyed in pipes to Woodward patent iron basins in each stall, from which the animals drink at pleasure.

**THE DAIRY BUILDING**

is of handsome design, roomy, light, and well-equipped with a complete creamery plant, supplied by the R. A. Lister Company, of Montreal, and under the superintendence of a trained butter-maker, the separator, churn and other machinery being run by an electric motor connected with the town system, from which the farm buildings, as well as the dairy, are lighted. The creamery was started

placed, and the varieties to have preference are Barred Plymouth Rocks, Minorcas, Silver-laced Wyandottes, White Leghorns, and Indian Game. The buildings, which are double-boarded inside and out, with felt paper between, and lined inside with brick, face the south, and have ample windows, hung on hinges and operated by ropes and pulleys from the passages, which afford abundant light and air as needed; while means are provided for artificial heating in extreme cold weather in the pens, and at all times in the incubating and brooding rooms. Grassy yards or lots, of about one-seventh of an acre each, and divided by wire netting, are provided for each pen of mature fowl. The brooders are kept upstairs in a warm room during winter months, and outside on the green in summer; and numerous colony shanties are scattered over the green for the shelter of the growing birds. Oats, corn and sunflowers are grown on the little farm for feeding the flock. Other grain and foods are purchased to a limited extent, and all the most approved modern appliances for the promotion of healthfulness and rapid growth are provided; and when the establishment gets into full swing on the scale contemplated, it is

comparatively mild weather which prevailed in November, and were in excellent condition, doing credit to the manager, Mr. Jas. Yule, and the men in charge.

Considerable alterations and additions have been made to the live-stock stables during the past year, and an addition has been made to the hog-house, and a large basement stable provided for feeding cattle loose, together with improvements in the facilities for feeding. A very compact and neat dairy building has been added to the equipment of the farm. It has been built from plans prepared by Dairy Superintendent Murray. The building is on stone foundation, 20x30, one and a half stories high, with an engine-room adjoining, 14x10. On the ground floor is an office 7x9, a cold storage room 5x8, and an ice-chamber 8x12, in addition to the main room, which is equipped with the most approved of modern dairy utensils.

The dairy herd consists of 20 pure-bred Ayrshires, besides about as many more grades. The management of the dairy herd and creamery is in the hands of Mr. Ostler, a graduate of the O. A. C., Guelph, and the Manitoba Dairy School. At the head of

with self-feeder, blower, and grain-elevating spout complete, and the outfit gave every satisfaction. To handle such a large acreage, considerable horse power is required; mostly four-horse teams are used, thus saving men, and the horses are of a good, solid, drafty stamp, and in excellent condition after their heavy season's work; in fact, all the stock on the premises were comfortably housed during even the

the herd stands Surprise of Burnside, a bull with few equals in Canada, sired by Imp. Glencairn 3rd, out of the famous imported Nellie Osborne, female champion at World's Fair, and a winner in many a showing. Space only permits the mention of the names of a few of the many good things in the Ayrshire herd: Eva of Burnside, by Golden Guinea; Silver Maid of Howick, by Silver King; Beauty of Elmshade, first prize 2-year-old at Toronto in '98; Heather Honey, Lillian, and Bonnie Doon, all by Imp. Glencairn 3rd; Loyalty and Clara Bell, by Tam Glen; Ayrshire Maggie 2nd, by Douglas of London; Mattie of Meadowside, by Farmer's Boy; Beauty of St. Anne's, by Kelso Boy, first prize as calf at Toronto, Ottawa, and London; and Spottie of St. Anne's, by Napoleon of Auchenbrain (imp.).

The Shorthorn herd now consists of 65 head, and is certainly a very strong herd, containing many animals of an exceedingly high standard, and is throughout of great uniformity of type and character. At the head of the herd stands Judge -23419- (by Imp. Royal Sailor, out of Mildred 4th, by Imp. Hospodar), first-prize yearling at Toronto in 1897, and first-prize 2-year-old and sweepstakes bull,

Flame; Imp. Red Rose, by Waterloo, bred by G. Sheppard; Donside Beauty, bred by Alex. Campbell, of Aberdeenshire, of the Kinellar Claret family, by the Nonpareil Sittyton bull, Prince of Fortune. And such Canadian-bred cows as: Begonia, by Imp. Grandeur; Roan Mary, mother of the first-prize bull calf at the last Winnipeg Industrial, and now with twin heifers at foot, by Judge; Miss Earl, by Premier Earl 3rd; Village Princess, by Abbotsford; Isabella Stanley, by Duncan Stanley; Crystal Beauty by Volunteer; Bracelet 8th, by Imp. Rantin Robin, with a red heifer calf at foot, by New Year's Gift; Jane Gray 5th, by New Year's Gift; Vanity, by Village Hero; Regalia, a roan daughter of Abbotsford, out of Roseberry Lass; and Village Princess, by Abbotsford, out of Village Queen, by British Flag, third-prize heifer calf in very strong competition at the late Toronto Industrial; and many others almost equally good might be enumerated would space permit. In addition to the pure-bred Shorthorn and Ayrshire herds, a considerable number of grade cattle are kept, and some 50 skim-milk grade calves raised on the farm are being wintered in a large, well lighted and ventilated basement, fed principally chopped straw with a little meal, and are doing exceedingly well.

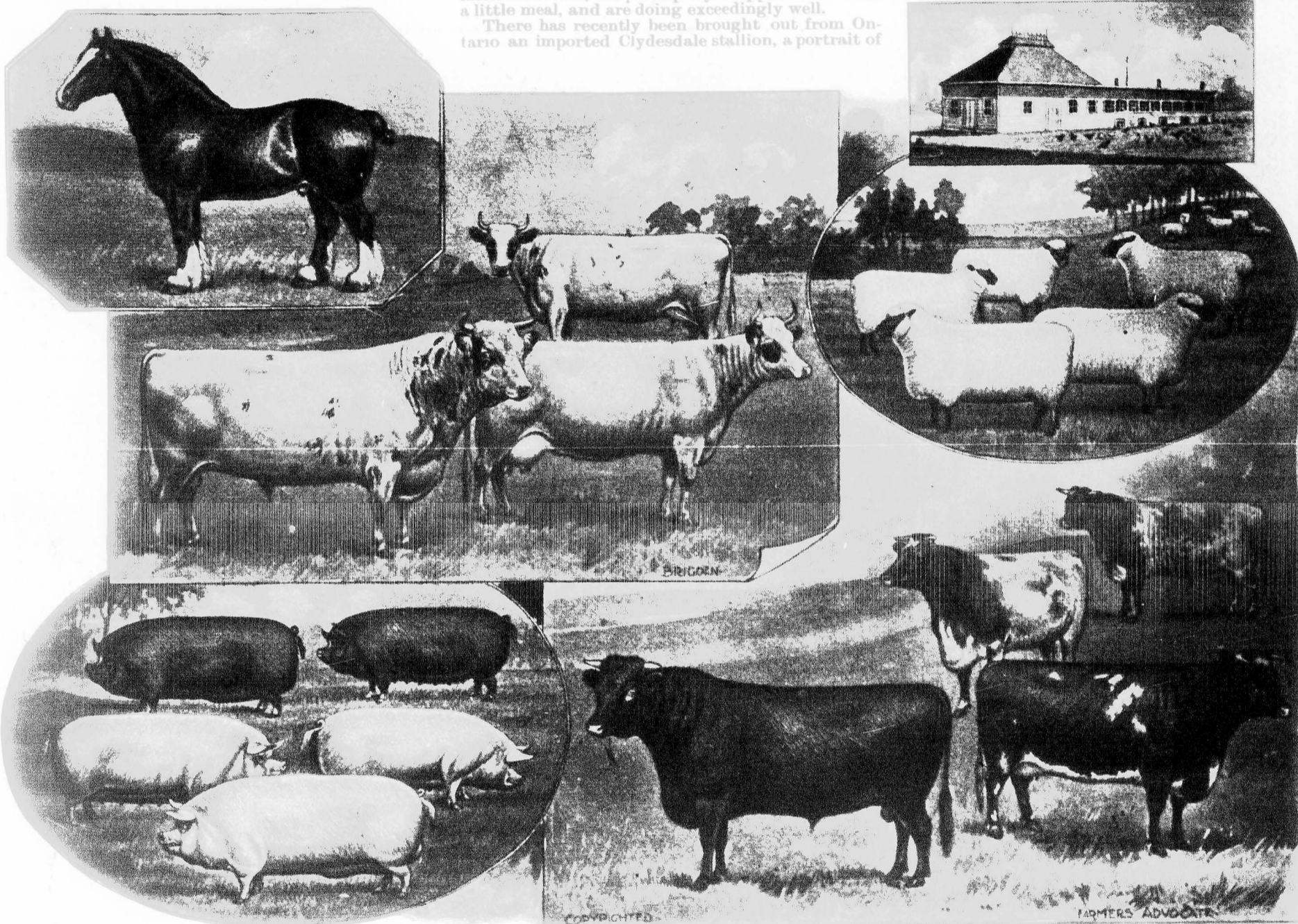
There has recently been brought out from Ontario an imported Clydesdale stallion, a portrait of

Eliza Jane; Kate of Crystal City, by Yorkshire Bill; Marjory 9th, by Snowman; and Susie, by Sitting Bull. At the head of this herd is the sweepstakes boar, Yorkshire Bill -2492-. Twelve brood sows make up the matron portion of the Berkshire herd, among which are such noted sows as Harmony, by Baron Lee 4th; Kathleen, by Imp. Star 1.; Starlight Maid and Victoria, by Prince Albert; Prairie Girl and Favorite, Queen Esther, and a number of others, headed by the boars, King Clere and Nonpareil.

Attention is also given to poultry by the twin sons of Mr. Greenway, and a number of the leading utility breeds are kept.

**The Ingleside Herefords.**

Hereford cattle have made an outstanding record in America in the last two years by selling for higher prices for breeding purposes than any other breed. They have long been held in high esteem by feeders, especially in the corn-growing States, and as grazers by the ranchmen of the Territories of both Canada and the United States, and in Texas,



THE HERDS AND FLOCKS OF HON. THOS. GREENWAY, ON HIS PRAIRIE HOME FARM, AT CRYSTAL CITY, MANITOBA, CANADA.

any age, at Winnipeg in 1888; with his calves winning in hot competition both at Toronto and Winnipeg in '90. Judge needs no further commendation. The imported bull, Jubilee -28858-, bred by Alex. Crombie, Aberdeenshire, Scotland, by Czarewitch, by Prince of Fashion, out of Diamond 2nd, by the Cruickshank bull, Coldstream, is also in service. An excellent portrait of Jubilee, a bull that has never yet been shown, appears in the illustration of some representative animals from the Prairie Home Stock Farm which embellishes a page in this issue of the FARMER'S ADVOCATE. The other bulls at present in the herd are: The roan Grand Quality by Indian Statesman (a son of Imp. Indian Chief), third-prize yearling at the Toronto Industrial, beaten only by sons of Judge; and Sittyton Hero 7th, by Sittyton Hero, out of 39th Duchess of Gloster, a thick-fleshed, smooth youngster, that will do credit to any herd.

Among the females are Imp. Lady Jane, by the Cruickshank bull, Coldstream, one of the low-set, thick-fleshed sort, with a neat head and plenty of style and breed character. She is the rich dark roan cow appearing in the illustration. Her companion in the picture is Lena, bred at Prairie Home, sired by Willie Gladstone, out of Laurel. Another imported cow is Missie 142nd, bred at Upper Mill, and sired by Sea King, with her bull calf, Challenge, by Caithness, at foot; Imp. Clara 33rd, by the Marr bull, Sunlocks, in calf to Golden

which appears in the illustration, Royal Reward (10,003), a handsome bay, foaled in '91, by Dexter (9677), dam Maggie of Bardrainy, by Topgallant (1850); both sire and grandsire being by Darnley (222). Royal Reward is a big, strong, well-topped horse, with good bone and plenty of it. As stall-mate there is the Canadian-bred Clydesdale, Young McMaster [2509], a thick-set, stylish little horse with lots of vim and go.

The flock of Shropshire sheep, now numbering some 60 head, was founded by selections from the flocks of John Campbell, of Woodville; Richard Gibson, of Delaware; and Cooper & Sons, of Kippen. Upon these were used, with excellent results, an imported ram, many of the lambs showing good size and remarkably fine quality. Additions have since been made by importations of ewes from Ontario flocks, and a shearing ram imported by D. G. Hamner & Sons, Burford, is being used on the flock this season.

The piggery has been enlarged to meet the requirements of this department, the building being now about 130 feet long by 32 feet wide, on stone foundation; 80 feet of this has cement floors, which, with plank cover for the sleeping bunks, gives entire satisfaction. Yorkshires and Berkshires are the breeds kept, there being 25 Yorkshire breeding sows, including such notable matrons as Stamina -2136-, by Oak Lodge Stamina; Markham Maid, by Markham Physician; Oughton 6th, by King William;

where Hereford bulls have produced a revolution in grading up the common stock into high-class beeves, and Hereford grade steers have so frequently topped the Chicago market that their claims to superiority as grazers are practically undisputed. The sharp advance in values of butchers' cattle in the last two years has naturally had its reflex influence on the price of breeding stock of all the beef breeds, but none have shared this appreciation of values to so signal a degree as have the breeders of Herefords. At the last spring sales at Kansas City, the bull, Sir Bredwell, champion of the Trans-Mississippi Show, was sold for \$5,000, and 46 animals made an average price of \$576, while at the dispersion sale of the Sunny Slope herd, in March, 144 animals sold for an average of \$407 each. At the Hereford show and sale held at Kansas City in Oct., 1899, three hundred head sold at an average of \$317, a yearling bull bringing \$1,950, and a yearling heifer \$2,500.

The advance in the price of Herefords in Canada in the same time has not been so distinctly marked as in the United States, but it is nevertheless true that the demand for that class of cattle has been very brisk, and that Hereford bulls have been bought up so closely that very few are on hand, and the prices obtained have been exceedingly satisfactory, bull calves selling readily at \$150 to \$300 each at less than a year old.

Prominent among Canadian Hereford herds is that of Mr. H. D. Smith, of Compton, Quebec,

maintained on his beautiful farm, "Ingleside," at that place, where, by careful breeding, selection and mating, he has built up a magnificent herd of his favorites. The success of representatives of this herd in winning prizes in the principal Canadian showyards in the last five years has been remarkable, and stamps it as thoroughly up-to-date. For five years in straight succession the Ingleside Herefords have won the first herd prize and both the male and female championship of the class at the great shows at Toronto, London, Ottawa, and Montreal, and last year two show herds were out at the same time, one winning the first herd prize at Quebec Provincial Exhibition, and the other the same honor in Ontario. The notable success of the herd in the showing and in producing uniformly high-class animals has largely been due to the good judgment and liberality displayed by the enterprising owner in selecting suitable sires to stand at its head. The typical Corrector bull, *Sir Horace*, used for three seasons in the herd, has had a remarkable career as a show bull, having an unbroken record, winning the first prize and the championship whenever shown at the leading shows in four Provinces. Being himself a model of the most approved type,

Hanna won in 1899 first prize as a 2-year-old, and sweepstakes at Toronto, London, and Ottawa, and headed the first-prize herd at each show. He is a bull of almost faultless symmetry, standing on very short legs, and covered with thick flesh evenly distributed, and his stock is proving even better than that of *Sir Horace*, which is saying a great deal, and speaks well for the future of the herd. The Ingleside herd numbers nearly seventy-five head of registered animals, among the females of which eight are imported animals selected from leading herds in England some three years ago, and with their produce, in addition to the descendants of earlier importations, the herd is exceedingly strong in individual excellence, as well as in richness of breeding and show-yard records.

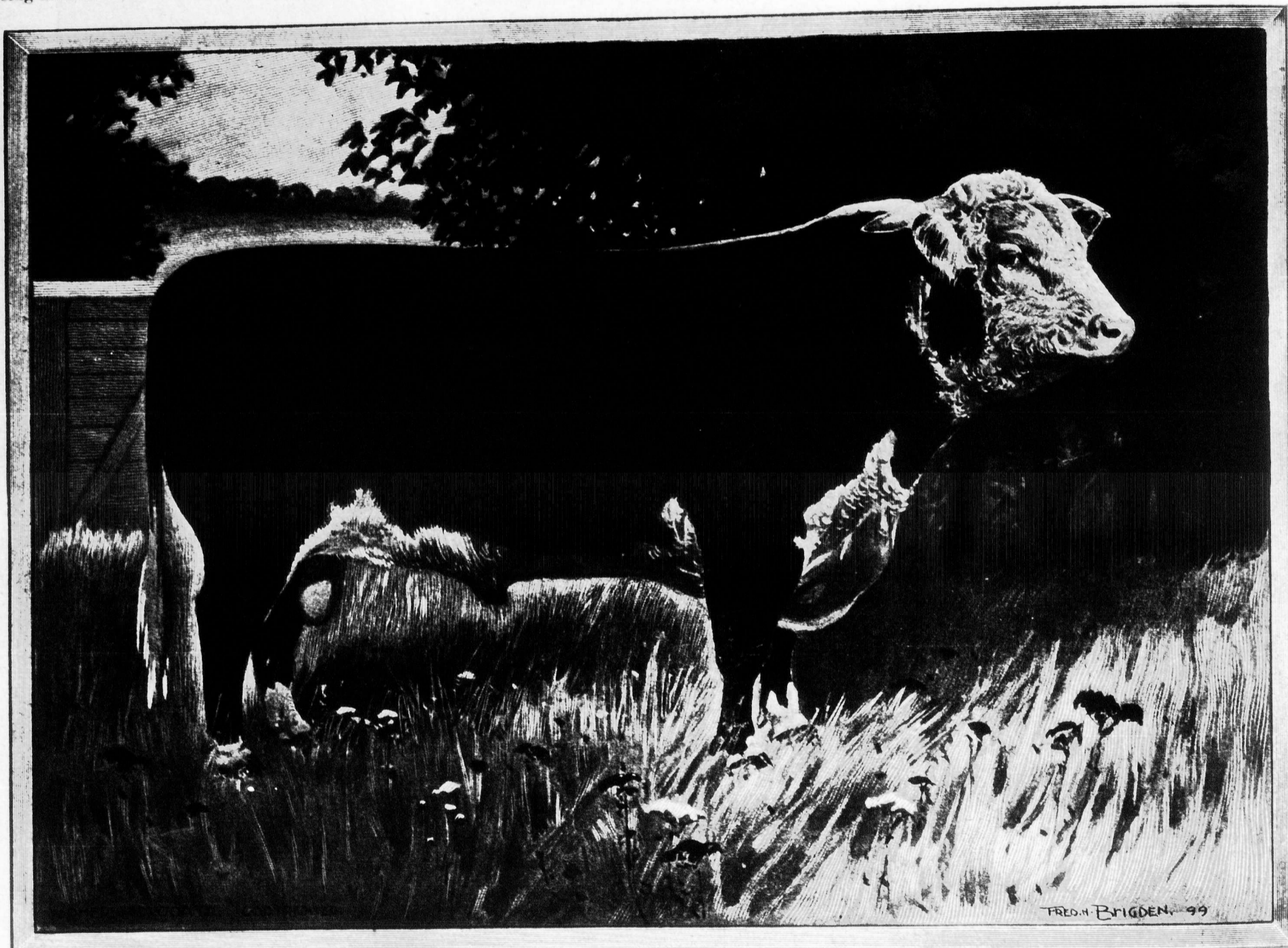
#### The Provincial Winter Show.

As we go to press our report of the Ontario Provincial Fat Stock, Dairy and Poultry Show, held in the City of London, December 11th to 15th, is being prepared, and will appear in full in our next issue, together with reports of the various Stock Breeders' Association meetings held in the

to John Campbell, Woodville, for Shropshires, and the second to John Rawlings, Ravenswood, for Cotswolds. The sweepstakes for two best export bacon hogs went to J. E. Brethour, Burford, for Yorkshires, and the sweepstakes for two best carcasses, any breed, were awarded to the same exhibitor for Yorkshires, the second going to Geo. Green, Fairview, for Berkshires.

#### Notable Features of the 1899 Smithfield.

Smithfield, 1899, will be notable for several things, but chiefly for the back seat taken by the Scottish breeds, which in the past have so often carried the field by storm. The breed champions in every case were worthy representatives of their class, and in the case of Mr. McDowall's Blackface sheep, and Mr. Biggar's Galloway steer, they were something more, but, taken all through, except in the cross-bred section, where Ross-shire carried all before it, Scotland was not so strongly represented as it has sometimes been. The popularity of the Queen's Hereford steer cannot be gainsaid, and he deserved his honors, but one would have liked had the Scottish exhibits been stronger opposition for



CHAMPION HEREFORD BULL, MARK HANNA 74230. OWNED BY H. D. SMITH, INGLESIDE FARM, COMPTON, QUEBEC, CANADA.

and that type bred into the family for many generations, his offspring were uniformly like himself in contour and quality, and his daughters are growing into beautiful and bountiful young cows. The present principal stock bull, *Mark Hanna*, illustrated in our engraving in this issue, is now in his three-year-old form. He weighed 1,900 lbs. at 35 months, and 2,060 lbs. at 38 months, and has had an equally successful showyard career so far, having won first prize for two years in succession at the Toronto, London, and Ottawa Exhibitions, and the sweepstakes as best bull any age in every contest for this honorable distinction. *Mark Hanna* is a son of *Eureka* by *Kansas Lad*, dam by *The Grove 3rd*, both noted breeding bulls, while the dam of *Mark Hanna*, *Miss Lark*, belongs to one of the most popular families, as the record of the recent American sales attests. *Sir Christopher*, a half-brother of *Mark Hanna*, was placed second in the aged class at the great Hereford show at Kansas City last fall, and a son of his, named *Aaron*, was awarded the junior championship and also first prize as best bull any age entered for the great sale, and was sold for \$1,950, the highest price made by any bull in the sale. Another bull called *Lincoln 2nd*, son of a sister of the dam of *Mark Hanna*, brought \$1,000. *Mark*

same city during the week of the show. Space permits only a very brief reference to a few leading features of the show. One of these is the award of the championship honors, which in the class for beef cattle went to the pure-bred Shorthorn steer, *Free Trade*, bred and exhibited by H. Smith, of Hay, Ontario, a model butcher's beast, weighing 1,800 lbs. at two years and ten months old, and smoothly-fleshed all over his symmetrical form. His strongest rival, and a very close competitor, was the pure-bred Aberdeen-Angus steer, *Robin*, bred and shown by Walter Hall, of Washington, Ontario, a well-nigh faultless bullock, judged from the consumer's standpoint. The milking trial brought out a phenomenal performer in the Holstein-Friesian cow, *Aaltje Posch 4th*, owned by *Rettie Bros.*, Norwich, making a record unparalleled in any public trial in America hitherto, her product in the two days being 146.9 lbs. of milk—6.79 lbs. butter-fat, and an average test of 4.61 per cent. butter-fat, equal to 29.66 lbs. butter, 80 per cent. butter-fat, in 7 days. The sweepstakes prize for best single sheep in the show was awarded to a Southdown yearling wether, bred and exhibited by John Jackson & Sons, Abingdon. The first Prince of Wales prize for the best 5 pure-bred lambs went

him. As it is, the West of England breed had a good right to its innings, and the Hereford men are to be congratulated. Meikle Tarrel and Rosehaugh have every right to feel proud of the triumph of their stock amongst the cross-breds, and Inverquhomery has concluded a magnificent showyard career by winning the Shorthorn championship.—*Scottish Farmer*.

#### Do Him a Good Turn.

Would you do your friend, young or old, on the farm anywhere, a good turn? You can send him nothing more appropriate or helpful than the *FARMER'S ADVOCATE* for one year, beginning with the Christmas number, which goes free to all new subscribers. For so doing you will also be entitled to an extra copy of the number as a premium. It is a rare opportunity, that should be utilized at once.

Some pig breeders make a serious mistake in continuing to feed their stock on the same materials for weeks or months on a stretch. Pigs, like other animals, greatly relish variety in their food, and an occasional change now and again is found to greatly benefit them.

### Messrs. Beith's Horse Breeding Establishment.

It has often been remarked that the favor in which any breed of stock is held in any country is to a large extent dependent upon the persons who are most intimately associated with their introduction and distribution. If that be true in the case of horses, to the firm of Messrs. Beith, of Bowmanville, Ont., is due a very large debt of gratitude from the draft horse breeding interests of Canada, for what they did twenty years ago and later, and from the Canadian carriage horse popularity for what they are accomplishing at the present time. It was about 1878 that their first importations were made. From the first, and as long as Clydesdales were imported, none but animals good enough to win in Scotland were brought out. Among those in mind may be mentioned Sir Maurice, St. Gatian, Pride of Perth, Bounding Willow, Granite City, The Abbot, Oliver Twist, Peter the Great, Viceroy, and Eastfield Chief. These, as all Clydesdale men will recognize, were well bred, grand animals, that their Scottish owners would not let go short of a long price, often longer than the market in Canada would warrant; but in spite of this they were brought here and distributed, where their goodness will live in their descendants as long as heavy horses are bred. The pity of it is that so few becoming mares have been accessible to such worthy sires, or the graded stock of the present day would not now be charged with being undersized for the European city draft trade.

Jubilee Chief, Ottawa, and Winifred were imported, to be maintained as a foundation for the present Hackney stud. There is no controverting the assumption that these three noted animals were the best in America at that time and for some years later, as in open competition at the World's Columbian, in 1893, Jubilee Chief won the male championship, Winifred the female championship, and Ottawa 1st as a three-year-old, and stood next his stable mate in the championship contest. Since that date extensive importing, breeding and trading operations have been conducted at this former home of Clydesdale fame.

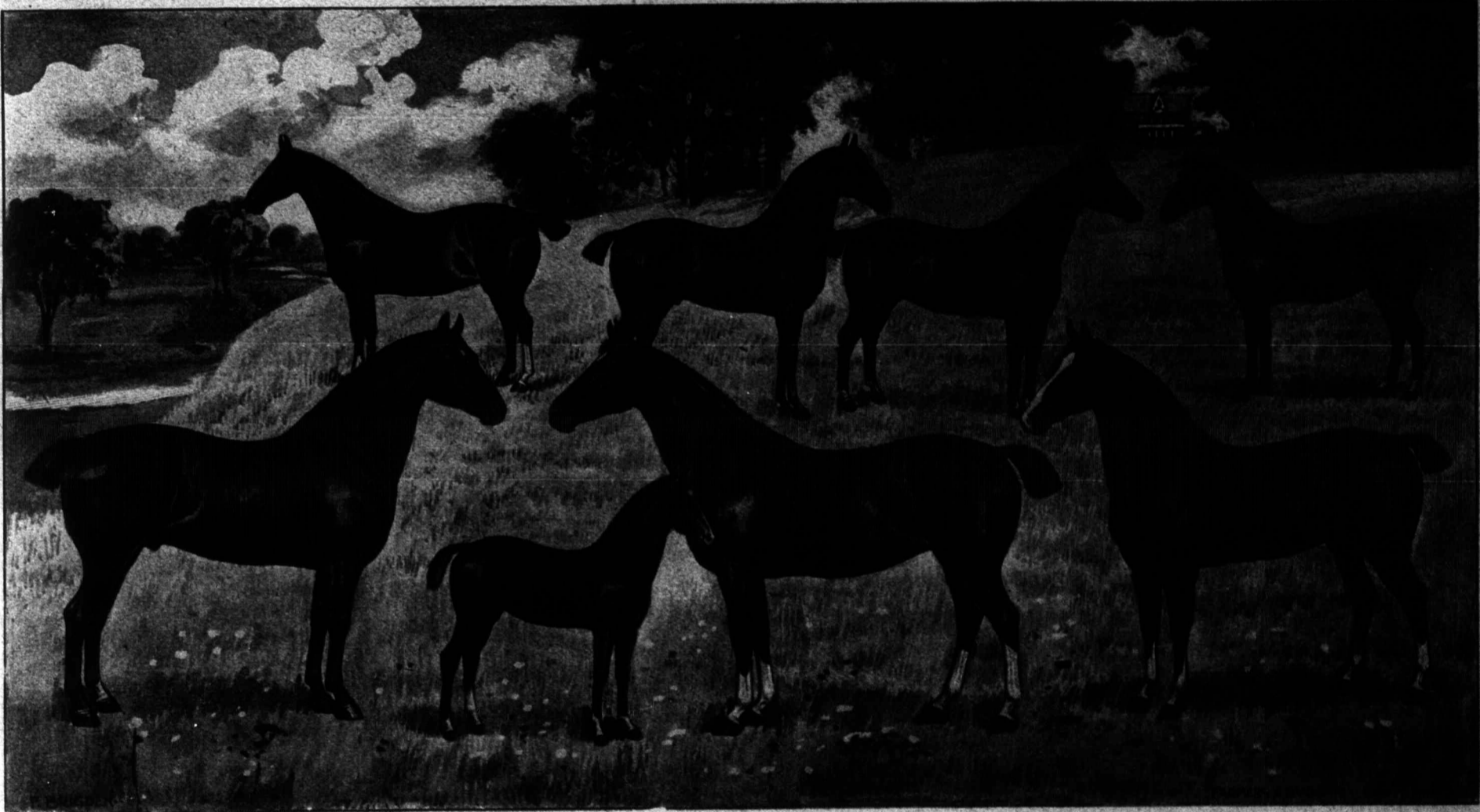
The present breeding stock include the brood mares, Mona's Queen, Lady Aberdeen, Portia, Cassandra, Florence, Cherry Ripe, Princess Shela, Wild Mint, Lady Brookfield, and Cordelia, from which a beautiful group of half a dozen exceedingly choice foals have been produced from the well and grandly formed stock horse, Squire Rickell 264, by Cadet, by which these matrons have again become impregnated. The valuable brood mares, Ottawa's dam, Mayflower, Lizette, Conquest, and Miss Rickell, dam of Squire Rickell, were imported and retained for a time, and then sold to E. W. Twaddell, Devon, Pa., where they have produced much valuable stock.

The business at Messrs. Beith's breeding establishment is not confined to breeding the finest class of animals, but the work of developing and fitting carriage horses and mating pairs receive due attention. Beside their own production, really good things are picked up, especially for mating pairs to

ests. The farm, containing about 250 acres, now under the superintendence of Mr. William H. Gibson, faces the noble St. Lawrence River, running back a mile or more, with a gentle slope to the rear. The residence and farm buildings are located about midway between the river shore and the opposite boundary line, and command a charming view of the river and an extensive landscape of great beauty and variety. The farm, which was originally in a very rough state, being exceedingly stony, has, by dint of much labor, been brought into a model condition, the stones having been utilized in buildings and in the making of roads and fences, the latter being well built and making a fine appearance with their even capping and strong red gates. The greater part has been thoroughly underdrained, the mains being of 4-inch tile, and the laterals, at intervals of 40 feet, of 2½-inch pipes, except in very wet places, where extra drains are laid between those. Excellent crops of grain, corn and roots are grown, and a large proportion of the farm is kept in permanent pasture, about 50 acres being devoted to golf links, a sport to which city friends are invited during the summer months.

#### THE SOUTHDOWN SHEEP.

This portion is kept mown closely during the season for this purpose, and makes besides a capital run for the magnificent flock of Southdowns, the main stock feature of the farm, of which from 200 to 250 are kept, and which are of the highest type of the breed, being selected and imported from a number of the best known and most noted English flocks. There are at present no fewer than 67 imported ewes



A GROUP OF HACKNEYS IN THE STUD OF MESSRS. BEITH & CO., BOWMANVILLE, ONTARIO, CANADA.

Where the offspring have been females, the aristocratic blood will not be lost, and where wisdom is used in their mating only good results can follow, barring accidents. While no Clydesdale importations have been recently made by this firm, this breed has not been dropped, as the imported stallions, Aberdour and Eastfield Laddie, and the mare, Maria, are still doing service in the stud for their owners.

During Mr. Robert Beith's importing visits to the old land, which were frequently made at the time of the National and other large shows, his attention and affection were drawn toward the showy Hackneys whenever they were brought into the ring. So much was this the case that in 1884 the grand specimen, Norfolk Hero, was secured to accompany a shipment of draft companions to this country. With Hackneys as with Clydesdales, the best were none too good for Mr. Beith, and in this new selection Canada reaped a valuable contribution, as from him a great many high-priced progeny followed his services. From Ontario he went to Philadelphia, where he still lives, propagating his kind and making his owner money. Later on, Fire Fly and The Gem were brought from "home," to remain in Messrs. Beith's stud but a brief period, as they were soon secured by wide-awake horsemen for other quarters. During these years, and until 1891, Clydesdales monopolized the firm's interests almost entirely, but on this later date the trend of the horse business, together with Messrs. Beith's tastes, brought about a turn in the tide of affairs, when

fill the high-class trade that is gradually increasing. At the present time the finished harness animals include the many-times champion, Jessica, from Jubilee Chief and Mona's Queen; Bianco, by Sea Gull; a pair by Lightning and Lord Derby, from a Standard-bred mare, that won a gold medal at Ottawa this year; besides a few other high-class things in course of preparation. Demands for upstanding, high-acting, mated pairs of first quality are far more frequently made of Messrs. Beith than they can be filled, although earnest efforts are continually being made to secure them throughout the country. This simply bears out the old truism, that "there is always room at the top," as the best things will always find a ready market.

It might be added that beside Squire Rickell, two recent arrivals find a place in the stallion boxes, viz., Ganymede 2nd 265, by Ganymede, by Danegelt, and out of Modiste by Model, and Maplewood Chief 241, from Jubilee Chief and Winifred. These, along with a number of others mentioned above, which are honestly represented in the illustration, are superb goers, which is quite in keeping with their capital breeding, which in the breeding stud gives them their greatest value.

#### Huntleywood.

The largest flock of pure-bred Southdown sheep, and the only herd of Dexter-Kerry cattle in Canada, are found on the farm of Senator Drummond, of Montreal, which is situated at Beaconsfield station, on the Grand Trunk Railway, 15 miles west of the city, where the owner has extensive business inter-

ests in the flock, and 120 ewes, 50 of which are for sale, are being bred this season to high-class imported rams, and these, together with the younger sheep growing up, constitute decidedly the best flock of Southdowns of the number, and the best large flock of any number, of which we have knowledge, anywhere in America. For quality, symmetry, and uniformity of type and breed character, they are an ideal collection of this model mutton breed of sheep, which sets the standard of quality and conformation which breeders of all other varieties aim to copy, while the trim appearance and healthy and robust condition of the flock is exceedingly creditable to all concerned in their care and management.

#### THE KERRY CATTLE.

This hardy breed of general-purpose cattle is little known in Canada, those in the herd at Huntleywood being the only representatives of the breed in Canada or in America, so far as we know. They are a small breed of Irish cattle, and are found in two varieties, one of which is known as the Dexter-Kerry, being very short legged, but weighing heavy for their appearance. They are sturdily-built, of robust health, and carrying a lot of good, thick flesh of excellent quality, while as milkers they make a remarkable record for such small cows. They may be either black or red, with a little white. At the late London Dairy Show in November, the first-prize cow of this breed gave 39 lbs. 5 ozs. of milk in a day, and the second-prize cow 37 lbs., their dates of calving being June 5th and September 24th; while the third-prize cows gave 44 lbs. 13 ozs., her time of calving being September 7th, but the quality of her

milk was less rich than that of the cows placed above her on the honor roll. It is claimed that in individual cases these cows have yielded 1,000 imperial gallons of milk per annum. In a pamphlet recently published by the proprietors of *The Cattle*, an English agricultural paper, extracts are given of interviews with several breeders who have "taken up" the Kerry, and whose experiences have been of a most satisfactory character. Mr. Sheriff, a prominent Herefordshire farmer who holds 300 acres of land under Lord Salisbury at Hatfield, said: "In my opinion Kerries are one of the best class of cows a poor man can have. I have had a Kerry that has given me 20 quarts of milk a day for six months at a stretch." Mr. Robertson, of Babraham, Cambridge, says: "The Kerry is the cow for the poor, no less than the cow for the rich man. She can be kept at half the expense of an ordinary cow. This I have proved by my own experience. There is another point in their favor. Nowadays small joints are much more in request than large, and our little beasts are worth more per pound than larger animals, and the beef cannot be surpassed. The average yield of milk on a second calf is from 10 to 12 quarts a day, which, considering the small amount of food they consume, is a wonderful yield, and it is of superior quality." An English writer has said of the Dexter: "When of a red color, as it sometimes is, it has been known to present the appearance of a grand Shorthorn seen through the wrong end of a telescope." One characteristic of the breed is the very short legs and the small space from the knee and hock to the hoof, which has

the nucleus of a high-class herd. The yearling bull, King Cole, imported in utero, has grown into an exceedingly fine animal, rivalling the Royal winner in the symmetry of his form and the wealth of his flesh, and the young pure-breds, as well as a number of cross-bred calves, show fine feeding qualities.

Poultry and pig breeding and feeding are also carried on very successfully on the farm, the poultry house and piggery being very handsome and complete structures, and the feeding and care of these branches, as well as the care of the garden and grounds, are under the competent superintendence of Mr. John O'Dowd, who is enthusiastic in his devotion to his duties, and eminently successful.

#### Log Cabin Times.

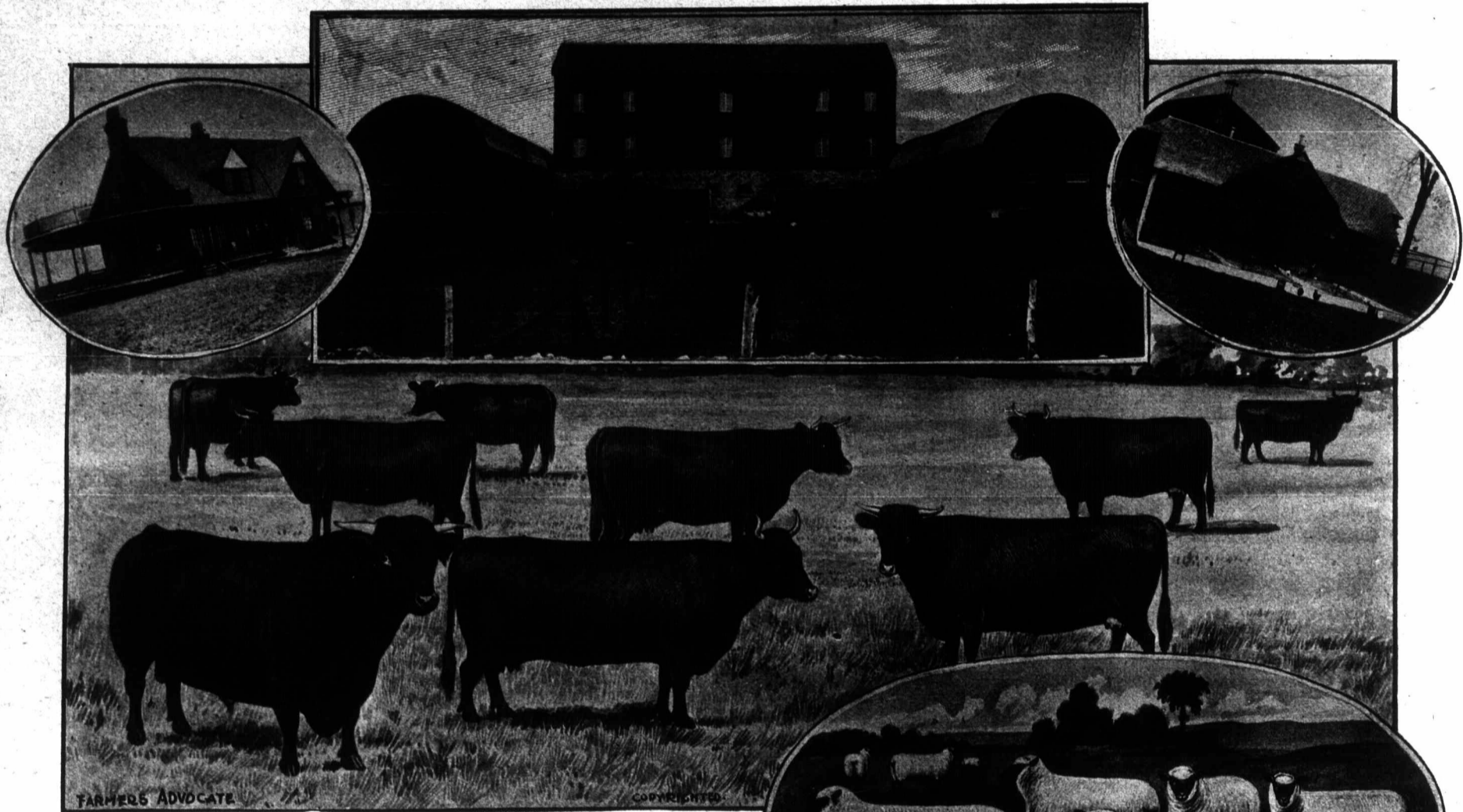
BY REV. W. A. MACKAY, B. A., D. D., WOODSTOCK, ONT.

Someone says that you can tell the nationality of a man by the way he leaves a railway car. If the traveller is an Irishman, he will with the first toot of the engine quickly seize his valise, hurry to the door, and probably be the first man on the platform. If he is an Englishman, he will retain his seat till the train comes to a full stop, then quietly take up his belongings, and in a dignified fashion make his way out. But if he is a Scotchman he will remain seated to the last, then make sure that he has all his own things and look carefully around to see if anyone has left something behind. The description has

The settlers usually arrived in the fall, and the first cabins were hurriedly built in preparation for the approaching winter. They were usually 12x18 feet, and 9 or 10 feet high. The logs were cornered but not hewed, with chinks between, then moss packed in, and all plastered over with clay. The roof sometimes consisted of rafters with poles laid across, and for shingles pieces of elm bark 3x4 feet; but more frequently it was constructed of basswood logs hollowed out and laid alongside each other with the hollow side up; then other logs similarly hollowed were laid on these with the hollow side down and so as to overlap those underneath. This roof lasted for 4 or 5 years; it was usually waterproof, but by no means proof against the driven snow, and we youngsters who slept in the garret frequently woke up in the morning to find our bed well covered with nature's white mantle.

The old fireplace! Who can ever forget it, associated as it is with our earliest impressions of Scottish Covenanters, military heroes, battles lost and won, and weird tales of ghosts and goblins, things most surely believed in by these Scottish pioneers?

The primitive log cabins, though rude, and in some respects uncomfortable enough, constituted happy homes to which a few of the generation of to-day can look back with fond recollection. Often at night a neighbor would call just for a *ceilidh*, or friendly visit. Old country reminiscences were rehearsed, stories of love and adventure were told, and school



VIEWS OF HUNTLEYWOOD, WITH ITS DEXTER-KERRIES AND SOUTHDOWNS, OWNED BY SENATOR DRUMMOND, MONTREAL, QUEBEC, CANADA.

probably given rise to the saying: "Tipperary beef to the heels." Mr. Richard Stratton, well known as one of the leading breeders of Shorthorns in England, has made some very interesting experiments by crossing Kerry cows with high-class white Shorthorn bulls, and has produced a capital class of blue-gray beef cattle which have been very much sought after by British butchers, a steer calf having weighed at nine months old, 6 cwt. 2 qrs., or 728 lbs., and one placed in the carcass competition at Smithfield, at 1 year and 10 months, weighed 10 cwt. 1 qr. 21 lbs. (1,169 lbs.), and gained 3rd prize. Mr. Stratton sold three of these cross-breeds at 2 years and 3 months at an average of £17 each (\$85), while three choice ones of the same age made at Xmas £25 15s., £27, and £28 15s. (over \$140).

Senator Drummond, whose ambition is only satisfied by possession of the best of whatever class of stock he fancies, selected and imported at a very high price, for the head of his herd of Dexters, the phenomenal young bull, Bantam (illustrated in our engraving), bred by His Royal Highness the Prince of Wales, winner of first prize and the championship of the breed at the Royal Agricultural Society Show at Manchester. That he comes of superior stock is attested by the fact that his sire won the male championship and his dam the female championship at the Royal Show at Cambridge on a previous occasion. With this bull, now 3 years old, came four handsome young cows in calf, namely, Kathleen, Gloria, Toffy, and Trilby, which have since produced two sets of calves, which gives

at least the merit of bringing out in a striking way the three national characteristics—the impulsiveness of the Irish, the stolid dignity of the English, and the ever thoughtful acquisitiveness of the Scotch.

The log-cabin experiences of the writer were confined to a Scotch settlement, chiefly Highlanders, and this, for better or worse, gave them a distinctive character. When 5 years of age I knew nothing of the tongue of the Sassenach, but could speak fluently the soft, flowing, melodious language of Ossian. So far as I can remember, my earliest impression of life was that its chief end was to acquire property here and make sure of heaven for the hereafter. Acquisition for the present and future—this was the end and aim of the Celtic pioneer. Acquire land, acquire a shanty, acquire a yoke of oxen, acquire cows, sheep, hogs, implements, then acquire a schoolhouse and a church.

And it must be acknowledged that if this is not the highest ideal of life it is a very useful one, and greatly helps in the development of not a few of the social virtues and christian graces. It will teach the young man industry, perseverance, thrift, self-denial, integrity, and the fear of God.

and church affairs discussed. Sometimes the school teacher would be there getting a week's board as part of salary. He was always welcome, and his presence had a refining, elevating influence. Sometimes the old people first learned from him how to read and write English. I have known persons over 60 years of age do this.

There were also tramps in those days, but very unlike the modern namesake. For the tramp of to-day we have little sympathy, but the pioneer tramp was no lazy lout, but some poor unfortunate who had lost an arm or a leg, or perhaps some crazy old woman going her annual round wool-gathering. The male tramps were often quite intelligent, and a storehouse of news and gossip, and they were always welcome visitors. To-day the tin peddler is almost an extinct species, but he frequently broke the monotony of the life in the cabin. But of all visitors, the saddle-bag preacher was the most notable. He was a man of Pauline type, counting it no hardship to journey from dawn till dark in the bitter cold of a Canadian winter, making his way through an unbroken country, often with no path but a forest "blaze," carrying with him Bibles,

Testaments, hymn-books, tracts: selling them, or more frequently giving them away, to the people, and privately and publicly speaking words of cheer and comfort. Of one of these it is related that often the congregation was kept waiting while he was in some retired place on his knees pleading for the Spirit's presence and power, without which he could not preach. Then, when his prayer was answered he came before the people, and none could listen unmoved as, with his heart burning with love to God and man and his face all aglow with the very light of heaven, he told the story of Jesus and His love.

The logging "bees," the quilting "bees," the apple-paring "bees," the sugarmaking "bees," were occasions not to be forgotten. They developed the social life of the people, and were associated with much innocent amusement. Of course there was *uisge-beatha galore*, and sometimes ridiculous scenes as the result. Here is an incident which, so far as I know, has never been in print: Tom McPherson was a hard-working farmer, but waggish and always ready for fun. Along with a couple of others he determined to play a trick on some of his neighbors; so he feigned to be very drunk—indeed, paralyzed with drink. His fellow-conspirators expressed sympathy for the unfortunate man, and easily worked the game, so that four stalwart young fellows volunteered to carry the man home, which was about a mile away. It was a hard task. The drunken (?) man's feet every now and then would become entangled with those of his bearers, causing a stumble, but at length they reached the house and deposited their supposed helpless burden on the kitchen floor. No sooner, however, were they gone than up jumped the paralyzed man, and taking a short cut through the woods was at the original house, perfectly sober and in his right mind, quite a while before his wearied friends returned. On entering the house the first man they saw was the one they had left dead drunk behind. Blank amazement was depicted on their countenances.

"Tom McPherson, how she pe here?" was the question asked by one of them.  
"Why, she pe here all night, and all day too. Why she pe askin' for?"  
"Cause we left you drunk in your ain hoose a little ago."

"Me drunk! Tom McPherson drunk! Na, na, she pe lying, she pe, indeed."

There was now real terror on the faces of the late burden-bearers. "What we did?" Who was that drunk man that they had just left in Tom McPherson's kitchen? And the consternation was greatly increased by McPherson's feigned indignation at the men who dared to leave a drunk man in his house to scare his wife and bairns. So back the four men went to institute an investigation as to the identity of their man. It was some time before they discovered the imposition practised upon them. When they did the wicked trickster was not to be found.

The dependent condition of the pioneers greatly helped to develop among them the grace of kindness. They bore one another's burdens in many ways. In the beginning of winter, when the cow, the steer or the pig was killed for the winter's supply of meat, portions were always sent to the neighbors and to the poor. So, also, on New Year's day (which was January 11th) a number of young men would drive round in an ox-sleigh, making a great noise with guns, tin horns and the bagpipes, and collecting all kinds of provisions, such as flour, oatmeal, potatoes, for some poor widow woman or some sick man. There were no hospitals in those early days, nor houses of refuge, but the poor were well cared for. As there were no asylums, idiots could be seen here and there throughout the country running in a semi-nude state in the woods or along the roadside, a source of great terror to women and children.

It seems to me that for the development of individuality the conditions of the pioneer life were more favorable than those of to-day. To-day we are fearfully and wonderfully classified, and the whole tendency of our system of education is to put us all through the same sieve and make us as much alike as two grains of peas. There may have been more corners on the pioneer than are usually found on a man to-day, but there was also more character.

Lastly, the condition of the pioneer made him industrious, and this made him a happy man. "Pleasure," says Ruskin, "comes through toil, and not by self-indulgence and indolence. When one gets to love work his life is a happy one." This was certainly true in log-cabin times. In the winter season there was the threshing with the flail, the feeding of the cattle, and all day long might be heard the sound of the axes and the crashing of falling trees. In summer it was burning the logs and brush, plowing, sowing and harrowing among the stumps and roots, and reaping with the scythe, the cradle or the sickle. The story is told of an

English dude who came upon a pioneer settlement. He inquired if there were no gentlemen in the district.

"Shentlemans! Who she pe meanin'?" inquired Donald.

"Why," was the reply, "I mean men who don't work for a living."

"Na, na," was Donald's response; "there is no shentlemans here—everybody work; man work, woman work, horse work, ox work, dog work, cat work; but the hog, she eat, she sleep, she do nothin' all day—she pe the only shentleman here."

Plain living, industrious habits, and plenty of outdoor exercise, made the men of the log cabin not only happy, but healthy. Their longevity was astonishing. The old cemeteries record the names of not a few who lived from 90 to 110 years. "Do

him to come and sit beside her and pet her. When he came he talked of things she had lost all interest in, and tried to rouse her by telling her, clumsily enough, the gossip of the neighborhood, when all she wanted was for him to hold her close to his broad bosom and tell her that she was his own little girl—worthless enough—but his own for all that. But something was brewing for Albert Gray in the pleasant old kitchen that night. Aunt Tabitha had come over expressly to speak her mind, and she was not one to be balked in so laudable a purpose.

"Dr. Clark was in to-day to see Grace," said Mary, as she reached for the sewing basket. "I'm afraid its serious."

"Nonsense," said her brother shortly. "What did he say?"

"He said," and Mary paused to give the words weight, "she was fading out of life, that's what he said. I've seen it coming; the minister, dear man, has seen it coming, too. Only last week he says to me, when he came out of her room, 'She'll be an angel before the spring, Miss Gray.' These were his words."

"Then why the deuce doesn't Dr. Clark do something, and not—"

"Brother, brother, this is no time for sinful words. If the Lord has more need of Grace than we have, we mustn't murmur if He takes her." I haven't a doubt that Mary thought Grace would be more of a success as an angel than as a wife. She would look beautiful playing on a golden harp, and, really, as a farmer's wife she wasn't much good.

"No, we mustn't question Providence."

Here an interruption came from Aunt Tabitha, who was knitting rapidly. "I always think it a low trick to saddle one's own meanness and mistakes on the Lord. If I were you, Albert, I'd be man enough to bear my own. Four years ago last June you married a slip of a girl who shouldn't have left her mother for long enough. You might have married Harriet Jenkins, who is the best of workers, but homely as all outdoors. But no, you wanted the bright-eyed, pink-cheeked bit of a girl, and got her, more's the pity."

"I don't know why you should take that tone to Albert," protested Mary.

"I am not talking to you, Mary; I am talking to my favorite nephew, and he may scowl as much as he likes, he's got to listen to some healthy truths. You remember how she looked on her wedding day, for all the world like a pink apple blossom. You were proud enough of her, too, but lovers and husbands are different creatures, quite."

"I don't know what you are driving at," he exclaimed sulkily.

"You will before I'm done," cheerfully. "You thought her about the sweetest thing in the world once on a time, but you changed."

"Aunt Tabitha," said Albert Gray sternly, "you have no business talking like that. I—I've always thought—"

"Just so, but tell me this. When you brought her home, how long did the honeymoon last? Oh, you had so many dollars to make, so much to do! For a busy man to take time to make love to his wife would be a sin and a shame, wouldn't it?"

Albert Gray was a school trustee, and an elder in the church. No wonder he resented the blunt old Aunt Tabitha's lecture. "I don't think you've heard Grace complaining," he blustered, "and you've no right to make out I've used her badly."

"Yes, you have," went on the old dame. "She wasn't fit to do the work of this house, and doing her best to get through with it has cost her something, you can see. Poor girl!"

"I do it," put in Mary, "do it easily."

"Yes, you're like myself, work is about all you're fit for, but with Grace 'twas different. And little sympathy

she got from Albert—oh, I know men, bless your heart!—but plenty of complaints, and let me tell you this, fault-finding and lesson-giving are mighty poor help when a mortal is tired to death. When you saw it was killing her why didn't you put a good servant girl in the house? Didn't think? Don't tell me. It's the self in a man that keeps him from acting as he ought to. You thought of yourself and your pocketbook, as many a man has done before you—and called it economy. It seems to me that the man who cares for his horses, and his stock, and works the wife of his bosom to death, is about the biggest kind of a fool there is. Yes, gasp away. Kind of scares you, don't it? Well, you ought to be scared."

"Aunt Tabitha, I'll never forgive you," cried Mary; "it's scandalous, it's irreligious, to talk so. Grace has a call to a better land, and—"

"Grace has no such thing. She has a call, and a good urgent one at that, to be petted and made much of. Albert Gray, if you can look at that little woman dying because she is too tired out and discouraged to go on living, without feeling



THE SETTLER'S HOME IN LOG-CABIN TIME.

these people ever die?" asked a Sassenach. "Weel," replied Donald, "it's about the last thing they do."

The Beginning of a Cure.

BY JEAN BLEWETT.

Aunt Tabitha had the best of it, there is no denying the fact.

It was Mary Gray, the maiden sister of the man warming his feet at the kitchen stove, who opened the discussion. She was a pleasant-faced, hustling woman, who had the reputation, hardly earned and grimly held against all comers, of being able to do more work than any other woman in the neighbor-



INTERIOR VIEW OF A PIONEER'S HOUSE.

hood. For two months she had had full charge of her brother's house, and on that Christmas eve she had the pleasure of knowing for a certainty that it was in apple-pie order from garret to cellar. She had been her brother's housekeeper long before the pale-faced little thing lying in the spare bedroom had come to Cloverly as a wife, and it seemed easy to slip into the old place. Mrs. Albert Gray had offered no objections; she had resigned without a murmur. Pale, listless, tired, she was glad to creep away from the work and the worry.

She wasn't missed much, she told herself bitterly; the farmhouse affairs were ever so much better managed. Her husband did not hide his satisfaction, and boasted of Mary's skill in cooking and buttermaking, in the brief visits he paid the deposed queen of the household in the spare bedroom. Mrs. Albert Gray was very fond of her big, good-looking husband. It fairly broke her heart to think how they had drifted apart, and when she hid her face in the pillow on that Xmas eve, and cried hot tears until her eyes were swollen, she was only carrying out the usual evening programme. She wanted

ashamed of yourself, you're a harder man than I think you." His face was as pale as a healthy, sun-tanned face could be. "I didn't know," he stammered. "Other women—"

"But Grace isn't like the others. You fell in love with her because she was a little flower-faced thing different from everybody else. You were awfully fond of her once, you remember."

Albert Gray jumped to his feet. "Once!" he cried, with the first, and, I may add, the last oath his sister Mary ever heard pass his lips. "I want you to know that I love my wife with all my heart—with all my heart, do you hear?"

"Maybe so," went on the placid and relentless dame, "but you've succeeded in disguising your feelings so well, that I'll bet you anything Grace doesn't guess the fact. When a man loves a woman so well, he'll find it a pious plan to tell her so once in a while, and not leave her breaking her heart for a tender word and helping hand. Mary says Grace has had a call, but remember, it won't ease your conscience up a bit to saddle the whole thing on Providence when the coffin hides her away—a poor little faded flower dead for want of care. It—"

But he was stumbling up the stairs to his wife's room, the hot, unbidden tears blinding him, a great fear and a great love in his heart. Oh, the fool he had been! The face on the pillow was very white, the dark eyes lifted to greet him seemed unnaturally large. How sweet and frail she looked with the soft curls on her forehead! He knelt down beside the bed. Let the pride out of a self-satisfied man and he is the humblest of the humble. Ay, kneel, Elder Gray, the love that brings us to our knees is the love that lifts us up.

What he said to her and what she said to him rests between them. It was the beginning of a cure. Once Aunt Tabitha and Mary heard the happiest little peal of laughter. Aunt Tabitha immediately said with decision:

"That girl isn't going to be an angel yet for awhile, I can tell you. I never liked Albert so well in my life as when he was ready to swear at me for hinting that he didn't love his wife. Did you see the tears come, Mary?"

"You were very unkind to Albert," said Mary peevishly.

"Not a bit of it. Men like your brother have to get the selfishness shaken out of them before they're any good in the world. A man muffled up in self is blind and deaf, and generally nasty. You never were married—I was. But, then, I've done lecturing. I've only got to tie this sock off. Have you ever noticed how fast you can knit when you're talking? These socks are a Christmas box for Albert, and I was a bit afraid I wouldn't get them done. She began rolling up her work, paused to scan it in a perplexed way, then burst into a hearty laugh at her own expense.

"I declare," she cried, holding up a ridiculous-looking knitted thing, "if I didn't talk so hard I forgot to put a heel in this sock altogether."

### Dairying in the Territories.

OUTPUT OF THE CREAMERIES IN THE EASTERN DIVISION FOR 1899—SOME QUESTIONS OF INTEREST TO NORTHWEST DAIRYMEN DISCUSSED.

The output of the creameries in the eastern division of the N.-W. T. for 1899 was 252,500 pounds. This is not quite as large a make as we anticipated having this season, from the good prices and otherwise successful season of last year. It is not to be taken, however, as indicative of abated interest and zeal on the part of the patrons, or of any decline in our new dairy industry, but is wholly attributable to the nature of the season. Last winter was unusually long and severe, there was a shortage in the food supply, and many of the cattle were housed in cold, uncomfortable stables; and in addition to this, the spring was very cold and backward. As a result, many cows wintered very poorly and did not begin to milk well until late in June. The inevitable effect upon the creamery business was, that the creameries were late in opening and the make during May and June comparatively light.

As regards prices, this has been our banner year. The butter will net an average price of between 20c. and 21c. at the creameries, or fully a cent and a half better than last year, and two and a half cents better than in 1897. This should certainly have a stimulating effect, and augurs well for next season.

I should now like to deal with a few questions which are of vital importance, and which all our dairymen should greatly interest themselves in, namely:

1. The winter care of stock.
2. The care of milch cows during fall.
3. The improvement of our dairy herds.

I have chosen these points because in dealing with them I am dealing with what I consider some of the most defective features in Northwest dairying, and because I feel certain that there is not one of the difficulties now existing that cannot be fully overcome.

Many of our creamery patrons either neglect or have not heretofore felt themselves in a position

to provide for their cattle suitable stables and a plentiful supply of good food for the winter. Many cows are fed wholly on either straw or a very inferior quality of hay, and are kept in very poor sod stables. As a result they winter very poorly and are incapable of giving the returns they otherwise would during the spring and the early part of the summer, or even during any part of the season.

Again, many neglect to stable and feed their milch cows during the stormy weather and cool nights of autumn. A more fatal mistake could not be made; it causes them to fail in milk very rapidly.

Consequent upon the conditions mentioned, the creamery season is shortened by fully two to three months, as we are unable to open the creameries as early, or run them as late, as we otherwise would.

It is natural that the conditions mentioned should still exist, on account of the dairy industry being still in its infancy with us—co-operative dairying having just begun in 1897, in any kind of general way. Yet I think that it can be shown conclusively that they need not continue to exist. Besides slough hay, we can produce in abundance such fine qualities of hay as Brome and native rye grass, as has been fully demonstrated, not only at the Experimental Farms, but by many farmers throughout Manitoba and the Territories. During the past season I saw Brome standing thick on the ground, and between four and five feet high, and which would easily yield four tons of hay per acre. Also as a substitute for hay, and as a variety, we can raise heavy crops of oats and other suitable coarse grains, to be cut when somewhat green; and of course we have the straw from the threshed grains to feed. The Northwest is unsurpassed by any other part of the world for the growing of coarse grains and roots; and bran, which is one of the best grain foods for cattle, and especially for milch cows, can readily be obtained, and the supply is sure to keep pace with the demand, as flour mills are constantly being erected.

I spoke of a need of improvement in our cattle for dairy purposes. It must be remembered that until within very recent years the great majority of those who bred and reared cattle did so with an eye exclusively to their quality as beef producers. Now, however, that they have begun to combine the dairy with the beef industry they will need to breed and select with this twofold object in view. They will need to cross their beef breeds with some suitable dairy breed, or at least select the calves from the best milkers in their herds, to obtain what is known as a "dual purpose" animal—that is, one suitable for either dairying or the production of beef. If I might venture an opinion, I would say that a cross between the Shorthorn and Ayrshire should give a type of animal that would well suit our requirements. Shorthorns and Shorthorn grades are very common in the west, and being quite suitable for our climate, have proven a success as beef producers. The Ayrshire, although a distinctly dairy animal, produces beef of excellent quality and has been accustomed to a rigorous climate in its native hills of Scotland, and is quite suited to our rather severe climate. Consequently a cross between the Shorthorn, or Shorthorn grade, and the Ayrshire should give a hardy animal of good size, which will produce beef of the finest quality and should give a good account of itself for dairy purposes. While I suggest this cross, and am satisfied that it would give excellent results, I do not mean to say that there are no other beef and dairy breeds whose cross might not give equally good results. There is fully as much in selecting as in breed, and I have no hesitation in saying that by judicious selection, alone, one can build up an admirable herd. But it is necessary to combine the two to secure the best results.

No doubt as time goes on, and the dairy industry becomes more thoroughly established and developed, there will be many farmers who will wish to make more of a specialty of dairying, and of course they will need to breed and select solely with this object in view. But for many years to come I am satisfied that the great majority of our farmers will wish to combine dairying and beef production, and for such the dual purpose cow is the only suitable kind. What would be the results of improvements along the lines suggested? At the present time we are unable to run the creameries more than about five months in the year, and during the first and last of these the make is light; whereas the season should be two to three months longer. By stabling and feeding our cattle properly during the winter, and again during stormy weather and the cold nights of autumn, we can open our creameries much earlier in the spring and run them much later in the fall, and thereby lengthen the creamery season to fully seven or eight months; and not only this, but cows which have been properly wintered will milk much better during the entire season. I would strongly urge upon our creamery patrons to prepare for a longer season next year. The creameries will open as early in the spring and continue to run as late in the fall as a reasonable amount of cream is obtainable. If with good care of our cattle we combine care in selection and breeding, the output of the creameries can be enormously increased; and by prolonging the season into the late fall months the average price of the butter will be raised, as butter made during the fall months always commands a much higher price than the summer make—3 to 5 cents on the pound.

While I have intentionally limited my remarks to pointing out the weak points in Northwest dairy-

ing, and suggesting remedies, I am neither dissatisfied nor disappointed with the results already achieved. Moreover, I have every confidence in the future of dairying in the Territories, not only from the good measure of success already attained, but from the adaptability of the west for mixed farming, of which dairying will naturally be an important phase; and, furthermore, from the fact that we have at our very door, in British Columbia, a large and growing market, which must of necessity be supplied from some outside source. As has been pointed out, we can produce a great variety of superior foods, and these in abundance, for the fall and winter feeding of our cattle; and during the summer there is an abundance of grass which is not only nutritious, but produces milk, butter and cheese products which are of the finest flavor. As a proof of this last statement, I would say that I have not received a single complaint regarding the quality of the butter in any one of our creameries during the entire season—an announcement which I am very pleased to be in a position to make.

J. W. MITCHELL,  
Supt. of N.-W. Creameries.

### Peafowl! (Why Not?)

Why has the raising of peafowl on the farm been so steadily neglected? Why should it be the only variety of poultry that has not been affected by the grand march forward of the industry? It seems to be left away behind—"out of sight," in fact. The younger members of many families have never even seen these fowl. It is certainly not from any lack of beauty that they are thus abandoned; for as far as color of plumage and graceful form count, of all birds native to Canada, or introduced, the peacock surpasses all others. His slender legs seem scarcely large enough to support so great a quantity of elegance. Even those feathers that are scarcely noticed have great beauty: the handsome brown flight feathers of the wing; then the metallic blue-black in connection, and above these the mixed brown, white and blue. But when we see the peacock we do not think of these. We notice first his tail, the longest feathers of which are very nearly 5 feet; and such feathers!—of so many shades that to describe them were impossible, and the most skillful artist's brush could only produce one effect, while on the living bird, every turn or motion makes the colors ever different. It is seen in all its splendor when spread out in a huge fan measuring over nine feet across the base, the sun gleaming on the brilliant and varying tints of its row after row of ivory rods, edged with fringe of richest bronze, and surmounted and half-concealed by those beauty eyes of nicely graded sizes down to the very smallest, which merge in the brilliant green of its back, which again meets and blends with the peacock blue of his slender, graceful neck, which is a fitting support for the dainty head, with its fan-shaped tuft. He is supposed, proverbially, to be very proud; at any rate he seems never to tire of showing his beauty, and of attracting the notice of all other fowl. I cannot understand why they pass him by so carelessly. Is it that they do not see, or that, like the shallow human bird, they are slightly jealous, and do not care to admire beauty which they do not themselves possess?

The peahen is a daintily pretty bird, even though not so showily dressed; wearing always a sober gray suit, which when worn a year becomes faded and is then discarded, when a new dark gray takes its place; this is always brightened about the neck and breast with blue-green and white. Hers is an ideal suit for any female who wishes to look well, yet inconspicuous. One may pass quite close to her nest without noticing her, so well does she harmonize with her surroundings. Her eggs are large and very firmly-shelled, and are rounder in shape than turkey eggs; she lays about eight before wanting to set, and if these are taken she will lay as many more. Incubation lasts four weeks. I set four peahen eggs and six turkey eggs, on the ground, under a Rock hen. She hatched all but one peahen, which failed to get out. I allowed the hen to wander with the flock. She raised the three peafowl and four of the turkeys, so I judge they are not hard to raise. I fed them occasionally. In the morning, near the kitchen window, I would hear their peculiar call, which was rewarded by some oatflakes.

The peacock is very friendly in his nature; in fact, both old and young are perfectly tame. He delights in the society of young chickens, which he would not willingly injure. I have heard of flocks being killed, but, from observation, I judge it was rather by the excited objections of the mother hen than by the wrong intentions of the peacock. We have never found him the least bit rough, though at first it would afford him great pleasure to chase the old turkeys. Now he is often travelling through the woods and fields with the flock. It is said that they are an excellent preventive to the destruction of poultry by hawks. They have a loud, shrill call, which is oftenest heard before rain and always when any danger approaches. It would be a bold robber that would venture near the poultry-yard at night when the peacock or peahen is giving his or her warning shriek. One would not care to kill the beautiful peacock for the table, even if one could not dispose of surplus stock alive; but the peahen makes a very delicate and savory roast, and has a generous supply, especially on the breast, of excellent firm meat.

GYRA.



### Agricultural Instruction.

BY C. C. JAMES, M. A., DEPUTY MINISTER OF AGRICULTURE FOR ONTARIO.

"Of all branches of human industry, agriculture is assuredly that which occupies the greatest number of men, which comprises the most interests, and the progress of which counts for most in the development of the wealth of nations."

With these words written in 1839 by M. Tisserand, then Director of Agriculture in France, our readers will doubtless agree. No one denies that agriculture is great in extent and great in importance. The training of the men and women who are to manage this great industry should be a matter of vital importance. Up to the beginning of the present century unceasing, monotonous slavish toil, and dark, almost hopeless ignorance were associated with the pursuit. Bread was produced only by the sweat of the brow. A century has wrought a change—a marvellous change. It has taken a hundred years to relieve the monotony, to lighten the burden of toil, and to let light in to bring brains and brawn together as associates and co-workers in what is the most varied and most promising of man's pursuits. The agriculture of to-day makes demands that were undreamt of a century ago. The early prophets of the new science of agriculture met with but little encouragement, but their recognition is coming at the close of this century. When the history of the rise and progress of modern civilization comes to be written, or to be re-written, the names of the pioneers in the development of the science of agriculture will find place along with the statesmen, and generals, and financial and commercial magnates whose names now adorn the pages of our written histories.

He would be a bold and venturesome prophet who would venture to predict the future of agriculture a century hence, even a half century hence. One hundred years ago it began to be suspected that there was a science of agriculture—to-day we know it, though we know but little of it. The lines of agricultural science are opening up so promisingly in so many directions that speculation may find delight in dreaming of what may come, but prophecy is almost debarred. This we know, that there is a science of agriculture, and that the man who to-day enters upon an agricultural career is handicapped unless he has some acquaintance with the rudiments or the elements of that science.

When we say that agriculture should be taught in public schools in a rational manner, what do we mean? In the first place, we mean that the science should be taught and not the art. The art of agriculture is the doing of the work, the knowing how to plow, and sow, and reap, and thresh; the science is the knowledge of why these things are done, what laws operate in nature when the work is being done, why the work is best done in such and such a manner. The laws of nature in agricultural work are precisely the same as those that operate in other pursuits, and the boy or the girl who studies agricultural science is simply studying the laws of nature on the farm. These laws, lying at the basis of agricultural work, are very few and very simple. This brings me to my second point, and it is this, that in teaching our subject in the public schools the work should be made very simple, and but a limited area should be covered. I have heard men read essays at Farmers' Institutes, in the early days, full of big words and complicated sentences, dealing with the subject in a "learned" manner. The audience evidently could not follow the address, and the speaker or reader probably knew no more about it than the audience—it was above the heads of all, the speaker included. The audience concluded that the teaching of agriculture in our schools would be a failure.

If the subject cannot be made simple and plain to the pupils, the fault lies, not with the subject, but with the teacher. Once the subject becomes plain and intelligible to teacher and pupil, it will at once begin to be interesting. There is nothing uninteresting in nature, except as we make it so or fail to comprehend it.

The teacher will give the pupil only what the teacher himself or herself has to give. If the teacher has inspiration, has enthusiasm, has a desire to know, the pupils will soon catch the inspiration and the enthusiasm. The aim of teaching should not be to load the minds of the children with dry facts—the brain is a poor carrier of such,—but if the teacher can be brought to see that the aim should be to open the eyes of the pupils to see the workings of nature, and to unstop their ears to hear the myriad voices of nature, then the first and most important step in educational training will have been reached. Rather we should say the aim should be to keep the eyes open and to keep the ears unstop, for children start in school life with eyes and ears wide open. Children are question askers, they are inquisitive. The true, helpful teachers will encourage questioning in the right direction, and keep the open eyes and ears of the pupils turned toward nature, which will open up to them just as they open up toward nature.

Keeping close to nature—to nature as it is right at home, in the fields, along the roadside, in the running brooks—looking for the simple workings of laws all about us, not trying to fathom the far-off problems of some remote science, starting right at our feet with the simple things of life about us, and getting down to the explanations of so-called common things, is the key to the situation. "Digestion co-efficients," "albuminoids," and "nitrogen free extract," are terms that the expert and advanced

student must understand and be able to use when necessary; to the pupil in the early stages, they are but stumbling-blocks. The teacher must train pupils to walk alone, and the path must be made both easy and attractive. Treatises have been written on this subject, elaborate and learned; the purpose of this short article is to emphasize this one point as fundamental, that in teaching agriculture in our public schools we must keep in mind that only the science of this great subject must now be attempted, that only the laws of nature to be found in the simplest operations of farm work should be studied, and that this instruction must be made as simple and plain as it is possible to make it in our English language. The misunderstanding of this will lead to failure. If pupils could be interested in the formation of the soil, the effect of the air upon the soil, the nature of the rains, the sprouting of the seed, the feeding of the plants and the forming of seed, a good start would be made. Acquaintance with the birds, the insects, the weeds and wild flowers would follow as a recreation rather than as a hard, uninteresting study. The physiology and anatomy of farm animals would follow in their proper course. But no fixed rule as to system need be laid down. Given a teacher with an inspiration for the work, and the ability and determination to make things plain, good results alone can follow; the teacher will work out the plan. This article is not written to give instruction as to how to teach or what to teach, simply to emphasize the fact that in making a rational beginning of this work only the simple principles of the science of agriculture must be taught in the simplest manner possible. In agricultural instruction, as in so many other things, well begun is more than half done.

There are upwards of two hundred thousand farmers' families in Ontario Province alone; to take their place as the heads of these families, two hundred thousand boys and two hundred thousand girls are now being trained, or will soon begin to be trained, in our public schools. How are they being trained for that work? They are getting, or will get, some education. But, if, in addition to being taught to read and write and "figure"—the three R's—they could be given some acquaintance with the very interesting sciences that underlie their future work. If they could be taught to think more accurately about the why and wherefore of their life work; if they could be imbued with a desire to know more, so that they would read and study the agricultural papers, reports, bulletins, and books that are issued for their instruction, would not the twentieth century see the coming up in this Province of a commonwealth of citizens that would be intelligent, enterprising, well-ordered, and possessed of the possibilities of the highest moral and material prosperity? We do not look for the millennium along these lines, but we do find in this direction the most promising development of our people. The new century presents no more hopeful outlook than along this line. The science of agriculture has reached a stage when it can be taught in our public schools, and popular opinion approves of the making of a start in a rational manner. The opening up of the gold fields of the Yukon, the immigration of the Doukhobors and Galicians and Finns, the deepening of the canals, the inauguration of a fast Atlantic passenger service, the extension of penny postage, and many other questions that attract national attention, are of importance, but in comparison with the instruction of the rising generation that are to manage the great agricultural industry of this country, they are of but secondary importance. Ontario possesses the greatest wealth in her rural classes. The making of high-class farmers, honest, industrious and intelligent, with a special training of mind and senses along the line of their life work, is the most important problem that concerns this Province to-day, for in it are the possibilities of the greatest good to the greatest number, and the progress of agriculture means the progress of every other industry and the improvement of the whole people.

### Tent Caterpillars.

During the last three years few can have failed to notice the extraordinary numbers of tent caterpillars that have made their appearance not only throughout Ontario, but in all parts of the Dominion, and in the neighboring States. There are two closely-allied species that are known by this name, the apple-tree tent caterpillar (*Climacampa Americana*), which frequents our orchards and gardens, and the forest tent caterpillar (*C. disstria*), which devours the foliage of a great variety of trees and shrubs. Both have been excessively numerous and destructive for the last three seasons. As far as the latter species is concerned, we are almost absolutely helpless. We may protect the shade-trees in cities and towns, and on our own lawns, by spraying with Paris green, but to prevent its increase and work of destruction in the woods is entirely out of our power.

Happily, our position with regard to the apple-tree tent caterpillar is not so discouraging; any fruit-grower who takes the trouble can protect his trees from any serious injury. If we consider the life-history of the insect we may see how this is to be done. The first stage of existence is the egg. The parent moth lays the eggs which will produce the next generation during the month of July; they are deposited on the twigs of various fruit trees, not very far from the tip, in regular lines, completely encircling the twig and forming a cluster or bracelet containing two or three hundred eggs; the

whole mass is covered with a waterproof varnish, which cements them tightly together and protects them from the weather. For about nine months the life of the insect is confined to the egg state, and there it remains quiescent until the warmth of spring causes the little caterpillars which have been hatched within to gnaw their way out of the shells and make their appearance about the same time as the buds on the fruit trees are beginning to expand their tender foliage. The exact time of hatching depends entirely upon the weather, and therefore varies in date from year to year. At first the tiny caterpillars feed upon the varnish that has covered the egg mass, but they soon crawl away, down the twig, to the nearest fork; there they form a web or tent within which they find shelter when not feeding upon the tender unfolding leaves. Wherever they go they leave a thread of silk behind them, which soon forms a smooth carpet for them to walk upon. Being voracious feeders, they grow with great rapidity, and completely strip the twig on which they were born of all its leaves. Then they move further down into the tree and make a much larger tent in some crotch, from which they can sally out in various directions; finally, when nearly full-grown, they scatter about the tree, and at last crawl off in all directions to find some suitable place in which to change to the chrysalis state. The angles formed by the posts and boards of fences, clapboards of buildings, etc., are favorite places. Here they construct a loosely-woven cocoon, and inside of it a tough and thick one, the space between the two being partially filled with a yellow powder resembling sulphur in appearance. Inside is formed the dark-brown chrysalis, from which the moth, the perfect insect, comes forth in about two or three weeks' time. This brings us to the end of June or beginning of July. We are soon made aware that the moths have come out, from their habit of coming into the house at night, attracted by the lights, and dashing about the room in a crazy, reckless manner, burning their wings in the lamp, dropping into a tumbler of water, or getting into the butter and scattering over it an abundance of scales from their fluffy bodies. The female moths lay their eggs at this time, as already described above, and so the cycle of life goes round.

From this brief outline of their life-history, we may see where remedies can be applied. In the first place, an immense deal may be done by destroying the egg masses, and this is what we want to bring before our readers now. During the long winter months, on a dull day when there is no glare to blind the eyes, it will pay to go round the garden or orchard and look for these bracelets. After a little practice the eye will soon get into the way of seeing them, as they are an evident thickening of an outer twig where there should be no swelling of the kind. Snip off the twig with its bracelet and burn the mass, thus destroying in a moment a whole future colony. However careful the inspection during the winter, it is not likely that every batch of eggs will be found; therefore, it will be necessary in the spring to go round the trees again, just after the buds have opened, and look for the silvery-white silken tents in the forks of outer branches. These can be easily removed by twisting them round and round a rag tied at the end of a pole. Two or three inspections will require to be made at a few days' interval, as all may not be apparent at first, and then there will be no further trouble.

C. J. S. BETHUNE.

### My Country Girl.

My brave-eyed, grave-eyed country girl,  
To-day I brought her to the Fair.  
In all that mighty human whirl  
No sweeter, fairer lass was there.  
Her dress was neat from head to foot,  
Her face was flushed, and bright and sweet,  
And as we moved a-through the stir  
The passers turned to look on her.

My blue-eyed, true-eyed country girl,  
Who would have thought those small brown hands  
Had made the churn dash bump and swirl,  
Had helped to tie the wheaten bands?  
Who would have thought those fingers small  
Had done the baking, pies and all?  
Fast in that mighty human burr  
The well-pleased people looked on her.

My brown-cheeked, round-cheeked country girl,  
To-night I brought her to the Fair.  
The rockets in a maddening swirl  
Were lashing all the upper air.  
She gave a cry as through the sky  
A booming meteor rushed on high;  
And even in the evening blur  
The watchful people gazed on her.

My brave-eyed, grave-eyed country girl,  
I think that I can see her now;  
For in the crush a little curl  
Trilled down upon her snowy brow.  
And in alarm she clasped my arm  
With tender fingers, brown and warm.  
I'll keep her safe thro' life's wild stir,  
And journey through the world with her!

—The Khan, in Toronto Globe.

### A Bright Conundrum Game.

Questions and answers numbered alike were written on slips of paper and then cut apart, the questions being put in one box and the answers in another. Each guest selected a slip from each box. When all were ready, a question was read by some holder. An opportunity was given for any player to give the answer. If the answer was not given, the holder of the answer read it from his slip. If he did not know that he had the answer, and waited for the calling of the number, he paid a forfeit, or was condemned to some form of punishment.

### Shepherding in the West.

BY J. M'CAIG.

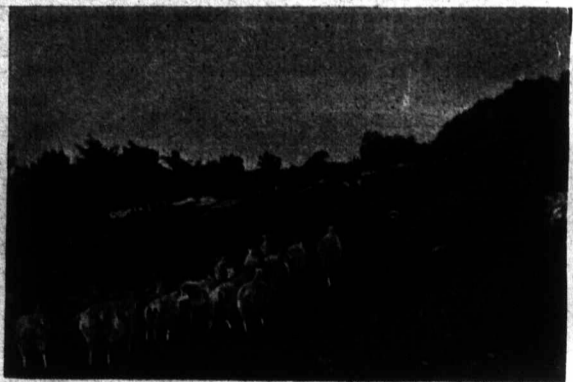
What determines whether a country is a ranching country, on one hand, or a farming country, on the other, is a matter of physical differences, chiefly in regard to climate. Considerable precipitation of moisture is necessary for the maturing of cultivated crops, but for ranching this condition is not necessary. The ranching country of Alberta is what might be called arid, or at least semi-arid, land, the rainfall being extremely low compared with the rainfall on the western slope of the Rockies, or in the Eastern Provinces. This condition is significant in many ways. In the first place, it means an absence of trees, except in the river bottoms, at least in the greater part of Southern Alberta; it means



ONTARIO RAM.

less discomfort from the lowering of temperature in winter time, and hence makes possible the running out of stock all winter; and it means the natural curing of the grasses on the stalk without loss of nutriment. In moist countries and under high cultivation, grasses continue to grow and decay at the same time all spring, summer, and fall; in this country almost all the growth takes place in three or four weeks, or at most a couple of months, in the spring, and the grass remains cured by the natural succeeding dryness until it is eaten off. One of the most important factors in the climate of Alberta is the Chinook wind, a warm and balmy, though dry, breeze that sweeps the country and licks up, as it by magic, the occasional snowfalls, and brings just at the opportune time the relief to the stock made to go on short rations for periods of from two or three days to perhaps two weeks at the outside. Snow as a rule lasts only for two or three days. With these features of the climate well understood, the reader can better understand the system of stock-raising in this district.

It may be the case that there are those who, like myself, have had an exaggerated idea of the bountifulness of the ranching country. The florid references to "the waving grasses," "unshorn fields," "wealth of vegetation," etc., that one reads would lead him to suppose that an Ontario four-ton-to-the-acre timothy crop four feet high would drop into insignificance beside the prairie. This is a mistake.



ONTARIO EWE FLOCK.

Haymakers cut half a ton to the acre oftener than a ton, except in the river bottoms. From this it will be seen that stock will have to "rustle" its living, as they say here, over wide areas. The characteristic "bunch grass" of the prairie is not a tall grass. It consists of separate stools, strong and thick at the bottom and not tall in the stalk. They grow somewhat thinly on the ground, and do not form a mat or turf, generally speaking.

Sheep husbandry is not so general as cattle raising, and its position is somewhat peculiar. The way the ordinary small rancher begins, with either sheep or cattle, is to pre-empt a quarter-section, buy more if he can, and then rent from the Government, for, say, twenty-one years, as much land as he deems his stock will require. Some pay very little rent, and still graze considerable stock, as unfenced territory, which is the property of the Government—

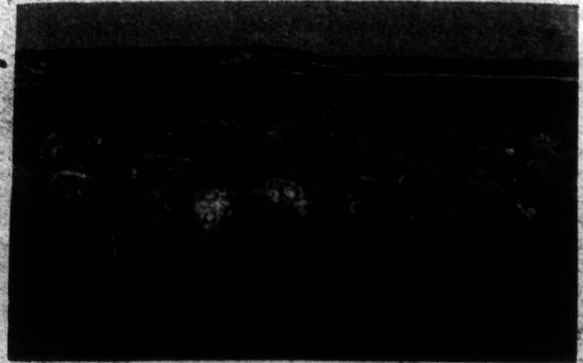
well, the cattle and sheep do not always know whether they are grazing on Government land or not. The rent of Government land is one cent an acre annually. There are many localities in which sheep are not allowed to graze at all, except on land owned by the proprietor. The natural grasses do not stand the close bite of the sheep well. Their hooves also are claimed to cut the grass out. Cattlemen are strongly opposed to the unlimited ranging of the sheep, as cattle refuse to graze after sheep. Weeds follow where the grass has been cleared off by the sheep. The greatest sheep districts are around Calgary and around Medicine Hat, in the neighborhood of the Cypress Hills. The chief interest is the production of large quantities of mutton, rather than of breeding stock, though there are some good foundation flocks of registered sheep in the district. As it is the larger flocks that have new features for your readers in the east (though the ADVOCATE is no stranger out here), I shall deal principally with these.

As to the system pursued, there is a marked contrast between the west and the east. In the first place, instead of having to feed on stored foods for six months in the year, the flocks of the west "rustle" their living, as it is called, all the year round, with the exception of short periods lasting from three days to two weeks, when it is necessary to throw out hay, and advisable, though not common, to shelter them. In many years no hay at all is needed, and it is considered unnecessary to put up for emergency more than at the rate of a ton to forty or fifty sheep. Many put up less, but far-sighted shepherds say they would like to have double the amount, if possible. There is a strong tendency to an increase in care from year to year, and to the provision of more shedding. Shedding is ordinarily constructed of slabs, with a light frame of studding, six feet high at either side, about twenty feet wide, and of any length desired. Though the losses in numbers ordinarily counted on in a single year is only three per cent. of the adult flock, there is no doubt but that good condition and size would be better promoted or perhaps retained with better shelter and more detailed and minute attention in hard weather.

Flocks range in much larger bands than are found in the east. In Ontario a couple of hundred of a breeding flock is exceptionally large, and it is probable that there are more flocks in Ontario below twenty than above it. The illustration gives a typical bunch of the "rent-payers" in characteristic surroundings setting off for the hills. In contrast to this, sheep property in the west goes up to numbers as high as thirty thousand, which is the number grazed by a company in the neighborhood of Swift Current. The Cypress Hills are not in Alberta, but in Western Assiniboia, which resembles Alberta in character. Large properties, such as I have spoken of, are subdivided for grazing purposes into bands of two thousand or twenty-five hundred, as this is as many as one shepherd can conveniently manage, and as many as it is advisable to have grazing in a bunch. The shepherd has to be with them night and day, following them in the day time and "bedding them down," as it is called, around his tent in the evening and starting them out on the range again in the morning. They cannot be left to wander away at will, as they would scatter too much, and without the shepherd would become the prey of wolves and coyotes. Spring lamb is much in favor as diet for the coyotes. A good collie is necessary and invaluable to the shepherd. Hounds are sometimes kept to keep off wolves. Where a number of bands belonging to one outfit are scattered about the prairie it keeps one man occupied driving a wagon with supplies to the several camps, which he visits once or twice a week. The shepherd cooks his own food. His chief supplies are flour and bacon, with different kinds of canned stuffs. Sometimes his duties are not pleasant. If he is not weatherwise, so as to keep between the quarter in which the wind sits and his camp, that the wind may drive him and his sheep home, he may have to face a storm and be unable to keep his flock moving. They may string off to the side or the rear ones pile up on the front ones which have stopped before the storm, or they may start over the edge of a coulee where the deep snow has drifted, pile up and a couple of hundred of them smother. Generally the stress of weather here or the suffering of the shepherd or loss of the sheep is slight. During the October storm in Montana eight shepherds were frozen to death. Such occurrences are unknown here, though there have been seasons in which considerable stock has perished.

As to the class of sheep stock kept, there is a strong contrast with that of Ontario. The greater part of the ewe stock has been originally Merino and has been brought in from Montana, which lies just to the south of Alberta. This stock has been bred to rams of the English breeds successively until mutton blood predominates. On account of the number of rams required, the closest selection cannot always be made, and the ram bunch is very often a somewhat mixed lot, as is shown in the accompanying lot of one hundred and forty belonging to an Alberta sheep-man. It will be seen that the black and brown faces predominate, and of these the Shrop, seems to have the call. This indiscriminate mixing of long and medium wool breeds shows either a want of knowledge on the part of the breeders or else a scarcity of rams. It is perhaps possible to take a bunch of ordinary grade Merinos and breed successively to good

mutton rams of a single breed and to reach a good mutton flock by this course, especially if the breed of rams chosen to transform the flock is of a kind which by habits and hardiness is suited to the country; but it may be safely voted that if either the large long-wool or medium-sized middle-wool, for example, is good, the other is not good, and the building up of flocks from both at the same time will entail disappointment. The first cross of any of the mutton breeds on the Merino makes a nice sheep, but continuous breeding does not bring the same success with all breeds alike. Attempted grafting of very violently opposite qualities is generally attended with disappointment. The offspring become rough, unbalanced and unsymmetrical to an extent that leads to sure impairment of constitution and to fatal deterioration. The anxiety to raise as many sheep of some kind as possible, where the chances of cheap grazing are good, leads to the retention of inferior ewes and



NORTHWEST RAM FLOCK.

the use of nondescript rams. It will be seen that the rams of the group shown above display considerable convexity of back, instead of being table-topped. They might also be thought to have "too many legs." This is likely to be the fault of all sheep that travel long distances for their living in large bunches; the ewes show the same qualities. There is no need of emphasizing that the individual excellence of a flock of sheep decreases as the numbers increase; that they become smaller in size and lighter in every way. It would then seem that the necessity of selecting the best models of rams obtainable is indisputable with larger bands of ewes to counteract decrease in size. The heavy-fronted, short-legged, long, level-topped specimen in the illustration, contrasted with the larger bunch, will suggest the class required to counteract peaked backs, long legs, and narrow heart-room. There is a larger opening now than ever before for the best class of rams in the West. Pampered stuff is no good, but good, muscular, strong, well-knit rams are what is required. It is my impression that the best results would be obtained from bringing out here strong, well-matured February or March lambs, in September or early October, to give them a couple of months on the range before trying weather sets in, and hold them over for service as shearlings—not use them as lambs at all. I see, for the skill and capital invested in stud flocks by the Ontario shepherd, a good chance for profitable return for part of their ram stock, at least, and I am not less confident, but rather more, that the more of Ontario blood and fleece and form and vigor the western shepherd works into his wealth of sheep bands gathering up the free wealth of the prairie, the greater will be their reward.



NORTHWEST EWE FLOCK.

The time at which lambing takes place is much later than in Ontario. It is timed to catch the first grass, and begins generally between the first and the tenth of May. Losses seem larger; ninety lambs to the hundred ewes is considered an excellent increase; one each exceptional, while the number in backward, wet springs is sometimes as low as 40 to the hundred. It requires about three men, instead of one, at lambing time for a bunch of 2,000. The care bestowed is bound to increase, as the farther an art advances, the greater the returns tend to be a reward for skill. Though the sheep business is small, compared with the cattle business, on the whole the little quadruped is bound to make its way. The hoof will be more golden in this country, where it is very dry, and the energy, enterprise and susceptibility of the western shepherd is going to lead it into the prominence it deserves.

THE FARMER'S ADVOCATE AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE DOMINION.

PUBLISHED BY THE WILLIAM WELD COMPANY (LIMITED).

EASTERN OFFICE: CARLING STREET, LONDON, ONT. WESTERN OFFICE: MCINTYRE BLOCK, MAIN STREET, WINNIPEG, MAN.

LONDON, ENGLAND, OFFICE: W. W. CHAPMAN, Agent, Fitzalan House, Strand, London, W. C., England.

1. THE FARMER'S ADVOCATE is published on the fifth and twentieth of each month.

It is impartial and independent of all cliques or parties, handsomely illustrated with original engravings, and furnishes the most profitable, practical, and reliable information for farmers, dairymen, gardeners, and stockmen, of any publication in Canada.

2. TERMS OF SUBSCRIPTION—\$1.00 per year in advance; \$1.25 if in arrears; sample copy free. European subscriptions, 6s., or \$1.50. New subscriptions can commence with any month.

3. ADVERTISING RATES—Single insertion, 15 cents per line. Contract rates furnished on application.

4. DISCONTINUANCES—Remember that the publisher must be notified by letter or post-card when a subscriber wishes his paper stopped. All arrears must be paid. Returning your paper will not enable us to discontinue it, as we cannot find your name on our books unless your Post Office address is given.

5. THE ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrears must be made as required by law.

6. THE LAW IS, that all subscribers to newspapers are held responsible until all arrears are paid and their paper ordered to be discontinued.

7. REMITTANCES should be made direct to this office, either by Registered Letter or Money Order, which will be at our risk. When made otherwise we cannot be responsible.

8. ALWAYS GIVE THE NAME of the Post Office to which your paper is sent. Your name cannot be found on our books unless it is done.

9. THE DATE ON YOUR LABEL shows to what time your subscription is paid.

10. SUBSCRIBERS failing to receive their paper promptly and regularly will confer a favor by reporting the fact at once.

11. NO ANONYMOUS communications or enquiries will receive attention.

12. LETTERS intended for publication should be written on one side of the paper only.

13. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve the ADVOCATE, Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns. Rejected matter will be returned on receipt of postage.

14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

Address— THE FARMER'S ADVOCATE, or THE WILLIAM WELD CO. WINNIPEG, MANITOBA.

CONTENTS OF THIS ISSUE.

ARTICLES.

Canada, the land we love 637
Canada at the Paris exposition 637
Agricultural situation and outlook for the Dominion 638
Agricultural education 639
Oats as a finisher for fat stock 640
The future of British agriculture 640
A bright chapter for stockmen 641
Our old friend the "Mummy Pie" 641
James I. Davidson and the Cruickshank cattle 642
Manitoba December crop bulletin 642
Beresford stock farm, Brandon, Man 642
Manitoba No. 1 hard 643
An excellent market for western dairy produce 644
The wit that won the teacher's woodchuck 644
Woodside and Burnside 644
The debit side 646
Deschenes 646
A week's allowance 646
The salaries of potentates 646
Farming in the Transvaal 648
Farnham farm 648
Elbow Park ranch 649
Elmhurst and its Ayrshires 650
English Shorthorn sales of 1899 650
Professional courtesy 650
Brookbank dairy and stock farm 651
Hillhurst 652
Capt. T. E. Robson's champion herd of Shorthorns 653
The best is none too good 654
Woman's influence on the farm 654
Balgreggan Ranch, Millarville, Alberta 655
Output for 1899 of the Government creameries in the Northwest Territories 655
A Southern Manitoba nursery 656
Alva farm 657

Worth many times its price 657
The Greenwood herd of Shorthorns 658
Up goes the price of wool 659
The present aspects and the outlook for pure-bred flocks in England and elsewhere 659
The Oak Lodge Yorkshires 660
Teaching geography to a professor 660
The stock farm of J. A. S. Macmillan, Brandon, Man 661
Glenhurst 661
The Trout Creek Shorthorns 662
Belvedere 664
Pioneer agriculture in the Red River Valley 665
The Czar's American driving teacher 666
Famous rings 666
The index of 1899 articles 666
The Cargill herd of Shorthorns 666
The Summer Hill Yorkshires 668
Maple Cliff dairy and stock farm 669
The Freeman herd of Shorthorns 670
Securing extra copies of this beautiful number 670
A gold medalist's gold medal stock farm 671
Great Britain's egg supplies 671
Why are orchards barren? 671
Increase circulation 671
Thorncroft 672
A veteran horseman still on deck 672
Riverview farm 674
Prairie Home stock farm 674
The Ingleside Herefords 675
The Provincial Winter Show 676
Notable features of the 1899 Smithfield 676
Do him a good turn 676
Messrs. Beith's horse breeding establishment 677
Huntleywood 677
Log cabin times 679
The beginning of a cure 680
Agricultural education 681
Tent caterpillars 681
My country girl 681
A bright oonundrum game 681
Shepherding in the west 682
Blaine cornered by Kimberley 684
Pioneer horse of the Arctic Circle 684
Winnipeg's Twentieth Century Exhibition 689
Entomology in the Northwest 689
Fire insurance 689
'Daisy' barrel churn 689
Brandon's big summer fair 689
Natural history of the honey-bee 689

HOME DEPARTMENT.

Minnie May's Department 684
A petition to the prince (illustrated) 684
The Children's Corner 685
The Quiet Hour 687

ILLUSTRATIONS.

Main entrance to Paris exposition 637
Plan of Paris exhibition grounds and buildings 638
Hon. M. H. Cochrane 639
Mr. Wm. Duthie 641
Mr. James I. Davidson 642
Beresford and Smithfield stock farms 643
Maplehurst farm 644
Old home of President McKinley's family, County Antrim, Ireland 644
Woodside and Burnside farms 645
Views of Messrs. R. & W. Conroy's stock farm 647
Farnham farm 648
Elbow Park ranch 649
Elmhurst farm Ayrshires 651
Brookbank farm 652
Yearling Shorthorn bull, "Scottish Hero" 653
Group of typical Shorthorns, at Capt. Thos. E. Robson's farm, Ilderton 653
Views of Balgreggan ranch and its stock 655
Photographic views of Pine Grove nursery 656
Views of the herd and flock at Alva farm 657
Mr. Arthur Johnston's Shorthorns and Clydesdales, at Greenwood 658
Mr. Alfred Mansell 659
Representative group of Oak Lodge Yorkshires 660
Views of J. A. S. Macmillan's stock farm, and specimens of his studs, herds, flocks 661
Glenhurst Ayrshires at home 662
Representatives of Trout Creek Shorthorn herd 663
Glimpses of Belvedere 664
Angus Henderson 665
Donald McIvor 665
Indians at Regina, N.-W. T. 666
A representative group of Shorthorns in the herd of Messrs. H. Cargill & Son 667
Yorkshire swine at Summer Hill farm 668
Maple Cliff stock and dairy farm 669
Imported Scotch Shorthorns, representatives of the herd of W. G. Pettit & Son 670
The home and herd of G. A. Brodie 671
Some of the Clydesdales, Jerseys and Ayrshires at Thorncliffe farm 672
Mr. Joseph Thompson 673
Views of the Smith's Falls Poultry Co.'s poultry yards 674
Herds and flocks of Hon. Thos. Greenwood 675
Champion Hereford bull, Mark Hanns 72300 676
A group of Hackneys in the stud of Messrs. Beith & Co. 677
Views of Huntleywood with its Dexter-Kerries and Southdowns 678
The settler's log cabin times 679
Interior view of a pioneer's home 682
Ontario ram 682
Ontario ewe flock 682
Northwest ram flock 682
Northwest ewe flock 682
A petition to the prince 684
Jack's picture 686
The Winnipeg Industrial Exhibition 689
Pioneer horse of the Arctic Circle 689
'What do you think of me?' 689
The bacon pig in his native haunt 689
Bird's-eye view of the exhibition grounds at Brandon, Man 690
An English harvest scene 691
Avenue of native maples 695

25-Shorthorn Bulls-25

From 6 to 18 months. Also a limited number of females, among which are grand, thick-fleshed and choicely bred animals, mostly solid red colors. Speak quick, for they will not last long. G. A. BRODIE, BETHESDA, ONT.

STOUFVILLE STATION, G. T. R. PLEASE MENTION FARMER'S ADVOCATE.

Pure-bred Ayrshire Imported Cattle.

LARGEST AND MOST EXPENSIVE IMPORTATION IN AMERICA.



Bred for the dairy, with grand constitution, and champion prize records awarded them in Scotland and England. Sweepstakes herd, Montreal, Toronto, London, and Ottawa, in 1897; also Toronto, 1899. Awarded four years in succession herd prize at Ottawa's great exhibition, and special gold medal; at Montreal, herd prize and W. W. Ogilvie's special \$100.00 prize. Their individual prize records are of the same distinguished honors of their exhibition career. Stock all ages for sale and at prices in reach of all.

Maple Grove Ayrshire Stock Farm, LYN, ONT. R. G. STEACY, Importer and Breeder, Brockville, Ont. Box 730. Line G. T. R.

THE ONTARIO MUTUAL LIFE ASSURANCE CO.

ESTABLISHED 1870. HEAD OFFICE: Waterloo, Ont.

THREE DECADES OF GREAT PROGRESS.

Table with columns: Cash Income, Assets, Policies in Force. Rows for years 1878, 1888, 1898.

THE dividends to the policy-holders under the quinquennial distribution of profits declared in 1896, 1897, 1898 and 1899 were 10 per cent. higher than the estimates put in the hands of the Company's agents for 1891, 1892, 1893 and 1894.

All desirable forms of insurance and annuities are issued by this Company. We have the best of everything that is good in life insurance. This Company's 20-Pay Life—15 or 20 year Survivorship Distribution—is the most popular policy issued. Values handsome and guaranteed. Options many and attractive.

Money to Loan on improved farms, church property, etc., at lowest current rates. Terms of repayment easy. Costs low. Debentures purchased.

BOARD OF DIRECTORS.

- ROBERT MELVIN, PRESIDENT, GUELPH.
ALFRED HOSKIN, Q.C., 1ST VICE-PRES. B. M. BRITTON, Q. C., M. P., 2ND VICE-PRES.
R. P. CLEMENT.
W. J. KIDD, B. A.
GEO. A. SOMERVILLE.
FRANCIS C. BRUCE.
J. KERR FISKEN, B. A.
HON. F. W. BORDEN, M. D.
HON. J. T. GARROW, Q. C.
WM. SNIDER.

OFFICERS.

- T. R. EARL, SUPT. OF AGENCIES.
J. H. WEBB, M. D., MEDICAL DIRECTOR.
GEO. WEGENAST, MANAGER.
O. S. FORREST, LOAN INSPECTOR.
MILLAR & SIMMS, SOLICITORS.
W. H. RIDDELL, SECRETARY.

Barred Plymouth Rocks

EXCLUSIVELY. I have the very finest

PULLET

breeding pen that money can buy. Good color, large size, clear yellow beaks and legs. A number of cockerels and one-year-old birds for sale—\$2 to \$5 each. Eggs in season. Pullet breeding pen, \$3; other pens, \$2, per setting. Order now.

J. SULLIVAN, EMERSON, MAN.

Three Good Points for 1900.

- 1st—Send us a new paid-up subscriber for 1900, and get as a premium a copy of this Christmas number.
2nd—Present your friend with a year's subscription, and then both will receive a copy of it.
3rd—Send with your renewal for 1900 (unless previously renewed) an order for extra copies at 25 cents each. (Price to non-subscribers is 50 cents.)

A Good Roadster.

"A typical roadster or road horse is one that stands 15 to 16 hands high, weighs from 1,000 to 1,200 pounds, sound and straight in every part, level-headed and resolute, capable and willing to road 12 miles an hour or 100 miles in ten hours, and when put upon his speed will show a 2.30 gait."—Kentucky Stock Farm.

A \$40 Rate

TO EASTERN CANADA.

For the cheap rate of \$40 the Northern Pacific will again sell the round-trip Canadian excursion tickets to Eastern Canada. The people in this section of the country are familiar with the accommodations and train service which the Northern Pacific always offers, and this year the road purposes to be more careful, if possible, of the comfort of its patrons than ever. Liberal stop-over privileges and opportunity to have final limit of tickets extended upon payment of a reasonable additional sum will be given. For further particulars apply to

Chas. S. Fee, H. SWINFORD, G. P. & T. A., St. Paul. Gen. Agent, Water St. WINNIPEG.

Condensed Time Table from Winnipeg.

MAIN LINE.

Morris, Emerson, St. Paul, Chicago, Toronto, Montreal, Spokane, Tacoma, Victoria, San Francisco

Lv. Daily 1.45 p.m. Ar. Daily 1.05 p.m.

PORTAGE BRANCH.

Portage la Prairie and intermediate points. Lv. Daily ex. Sunday 4.45 p.m. Ar. Daily ex. Sunday 11.05 a.m.

MORRIS-BRANDON BRANCH.

Morris, Roland, Miami, Baldur, Belmont, Wawanesa, Brandon. Also Souris River Branch, Belmont to Elgin

Lv. Mon., Wed. & Fri. 10.40 a.m. Ar. Tues., Thurs. & Sat. 4.40 p.m.

FOR FURTHER INFORMATION APPLY TO H. SWINFORD, Depot Building, Water St., Winnipeg Man.

## MINNIE MAY'S DEPARTMENT.

MY DEAR NIECES,—

Hark! what is that? Surely it cannot be already! It is not very long since— There it is again! I do believe you are right. It is the faint tinkle, tinkle of sleigh bells. Who is coming? Why, Santa Clause, of course, with his pretty reindeer and his huge sleigh, piled high with toys for the children. Before he arrives we have just time for a little talk about those toys and where they come from, so let us begin at once. Most of our toy days are over, at least, our toy-getting days, and we are now at the toy-giving stage; so we are always, every Christmas, among toys, whether we are young or old.

Look at the dolls first. What a variety is here! Wooden dolls and wax dolls; sewed babies and kid babies; big beauties and dwarfs; talking ladies and sleeping darlings; black dolls and white. A very large number of these are made in Germany, in the town of Sonneburg, the inhabitants of which are very poor, and are brought up to doll-making. Every year buyers from all over the world visit Sonneburg to purchase these dolls.

There are at least 500 different kinds of dolls made. Many of the most attractive are of French make, but the Germans copy them so cheaply that the world's buyers prefer the latter, though France leads in dolls of fine dress variety. A doll passes

through about nine hands before it is a finished article. There is the maker of the body (wooden, or cotton filled with sawdust, wool or hair), the head maker (wax or composition), the hands and feet maker, the hair or wig maker, the eye maker, the artist in color, the person who puts on the paint roughly, and the one who gives the delicate final touches to the complexion. The clothing is made by another person, and then dolly is dressed by the last.

Dolls' eye making is a separate industry, and is really a branch of human eye making. There are blue and black eyes, hazel and gray. It has been estimated that in London, England, alone, there are made every year over 24,000 dozen pairs of dolls eyes. What a selection of dolls we have to choose from! The taste of every child is met. She may have a treasure of any complexion, from the fairest Anglo-Saxon to the duskiest damsel of the Orient,—of any nation, be it British, Boer, or Burmese; or of any rank, from Kings and Queens down all the line of caste till we reach the humblest. Only one class of doll is wanting—the homemade rag-doll, dear to every little one's heart. That is usually made by "Mother."

Almost every science is called upon to contribute as quota to the making of toys. Electricity is used in toy batteries for the lighting of dolls' houses, etc. Chemistry gives us fireworks, balloons and crackers; mechanics, clockwork toys, such as mice, tight rope dancers, cars, engines, and so on; Jew's harps, accordions and other musical instruments. Many trades, too, are called in to assist in toy-making. The glass blower makes dolls eyes; the pewterer makes lead soldiers, dolls' cups and saucers, knives and forks, etc.; the tinsmith produces tin swords, peashooters, money-boxes and humming-tops; the turner makes skipping-rope handles, nine-pins, and peg-tops; the basket-worker gives us dolls' cradles, babies rattles, and wicker carriages; the wig-maker produces dolls' curls, while the potter supplies the dishes. We also demand aid from the cabinet-maker for furniture; from the optician for tiny telescopes, microscopes, and magic-lanterns; from cutlers, hardware men, and many, many more.

What a number of people are employed in toy-making! One would imagine that toyshops would

soon be overstocked, but, as in everything else, fashion in toys changes. Besides, the very ones for whom toys are made are the very ones to destroy them, and so the demand goes on, keeping the makers busy.

Current thought and invention, too, have a wonderful effect upon the kinds of toys made. Our grandmothers would have been amazed to see a toy baloon, full of lady and gentlemen dolls, all wound up and dancing to the music of a toy piano (a musical box in reality), apparently played by an elegant doll professor of music. The recent wars have influenced the toys too; there are war-ships in miniature, forts, soldiers, battlefields, and all the usual array of cannon, muskets and swords. Santa Clause is a thoroughly up-to-date old fellow, with his sleigh-load of toys; he knows everything that is happening, and he must surely be a great reader to know what are the latest inventions, and use these to make his little folks happy.

Usually box-toys are of German make; that is, boxes of soldiers, Noah's Arks, railroads, tea-sets, farmyards, and etc. These are made principally in Nuremberg, Frankfort, and near the Black Forest. Whole families are employed in making these toys. The carved wooden toys, animals and cottages, are of Swiss origin. Musical toys are chiefly made in Germany. The ingenious mechanical toys are usually French, such as moving figures of all sorts, dolls' china tea and dinner services, and fancy glass boxes. Toy-making is an in-

## "A Petition to the Prince."

There is much to be inferred from this picture, and one might easily weave it into history. It is by Erdmann, and appears not to have had any design beyond imagination. It has sometimes been entitled "A Plea for Mercy," which would be equally suitable. The artist, whether or not any historical incident was in his mind, has succeeded in making a realistic work of great interest. The Prince, handsome and youthful in his picturesque dress of those times, presents an attractive picture—his face is full of charm, his attitude of deep attention. Ah! what is the prayer of that sad, black-robed woman? One can well imagine she pleads for an imprisoned husband, condemned perhaps to death, for some political offence; and surely that is her young son in the background, so young alas! for such heavy sorrow. And that beautiful woman—who tries to give courage to the poor suppliant with her gentle touch—while she fixes her own imploring gaze upon the Prince. Is she, we wonder—the gallant Prince's wife—sweetheart—sister? The petition, whatever it is, is just about being presented, and with the added plea of that poor suffering woman, surely the prayer is granted. All the figures are full of expression—all seem deeply interested—and what wonder? An added attraction, and most appropriate to the subject, is the noble staircase with its exquisitely wrought balustrade and the fine old vaulted hall with its statuary. This old

picture has given rise to much comment, as it seems to point to some historical episode, and this writer has made enquiries in England amongst the leading picture dealers, but no one seems to know it save as what is called "a fancy picture." If any of our readers can give authentic information, supposing it is a historical picture, we should be glad to hear from them.

"I remember," said a boy to his Sunday-school teacher, "you told me always to stop and count fifty when angry."

"Yes, Well, I'm glad to hear it. It cooled your anger, didn't it?"

"A boy came into our alley and made faces at me and dared me to fight. I was going for him. He was bigger'n me, and I'd have got pulverized. I remembered what you said, and began to count."

"And you didn't fight?"

"No, ma'am. Just as I got to forty-two my big brother came along, and the way he licked that boy would have made your mouth water. I was going to count fifty and then run."

## Blaine Cornered by Kimberley.

It is said that the only time the late James G. Blaine was nonplused was when he was U. S. Secretary of State. One of the applicants for a Consulate in Japan was Samuel Kimberley, of Baltimore, who died in the service in Central America. After he had presented his credentials Mr. Blaine said:

"I should like to appoint you, Mr. Kimberley, but I have made it a rule to recommend no one who does not speak the language of the country to which he is sent. Do you speak Japanese?"

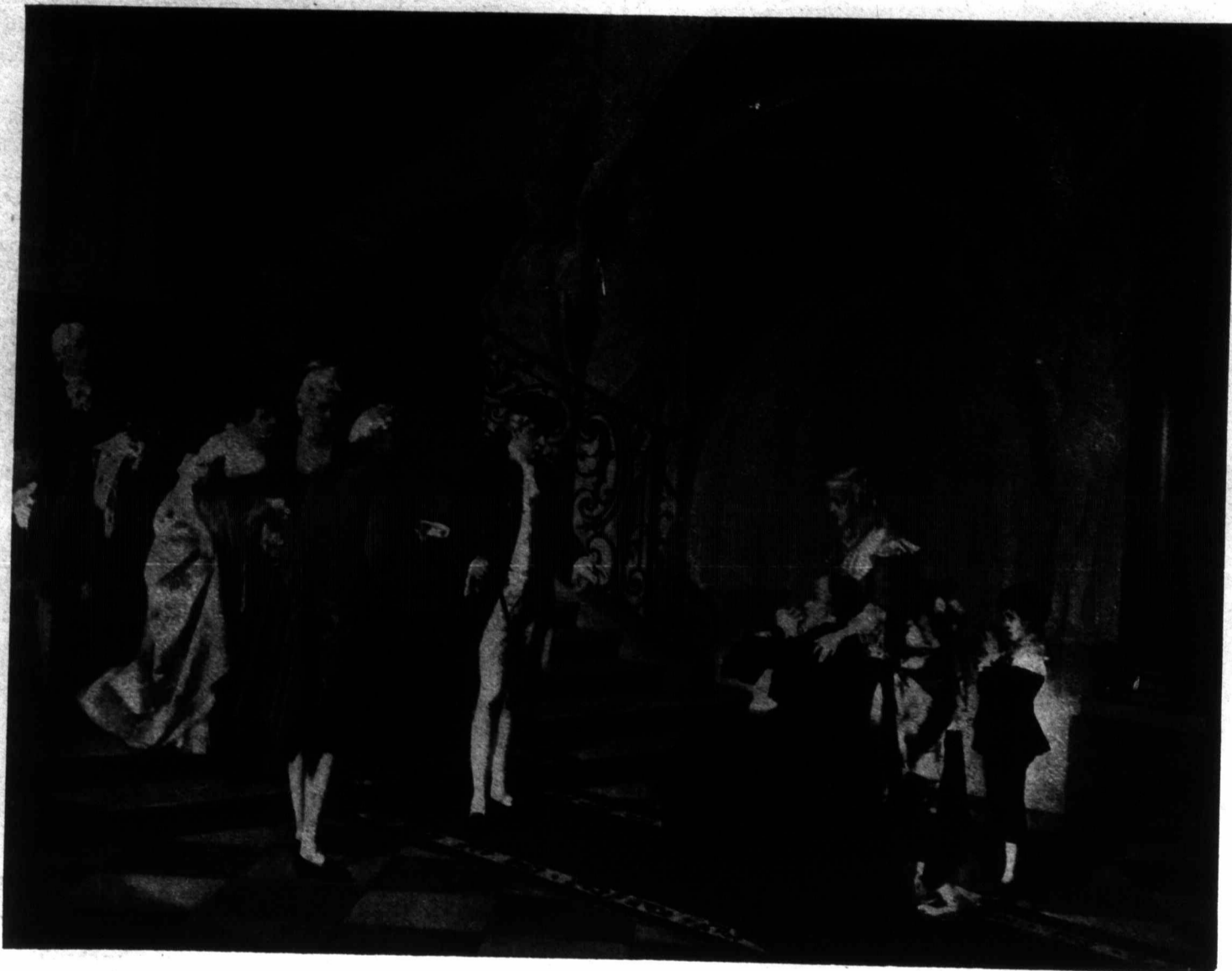
"Cert-tainly, Mr. B. Blaine," stammered Mr. Kimberley. "A-a-ask me s-s-something in J-J-Japanese and I'll a-a-a-answer you."

Mr. Blaine hadn't a word to say, but the Japanese post went to another man, all the same, and Kimberley went to Central America.

Another story is told of Kimberley equally creditable to his nimble wit. One day he met a young woman who threw her arms implusively around his neck and kissed him. Seeing her mistake, she drew back and angrily asked:

"Aren't you Mr. Jones?"

"N n n no, madam," replied Kimberley, bowing; "I'm n n-not but I w-w-wish to goodness I was"



"A PETITION TO THE PRINCE."

dustry with many branches, i. e., many men are employed at each individual thing. For example, some people make nothing but theatres, others make kites, fireworks, baby-houses, steamships, toy laundry or cookery requirements. How many little girls get their first lessons in house-keeping through these miniature washing-machines and little gas-stoves?

But there is a sober side to all this toy talk. What means pleasure for the children means bread and butter (and sometimes not even butter) for those toy-makers, who are very, very poor. Whole Swiss and German families, father, mother and children are so employed, and often find it hard to eke out a meager living. And toys nowadays are so cheap that we wonder how the makers can earn a livelihood at all. Just think of the many fingers and hands and brains that have been in action to produce such a load as dear old Santa Clause brings. But there! the sound of the bells is nearer, louder, merrier than ever. Here he comes, bringing with him Christmas and good cheer, and toys, and Jack Frost, and happy meetings and good wishes, and our country again becomes "Our Lady of the Snows." Just here, my dear nieces, allow me to wish you all a very merry Christmas and a very happy New Year, for with the advent of Santa Clause, exit.

Your loving old auntie,

MINNIE MAY.



### A Christmas Vision in Three Peeps.

[WRITTEN FOR THE FARMER'S ADVOCATE.]

#### I.—A PEEP AT SANTA CLAUS.

Santa Claus was busy in his workshop. Around him were shelves heaped with toys of all descriptions—beautifully fitted up dolls' houses, rocking-horses, trumpets, toy watches, *everything!* Only two months to Christmas, and such a lot to do! The old gentleman gave a deep sigh, then took off his spectacles and wiped them carefully. Something very like a tear was in his eye.

"What is the matter, Grandfather?" said a sweet voice at his elbow, and a little hand was slipped into his.

"Why, Aurora, are you there?" said old Santa, as he picked his youngest great-grandchild off the packing case on which she was perched, and held her up to the top shelf to admire a beautiful toy train which was running along a tiny railroad. "I thought you were playing house in the big iceberg."

"But what are you crying about?" persisted Aurora. "You don't look like my dear, jolly grandfather at all."

"The fact is, little girl," said Santa, as he set her on his knee, "I am getting old, and the poor reindeer are nearly worn out too, so I was feeling rather unhappy about some of those children out in Manitoba. They live such a long way apart, and I can't possibly reach them *all* in one night. There are societies for nearly everything now. Why can't someone start a Santa Claus Society and help me to fill the stockings?"

Aurora clapped her hands joyfully. "That's a good idea!" she exclaimed. "I'll just put on my new dress, made of Northern Lights, and slide down to Ontario on a moonbeam. You know I can tell people things in dreams, and some of the rich children will be sure to help, if they only know about it."

She was soon dressed in her shimmering robe, which flashed with many-colored fires; and tied on her wonderful dream-sandals, made of the best blue ice, frosted all over with diamonds. Then she caught and harnessed a shining ray of moonlight, and flew off, with her hair floating behind her like a comet's tail.

Santa turned to his heavy mail-bag and started to read the letters. "Fifty-three requests for bicycles!" he exclaimed when he got through. "There were five hundred last year! Do the children think I keep a bicycle factory, I wonder?" Then he opened the door of the bicycle room and counted the shining wheels.

"I have a good mind to give them all to children who have not asked for them," he remarked, with a twinkle in his eye. "That would teach them not to be greedy."

#### II.—A PEEP AT THE SANTA CLAUS SOCIETY.

A number of girls were chattering eagerly together in Helen Osborne's own particular "den." She was the only child of a rich farmer in Western Ontario, and her room was as pretty and comfortable as heart could desire. Two girls were sitting on the bed, Helen herself had the seat of honor—a rocking-chair, near the window—one was stretched out on the lounge, and the rest were scattered about the room in comfortable though inelegant attitudes.

"You see, girls," Helen was saying, "mother had been talking last night about the Christmas box which is to be sent to a poor missionary in the Northwest. She said his wife died last July, and his eldest child, only fourteen she is, and her name is Helen, too, had to do all the work and take care of the little ones. There are four children altogether, and mother says the ladies will send a complete outfit for each of them. Well, I was thinking about them, and wondering whether they would get any other Christmas presents besides just *clothes*, when I fell asleep. Suddenly I woke up and saw the *dearest* little fairy, all shining and sparkling like fire. She was standing just here, on the window-sill; and she told me that Santa Claus was too old to get through all his work, and asked if we could help him. She thought a Santa Claus Society would be the best thing. He can manage pretty well except in Manitoba, where the children live so far apart, and his reindeer get tired before all the prairies are crossed."

The girls were charmed with the idea of helping Santa Claus, and talked eagerly about what they should send.

"It must have been a dream, you know," said Madge, "but it's a splendid plan all the same."

Helen shook her head decidedly. "I know it wasn't a dream," she declared, "I was as wide awake as I am now."

Little Susy, who was sitting on the floor at her feet, whispered, "I'm going to send my very dearest doll, Selina, and all her clothes."

Annie exclaimed, "I believe I'll send the little clock I bought with my egg money. You know

mother gives me a cent for every dozen eggs I gather. —It's my very own."

#### III.—A PEEP INTO PARADISE.

It was Christmas eve. Helen Anderson was sitting in a bare-looking room, gazing out of the window, with a very sad expression on her usually merry face. She drew the old shawl closer about her and shivered as she said aloud, "I wish father would come, I'm so lonely." Then two big tears trickled slowly down her cheeks as she caught a glimpse of the little stockings hanging in a row near the stove. "Last year mother was here, and she always found something nice to put in the stockings," she thought; and the tears came thick and fast, though she tried to stop them. "It will never do for father to find me crying!" she exclaimed. "I wonder what is keeping him so long."

Then came a sleepy cry from little three-year-old Bob, "Is Santa Claus come yet?" and she hurried in to find him lying with his little rosy feet all bare and cold. She tied the clothes securely to the bed post—it was the only way to keep him from kicking them off—then hurried to the door, as she heard the sleigh bells.

"Oh, father," she exclaimed, "I thought you were never coming! Don't make a noise, or the children will think you are Santa Claus."

"Well, and so I am!" said a cheery voice. "What do you think of that?" and he hauled a big bale out of the sleigh.

In a few minutes the eager children were sitting round that wonderful parcel. Helen wrapped them up in quilts, but they were too excited to feel the cold. The warm underclothes, dresses, caps, boots, were received with little shrieks of joy; but when the parcel labelled "From the Santa Claus Society" was opened, the uproar became deafening. Each package was wrapped in tissue paper and tied with baby ribbon. Little Jean's motherly heart went out at once to the beautiful Selina, and she hugged it tenderly. Maggie could hardly believe that the little clock was for her. Bobby marched triumphantly about, with a trumpet in one hand and a big sugar-stick in the other. Helen fairly cried for joy over the beautiful workbox which Helen Osborne had bought and the girls had stocked with scissors, thimble, cotton, silk,—everything they could think of. There were picture books new and picture books old, for Bobby and Jean, "Alice in Wonderland" for Maggie, "Little Women" for Helen. There was a pair of stockings for each child, filled with candies, nuts, and pop-corn. Nor was the dear father forgotten. His socks were stuffed with interesting little parcels, containing a knife, handkerchiefs, sticking-plaster, and many other things too numerous to mention.

Then there was a big Christmas cake, and a plum pudding, which made them all hungry to look at. In fact, if I tried to tell you all the things that clever society had managed to send, you wouldn't believe me. One thing is certain, Santa Claus was happy, the little Andersons were happier, and the Santa Claus Society was happiest of all, that Christmas day.

Cousin DOROTHY.

### "The Waits."—They Wait No Longer.

In days of old the "Waits," no doubt,  
Received due hospitality;  
When Christmas came they went about  
From house to house, for ale and stout,  
Dispensed with cordiality.

But times are changed: if "Waits" appear,  
And sing at night, the fact is,  
They'd best not sing so folks can hear!  
The modern world, 'tis very clear,  
Does not enjoy the practice.

When dropping off to sleep at night,  
A sudden noise like thunder  
Fills all your senses with affright—  
Can this be called supreme delight,  
Or Christmas joy, I wonder?

If they should study up the thing,  
And take out a diploma,  
We might allow a few to sing—  
Say nine or ten in Making  
And one out in Algoma.

The "Waits" a nuisance are, their song  
Would break the soundest slumber—  
You seek enjoyment? Am I wrong?  
Then, hurry up! Don't wait too long!  
But buy our *Christmas Number*.

C. D.

### Hang Up the Baby's Stocking.

Hang up the baby's stocking,  
Be sure you don't forget,  
The dear little dimpled darling,  
She never saw Christmas yet;  
But I've told her all about it,  
And she opened her big blue eyes;  
And I'm sure she understands it,  
She looks so funny and wise.

Dear! what a tiny stocking!  
It doesn't take much to hold  
Such little pink toes as baby's,  
Away from the frost and cold.  
But then, for the baby's Christmas  
It will never do, at all;  
Why, Santa wouldn't be looking  
For anything half so small.

I know what we'll do for the baby,  
I've thought of the very best plan;  
I'll borrow a stocking from Grandma,  
The longest that ever I can;  
And you'll hang it by mine, dear mother,  
Right here in the corner, so,  
And write a letter to Santa Claus,  
And fasten it on to the toe.

Write: "This is the baby's stocking  
That hangs in the corner here,  
You never have seen her, Santa,  
For she only came this year;  
But she's just the blessedest baby!  
And, now, before you go,  
Just cram her stocking with goodies,  
From the top clear down to the toe."

### Travelling Notes.

SAN FRANCISCO.

Although we entered San Francisco by rail, it seems only natural to first mention the city through its sea entrance, the celebrated Golden Gate. The origin of this name is variously stated. One account is that it was applied by Colonel Fremont (1848) in his Geographical Memoir of California, and is descriptive of the rich and fertile country on the shores of the Bay—but *not* by reason of its gold-bearing districts—many people, however, incline to the latter belief. Another reason given is the gorgeous golden sunsets to be seen there. We are content to let it rest here, for truly the sunsets are golden gorgeous to a degree undreamt of. A curious picture is presented by the fogs rolling through the Golden Gate, not a yellow pea-soup fog such as one sees in London (the old), but a long line of thick, white mist. The action of these fogs is peculiar, their sudden clearing away by about 9 a. m., and a radiant summer day following, then about 5 p. m. the fog rolls up again, disappearing a few hours later. The city is built upon hills, hillsides and valleys, which gives it a most picturesque appearance. As we approach it at night from Oakland, Alameda and of her points, the effect of the lights climbing and clustering about the hills and their bases is beautiful and unusual. The best way to get a good view is to take the front seat of a cable or electric car which climbs easily up the steepest grades. San Francisco might as readily be termed the City of Flowers as the City of a Hundred Hills, for the rich evergreens and hot-house (with us) plants which grow on every side are indeed remarkable, but there is a sad dearth of shade trees—none seeming to thrive much save the Eucalyptus—the soil and strong sea-winds seemingly disagreeing with the others. It is impossible to mention at length even a few of the places to see in San Francisco, with its population of about 335,000, its numerous churches (St. Ignatius Church has the tallest spires (275 feet) in California, the second largest organ in America), schools and other public buildings, newspaper offices, hospitals, banks, etc., etc. As for hotels their name is legion, and they are magnificent. One cannot help being struck by the enormous number of restaurants largely patronized by whole families, who have rooms, but go out to board. Of course, this is done in many places, but in San Francisco to an *alarming* extent. The word "alarming" is used advisedly, for what a way it is to bring up children! It is always an unnatural sight to us to see young children sitting unconcernedly in a crowded dining-room, holding the *menu* in their little hands and giving their orders. A simple, old-fashioned motto we see sometimes in old-fashioned houses is, "God bless our home," and heartily do we echo it, and are heartsick for those who do not possess that dear, dear place—"Home". We must not, however, digress, but proceed to business. A very striking feature to be observed is the large domes and towers on some of the public buildings. The City Hall has a dome of 134 feet from the roof; the Free Public Library one of 335 feet from the ground and one of the handsomest in America. At the Ferry depot is a clock tower 245 feet, its clock numerals 3 feet long.

Having so lately described Stanley Park in Vancouver, we will not linger long over a description of Golden Gate Park, which is alike endowed by Nature with a bounteous hand. The climate is such that the shrubs, artistically arranged flower beds and lawns are blooming and beautiful year in and year out. The conservatory is a dream of loveliness, and boasts the only *Victoria Regia*—that rare water lily—in America. The Japanese Garden is most unique and attractive, and was laid out by Japanese gardeners. The gateway is of beautiful oriental workmanship, and is constructed *without a single nail*. The fronds, storks, tea-houses, etc., with the Japanese attendants, afford a genuine glimpse of Japan without crossing the Pacific. The Prayer Book Cross of Colorado Sandstone is interesting as having been erected under the auspices of the Episcopal Diocese of Northern California, to commemorate the first Christian Service (in English) on the coast (1579). The Park also contains some very fine statues—Garfield, Grant etc., a museum, an aviary, buffalo paddock, deer and other animals. Delightful open air concerts are given at the music stand. There is also a children's house and play ground, and many other attractive features. The main drive is over a granite bridge, said to be the most perfect arched bridge on the continent. Well, it is something to have seen, within a few weeks, two such parks as Stanley Park, Vancouver, and Golden Gate Park, San Francisco.

This being the age of departmental stores, we should certainly mention "The Emporium," the largest in the world, which covers 15 acres, lighted at night with 500 arc and 10,000 incandescent lights, which make it like unto the fairy palaces we read about. Concerts are regularly given at the band stand of ornamental bronze, under a dome of 100 feet, except on Saturdays, when, of course, the stores are in full business swing. Eleven elevators—a special freight one being large enough for a

wagon and team—free parcel and check-room, emergency hospital, nursery for babies, parlors, reading and writing-rooms; in fact, what is there that is not in this wonderful Emporium? The massive entrance of bronze and French plate-glass, 45 feet high and 25 feet wide, is considered to be the handsomest specimen of bronze-workers' art in the world.

We must take a peep at Chinatown, and note that the first Chinese landed in San Francisco in 1878—two men and one woman. Evidently, they wrote fine accounts to the old folks at home, for by 1880 there were 21,613 in San Francisco alone. Large numbers went direct to the mines. Chinatown covers about ten square blocks. Ten thousand Chinese live here, and about 3,000 more in various parts of the city, some as servants and others running laundries, and indeed all other kinds of trade. The narrow streets are lined with stores, gambling houses and various places we need not talk about. The majority of this population is of very low class, but there are many sharp and educated business men, and you want your best wits when a bargain is on foot. The women dress very gaudily—their hair a marvellous structure and their faces daubed with paint, a loose-fitting and huge-sleeved blouse, and generously baggy trousers complete the fascinating outfit. Oh! we forget the feet—the poor little deformed feet—in white stockings and a woden-soled shoe, with a pointed heel in the middle of the sole (and this we have seen with other than Chinese ladies!), an ivory ring is generally worn round their ankles and wrists. If one wants to see the Chinaman really enjoying himself, you must go at night, when the gambling and opium smoking is in full swing, and the odors something appalling. Ladies don't often go, and everyone requires a guide. The restaurants are well worth visiting, and are beautifully decorated, and the tea and preserved fruits, etc., delicious. The bazaars are not attractive outside, but are filled with beautiful curios and rich stuffs, embroideries, carvings, etc., for which, you may be sure, you have to pay a pretty round sum. The Temples or Joss-houses too are very interesting, and visitors are allowed to stroll all over and admire the hideous idols and images perched on stands, and gorgeously attired. The best time, however, to see these places is at the Chinese New Year—from Jan. 20 to Feb. 20—when special services are conducted.

The theaters are very curious, and certainly not amusing, excepting, we may suppose, to the Chinese community itself. We believe some plays last a week. You can sit on the stage if you like and examine the dressing-rooms. No women act, the parts all being taken by men and boys (this was also a very ancient English custom). The musicians keep up a continuous and awful din of cymbals, drums and squeaking horns, so that one is thankful to get into the open air and breathe something besides reeking tobacco smoke and other odors. One very queer sight in this very queer place is the children. To see these yellow mites, with their absurd pig-tails, would indeed amuse our children or any one else. No doubt, though, we look just as funny to them, and why not? If all the world dressed alike it would be a monotonous sight.

#### Our Library Table.

"THE TWO MISS JEFFREYS." David Lyall.—This is really a series of stories, the book simply taking its title from the first one, and a most delightful and refreshing series it is. It treats of the varied experiences of a lawyer's confidential clerk in Edinburgh. The author truly says in the beginning of his book, "The minister's study, the doctor's consulting room, the lawyer's private room, in these the veil is lifted from human motive and life." The strange old Scottish laws, the Celtic pride, the outward reserve but inward generosity of heart which so distinguishes this race is graphically brought out. The first pathetic story of the two Miss Jeffreys depicts the innate refinement of two well born ladies who are almost starving. All the stories are interesting, but one of our favorites is "Adam Shiel's French wife." We can picture Adam—tall, strong, rugged—living a solitary life, for few were invited to visit the womanless house at Randerston—making careful inquiries as to the law of mixed marriages; and we see the beautiful French girl—such a contrast, but she loves him! In "The little old lady" a stubborn pride is shown which is both pathetic and amusing. "Uncle James Bathgate" tells a story of a man whose character is entirely mistaken during life, but whose death reveals a depth of charity undreamt of. We think, however, that he took extreme measures in some instances to conceal his goodness of heart. A finely drawn character sketch is, "Which passeth understanding"—old David Lumsden and his wife Teenie. The steadfast love of this old couple is beautifully told. The reserved Dauvit called a "very still man," who always got his own way. His long and faithful service was fully appreciated, but his old master was sometimes a trifle irritable! "Ye'll open the roads on the back braes the morn first thing, d'ye hear, Dauvit?"

"I'm hearing, but the back braes maun wait or the lan be shorn," replied Dauvit, placidly. "Whether am I the maister or you, eh?"

"Whichever ye like," Dauvit would reply, without tremor, "but I've cut the lan afore the braes for thirty year, and I'm no gann to try any new-fangled plans this year, whatever ye may say!"

"Very well, ye thrawn deil, hae your own way."

and so the breeze blew over.

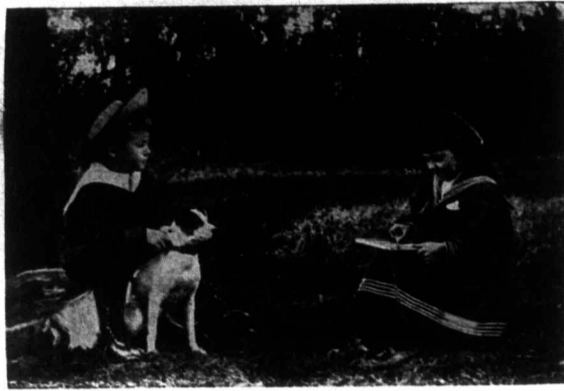
Of the illness of Teenie, the devotion of her husband, the beautiful self-sacrifice of both, one must read to thoroughly appreciate. "The wife's purse" is a wholesome lesson to husbands who do not entirely trust their wives with a proper knowledge of their money affairs, and who make them feel like paupers instead of co-workers. "A shock of corn, fully ripe," gives the picture of a noble man, who, dying, reveals an unsuspected romance. The simple straightforward writing of David Lyall is delightful, and one cannot fail to recognize the truth of all these stories. The book should be widely read.

Published by Copp, Clark & Co., Toronto.

FELIX.

#### Jack's Picture.

These pretty pictures tell a story which scarcely



NO. 1—TAKING HIS PICTURE.

requires explanation, so graphic are they. In No. 1, we see a concentration of expression in the faces of artist, brother and doggie, which speaks the im-



NO. 2—FINISHED.

portance of the occasion. In No. 2, a great work has been achieved, and the future Rosa Bonheur or Sir Edwin Landseer, is evidently well satisfied with the work, while Master Jack has to be held back from a too early inspection. No 3, however,



NO. 3—CLOSE INSPECTION.

shows an inspection of a very close nature, and the extremely worried look on our little girl's face betrays an anxiety which, we should say, was well founded for that recognition lick-kiss of Master Jack's, will certainly not improve this evidently speaking likeness, for doesn't Jack either see in it himself or another and smaller doggie?

#### Recipes.

##### GINGER BEER—VERY GOOD.

Two and a half lbs. white sugar, 2 ozs. bruised ginger, 1 oz. cream of tartar, rind and juice of 3 lemons, 1 cake yeast, 3 gallons boiling water. Put sugar, lemons, cream of tartar and ginger into a crock, pour boiling water on them, when milk warm, add yeast (softened in a little luke warm water). Leave over night. In morning strain and bottle. Fit for use in three days.

##### CHRISTMAS PUDDING.

One and a half lbs. of sugar, 2 lbs. suit, 1 lb. bread crumbs, 1 lb. flour, 2 lbs. of raisins and 2 lbs. currants, 12 eggs, citron, lemon and nutmeg, 1 lb. 3 teaspoons soda.

##### WHITE FRUIT CAKE.

Half a lb. each of flour, butter, white sugar and blanched and chopped almonds, 1 lb. of citron, 1 cup of cocoanut, whites of 8 eggs, 2 teaspoons B. P. lemon rose flavoring.

##### BAKED MACARONI.

Cook the macaroni in salted water for about twenty minutes. It should be soft but not split. Drain well and put a layer in the bottom of a buttered pudding dish. Upon this grate some mild rich cheese, and scatter over it some bits of butter. Spread upon the cheese, more macaroni, fill the dish in this order, having the macaroni at the top covered with bread crumbs and bits of butter scattered over. Add a little milk and bake covered for half an hour, then brown and serve.

#### A Siege Baby.

BY THE AUTHOR OF "BOOTLE'S BABY," ETC., ETC.

(Continued from page 625.)

At this point Majid, who had been surprised and delighted with the style in which she kept up the march, stopped the little party for refreshment, which consisted of some boiled rice and sweet milk, with some strong chicken broth for the lady, cold but good, which Majid had made during the afternoon and had put up in a bottle for her use on the journey. How she enjoyed it, and munched nice little native cakes—chutnies as they rested; and then, just as they were about to start, there was a rustling among the growth of the jungle, a trembling of the tall grasses to the left, and a terrified shriek, followed by a report of a gun and the falling of some heavy body to the ground. For an instant Mrs. Mordaunt did not know where she was, nor what she was doing, for it seemed to her as if Majid had unceremoniously knocked her down. However, when she came to her full senses she found herself lying under a low-growing bush, with Majid lying beside her and holding the branches on one side down upon them till they pressed upon the ground. In this way they lay hidden for two hours or more, listening to the coarse jests and quarrelsome talk of the band of rebel-sepoy which had thus sprung almost upon their very resting-place. Once only she spoke, whispering into his ear, "Where are Corah and the baby?"

"All right," he answered, and so she lay very still, being perfectly satisfied.

Personally, Majid was very glad indeed of the opportunity thus afforded him of learning the movements of the rebels. Having shot the wretched fugitive who had fallen in their way, the Sepoys squatted themselves down on the ground to discuss matters generally, and happily they just discussed those points upon which he was most anxious to be informed. He learnt, among other things, that Singkote was regarded as absolutely out of their power, the garrison being very strong, the health of the defenders very good, the defenses impregnable, and ammunition and provisions inexhaustible. And he learnt also that the road to Singkote was comparatively clear, a piece of information worth more to him a great deal than two hours' discomfort, delay, and a little cramp. Finally, the rebels moved off, leaving the coast clear, and presently when he had made quite sure they were out of sight and hearing he rolled out from under the bush and helped his mistress to her feet.

"Do not look to the left, Mem-Sahib," he said, wishing to spare her the sight of the poor dead white face of the man whose last shriek was still ringing in her ears.

Mrs. Mordaunt trembled, but obeyed him. "It is not the Sahib!" she asked in an awful dread.

"Oh, no—it is a mere boy. Majid will take his watch and rings into camp."

He would have scooped a shallow grave for the poor boy but the ground was hard and he had nothing with which he could dig—so he searched his pockets for any things by which he could be identified, and then put him as decently as he could under the bush where they had lain hidden.

And then Mrs. Mordaunt, who had been peering curiously around, said suddenly, "Majid, where are Corah and the baby?"

The words had scarcely left her lips when a succession of piercing and agonized shrieks rang out upon the air in the direction which the rebels had taken. Then there was *dead silence!* The mother caught at his hand that she might steady herself, and together they listened intently; a few shouts and peals of derisive laughter rose upon the stillness of the night, but they too died away and all was quiet, quiet as the grave; the faithful native and the overwrought and half-fainting Englishwoman looked at one another—a desperate question shining out of the blue eyes of the mother—the wistful gentleness of profound and hopeless pity melting the black orbs of her protector.

V.

The look in Majid's eyes was all too plain an answer to the question the mother had put; and as she realized that her child had fallen into the hands of the rebels, that almost beyond all possibility of doubt the piercing shrieks which but a few minutes ago had rent the air were the last cries of agony uttered by poor Corah, and that the dead silence which followed had been to her the silence of the grave, Mrs. Mordaunt sank down upon the ground in utter and abject despair. For half an hour she stayed thus, crushed, hopeless, and so weary of life that it seemed useless to attempt to continue the struggle any further. A horrid night-mare seemed to possess her, and she sat swaying herself to and fro like a woman in a dream. Could it be possible that her little child who had come into the world with such difficulty, and yet who, like a sweet flower growing up in a ditch, had thriven and flourished in spite of all the unlovely and unhealthy surroundings, was gone from her forever? That she was not only gone, but to a violent death; for oh! there was no hope of mercy from the wretches who had shot down the poor lad who was lying still and silent under the bushes but a yard or so away from her as she sat! Oh! why, why had not the little life ebbed away in peace at the old woman's but? Why should it have been spared only for such an end as this! It was surely too cruel, too hard, that if she ever found herself in her Charlie's arms again, she should have to tell him of the little child—his own—whom he had never seen; that if they should escape the perils of this horrid country and live out the rest of their life together, there would be a leaf in her life which would have no part in his, a leaf turned down and never to be read again until they should read it together in eternity.

And then—oh! who but God Himself rent the thick clouds asunder and let a flood of joyous and hopeful light into her soul—and then a remembrance came back to her of the words she had spoken to her husband the night they had first heard the news of the outbreak at Meerut—"God will do all the rest, Charlie." Yes, God would do all the rest. Oh! what had she been about not to have had a stronger faith, a greater trust! Surely, she was not the one whose faith should be small, she who had been brought through so many and great dangers, who but that very day had heard the blessed and joyous news of her husband's safety, the dear husband whom for three weeks and more she had mourned as dead!

The new thought put new life and new heart into her! She rose to her feet and put out her hand for Majid, resolved that, come what might, she would not give in yet. She would keep up heart and pluck to the last, the very last, hoping and believing that the Power which had saved the father would save the child.

"I don't believe that was Corah," she said, in a whisper; "that did not sound like her voice. I believe she will get my baby in safety. I feel convinced she is still alive—that they are both still alive, and that it will be well with them in spite of all we heard and fear."

Majid's grave face lightened a little. "If that was not Corah we heard she may get the little Baba in safely," he said. "In any case, it must be best for the Mem-Sahib to press on in order that help may be sent out."

So she consented once more to put herself altogether in his hands, and they set off on their steady plodding tramp once again. But alas, Majid did not find that she kept up as well as she had done before; very soon she lagged wearily and began to show signs of the greatest weariness until their steady pace dropped down at last to a mere crawl, a dragging of one sore and weary foot before the other.

No wonder that it was so, poor little soul, for the loss of the child had taken all the strength out of her, and, naturally enough, the all was not a very large store and had been soon exhausted. But the faithful Majid cheered her up, urged her on, fed her out of his bottle of chicken broth, and half carried her over most of the rough places.

"The Mem-Sahib must not give in," he said, imperatively. "If the Mem-Sahib can keep up a little longer we shall get into camp safely. Those are the lights of Singkote on in front."

She looked up eagerly, and, sure enough, on ahead were a few twinkling lights but dimly visible in the first dawn of the gray morning.

"Is that really Singkote, Majid?"

"That is Singkote, Mem-Sahib," he answered.

"How far is it?"

"Only about a mile and a half, Mem-Sahib."

A mile and a half! It seemed to that weary and exhausted woman that he might as well at once have said a hundred miles and a half. "Majid, I can't walk a mile and a half," she faltered.

"Not quickly, but the Mem-Sahib will get there a little at a time—very step counts, and we are too near the city now to come to much harm. Perhaps we may see some of the Sahib-loge driving or riding presently."

And sure enough Majid was right, and before they had toiled on for more than a couple of hundred yards further, a light buggy drawn by a seedy gray horse and driven by a stout old gentleman in white clothing, approached them from the city. At the sight of Majid's warning he drew rein and asked what they wanted.

"Is that an English lady?" he asked, peering at the travel-stained figure in the background.

"Yes, Sahib—a fugitive, and the wife of Mordaunt Sahib, who—"

But Majid never finished that sentence, for the old gentleman had flung the reins upon the old horse's back and himself out of the buggy to the ground.

"My dear lady, what joy for Mordaunt!" he cried, taking both her hands with an air of the oldest and closest friendship. "Why, God bless my soul, he has been mourning you as dead, poor fellow, this past month or more. Why, bless me, he'll go out of his mind for joy! But get into the buggy. I'm sure you're worn out utterly—utterly, you must be. But there, never mind, my dear, your troubles are all over now—you'll be as safe here as in the Bank of England. There, there, my dear, you mustn't cry. You're all right now, you know—why, you'll be back again with your husband in less than half an hour."

It would have done the little woman good to cry, to shed a regular flood of tears, but she did not altogether give way then; she dashed the few tears aside that had gathered in her eyes and let the old gentleman help her into the buggy.

"Can you make room for Majid?" she said. "He's dead beaten. I believe he carried me nearly all the way."

"Oh! of course, of course—we'll make room for him," cried the old gentleman, who was one of the old school and, but for the little lady's pitiable plight, would have seen "the nigger" shot before he would have given him the pampering luxury of a drive back into town. However, thus bidden, Majid clasped his hands together after the manner of his kind and made a polite bow of thanks; then, without further ado he clambered in, putting himself into as small a space as possible.

So the queer-looking party drove back at the best pace the seedy old grey could muster, and presently drove in at the principal gate and went straight up to the Residency.

"Where is Mordaunt Sahib?" the old gentleman shouted as he pulled up. "Oh! is that you, Owen? Do you know where Mordaunt is?"

Mr. Owen was a very young man, who had come out to the veranda on hearing the shout. "Mordaunt? Oh! he's lying on the sofa in the billiard-room. Why—do you want him?"

"His wife here does," returned the older man, with blunt enjoyment of the other's surprise.

"Mrs. Mordaunt!" he exclaimed, coming down the steps, and holding out his hand—for all Europeans were dear friends in those days—"Why, Mordaunt will go out of his poor distracted mind with joy. He's been nearly mad for weeks."

The sound of voices and their exclamations of surprise had brought one or two other white-garbed men upon the scene—among them one Ennis of the Black Horse, who stared at the new-comers for a minute in speechless astonishment.

"Good God, Mrs. Mordaunt, is that you?" he cried, and without further ado he just took her in his arms and gave her half-a-dozen kisses. "Is it really you?" he cried. "Oh! my poor child, you must have had a terrible time of it to change you so. But what will Mordaunt say? Has anybody told him? For Heaven's sake do it carefully—don't blurt it out at once."

"You'd better go, Ennis," someone suggested. "Mordaunt's in the billiard-room."

Thus bidden, Ennis disappeared in the direction of the billiard-room, leaving the others still in the large hall. He found Mordaunt asleep.

"I say, old chap," he began.

The other, sleeping very lightly, woke with a start. "Eh! what—anything wrong?" he asked, anxiously.

"Oh, no, my dear chap! quite the contrary. Can you hear news—eh?"

"News! Yes, of course. What news have you?" Poor fellow, he was so firmly convinced of his wife's death, that he never dreamt the news could be anything to him more than to anyone else. Ennis took his arm, kindly.

"It's good news, old chap—try and bear it bravely."

"Yes."

"Your wife's been brought in."

He felt Mordaunt cringe and shake, and his face grew a sickly greyish-white. "Is it—is it?" he began, when Ennis cut him short.

"Why, man alive, didn't I tell you it was good news. She's alive—a live, and as well as one could reasonably expect considering the time she must have had."

"Alive!" he gasped, staring at his comrade as if he were dazed or drunk.

"Yes—come along."

And then poor Mordaunt broke from his friendly hand and dashed into the hall where she was. And oh! what a meeting it was—what joy for both—what exclamations and incoherent questions—what an outpouring of unutterable thankfulness to God!

And then, in the midst of it all, the little woman suddenly gave way and flung herself upon her husband's breast with an exceedingly bitter cry. "Oh, Charlie—Charlie—my baby—my baby—my poor little lost baby!"

So Charles Mordaunt knew for the first time that his little child had been born into the world, and heard all the story of Majid's prudent care and forethought and of Corah's devotion to that frail life, which, like a little plant that comes up too early in the spring to weather the last storms of winter, had yet had time to entwine its tendrils close and firm about the mother's heart.

And as the days wore on and parties went out in all directions in the hope of finding alive the baby of the little woman who had borne so much and who had come through so many and great dangers, but returned without any success, the mother's sanguine heart began to fail before the horrible fear that she would never see her little child in this world again.

The uncertainty was terrible—fifty times in the course of the day she said to her husband that she could bear the loss if only she knew the worst—if only she knew what the end had been—if only she knew that the end had come, and that her babe was not left to the mercy of those demons. Yet four days

went by and they had no news of the babe or nurse, either dead or alive. Otherwise Mrs. Mordaunt would have been thoroughly happy, for surely never was a little woman made so much of before. Everybody in the garrison, and it was a large one, vied with everyone else in trying to do the most for her—the ladies all brought the best and prettiest garments in their wardrobes, and each one of them offered to put their needles at her disposal, so that she might have anything more that she wanted; the men went out, as I said, to search for the child, and had she wished it, she might have had every carriage in the garrison in which to take her daily drives; and the children brought her flowers and fruit, and one darling tot who knew "the poor pretty lady was sorry because she had lost her baby," brought her a present of a terrier pup, a siege baby like her own.

So the days went by—four of them—and on the fourth, towards evening, there was news. It was brought into the Mordaunts' quarters by an excited subaltern, who was one of Mrs. Mordaunt's most enthusiastic admirers and who had been one of the most indefatigable searchers for the lost baby. This young gentleman made no attempt whatever to break the news—on the contrary, he blurted out his errand at once.

"Oh! Mrs. Mordaunt," he exclaimed, "I believe they've found it, I do really. A young native woman has just been brought in, found a couple of miles out hiding under a bush dead-beat. She's got a baby, says it belongs to an English Mem-Sahib, but she doesn't remember her name. It must be yours."

"It is Corah! Oh! where is she?" cried Mrs. Mordaunt, starting to her feet.

"She's over at Forbes's bungalow," he answered.

The mother waited to hear no more—like a mad thing she flew to the place where a group of people were gathered around the new arrival, recognized with a cry of joy the wet nurse of her child, tore aside with a trembling hand the wrappings which covered it, and beheld, sleeping peacefully, with one tiny hand outspread against the breast which nourished it—a little native baby.

For a moment she was too completely stunned by the intensity of her disappointment to speak; then the sight of Corah's smiling face fairly roused her into fury!

"My baby! where is she? What have you done with her? What child is this?" she cried in a passionate voice.

"Is this really the nurse?" several of the bystanders asked anxiously.

"The nurse, of course it is the nurse," Mrs. Mordaunt answered, excitedly; then addressed herself once more to Corah. "My baby—where is she? What have you done with her? I tell you I will know!"

But it was perfectly useless to rave in English at a poor girl who only understood the Hindustani, and in a moment of less excitement Mrs. Mordaunt might have remembered it. However, her words made no impression whatever upon Corah, who still beamed brightly upon her and made as though she would lay the sleeping infant in her arms. She looked not a little surprised when the Mem-Sahib coiled a step; but then a light seemed to break into her mind, and she burst into a low amused laugh.

"Oh! this is too much," cried the mother, indignantly, with an appealing gesture to the others of the group; and then—"why—why—what are you doing?" she faltered.

Well, Corah was just unwinding the soiled and dingy cotton wrappings from the baby, and presently two pink dimpled legs appeared, the limbs not only of a European child, but of Mrs. Mordaunt's very own.

There was a little scuffle and a smothered ejaculation; and then Mrs. Mordaunt fell to frantically kissing that baby, first the pink European end, then with equal passion the brown Native end; and then she cried, then laughed, until finally the baby began to cry too, much after the fashion of babies, who have most manners and customs in common, no matter whether it be a poor little atom born in a London slum, or the new little King of Spain, in the account of whose christening there was this pathetic touch. "During the ceremony, His Majesty yawned several times in a loud voice."

That was exact! what little Corah Mordaunt did a few hours later, when the last traces of her disguise having been washed away, she, amid the rejoicings of the whole garrison, was received into the fold of Christ, bearing the name of the poor heathen girl who had saved her life at the risk, ay, the double and treble risk, of her own.

Long afterwards, when the Mordaunts had left India behind them for ever, they heard of Corah's death.

"Ah! Corah was an angel here, she is an angel above now," cried Mrs. Mordaunt with tearful eyes. "A heathen! Oh! well, she never changed her religion certainly, but, all the same, I know I shall meet her over there some day. Corah was very good, really good, and God will do all the rest"; an argument which might not be good theology, but it was very human, and in faith stupendous.—J. S. Winter.

## THE QUIET HOUR.

### The Meaning of the Message.

Strange message! What means it? A child is born!  
It means the old earth grows young;  
That the heart, with its sin and sadness torn,  
Grows whole and happy and strong;  
No more the fountain of fear and scorn,  
But a fountain of praising song.

I will tell what the message saith:  
That the spirit no more shall pine;  
That self shall die an ecstatic death,  
And be born a thing divine;  
That God's own joy and God's own breath  
Shall fill us with living wine.

That ambition shall vanish, and Love be king,  
And Pride lower and lower lie;  
Till, for very love of a living thing,  
A man would forget and die,  
If very love were not the spring  
That all life liveth by.

### A Light to Lighten the Gentiles.

He Lights the Dark Valley.

The promised Messiah was to be "a light of the Gentiles"; so Isaiah had declared more than once. Surely the promise has been fulfilled to us. "The people that walked in darkness have seen a great light; they that dwell in the land of the shadow of death, upon them hath the light shined." Take the great mystery of death, for instance: It is hard, very hard, to say good-bye to those we love; knowing that until we die ourselves we cannot meet them again, but how different our parting with dear friends is, now that God has thrown so much light on the dark mystery. They have left us, but we know they are still alive, in His keeping. Think of the darkness of despair we should experience if we thought their life was ended forever. How differently we look forward to our own departure now that we know it is not really death, but simply stepping out into a grander, fuller life.

It is not  
So much as even the lifting of a latch;  
Only a step into the open air,  
Out of a tent already luminous  
With light that shines through its transparent walls.

### The Path of the Just is as a Shining Light.

Then there is the light which Christ throws on our life in this world. The daily toil and monotonous drudgery which make so many lives almost as dreary as a treadmill existence in a prison. How changed it all is when it is illuminated by the Sun of Righteousness! Each one of the tiresome daily duties may be transfigured by love, and become as precious in His sight as the gold, frankincense and myrrh, offered by the Wise Men, that first wonderful Christmas so many years ago. Our lives may be as fragrant as the precious ointment which was poured out so lavishly in His honor. No gift is too small for His acceptance, no trifling act of self-control, or sacrifice of self for the good of others, is unnoticed by our King.

"Live on, brave lives, chained to the narrow round  
Of Duty! Live! Expend yourselves! and make  
The orb of Being wheel on ward steadfastly  
Upon its path! The Lord of Life alone  
Knows to what goal of Good: Work on! Live on!"

### Christ "The Light of Men."

St. John says: "In Him was life; and the life was the light of men," and he seems to connect that *Life* which was *Light* with the coming of Christ in the flesh. "The Word was made flesh, and dwelt among us, and we beheld His glory." It has been a question which men have discussed for centuries, whether Christ would have become incarnate if man had not sinned. In other words, whether God would have withheld His greatest Gift if His children had been obedient. Whether He would or not matters very little now, as we were not obedient; but think what a priceless Christmas Gift we have received. It was not only that a perfect example was given to the world. It was not only that the Son of God proved His marvellous love by dying to save us. It was far more than that. The "Mystery of His Holy Incarnation" has linked our lives to His so closely that God is in us and we are in God. We are members of His body, so completely one with Him that He could say to one who was persecuting men and women, "I am Jesus, whom thou persecutest."

The world to-day is talking a great deal about the science of Humanity. Human life is a sacred thing in Christian countries, no matter how useless or insignificant it may appear to be. The tiniest infant is protected by law, and even the life of a hopeless lunatic is jealously guarded. How different this is from the heathenish practice of killing little children or old people who were considered incumbrances.

How many noble men and women have given themselves to the work of helping their fellows, teaching them, bringing light into their darkened lives. Not content with giving them help from a distance, they follow the example of their Master, who, "though He was rich, yet for our sakes became poor, that we through His poverty might be rich."

"The restless millions wait  
The light whose dawning  
Maketh all things new;  
Christ also waits,  
But men are slow and late.  
Have we done what we could?  
Have I! Have you?"

God Himself could not reach us perfectly, except by becoming one with us, and the thrill of that Divine contact has put new life into humanity all through the centuries since. It is that life of His in men which makes them reach out eagerly to touch others, because in them, too, they see the image of God.

"Whatsoever spark

Of pure or true in any heart  
Flickered and lived, it burned itself towards Him  
In an electric current, through all bonds  
Of intervening race and creed and time,  
And flamed up to a heat of living faith.  
And love, and love's communion, and the joy  
And inspiration of self-sacrifice!  
And drew together in a central coil  
Magnetic, all the noblest of all hearts,  
And made them one with Him, in a live flame,  
That is the purifying and the warmth  
Of all the earth."

It is because we are all linked together in one holy fellowship that genuine loving-kindness is sure to find an echo in the hearts of others. It is possible to give all the goods to feed the poor, and yet rouse nothing but greedy, covetous desires for more. It is not possible to devote a life in true, generous, loving self-sacrifice, without bringing real divine light into other lives, without inspiring others to reach out after better things.

Although Christ is the Light of the world, yet He says also to His disciples "ye are the light of the world," and reminds them that a light is intended to be of some use. It must not be hidden under a bushel, but must shine, not for its own glory, but that people may be benefitted by the light. We should be mirrors reflecting God's glorious light. We, too, must do our part towards "lightening the Gentiles," both at home and abroad. HOPE.

### The Divine-Human Christ.

'Tis the weakness in strength that I cry for! my flesh that I seek  
In the Godhead! I seek and I find it. O Saul, it shall be  
A Face like my face that receives thee; a Man like to me  
Thou shalt love and be loved by, forever; a Hand like this  
hand  
Shall throw open the gates of new life to thee! See the Christ  
stand!  
—Robert Browning.

Never believe all you hear; for he who believes  
all that he hears often believes more than he hears.

WESTERN CANADA'S  
GREAT INDUSTRIAL FAIR

Winnipeg

1896

\$350000  
IN  
PRIZES  
AND  
ATTRACTIONS

WESTERN CANADA'S  
GREAT INDUSTRIAL FAIR

Winnipeg

1897

\$1500000  
IN PRIZES

WESTERN CANADA'S  
GREAT INDUSTRIAL FAIR

Winnipeg

1898

\$500000  
IN PRIZES

WESTERN CANADA'S  
GREAT INDUSTRIAL FAIR

Winnipeg

1899

\$1000000  
IN PRIZES

COMPETITION  
OPEN  
TO THE  
WORLD

JULY 23 TO 28  
1900  
WINNIPEG

BIRD'S EYE VIEW OF WINNIPEG EXHIBITION GROUNDS

FOR FURTHER  
INFORMATION  
APPLY TO

F. W. HEUBACH  
GENERAL MANAGER  
WINNIPEG - MANITOBA.

FARMER'S ADVOCATE

COPYRIGHTED







BIRD'S-EYE VIEW OF THE EXHIBITION GROUNDS AT BRANDON, MAN., CANADA.

**GOSSIP.**

At the recent National Horse Show, held at Madison Square Gardens, New York, \$1,335 of the prize money was won by Canadian exhibitors, as follows: Adam Beck, London, \$635; Geo. Pepper, Toronto, \$600; and Graham Bros., Claremont, \$100.

A. & G. Mutch, "Craigie Mains," Lumsden, Assa., advertise Clydesdale horses in this issue. Messrs. Mutch are very successful wheat farmers, cultivating an extensive area of heavy land, and have always paid great attention to the raising of heavy horses suitable for their own work. So successful have they been along these lines, that they not only keep their own farm well stocked, but have some to spare. The horses they offer are by imported Clydesdale stallions, and are full of quality and "western go," besides having weight and size. A visit to "Craigie Mains" will repay anyone.

W. J. Young, Superintendent of South Side Farm Co., at White Bear Lake, Minn., places an advertisement in this issue offering several Holstein bull calves of extra quality for sale. Mr. Young writes us that these calves are sired by the richly-bred bull, Baron Pauline De Kol, from cows selected with great care from some of the leading herds in Wisconsin, Michigan,

and Minnesota. At the head of the herd now stands the great bull, Johanna Rue 2nd's Paul De Kol. Shropshire sheep and Yorkshire swine are also kept at South Side Farm. Those in need of something strictly high-class in the Holstein line should correspond with the above.

Superintendent Bedford, of the Experimental Farm, Brandon, advises us under recent date that they have purchased fifteen steers for feeding purposes on the Brandon Farm, and all have passed the tuberculin test without any reaction. The fifteen head of steers are divided up, with one 3-year-old and four 2-year-olds in each of the three lots. Ten of the fifteen have been dehorned, five of these will be fed loose after dehorning, and the other two lots will be tied up in the ordinary way, all to be fed alike. Mr. Bedford adds, in reference to the tuberculin test: "Veterinarians tell me that an increased number of farmers are having their herds tested with tuberculin. The privilege of selling the meat after inspection is a great incentive in this direction. It is only a question of time when all herds will be tested."

C. M. Keeler, Lyn, Ont., writes: "Our stock of Holsteins go into winter quarters at their new home, the 'Lynfield Stock Farm,' in fine condition and doing well at the milk pail. We

were successful in the showing at Toronto and Ottawa, winning in all fifteen prizes. At Ottawa we secured the much-coveted prize, first on cow, taking it on the cow Princess Lida 4th; also we secured first on young bull and first on bull and heifer calves, which shows that our young stock are keeping at the top. We have done a splendid business since the fairs, showing that we have the type of cattle, combining size, quality, and milk, that intelligent purchasers are looking for. We are sold out of bull calves, and are receiving letters from their respective owners expressing themselves as being highly pleased with their purchases. The cow "Oxford Jewel" we sold to Dr. D. S. McDougall, of Russell, Ont., has eclipsed all others, giving him ninety pounds of milk per day, placing her in the ranks of the best cows in Canada. He is naturally also highly pleased with his purchase."

**The Speight Wagon Works.**

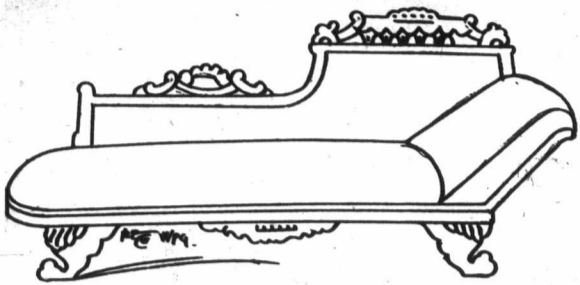
The Speight Wagon Co., whose extensive factory is situated at Markham, Ontario, was visited by a representative of the FARMER'S ADVOCATE recently, and found in a most prosperous condition. Although of large capacity, the firm find it necessary to enlarge their plant, to meet the growing demand which lifelong attention has made for their goods. The man-

ager, Mr. T. H. Speight, informed us that the business was established in 1830, and that he is of the third generation to grow up in the business, and as he has given his undivided attention along this line, he knows the business in detail. Parties requiring farm wagons or sleighs will find it to their advantage to ask for their illustrated catalogue and watch their future offerings in columns of the FARMER'S ADVOCATE.

**Manitoba Dairy School.**

Dairy Superintendent Murray has issued a circular of information on the winter session of the Government Dairy School. The Home Dairy course opens, as was announced in a recent issue of the ADVOCATE, on January 8th, continuing until February 3rd. The second course dates from February 5th to March 3rd, and the third course from March 5th to 30th. The Butter and Cheese Makers' course begins February 5th, continuing to March 31st. The school will be under the direction of Mr. Murray, and the staff will include instructors in buttermaking, separators, etc., in cheese-making, and in milk-testing. Tuition is free, and the Superintendent states that students will be welcome even if they can only remain a short time, and he promises to provide an interesting and instructive course.

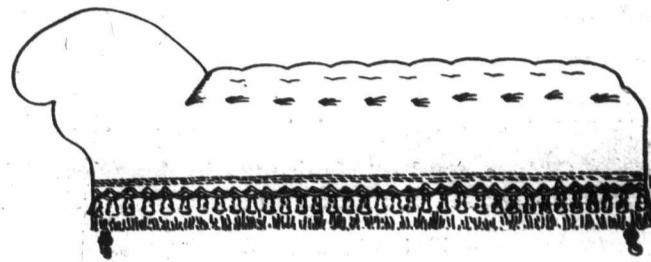
# Special Furniture Values for close buyers During Dec. and Jan'y



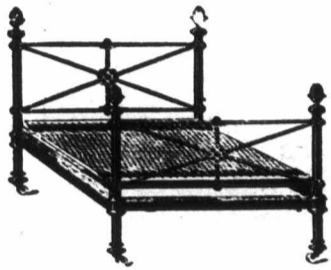
**No 1—Comfort Lounge.**  
Spring seat, Jute covering, \$6; Good Tapestry coverings, \$7.  
Hardwood frame, antique finish.



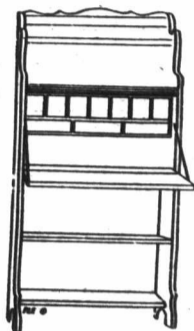
**Patent Kitchen Table, Very Strong, \$7.**  
2 Flour Bins.  
2 Divided Drawers.  
2 Bakeboard Slides.



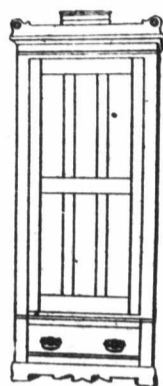
**No. 5—Turkish Couch.**  
Full spring seat and fringed in Jute, \$7.50; good Tapestry, \$8.50.  
Mention color wanted.



**No. 200—Iron Bed,** brass knobs, any size, \$5.00. Fitted with Wire Springs for \$3.00 more or Dominion Springs for \$4.50 more.



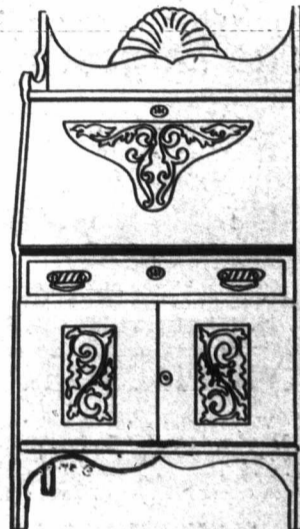
**No. 5—Desk, \$4.75.**  
Antique, drop lid, pigeon holes inside, shelves for books.



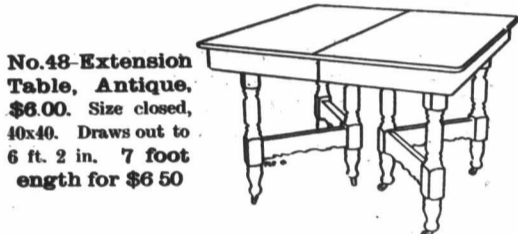
**No. 4—Wardrobe, \$8.50.** Antique, paneled door, drawer in base. 3 ft. wide, 7 ft. high, 18 in. deep.



**No. 72—Sideboard, antique, \$12.**  
Mirror, 14x24.  
Width 4 ft., height 6 ft. 6 in.



**No. 217—Desk.**  
Drop lid, antique, \$11.  
A very roomy desk.



**No. 48—Extension Table, Antique, \$6.00.** Size closed, 40x40. Draws out to 6 ft. 2 in. 7 foot length for \$6.50

If you don't see here what you want, write us. Describe fully your wants. We always have special snaps for close buyers. Visit our store if possible.

## John Leslie.

The Biggest Stock in Canada.

THE MAMMOTH FURNITURE HOUSE.  
298 MAIN AND 263 & 265 FORT STS.

THIS IS AN ILLUSTRATION OF

THE MOST SOLIDLY BUILT,  
BEST LOOKING,  
BEST WEARING AND  
MOST POPULAR

ORGAN  
IN THE MARKET.

# BELL

## PIANOS AND ORGANS

BUILT TO LAST  
A LIFETIME  
BY THE LARGEST  
MAKERS IN CANADA.

### The Bell Organ & Piano Co.

(LIMITED)

Head Office and Factories: GUELPH, ONT.

BRANCHES:

49 Holborn Viaduct, LONDON, E. C., ENG.  
6 Bridge Street, SYDNEY, N. S. W.  
70 King Street West, TORONTO.  
44 James Street North, HAMILTON.  
2263 St. Catharines Street, MONTREAL.



J. L. MEIKLE & CO., Agents, WINNIPEG, MAN.

**HILLHURST FARM.**

ESTABLISHED 1864.

**Scotch Shorthorns.**

SIRE IN SERVICE: **SCOTTISH HERO** AND **JOY OF MORNING**, BRED BY W. DUTHIE, COLLYNIE.

Oldest Stud of Hackneys in America. Shropshire, Dorset Horn, and Hampshire Down Sheep.

**M. H. COCHRANE,**  
HILLHURST STATION, COMPTON CO., P. Q.

**The Largest Herd of Ayrshires in America.  
The Largest Herd of Guernseys in Canada.**

**Special Sale for December Only:**  
Six Ayrshire bulls, from 1 to 3 years; 4 Guernsey bulls, 1 year and over. The above animals fit to head any herd. Also a few choice bull calves of either breed. 10 Yorkshire boars fit for service; 6 Yorkshire young sows, for breeding. All choice stock.  
For particulars, address

**ISALEIGH GRANGE FARM, Danville, Quebec.**  
J. N. GREENSHIELDS, PROP. T. D. McCALLUM, MGR.

**AYRSHIRES and YORKSHIRES.**

We now offer our stock bull, "White Chief of St. Annes," at \$75, and will pay half the freight to any point in Ontario; also a few choice young bulls. We also offer at special values, boars fit for service, young sows just served, and young pigs, of both sexes, from 2 months to 5 months old.

**ALEX. HUME & CO., Menie P. O., Ont.**  
Hoard's G. T. R. Station.

**BRAMPTON JERSEY HERD.**

Brampton's Monarch (imported), Canada's champion bull, 1898, heads the herd, which numbers 75 head. Now for sale, high-class cows and heifers in calf, heifer calves, and 6 extra choice young bulls, sired by Monarch, the best we ever saw. They are from tested show cows. A few high-grade springers.

**B. H. BULL & SON,**  
BRAMPTON, ONT.



**POPLAR GROVE  
HEREFORDS**

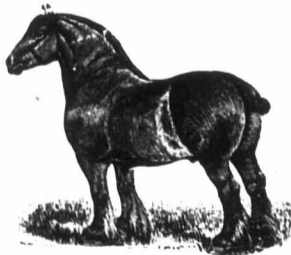
THE LARGEST HERD  
IN CANADA.  
STOCK OF ALL  
AGES FOR SALE.  
**J. E. MARPLES,**  
DELEAU, MAN.  
Pipestone Branch, C.P.R.

**THORNDALE STOCK FARM,  
MANITOU.**

**JOHN S. ROBSON, PROP.**  
30 Shorthorn Bulls and 30 Heifers  
FOR SALE.  
Write for particulars.

Shorthorn Cows and Heifers for Sale  
Of good breeding. Prices right.  
**GEORGE RANKIN, HAMIOTA, MAN.**  
"Melrose Stock Farm."

**J. E. SMITH,**



IMPORTER AND BREEDER,  
HAS FOR SALE—  
**CLYDESDALES**—Bargains in Stallions and Mares, all ages.  
**SHORTHORNS**—Choice Bulls, Cows and Heifers.  
**HEREFORDS**—17 Heifers.  
All animals registered in their respective herd books. Everything for sale except the stock bulls, Lord Stanley 2nd and Golden Measure. If notified, visitors will be met at the station. Come and see the stock. Satisfaction guaranteed. Write or wire.  
**J. E. SMITH,**  
Smithfield Ave., BRANDON,  
P.O. Box 271. Telephone 1.

**YOUNG BULLS**

of Missie, Mina, Rosebud, Strathallan, Wimple, and other choice Scotch breeding. Also, females at moderate prices.

**W. S. LISTER,**  
MIDDLEBURGH, MAN.  
Marchmont Stock Farm, near Winnipeg, Man.

**D. FRASER & SONS,**  
EMERSON, MAN.

Brooders and Importers of Durham Cattle, Shropshire and Southdown Sheep, and Pure-bred Poland China Pigs.

**Maple Lodge  
Stock Farm.**

ESTABLISHED 1854.

**SHORTHORNS**

FOR SALE:  
12 grand young bulls and as many choice young heifers, got by the great show bulls, **Cairness** and **Abbotsford**, and the heifers in calf to our hand some young imported bull.

**KNUCKLE DUSTER.**  
We have most excellent milking strains.

**LEICESTERS.**

We import and breed the very best and have them for sale. We had first-prize flock at Toronto and London, 1895, '96, '97, '98, '99. Have just received from Scotland, from flock of David Hume (winner of Prince of Wales gold medal, 1899), the first and second prize ram lambs at the Royal Northern, the Angus Counties, and Border Leicester Breeders' Club Shows, and a very choice selection of rammers, got by Highland Society winners, bred at Old Hamstocks, Auchincruin, Melton, Longcraig, Barredwell, etc.  
We are always pleased to show our stock or to answer any inquiries.

**A. W. SMITH,**  
Maple Lodge P. O.,  
ONTARIO

**WINTER SPORTS**



THE above is a cut of our

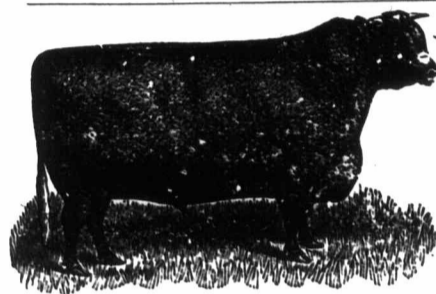
Improved "Hyde Park"  
Hockey Skate

which is unequalled, and is specially designed for hard and fast work. We also have the well-known **Star Hockey Skates.**

In **Hockey Goods**: STICKS, PUCKS, PADS, KNICKERS, ETC., we have the best values in Canada.

Send for our catalogue of WINTER SPORTING GOODS and see what we have to offer. We assure you our prices are right.

**THE HINGSTON SMITH ARMS CO'Y,**  
488 MAIN STREET, WINNIPEG.

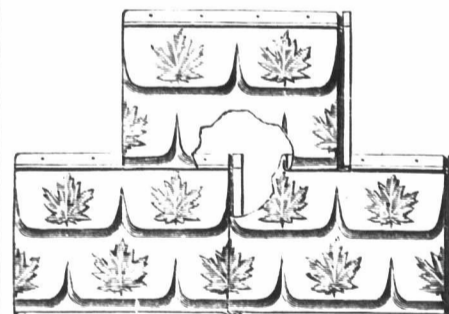


Young bulls and heifers for sale from Topsman = 17847 =, the winner of the sweepstakes and silver medal at the Winnipeg Industrial in '97 and '99; also Toronto and London in '99. My stock also won first for Manitoba herd. A good chance to get a splendid young bull to head a herd. Prices right. Write or call on

**JOHN G. BARRON,**  
Box 53, Carberry, Manitoba.

**Safe-Lock  
Metal  
Roofing**

For farmers' houses, barns and other outbuildings. A practically fire and lightning proof covering, guaranteed to be absolutely weatherproof.



Cut illustrates three shingles locked together on all four sides, leaving no opening to admit the weather. Made in galvanized iron, terneplate, and painted steel.

Can be put on quickly by any farmer, making buildings present a neat and finished appearance. Send size of roof for free estimate, catalogue and full information.

**THE  
Metal Shingle & Siding Co., Ltd.,**  
PRESTON, ONT.

**Clydesdale Horses for Sale**



25 young Clydesdale geldings, raised in the country, and of good weight nearly all from registered mares, some of them imported, and sired by the celebrated prizewinning imported horses, Raith Laddie, Pure Clink, and Balzreggan Hero. Also two Clydesdale stallions. For further particulars apply to **A. & G. MUTCH, Craigie Mans, Lumsden P. O., Assa.**  
PLEASE MENTION FARMER'S ADVOCATE.

**Do you need  
Furniture of any kind?**

Our new, big, illustrated catalogue will besent you free.

**School Desks** always on hand.

SEND FOR COPY.

**Scott Furniture Co.,**  
WINNIPEG.  
Largest Dealers in W. Canada.

**Shorthorns**

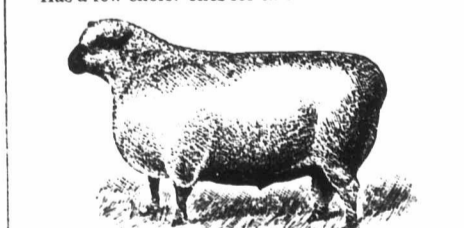
Will sell the fine young dark red Shorthorn Bull, **Sharkey** = 30615 =; calved March 15th, 1899; got by **Mina's Prince** = 24970 =; dam **Maggie Bell** = 30991 =; bred by John Trestain, Strathburn, Ontario.  
**IMP. LARGE YORKSHIRES**  
FOR SALE.

**JAMES BRAY, LONGBURN, MAN.**

**J. A. S. MACMILLAN**

IMPORTER OF  
**Clydesdales, Shires, Hackneys.**

**STALLIONS:**  
Has a few choice ones for sale. Also Pure-bred



**SHROPSHIRE SHEEP,**  
Rams and Ewes, from the most fashionable imported blood. Inspection invited. For full particulars, Apply: **Box 483, Brandon, Manitoba.**

**SHORTHORNS**

STOCK FOR SALE. WRITE OR CALL ON  
**J. H. KINNEAR, SOURIS, MAN.**

**WILLOWDALE STOCK FARM.**

**SHORTHORN CATTLE  
CLYDESDALE HORSES**

A number of young Clydesdale Mares and Fillies. Also a few choice young Bulls, sired by Cairness = 22045 =. Address,  
**PURVES THOMSON,**  
PILOT MOUND, MAN.

**SHORTHORNS, YORKSHIRES AND TAMWORTHS.**

Stock of all ages and both sexes, at prices according to quality. Auction sales of farm stock undertaken. Improved farm and wild lands for sale in the Winnipeg district. Correspondence solicited.

**W. G. STYLES,**  
Sec. 12-13-1. West, Rosser P. O., C. P. R.

Elmwood Stock Farm

**Scotch Shorthorns for Sale:**

Three grand young bulls, all got by imported Scotch sires, and out of extra good cows, by imported bulls.



**H. O. AYEARST,**  
Middle Church, Man.

**MAPLE GROVE STOCK FARM**



**Dairy Shorthorns.**  
Lord Stanley 25th = 29247 = at head of herd.

**Berkshire Swine.**  
Orders booked now for spring litters.

**Barred Plymouth Rocks.**  
Choice cockerels for sale.

**WALTER JAMES, Rosser, Man.**  
15 miles west of Winnipeg, on main line C. P. R.

**SHORTHORNS AND NATIVE RYE GRASS.**

6 Shorthorn Bulls, including the splendid herd bull, Sir Victor = 21612 = shown 11 times, taking 10 first prizes, 2 diplomas and a silver cup.



**Western Rye Grass Seed (Agropyrum tenerum).** — Sound, clean sample. In grain bags, \$6.25; in bran bags, \$6.10, per 100 lbs. f.o.b. Virden. Write or call.

**KENNETH McIVER,**  
Roselea Farm, Virden, Man.

**SHORTHORNS.**

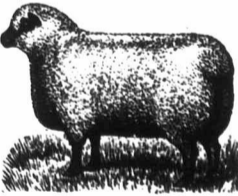
8 Young Bulls, mostly sired by Aberdeen 2nd. Also a few heifers, one or two years old. Write for particulars.

**Wm. Chalmers,**  
HAYFIELD, MAN.

**LANDAZER STOCK FARM**

**Shorthorns, Cotswolds**

Our Cotswold sheep are the **Choicest Flock in Western Canada.** Breeding stock all imported or straight from imported. Of the very best individual merit. Next spring's lamb crop will be by three choice rams. One ram, Mr. R. Miller, Stouffville, Ont., says is one of the finest he ever imported or ever saw in England. This breed makes a very desirable and successful cross on the smaller and shorter-wooled breeds of the West, and they thrive exceptionally well in our western climate. If you haven't tried a Cotswold ram, do so, and if you do, get the best. Try us for a lamb next year. We have the best that money can secure, and we sell away below the Eastern breeders' prices. Don't forget our address. Keep this for reference.



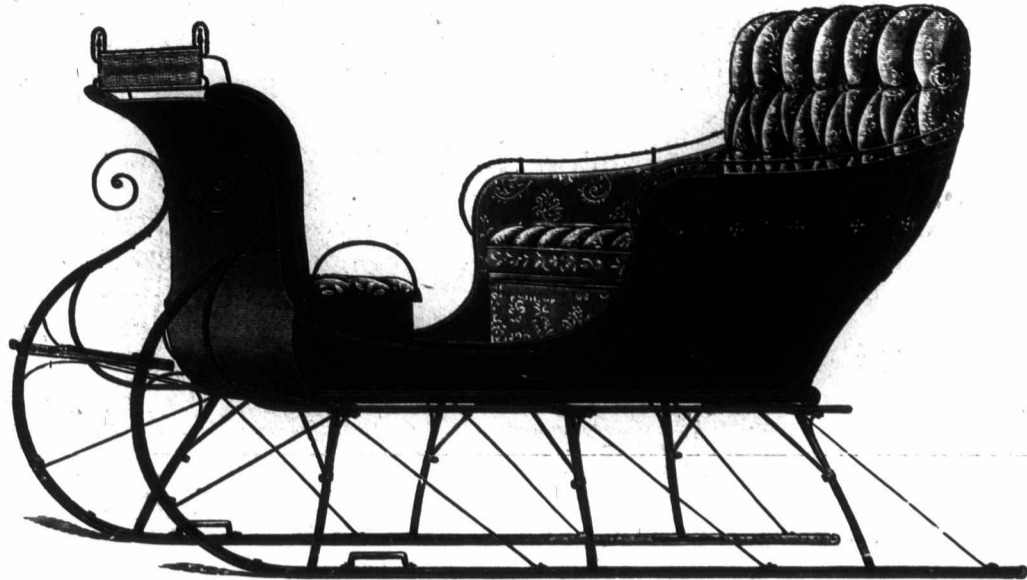
**D. HYSOP & SON,**  
BOX 492. KILLARNEY, MAN.



**SEEDS THAT WILL GROW!**

Importers of northern-grown seeds, acknowledged to be the most suitable for Manitoba and N.-W. T. We have the largest stock of field, garden and flower seeds ever collected together in this country to select from. Our large and handsome catalogue for 1900 sent free on receipt of name and address.

**J. M. PERKINS, Seedsman,**  
221 Market Street, WINNIPEG, MAN.



**Cutters**

From \$27.00 to \$75.00—a splendid line—easy runners and comfortable—the very best of material all through.

**Sleighs** FARM AND BUSH

Strong, durable, and prices right. Every runner guaranteed XX white oak.

Wholesale agency for XX Rays Plows, Buggies and Carriages. Full assortment of Harness, Robes, Horse Blankets, etc. When writing please mention this paper. Address:

**ALEX. C. McRAE,**

CORNER OF KING AND JAMES STS.,

WINNIPEG, MAN.

**SEEDS**

BRANDON SEED HOUSE

We are in a better position to satisfy your requirements this year than ever before. In addition to making a specialty of Field Seeds, we purpose handling Garden Seeds (in bulk).

**BROME GRASS**

was in great demand last year, but the demand this coming season promises to far exceed it. Our stock of this grass is all native grown.

**CHOICE FIELD SEEDS AND GARDEN SEEDS (in bulk)**

Quantity. Quality. Satisfaction.

Correspondence Solicited.

We will cheerfully answer all your inquiries and consider it no trouble.

**A. E. MCKENZIE & CO.,**

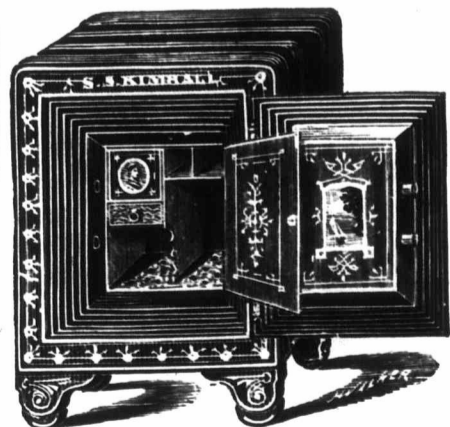
Grain and Seed Merchants,

BRANDON, MAN.

**Agents:** Our book on South Africa and the British-Boer War is a regular bonanza for agents. Big cheap book. Sells on sight. Outfit free. **Bradley-Garretson Co., Limited,** Brantford Ontario.

**Champion Fire and Burglar Proof Safes** In use from P. E. Island to Vancouver

18 years established.

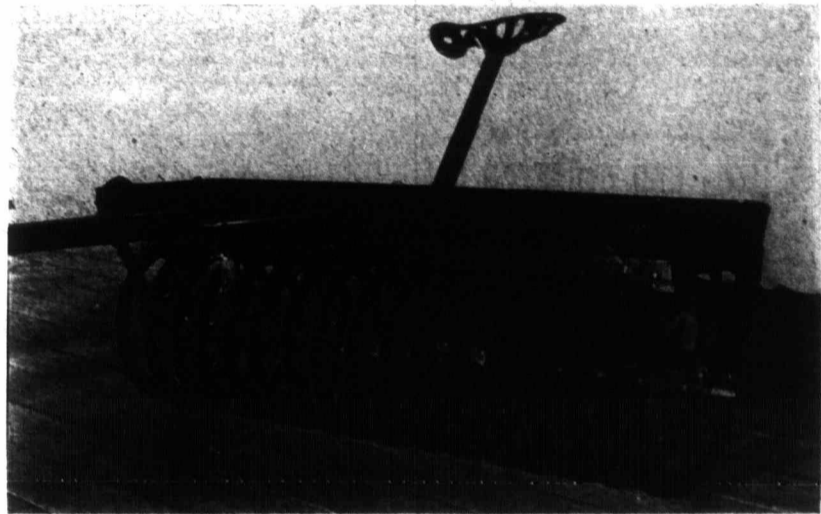


Send for catalogue and price list.

**S. S. KIMBALL,**

577 Craig Street, MONTREAL, QUE.

PLEASE MENTION FARMER'S ADVOCATE.



THE DAVIDSON

**Grain Picker and Sub-Surface Packer.**

MANUFACTURED BY

THE **BRANDON MACHINEWORKS CO., LTD.**

BRANDON, MAN.

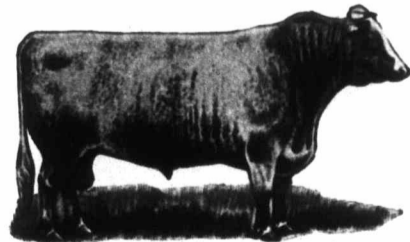
SEND FOR DESCRIPTIVE PAMPHLETS AND PRICES.

**"Prairie Home Stock Farm"**

BULLS AT HEAD OF HERD:

JUDGE = 23419 = AND IMP. JUBILEE = 28858 =

Yorkshire AND Berkshire Swine.



Clydesdale Stallions AND Shropshire Sheep.

**SHORTHORN AND AYRSHIRE CATTLE.**

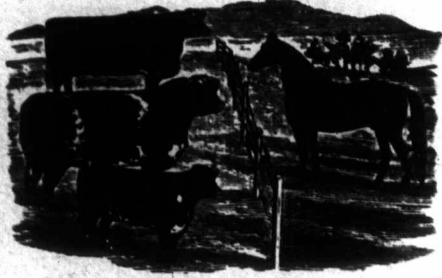
Berkshires, by the great boar, Nonpareil, and out of such sows as Harmony and Starlight Maid. Yorkshires, by the sweepstakes boar, Yorkshire Bill, and out of such sows as Stamira, Markham Maid, Eliza Jane, and Crystal City Kate. Orders booked for spring pigs.

**THOS. GREENWAY, Proprietor.**

**JAS. YULE, Manager, Crystal City.**

PLEASE MENTION FARMER'S ADVOCATE.

**W. D. FLATT,**  
HAMILTON P. O. and TELEGRAPH OFFICE.



OFFERS FOR SALE

7 Imported Bulls,  
5 Canadian-bred Bulls,  
30 Canadian-bred Cows and Heifers;

ALSO A NUMBER OF  
**IMPORTED COWS AND HEIFERS.**  
The noted imported bull, Golden Fame, is at the head of my herd. Prices consistent with quality. Correspondence and inspection invited. Visitors welcome. Catalogue on application.

**SPRINGBANK FARM.**  
Shorthorn Cattle, Oxford Sheep, and Bronze Turkeys. Young bulls for sale.  
JAS. TOLTON, WALKERTON, ONT.

**SHORTHORNS.** 2 Yearling Bulls, 1 Bull Calf, and my Stock Bull, Kinellar of York = 2504 =, by Imp. Kinellar Sort.  
F. MARTINDALE, York P. O., Ont.

**FOR SALE.**  
Six very choice Shorthorn bulls, from 9 to 15 mos. old. A number of Southdown and Leicester Rams, and Berkshire Pigs. E. Jeffs & Sons, Bond Head, Ont.

**MAPLE CLIFF Dairy and Stock Farm.**

**FOR SALE:**  
2 YEARLING BULLS, 7 BULL CALVES,  
10 TAMWORTH BOARS,  
Fit for fall service.  
SEVERAL YOUNG SOWS, 40 FALL PIGS,  
A number of BERKSHIRES of good quality.  
R. REID & CO., HINTONBURG, ONT.  
Five minutes' walk from Cen. Expl. Farm, Ottawa.

**Shorthorns.**  
Six bulls from 3 to 12 months old; one choice 4-year-old stock bull; eight 2-year-old and yearling heifers and heifer calves of choice quality and breeding.  
R. MITCHELL & SON,  
Burlington Jet. Station, Nelson P. O.

**Shorthorns and Leicesters.**  
Herd Established 1855.  
A number of young bulls, cows and heifers for sale. Herd headed by imported Christopher 28859, and Duncan Stanley = 16364 =. Grand milking cows in herd. Also a number of Leicesters of both sexes, from imported foundation.  
JAMES DOUGLAS,  
CALEDONIA, ONT.

**SHORTHORNS FOR SALE**—Three well-bred young bulls and a few heifers.  
ANDREW KNOX,  
Norwood Sta., C. P. R. South Dummer, Ont.

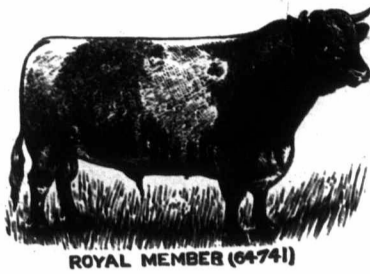
**SHORTHORNS**  
Crimson Flower and Minnie Strains. A number of very choice young bulls; also Cotswold sheep.  
DAVID BIRRELL,  
Greenwood, Ont.

**SHORTHORNS**  
Two choice young bulls, 17 months old; also a number of young cows and heifers.  
A. P. ALTON & SON,  
Burlington Jet. Station, Appleby P. O., Ont.

**Belvoir Farm**  
HAS  
SHORTHORN CATTLE,  
SHROPSHIRE SHEEP,  
CLYDE HORSES,  
YORKSHIRE SWINE  
Always for sale, of the highest standard of their respective breeds.  
RICHARD GIBSON,  
DELAWARE, ONT.

**10 Imported Shorthorn Bulls**  
ALL SCOTCH.

21  
IMPORTED  
HEIFERS.  
ALL SCOTCH.



ROYAL MEMBER (64741)

21  
IMPORTED  
HEIFERS.  
ALL SCOTCH.

Heifers all in calf to imported bulls. Also a number of first-class home-bred animals of either sex. The oldest home-bred bull we have was calved in April last. Correspondence or a personal visit solicited. Catalogues on application.

**H. CARGILL & SON, CARGILL, ONT.**  
Cargill Station and Post Office on G. T. R., within half a mile of barns.

**20 - Imported Scotch Shorthorns - 20**  
2 BULLS, 1 and 2 YEARS OLD; 14 HEIFERS, 2 YEARS OLD;  
4 YEARLING HEIFERS.

THIS importation came out of quarantine on the 12th July, and representatives of many of the leading Scotch families are amongst them, including Minas, Brawith Buds, Secrets, Mysies, Beauties, Lady Mays, Lustres, etc. The home-bred herd contains Indian Statesman = 23004 =, and 15 young bulls from 6 to 18 months old, and 50 cows and heifers of all ages. Registered Shropshires, yearling rams and ewes, ram lambs from imp. Flashlight. Any of the above will be sold at reasonable prices. Correspondence or a personal visit solicited. Catalogues on application.

Burlington Junction Station and Telegraph Office, G. T. R., within half a mile of farm.  
**W. G. PETTIT & SON,**  
FREEMAN, ONT.

**GLEN ROUGE JERSEYS.**  
WILLIAM ROLPE, Markham, Ont., offers twelve Jersey Bulls and Heifers (pure St. Lamberts), out of tested cows. Grand individuals. Prices right.

**PINE RIDGE JERSEY HERD**  
Has descendants of Canada's John Bull 5th, One Hundred Per Cent and Two Hundred Per Cent, with a grandson of the great Adelaide at the head. Two choice young bulls for sale and a few females.  
WM. WILLIS & SONS, o Newmarket, Ont.



AN ENGLISH HARVEST SCENE.

**AYRSHIRE CATTLE.**

KAINS BROS., Byron, Ont. (R. R. London), are offering a number of grand young bulls, prize-winners; also a few choice females. Prices right.

**1 Yearling Ayrshire Bull for Sale.**

Also 4 bull calves (spring of 1899), sired by Douglas of Loudoun.  
F. W. Taylor, Wellman's Corners, Ont.

**W. C. Edwards**  
AND COMPANY,  
IMPORTERS AND BREEDERS  
Laurentian Stock and Dairy Farm,  
NORTH NATION MILLS, P. Q.  
Pine Grove Stock Farm,  
ROCKLAND, ONTARIO.

**Ayrshires, Jerseys, Shropshires, Berkshires.**

Our excellent aged herd of Ayrshires is headed by our noted imported bull Cyclone. Tam Glen heads the young herd, and Fawn's Son 2nd of St. Anne's heads the Jerseys. The young stock are all from time-tried dams.  
A. E. SCHRYER, Manager.

The imported Missie bulls, Marquis of Zenda and Scottish Pride, at the head of herd, assisted by British Knight. We have a few extra good young bull calves that will be ready for the coming season.  
JOS. W. BARNETT, Manager.

We can be reached either by steamboat, the C. P. R., or C. A. R.; the C. A. R. making connections with the G. T. R. at Coteau Junction. Rockland is our station on all lines.

**HAZEL DELL TAMWORTHS AND BRONZE TURKEYS**

Largest and most select herd of Tamworths in the country. Four exhibition winning matrons in herd, including the Nurel sow, Gibson's Choice. Young stock for sale, from two to four months old. Orders booked for spring litters. Holsteins, all ages. Mammoth Bronze turkeys and White Wyandotte cockerels. Correspondence solicited.

**D. J. GIBSON,** Bowmanville, Ont.

**ASHTON FRONT VIEW STOCK FARM.**  
Four Shorthorn Bulls for sale, from 8 to 15 months old; all of choice breeding. Also Cotswolds of all ages for sale at all times. Visitors welcome.  
A. J. WATSON, Castleberg, Ont. C. P. R. Station and Telegraph Office, Bolton; or G. T. R., Palgrave.

**Shorthorn Bulls and Heifers.**  
Strongly tainted with the blood of the Crimson Flowers and Nonpareils, upon which have been employed such sires as Indian Duke, Crimson Prince, etc. Write John R. Harvie, Orillia, Ont.

**Herefords for Sale.**

**BULL**  
Santiago, two years old, Reg. 936; dam Rosella 2nd, by Cassio. Also Rosella 2nd 1239, bred by Hon. M. H. Cochrane.

**J. BERGIN, CORNWALL, ONT.**

**F. W. STONE ESTATE, GUELPH, ONTARIO.**  
The first Hereford herd established in Canada by importations in 1859 of the best prizewinners of England, followed by repeated further importations, including winners of first prize at Royal Agricultural Show. Choice young Hereford Bulls for sale. Also McDougall's Sheep Dip and Cattle Wash, fresh imported, non-poisonous and reliable; thoroughly tested by over forty years' use on farms of above estate.

**Ingleside Herefords**

First prize herd and medals for best bull and best female, Toronto, London, Ottawa. Send for prices and illustrated catalogue.

**TAMWORTHS**  
One boar six months old, and choice sows two months to a year old.

**H. D. SMITH,** COMPTON, QUE.

**GUERNSEYS.**

This is the dairy breed for ordinary farmers. Large, vigorous, and hardy, giving plenty of rich milk. Several fine young bulls for sale at very reasonable prices. A few heifers can be spared.  
Address—**SYDNEY FISHER,**  
17-y-o ALVA FARM, KNOWLTON, P. Q.

**St. Lambert of Arcfoat**

36943  
whose sire was 100 Per Cent.; dam, St. Lambert's Diana 69451. Official test, 18 lbs. 6 oz. in seven days. A few choice young bulls and heifers rich in his blood, from deep and rich milking dams, for sale at moderate prices. Tuberculin tested.

**H. E. WILLIAMS,**  
Sunnylea Farm, KNOWLTON, P. Q.

**Jersey Cattle**

THAT WILL PUT  
**MONEY IN YOUR POCKET.**

**Mrs. E. M. Jones,**  
Box 324, BROCKVILLE, ONT., CAN.

**BRAMPTON JERSEY HERD.**

Offering high-class A. J. C. C. cows and heifers in calf, and heifer calves; 9 choice young bulls. High-grade cows in calf; and Berkshires.  
**B. H. Bull & Son,**  
BRAMPTON.

**DON JERSEY HERD.**

Offering choice young Bulls and Heifers by Costa Rica's Son.  
**DAVID DUNCAN,**  
DON, ONTARIO.  
Nine miles from Toronto Market.

**Deschenes Jersey Herd.**

HEADED BY IDA'S RIOTER OF ST. LAMBERT 47570.  
4 young bulls fit for service—registered. Also Tamworth swine from diploma herd, Canada Central Fair, Ottawa, 1898.  
**R. & W. CONROY,**  
DESCHENES MILLS, QUEBEC.

**Oh, Yes!** We sell Holstein Bulls. Sold 7 in May. Have 12 now on hand; oldest 9 months old; bred right and are right. Write for particulars. Male or female. State what you want. **A. & G. RICE,** Currie's Crossing, Ont., Oxford County.

**MAPLE HILL..**  
**HOLSTEIN-FRIESIANS**  
 The Gold Medal Herd of '97 and '98.  
 A few choice cows and heifers now for sale, mostly bred to the butter bull, De Kol 2nd's Paul De Kol Duke. See my herd at the big fairs.  
 -o G. W. CLEMONS, ST. GEORGE, ONT.

**The Big 4 at Brookside**

**THEIR HOLSTEINS:**  
 Netherland Hengerveld..... Official test, 25.66 lbs.  
 De Kol 2nd..... " " 25.57 "  
 Belle Korndyke..... " " 25.77 "  
 Helens Burke..... " " 25.45 "  
 We want to sell 40 cows and heifers, and 20 young bulls, bred in the lines above mentioned. Write, stating exactly what you want.  
 om Henry Stevens & Sons, Lacona, N. Y.

**Maple Glen Stock Farm.**  
 Special. For immediate sale, Quality Tops...  
 Holstein of rich breeding. Blood Best...  
 Offer... winners, "test-winners"; others bred to bulls of rich merit; ranging in age from one to eight years old. Also a bull one year past, and a couple of Sylvia DeKol August bull calves. C. J. Gilroy & Son, Glen Buel, Ont. Brockville, on C. P. R. or G. T. R. om

**Galloways & Shropshires**  
 2 BULL CALVES by the sweepstakes bull of '98 at Toronto. In Shropshires we have about 30 ewes and 20 ram lambs for sale.  
 T. LLOYD-JONES & SONS,  
 BURFORD, ONT.

**HICKORY HILL AYRSHIRES.**  
 A few choice dairy bulls for sale, or will exchange for first-class fresh milch cows, if taken at once.  
 N. DYMENT, Clappison's Corners, Ont. Hamilton Station. -om

**FOR SALE.**  
 1 Three-year-old Ayrshire Bull; 4 Ayrshire Bulls, one year old; 3 Ayrshire Bulls, 8 months old; Bulls and Heifers under two months, and Cows of all ages; 8 Shropshire Ram Lambs, also Ewes; 1 Berkshire Boar, 1 year old; 2 Boars under one year, also Sows, pairs not akin. Plymouth Rock Hens and Chickens; a few fine Cockerels left.  
 J. YULL & SONS, Props., Carleton Place.

**AYRSHIRES FOR SALE.**  
 The kind that can speak for themselves. Size, constitution, dairy and show combined. Six young bulls for sale, by Glencairn 3rd (imp.), dam Primrose (imp.). Five from Napoleon of Auchenbrain (imp.). Their dams are all Glencairn heifers. Five of their dams were shown last fall at Toronto, London, and Ottawa. Also a few good cows. No culls sold.  
 JAMES BODEN, TREDINNOCK FARM.  
 -om STE. ANNE DE BELLEVUE, QUE.

**Ayrshire Bull Calves of 1899**  
 3 YET on hand, and more to come within the next month, from some of our best imported cows. Will sell at reasonable prices. Address:  
 ROBT. HUNTER,  
 Manager to W. W. Ogilvie. LACHINE RAPIDS, QUE.

**CHOICE AYRSHIRE BULLS**  
 I offer for sale 1 Ayrshire bull, calved Aug., 1898; 1 Ayrshire bull, calved Oct., 1898; 1 Ayrshire bull, calved April, 1899; 1 Ayrshire bull, calved Aug., 1899; 1 Ayrshire bull, calved Nov., 1899. Good individuals, sired by imported bull and from heavy-milking cows. -om  
 W. W. BALLANTYNE,  
 Formerly Thos. Ballantyne & Son. Stratford, Ont.  
 "NEIDPATH FARM" adjoins city, main line G.T.R.

**Trout Farm Stock Farm.**  
 Choice Ayrshire Cattle and Poultry.  
 Royal Star of Ste. Annes (7916), winner of first prize at Toronto, first prize and sweepstakes at London, 1898, heads the herd. For sale: Females of all ages, with size, constitution, dairy and show combined, all in calf to this famous bull; also 1 bull calf, 11 months old, winner of 5 first prizes without a skip, sired by a Morton-bred bull. Prices low, considering quality. Eleven pens of choice poultry, consisting of Light and Dark Brahmas; Buff, White, Black and Partridge Cochins; B. P. Rocks; Black and White Minorcas—100 cockerels and pullets in exhibition or breeding birds; also choice yearling cocks and hens in above breeds from \$1.50 to \$3.00 each, according to quality. For particulars, write  
 WM. THORN,  
 NORFOLK CO. -o LYNEDOOH, ONT.

**W. S. Hawkshaw & SON.**  
 I have just landed with a fresh importation of  
**Shropshire Sheep.**  
 These sheep were all bred before leaving England. We have also for sale Tamworth Swine and Am. Bronze Turkeys. -om  
 GLANWORTH, ONT.

**EUROPEAN ADVERTISEMENTS.**  
**W. W. Chapman,**  
 Secretary of the National Sheep Breeders' Association, Secretary of the Kent or Romney Marsh Sheep Breeders' Association, and late Secretary of the Southdown Sheep Society.  
 Pedigree Live Stock Agent, Exporter and Shipper. All kinds of registered stock personally selected and exported on commission; quotations given, and all enquiries answered.  
 Address: FITZALAN HOUSE, ARUNDEL ST., STRAND, LONDON W. W. Cables—Sheepote, London. -om

**The Danesfield Pedigree Stock**  
 IMPORTERS desirous of securing selections of either Shire horses, Aberdeen-Angus cattle or Hampshire Down sheep should inspect the stud, herd and flock, property of Mr. R. W. Hudson, which are kept in the highest degree of purity that care and selection can produce at Danesfield, Marlow, Bucks, England. Specimens of horses, cattle and sheep have been largely exhibited at the principal English shows during 1899 with very prominent success. For full information, etc., apply:  
 MR. COLIN CAMPBELL,  
 ESTATE OFFICE,  
 DANESFIELD, MARLOW, BUCKS,  
 who will be happy to make arrangements for inspection, or to quote prices. -o

**FAMOUS ALL OVER THE WORLD.**  
**ALFRED MANSELL & CO.,**  
 LIVE STOCK AGENTS AND EXPORTERS,  
 SHREWSBURY.  
 BRITISH STOCK selected and shipped to all parts of the world. Write for prices to ALFRED MANSELL & CO., Secretaries of the Shropshire Sheep Breeders' Association, Shrewsbury, England. -o

**FAIRFIELD LINCOLNS**  
 LARGEST NUMBER  
**Lincoln Rams**  
 IN AMERICA, AT  
**FAIRFIELD STOCK FARM,**  
 ONE MILE EAST OF ILDERTON, ONTARIO.

These rams are especially adapted for ranch purposes, being very large, strong and well woolled. They were sired by such noted rams as "Kenimore," "Duke of Kent," "Royal Prince of Canada," and other rams of the Clark, Wright, Hood and Dudding strains. Kenimore and the Duke of Kent clip 21 and 26 pounds of wool respectively. Can fill carload orders on a day's notice. Sold 600 rams to the range trade last year. Make a specialty of car lots, either rams, ewes or lambs. Our grand 1899 importation has just arrived. We have a grand lot of imported rams to head stud flocks, selected from the famous English flocks of the Messrs. Kirkham, Dean, Wright, and Wildsmith. Write for prices, or come and see the sheep.  
 J. H. & E. PATRICK,  
 ILDERTON, ONT.

**SHROPSHIRE SHEEP AND COLLIE DOGS.**  
 200 Bronze Turkeys, the Farmers' Daughter strain. 100 White Holland Turkeys.  
 W. H. BEATTIE, Wilton Grove, Ont.

**Dairyman Wanted.** One who understands feeding, milking and buttermaking, and who is willing to work to make himself a good situation. Give salary expected, experience and references. Address:  
 JOHN J. LENTON, Clerk,  
 "Hambledane Farms,"  
 LUTHERVILLE, MD. -o



**AVENUE OF NATIVE MAPLES.**  
 Planted in 1890, when about size of whipstocks; grown from seed. Over three hundred trees planted; one died first year, none since. Brandon Experimental Farm.

**J. E. CASSWELL,** Laughton, Folkingham, Lincolnshire.  
 breeder of Lincoln Long-wooled Sheep, Flock No. 46. The flock was in the possession of the present owner's great-grandfather in 1785, and has descended direct from father to son without a single dispersion sale. J. E. Casswell made the highest average for 30 rams, at the "Annual Lincoln Ram Sale," 1895 and 1897. The 1896 rams were all sold for exportation. Ram and ewe hoggs and shearings for sale, also Shire horses, Shorthorns, and Dark Dorking fowls. Telegrams: "Casswell, Folkingham, Eng." Station: Billingboro, G. N. R. -o

**Shropshire Rams and Ewes**  
 Newly imported from the greatest English breeders. Home-bred rams and ewes of best quality. Scotch Shorthorns and Clydesdale horses for sale at moderate prices, and in large numbers, by  
 ROBERT MILLER,  
 -om STOUFFVILLE, ONT.

**Shropshires...**  
 I offer for sale SHEARLING EWES, sired by Imported Newton Stamp 99631, prizewinner at Toronto, 1897; also RAM and EWE LAMBS, by Standard, a son of Newton Lord.  
 GEORGE HINDMARSH,  
 -o AILSA CRAIG, ONT.

**Shropshires.** One shearing ram, and a few ram lambs. One Shorthorn bull calf eleven months old. Write for prices.  
 HALDIMAND CO. -o H. GEE & SONS, Fisherville.

**SMITH EVANS, GOUROCK, ONT.,**  
 Breeder and importer of registered Oxford Down Sheep. Selections from some of the best flocks in England. Stock for sale at reasonable prices. Inspection invited.  
 6-1-y-o

**Oxford Down Sheep**  
 Flock Established in 1881.  
 Have for sale 120 registered ram lambs, and 50 ewes of different ages. Singly or in car lots. Prices reasonable.  
 HENRY ARKELL,  
 -om ARKELL P. O., ONT.  
 Guelph: Telegraph and Telephone.

**LARGE ENGLISH BERKSHIRES.**  
 Herd headed by five first-prize boars of large size and fine quality. Twenty-five young sows and ten boars for sale, bred from prizewinners. Pairs supplied not akin.  
 GEORGE GREEN, - FAIRVIEW P. O., ONT.  
 om Telegraph and Station: Stratford, G. T. R.

**SNELGROVE**  
**BERKSHIRES AND COTSWOLDS.**  
 We can supply singly, in pairs, or trios, not akin, or in larger numbers, registered Berkshire pigs and Cotswold sheep of the highest class. Young boars fit for service, sows old enough to breed. Young pigs 6 to 8 weeks old. Ram lambs and ewe lambs. Write for prices and particulars.  
 SNELL & LYONS,  
 -om SNELGROVE, ONT.

**Berkshires, Yorkshires, AND Scotch Shorthorns.**  
 Berkshire boars fit for service, sows safe in pig; boars and sows four months old, extra quality. Yorkshire boars fit for service, sows ready to breed, sows safe in pig, of the bacon type. One bull calf eight months old, and one heifer calf nine months old, of choice quality and breeding. Prices reasonable. All stock guaranteed as described. Write  
 JAS. A. RUSSELL,  
 -o PRECIOUS CORNERS, ONT.

**WOODSTOCK**  
**Yorkshires, Berkshires, Shorthorns**  
 40 head of improved White Yorkshires. Boars and sows from 2 mos. to 9 mos. Sows in pig to imported boar. 20 head of choice Berkshires, same age. Six Shorthorn bulls from good milking strains. Address: -om  
 H. J. DAVIS, BOX 290, WOODSTOCK, ONT.

**NORTH BRUCE HERD**  
 OF  
**Improved Large Yorkshires.**  
 Boars fit for service, sows ready to breed, and young stock ready to ship, for sale. Orders booked for spring pigs. Write for prices.  
 WM. HOWE,  
 Pt. Elgin St., G. T. R. -o NORTH BRUCE.

**Improved Large White Yorkshires.**  
 Good ones at a reasonable price. Also some splendid B. P. Rock Cockerels, well-bred, large and vigorous.  
 THOMAS BAIRD & SON,  
 -o CHESTERFIELD, ONT.

**PINE GROVE FARM HERD**  
**OF LARGE YORKSHIRES.**  
 Imported and Canadian-bred, from the Hasket family, which has taken more prizes at the leading fairs in Canada and the World's Fair at Chicago than any other family of Yorkshires in America. Young boars and sows fit for breeding for sale. Correspondence solicited, which will receive prompt attention.  
 JOSEPH FEATHERSTON, Streetsville, Ont. om

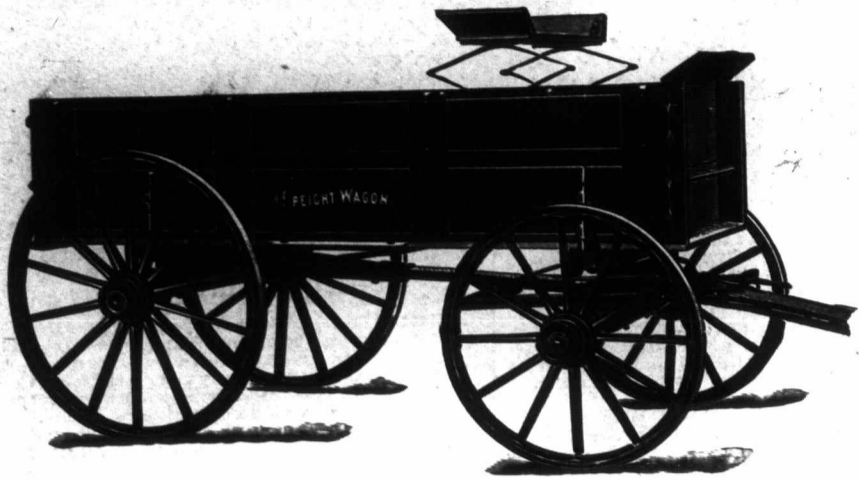
**OAK LODGE HERD**  
**OF Large Yorkshires.**  
 The oldest established and largest in America. Look up the record of this herd at the larger exhibitions—more prizes won than all others combined, sweepstakes over all breeds in class for bacon hogs two years in succession; winner of championship and gold medal at the Royal; also several prizewinning boars and sows personally selected from noted English herds. Oak Lodge Conqueror and Oak Lodge Challenge, two of the best boars in Canada, are in the herd. Stock from these boars are winners. Improve the quality of your pigs by securing some of the Oak Lodge blood. -om  
 J. E. BRETTHOUR, BURFORD, ONT.

**W. R. BOWMAN,**  
 MT. FOREST, ONT.  
 YORKSHIRE BOARS, 200 LBS., \$15.00.  
 YORKSHIRE SOWS, IN FALLOW, 12.00.  
 SIX-WEEKS PIGS, 5.00.  
 These are all of the most approved strains, being good growers and easy feeders.

**SHROP. AND SUFFOLK** shearing rams and ram lambs, \$10 to \$15. One JERSEY COW, one YEARLING HEIFER and HEIFER CALF for \$100. Registered in the A. J. C. C. -o

**OXFORD HERD OF POLAND-CHINAS**  
 The home winners of the winners. Headed by the imported boars, Conrad's Model and Klondike, assisted by Bacon Boy and Lennox. Has won 64 out of a possible 69 first prizes. Stock of all ages for sale. Write for prices or come and see  
 W. & H. JONES,  
 OXFORD CO. -om MT. ELGIN, ONT.

# The King OF THE Road



PRAIRIE FARM WAGON.

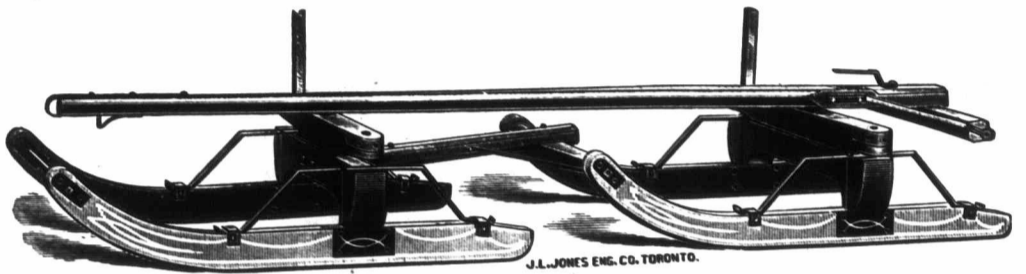
Points of Superiority :

Light Running.  
Perfectly  
Proportioned.  
Durability  
and Finish.



HEAD OFFICE :  
Markham, Ont.

DISTRIBUTING AGENT :  
H. F. ANDERSON,  
WINNIPEG, MAN.



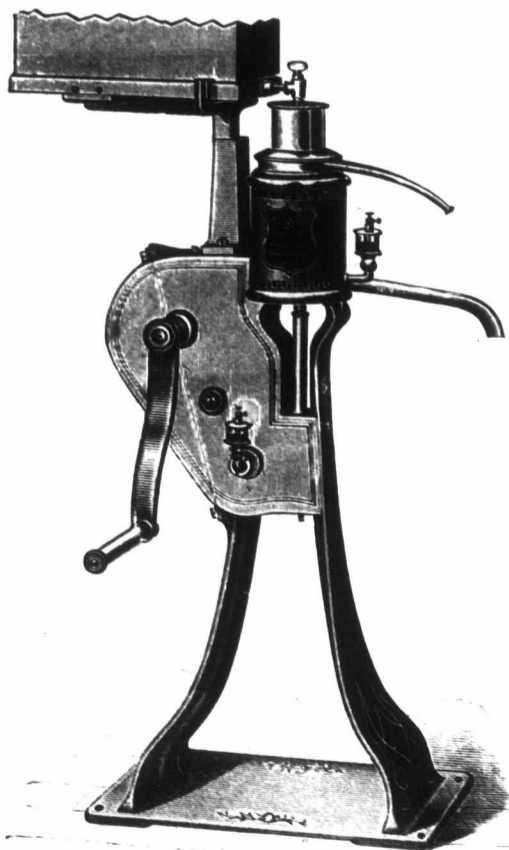
J.L. JONES ENG. CO. TORONTO.  
MANITOBA ONE BEAM SLEIGH.

Write for Descriptive Catalogue and Hanger.

## THE SPEIGHT WAGON CO., MARKHAM, ONTARIO.

"ALWAYS IN THE LEAD, AND NOW BETTER THAN EVER."

### The Improved United States Cream Separators.



THE Improved United States Cream Separators have been proven by tests repeated from year to year, at all Agricultural Experiment Stations in the last four or five years, to be superior to all other Cream Separators, many tests of the skim milk showing only .01 or .02, and are now still further improved and greatly increased in capacity for

1900 or the New Century.

All experienced Cream Separator operators concede that the United States is unapproached in thoroughness of separation and perfection of manufacture. All gears are enclosed; Bowl Spindle covered with brass shield; have ball bearings. The most cost is put into their manufacture, and they are therefore better and will wear longer, yet are sold for less, than others, considering capacity and close skimming—are therefore the cheapest, because the best.

#### Examine "New Century" Prices and Capacities

No. 9 Low Frame; capacity 150 to 175 lbs.,	\$50.00.
No. 8— " " " 225 to 250 "	\$65.00.
No. 7— High " " 275 to 300 "	\$85.00.
No. 6— " " " 350 to 400 "	\$100.00.
No. 5— " " " 450 to 500 "	\$125.00.
No. 3½— " " " 650 to 700 "	\$165.00.

Don't be inveigled into purchasing a Cream Separator until you have first sent for the "New Century" Catalogue of the United States, which will be mailed you free.



WE furnish everything necessary for a complete Dairy or Creamery Outfit.

Agents wanted in all towns not at present canvassed.

## Vermont Farm Machine Company, Bellows Falls, Vt., U. S. A.



**Natural History of the Honey-bee.**

BY MORLEY PETTIT.

The honeybee is an insect belonging to the order Hymenoptera. It flourishes only when associated in large number. In these groups, called "colonies," are found:



Queen.

- 1st. One queen, which is the only perfect female and lays all the eggs.
- 2nd. Many thousand worker bees, or incomplete females, which do the work of the hive.
- 3rd. At certain seasons of the year, several hundreds of drones, or male bees.

It was early noticed that one bee in each hive was larger and more stately than the others. This was called the "king bee" until 1609, when Butler, an English bee-writer, stated that the king bee was a queen, and that he had seen her deposit eggs. His discovery was verified by Swammerdam in 1737.

Queens are reared in peanut-shaped cells built of beeswax, about an inch deep and one-third of an inch in diameter, attached to the edges or sides of the combs. An egg is placed at the bottom of this cell, and in three days hatches a small grub or larva. For five days this larva floats in a thick, milky food, royal jelly, secreted and supplied by nursing worker bees. At the end of that time it is old enough to spin its cocoon, after the manner of insect larvæ, and to be sealed in its cell with a porous cap of beeswax mixed with pollen. This occupies one day, and six days more elapse before the virgin queen emerges from her cell. Immediately upon gaining her freedom, she searches the hive for rival queens. Any royal cells still unopened are sought and the occupant ruthlessly stung to death. If two queens hatch at the same time, they meet and fight until one is killed, and the other becomes queen of the hive.

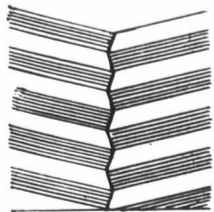
"Five days or more after her birth, the virgin queen goes out to have intercourse with a drone." The period is usually longer, however, the average being six or seven days. In one mating she is fertilized for life and the queen never leaves the hive again, except when the bees swarm. "The drone dies in the act of fertilization."

About two days after fertilization the queen begins laying. This is her sole duty, and she performs it so well that some lay more than three thousand five hundred eggs daily for several weeks in succession during the breeding season.

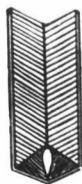
"Queens lay more or less according to:

- 1st. The season.
- 2nd. The number of bees that keep up the heat of the brood nest.
- 3rd. The quantity of food which they eat. When bees harvest honey or pollen..... they feed the queen as they pass by her oftener than they would otherwise; hence her laying increases in spring and decreases in summer and fall."—Langstroth on the Honeybee.

The eggs are of two kinds, fertilized and unfertilized, the former producing females (queens or workers, according to the food and treatment given the larva), the latter producing drones.



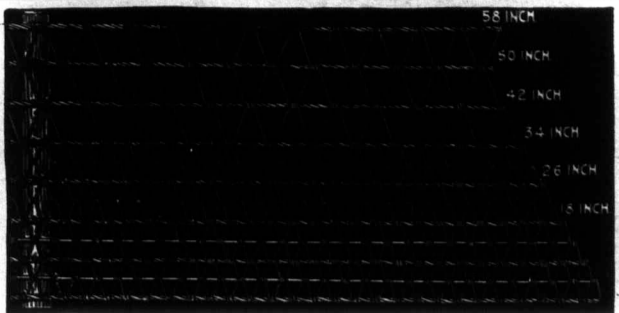
Cross-section of comb, showing slope of cells and shape of base.



Cross-section of cell, showing egg.

The length of a queen's usefulness is from two to three years, and she dies of old age in her fourth or fifth year.

**THE ELWOOD FENCES**



are the Standard Woven Wire Fences of the World. Standard in quality of spring steel wire, standard in heavy galvanizing, standard in efficiency, durability and economy. Standard for every fencing purpose, for horses, cattle, hogs, pigs, sheep, poultry and rabbits. **STANDARD OF ECONOMY**—More of our fences sold and put up in 1899 than of all other woven wire fences combined. Sold by our agents everywhere. If no agent in your town write to

**AMERICAN STEEL & WIRE CO., Chicago or New York.**

**The Gem Fence Machine**

BEATS ALL RECORDS.



ON Thursday, November 23rd, at the Scotten Estate, Sandwich West, MR. JOHN ALLAN succeeded in smashing all fence-weaving records and placing to his credit the remarkable record of weaving in 10 hours 120 rods of 10-wire fence, with No. 12 cross-wires, 15 inches apart. A number of prominent persons were present, including Messrs. A. Cole and E. McKee, ex-Wardens of the County; Noe Dufour, ex-Reeve and Councillor; R. Monforton, Tp. Assessor; W. T. Lonsbrough, Farm Supt. Scotten Estate; Geo. Green, Bookkeeper Scotten Estate; E. H. Stowell, of Pontiac; and others.

**THE GEM**

is, without question, the simplest, cheapest and best Fence Machine made; nothing to break or wear out; fully warranted.

**PRICE, \$5.**

We have also a large quantity of Colled and other Wire of best quality in stock and at Lowest Prices.

**McGregor, Banwell & Co., Windsor, Ont.**

**STILL ANOTHER BEAUTIFUL Basement Wall**  
—BUILT WITH—  
**Thorold Cement.**



**BARN OF THOMAS HARTLEY, NEAR NORWICH, ONT.**  
Size of Basement Walls, 50 feet x 68½ feet x 9½ feet high.

**WHAT MR. HARTLEY HAS TO SAY ABOUT THOROLD CEMENT:**

ESTATE OF JOHN BATTLE, MFRS. OF THOROLD CEMENT, THOROLD, ONT.:  
NORWICH, ONT., October 21, 1899.  
DEAR SIRS,—I used this year 135 barrels of your justly celebrated Thorold Cement in building my barn walls and floors, also a silo foundation and milk cellar. I wish to give you my testimony to the good quality of the Thorold Cement, and will strongly recommend its use to my brother farmers. My work was done under the superintendence of your traveller, M. A. Ware, whom I consider a capable man in his work, as he thoroughly understands the use of Cement in all kinds of structures.  
Respectfully yours,  
THOMAS HARTLEY,  
Dealer in Thoroughbred Holstein Cattle.

Mr. Thomas Hartley is a prosperous farmer in Oxford County, about two miles from Norwich. He is also one of the largest breeders of Holstein cattle in the County of Oxford. In the construction of the walls of his fine large barn, size 50 ft. by 68½ ft. x 9½ ft. high, also of Cement floors all through the same, 135 barrels of Battle's Thorold Cement were used, with 84 cubic yards of gravel, and a quantity of small stone. Mr. Hartley also had built a large silo foundation 16 ft. x 17 ft., also a milk cellar 6 ft. x 10 ft. This room is divided from the stables with an 8-inch concrete wall. He has stabling room for twenty-eight head of cattle and five head of horses, arranged with single stalls and two box stalls.

For free Pamphlet with full particulars, address **ESTATE OF JOHN BATTLE, Thorold, Ontario.**

**PLEASE MENTION FARMER'S ADVOCATE.**

When she becomes useless from any cause, the workers, who are the real rulers in the hive, rear a young queen to supersede the old.

The workers are reared in regular hexagonal cells of wax, each side forming a partition between two cells. This figure allows the largest number of cells side to side in a given surface. The comb thus formed consists of two layers of cells with closed ends together and open ends showing on each side.

An egg destined to secure a worker bee does not differ from the egg intended to become a queen; but the young queen larva is fed a richer and more copious supply of food. The periods of transformation for the worker are:

Incubation of egg	3 days.
Growth of larva	6 "
Spinning of cocoon	2 "
Time till hatching	10 "
<b>Total</b>	<b>21 days.</b>

"The workers are the smallest inhabitants of a hive, and compose the bulk of the population." They are nurses, housekeepers, carpenters, harvesters and scavengers, policemen and standing army, being always armed, besides resolving themselves into heaters and ventilating fans, as the needs of the hive and the curing of honey require. Always busy, they have different occupations at different periods of life. From observation of the progeny of an Italian queen placed in a colony of black bees, Dzierson draws interesting conclusions:

"1st. During the first two weeks of the worker bee's life, the impulse for gathering honey and pollen does not exist, or, at least, is not developed, and nearly three weeks pass before the gathering impulse is sufficiently developed to impel her to fly abroad and seek for honey and pollen among the flowers.

"2nd. In the early stage of their existence, the impulse for comb building is stronger than later in life.

"3rd. It is probable that the brood is chiefly attended to and nursed by the younger bees."

It often happens, when a colony is hopelessly queenless, that one or more of the workers undertakes the task of egg laying. These eggs produce only drones, and can be easily detected by the irregular manner in which they are deposited, often several in a single cell. Pleased at getting eggs, the bees try to rear a queen by enlarging the cells and feeding the larvæ on special food; but the poor over-fed drone usually dies in the cell. The best remedy is to give them a laying queen.

Someone has quaintly said that the bee is a summer bird, and it is true that the average life of a worker is thirty-five days in the honey season. Those reared in fall and early spring, of course, attain a greater age.

The remaining member of the family, the drone, is a gentleman of leisure. He is larger and more clumsy than the graceful queen or the busy worker, has no sting, and performs only the functions of the male. Drones are reared in "drone comb," which differs from worker comb only in having larger cells. The period of development from the egg is 21 days. At the close of the honey season they are driven from the hive, and either stung or allowed to perish.

**DES MOINES INCUBATOR CO**

The BEST and the CHEAPEST.

**95 Per Cent.** Hatches are often reported by those who use these incubators.

One reason for this record is absolute uniformity of temperature in egg chamber; correct instructions for operating; has fireproof lamp. A great mistake it would be to purchase an incubator or brooder without first getting a copy of our 148-page catalogue. Send 3 cents for illustrated catalogue of Incubator, Brooder, Poultry and Poultry Supplies.

"THE POULTER'S GUIDE" (new edition) 15 cents by mail.

**O. ROLLAND,**  
373 St. Paul St., MONTREAL.

Sole Agent for the Dominion.

When Buying Why not Get the Best

# MIKADO CREAM SEPARATORS

ARE THE BEST.



Are You

Terms

Easiest

UP-TO-DATE ?

The old method of "setting" milk for cream now as obsolete as muzzle-loading gun, grass scythe or grain cradle.

to suit all buyers.

You can make the price of a MIKADO CREAM SEPARATOR out of the extra butter received before you have to pay for it.

running, cleanest

skimming, and all washed up and ready for next time in three minutes.

## Women Interested.

*Farmers' wives have few labor-saving helps. Their work is often one of prolonged drudgery.*

The old plan of buttermaking is one which involves much unclean drudgery for the woman of the farm. Many farmers do not think of this. There is no good reason why this work of the farmer's helpmeet—whose work is never done—should not be made as light and agreeable as possible. This may be one of the reasons why the farmer's wife breaks down so soon or loses her early freshness; while the farmer, with his many and often costly labor-saving machines, has so lightened his part of the work that much of his old-time drudgery is a thing of the past.

While farmers are proverbially fond of their wives, they do not always spare them in their work as much as they might. A man is either mean or thoughtless who will insist upon having the most modern make of reaper mower and hay-rake, while compelling his patient and uncomplaining wife to drudge on, unaided by so important a mechanical device as the Cream Separator. The Separator is now recognized as a *necessity* on the farm. The fact that several hundred thousands are now in use throughout the world indicates that it is no longer an experiment, since by its work and the labor it saves, it is a device which pays for itself in a short time. There is nothing marvellous about the process. The milk is fed from a receiver into a bowl which is rotated at a high rate of speed, causing the milk and cream to separate because of the difference in their weight. It is merely the hastening of the natural action of gravity. It is a fact that a child with one of our smaller machines can keep up with the milking of three men. Butter made from this sweet cream is of the best quality and commands the highest price. Grocers know the difference and pay accordingly. They can easily tell that which is made from "separated" cream. The general advantages secured by using a Separator are as follows: 1. It saves a great deal of *labor*, especially for the women on the farm. 2. It saves *time* in buttermaking, reducing it more than half. 3. It saves the *cost* of utensils and the space required for their accommodation. 4. It saves the cost and handling of ice needed to keep the milk sweet. 5. It produces *more* cream from a given amount of milk. 6. It produces *better* cream. 7. If cream is sold, the Separator cream commands a better price. 8. Separator cream is more "churnable"; it can be churned in less than half the time. 9. As it is perfectly sweet, it is more valuable to use in making ice cream, and commands a better price. 10. It gives from 10 to 25 per cent. greater yield of butter; that is to say, from 20 to 50 lbs. more from the milk of each cow. A difference of from \$5 to \$10 per cow per year. 11. The cream and skim-milk will keep sweet much longer. 12. Doubles the value of skim-milk for feeding to stock. The farmer can feed his calves fresh warm milk, instead of old sour skim-milk. The milk is free from disease germs, because the filth is removed by the Separator.

**We Have Sold Between 600 and 700 Separators Within the Last 20 Months, and Reproduce Below a Very Few of the Many Testimonials We Have Received :**

Manitoba Cream Separator & Supply Co., Winnipeg, Manitoba: ROCK LAKE, Oct. 4, 1899.  
Gentlemen.—The Mikado Cream Separator I purchased from your agent at C. City is all he claims for it. It can separate a pail of milk in four minutes and turns very easy, and can be cleaned in three minutes after using. I have nine cows and have made price of machine over and above what I got before I purchased the machine. I have had separator since April, 1899. Six good cows will pay for separator in 12 months. WILLIAM SLACK.

LETHBRIDGE, N.-W. T., July 10, 1899.  
We are using the Mikado Cream Separator No. 5845 and it is giving perfect satisfaction in every respect. Will be glad to answer any inquiries respecting the machine. LITTLEBOW CREAMERY CO.

PILOT MOUND, Manitoba.  
I am more than pleased with the Mikado Separator I bought from you. I consider it the best separator on the market. It is easy to turn and a first-class skimmer. I am raising 15 calves and they look better this summer than I ever had them before: their coats are firm and slick and they are all fat. They have had no chops.

The separator not only makes money for me, but saves me a lot of labor. We have no pans lying around in the way as formerly, but now everything is washed up and put away just after milking. JOHN DICKINSON.

POPLAR PARK, Man., Sept., 26, 1899.  
Dear Sirs, I would not lose the Mikado Separator for \$200. It has done all it is said to do, and does it satisfactorily. I have no fault with it at all. It runs light, and skims the milk as well as can. Being a Swede, I know of several separators, but none does better work than this Mikado I have. I remain, Yours truly, JOHANNE ANDERSON, Postmaster, Poplar Park, Man.

SELKIRK, MAN., Sept. 22, 1899.  
I have six cows and find I make 50 per cent. more butter with the Mikado Cream Separator than I formerly did by the old process of deep-setting pans. Apart from the profit, it is very clean and it saves me a great deal of work and time. Our calves of this spring are as large as any others we have ever had at one year old and much fatter. I find the greatest benefit derived in the winter and now have no difficulty with the cream, when in the past it required time and trouble to prepare the cream. I would not be without it if I could not get another for considerable more than I paid for it. MRS. MUCKLE, Clondeboye P. O.

WINNIPEG, Man., Oct. 6, 1899.  
I bought your Mikado Separator last March and have since received splendid satisfaction. It has done all the agent said it would do. It saves us a lot of work, skims perfectly clean and runs easier than any other machine that I have ever seen. I now make over 50 per cent. more butter with the separator than I did from the deep-setting cans, although I do not get near that proportion of cream extra, and I think the churning is easier. It is very cleanly. I detected blood in the milk which troubled one of my cows all summer, otherwise I am satisfied I should have known nothing of it, and would have churned just the same. I would not do without it for considerable more than it cost us, provided I could not get another. HENRY SEARMAN.

COEDMORE FARM, Solsgrith, Oct. 24, 1898.  
Gentlemen,—I desire to say how pleased I am with the Mikado Separator. It does its work thoroughly, and is very easy to run. JOHN L. WHITWORTH.

BELCARRIS, April 3, 1899.  
Gentlemen,—I have been using one of your Mikado Separators that I purchased from your agent at Lorie for the past season. It is all that it was recommended. Skims clean and easier than any other machine I have tried. Yours truly, JOHN MORTON.

IF YOU DO NOT KNOW ABOUT THE MIKADO WE WILL BE GLAD TO SEND YOU PAMPHLET WITH FULL INFORMATION.

# Manitoba Cream Separator Co.,

WINNIPEG, MANITOBA.

The "CURE BRAND"



"Your remedy always cures," says a leading shipper—that's it in a few words.

**MITCHELL'S ANTI-LUMP JAW**

Is a cure brand. It may be imitated in the label, but it can't be imitated in the cures it makes.

OUR GUARANTEE: "If it doesn't cure, your money back at once."

One bottle, \$2.00; three bottles, \$5.

Get our little book about Lump Jaw, FREE.

W. J. MITCHELL & CO., CHEMISTS, WINNIPEG, MAN.

**Persiatric Sheep Dip and Animal Wash.**

A NON-POISONOUS LIQUID "DIP."

Kills Ticks. Kills Red Lice. Heals Wounds.

Greatly Improves quality of WOOL.

For Horses, Cattle, and Pigs.

Removes all insects. Thoroughly cleanses the skin.

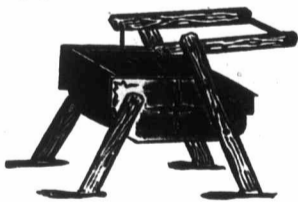
Leading "STOCKMEN" endorse it as the CHEAPEST and most EFFECTIVE "Dip" on the market.

SOLD BY ALL DRUGGISTS, 50 cents PER QT. CAN. Special rates in larger quantities.

MADE ONLY BY

**The Pickhardt Renfrew Co. LIMITED, STOUFFVILLE, ONT.**

**VOLLMAR'S PERFECT WASHER**



has gone through various stages of improvement, until it stands, as its name indicates, a perfect Washer. All machines are fully warranted. AGENTS WANTED. For full particulars, prices, etc., apply to

PHILIP VOLLMAR, CHATHAM, ONTARIO.

Catalogue Printing our Specialty.

Many of the best Catalogues in Canada are produced by us. Latest type faces, designs, ornaments, and modern machinery.—Best in America. Up-to-date covers designed by special artists without extra charge.

London Printing & Litho. Company, Ltd., LONDON, ONTARIO.

**\$3 a Day Sure** Send us your address and we will show you how to make \$3 a day absolutely sure; we furnish the work and teach you free; you work in the locality where you live. Send us your address and we will explain the business fully; remember we guarantee a clear profit of \$1 for every day's work; absolutely sure, write at once. IMPERIAL SILVERWARE CO., Box 419, WINDSOR, ONT.

**THE GLOBE FURNITURE COMPANY, LIMITED, WALKERVILLE, ONTARIO.**  
**CHURCH Pews, PULPITS, ALTARS, BARS, SCHOOL DESKS, ETC.**  
 WRITE FOR PRICES

EVERYTHING FOR THE **Garden, Farm and Greenhouse**  
 The best **SEEDS** that Grow.

FOR SIZE AND QUALITY OUR

**BULBS**

ARE UNEQUALLED.



OUR STOCK OF ROSES AND

**PLANTS**

IS UNSURPASSED.

Clematis, Vines, **SHRUBS**, Small Fruits, &c.

ILLUSTRATED CATALOGUES (FREE). SEND FOR ONE NOW.

**The Steele, Briggs Seed Co., Ltd., TORONTO, ONTARIO.**

RELIABLE **SEEDS**

OUR STOCK INCLUDES ALL THAT IS BEST IN... **FARM AND GARDEN**  
 Garden and Field Roots,  
 Flower Seeds and Flowering Plants,  
 Grasses, Clovers, and Seed Grain.

Illustrated Catalogues mailed free on application.

**WILLIAM EWING & Co.,**

SEED MERCHANTS,

142 MCGILL STREET, MONTREAL.



THE **NATIONAL Cream Separator**

FOR USE IN FARM DAIRIES

THIS cut shows the "National" No. 1 Hand Power Cream Separator, manufactured by The Raymond Manufacturing Company (Limited), Guelph, Ont. Since the introduction of this machine, it has taken so well that we have not been able to supply the steadily increasing demand. It has proved a decided success from the start. We have consequently been obliged to increase our manufacturing capacity, and have put in a number of the most improved machines obtainable, by which we are now in a position to more than double our former output. No expense is being spared to make the "National" a perfect machine, and we believe we have succeeded so far as to claim that it has no equal for:

- 1st. **Closeness of Skimming**, and smooth, even condition in which it leaves the cream under all circumstances.
- 2nd. **Easy Cleaning**. It takes only about half the time that other Separators require, on account of the few pieces there are to handle.
- 3rd. **Ease of Running**. Its simplicity of construction, having so few bearings, and those being anti-friction ball bearings, makes it such an easy-running machine that a boy or girl from ten to twelve years of age can operate it.

A trial of the "National" is all that we ask in order to ensure a sale to an intending purchaser. The sale of this machine for the Province of Ontario is in the hands of

**THE CREAMERY SUPPLY CO., GUELPH, ONT.**

who exhibit at the Toronto Industrial show this year, including the "National" Separator, took first prize. For further particulars enquire of  
**The Raymond Manufacturing Company of Guelph, Limited, Guelph, Ont.**  
 PLEASE MENTION FARMER'S ADVOCATE.

STAY AT **HOTEL LELAND**

The Leading Hotel of the West.  
 ALL MODERN CONVENIENCES. RATES, \$2 TO \$4 PER DAY.  
 BUS MEETS ALL TRAINS.  
**W. D. DOUGLAS, Prop., Winnipeg, Man.**

ADDRESS **Belleville Business College**  
 BELLEVILLE, ONTARIO.

WINTER TERM OPENS JAN. 2nd.  
**CENTRAL Business College**  
 STRATFORD, ONTARIO.  
 A large, popular and progressive school. Our catalogue is a gem. Write for one. It will interest you.  
**W. J. ELLIOTT, Principal.**

**Situations**

in the Business Field are constantly opening to those who are qualified to fill them. **The**



**TORONTO**, received these calls for help within three days from Oct. 30th: Bradstreet's Agency, lady stenographer; H. H. Williams, Real Estate, young man, clerk and stenographer; J. D. King & Co., lady stenographer; Gowans, Kent & Co., lady bookkeeper; King-Darrell Produce Co., young man, bookkeeping and stenography.

Our students secure such places as soon as they become qualified for them.  
 IT WILL PAY TO PREPARE FOR THEM.  
 Correspondence invited.  
**W. H. Shaw, Principal.**

**METAL EAR LABELS**  
 Used by all Live Stock Record Associations.  
 Sheep size, per 100.....\$1.50  
 Hog size, per 100..... 1.50  
 Cattle size, per 100..... 2.00  
 Punch and Pliers for attaching labels to ear, each \$1.00.  
 Name on one side and any numbers wanted on reverse side. **F. S. BURCH & CO.**  
 178 Michigan St., Chicago, Ill.

**FAMILY KNITTER!**  
 Will do all knitting required in a family, homespun or factory yarn. **SIMPLEST KNITTER ON THE MARKET.**  
 We guarantee every machine to do good work. Agents wanted. Write for particulars.  
**PRICE, \$8.00.**  
**DUNDAS KNITTING MACHINE CO., DUNDAS, ONTARIO.**

THE ONLY FIREPROOF HOTEL IN THE CITY.  
**Queen's Hotel**  
 MONTREAL.  
**G. & N. VALLEE, Proprietors**  
**GEO. D. FUCHS, MANAGER.**

**TORONTO ENGRAVING CO.**  
**92 BAY ST**  
 CUTS BY ALL PROCESSES  
 LIVE STOCK A SPECIALITY.  
 PLEASE MENTION FARMER'S ADVOCATE.

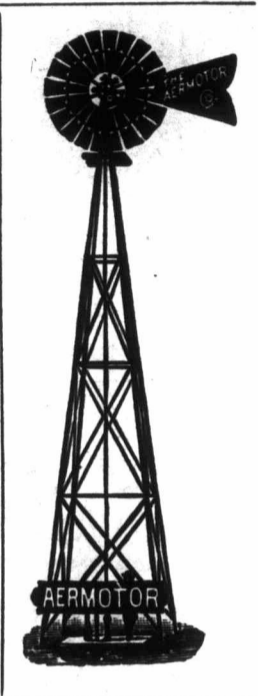
# CUTTERS

Our designs for this season have reached the top notch of excellence.

**Chicago Aermotors,**  
**Dore Hay Presses and**  
**Vessot Grain Grinders**

Are some of our leading lines.

Write us for Catalogues and prices, or interview the Massey-Harris agent in your locality.



## Joseph Maw & Co.,

Market Square, WINNIPEG, MAN.

### Government Analysis.

LABORATORY OF INLAND REVENUE,  
OFFICE OF OFFICIAL ANALYST,  
Montreal, April 8, 1895.

"I hereby certify that I have drawn, by my own hand, ten samples of the

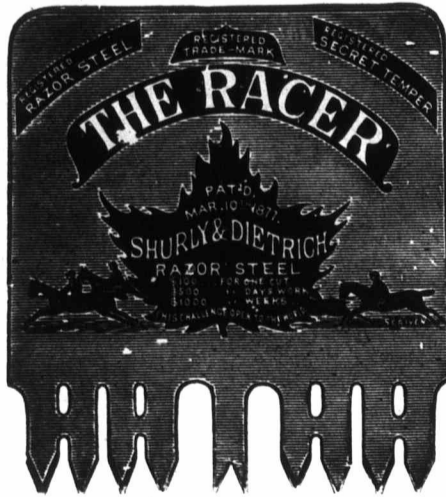
## St. Lawrence Sugar Refining Co.'s

EXTRA STANDARD GRANULATED SUGAR, indiscriminately taken from ten lots of about 150 barrels each. I have analyzed same and find them uniformly to contain:

99 <sup>99</sup>/<sub>100</sub> TO 100 per cent. of pure Cane Sugar, with no impurities whatever."

(Signed) JOHN BAKER EDWARDS, Ph. D., D.O.L.,  
Prof. of Chemistry and Public Analyst, Montreal

### The Razor Steel, Secret Temper, Cross-Cut Saw



WE take pleasure in offering to the public a Saw manufactured of the finest quality of steel and a temper which toughens and refines the steel, gives a keener cutting edge and holds it longer than by any process known. A Saw to cut fast "must hold a keen cutting edge."

This secret process of temper is known and used only by ourselves. These Saws are elliptic ground thin back, requiring less set than any Saws now made, perfect taper from tooth to back.

Now, we ask you, when you go to buy a Saw, to ask for the Maple Leaf, Razor Steel, Secret Temper Saw, and if you are told that some other Saw is as good ask your merchant to let you take them both home, and try them and keep the one you like best.

Silver steel is no longer a guarantee of quality, as some of the poorest steel made is now branded silver steel. We have the sole right for the "Razor Steel" brand.

It does not pay to buy a Saw for one dollar less, and lose 25 cts. per day in labor. Your saw must hold a keen edge to do a large day's work.

Thousands of these Saws are shipped to the United States and sold at a higher price than the best American Saws.

MANUFACTURED ONLY BY  
**SHURLY & DIETRICH,**  
GALT ONTARIO.

**A QUICK, SHARP CUT**  
hurts much less than a bruise, crush or tear done with the  
**DEHORNING KEYSTONE KNIFE**  
is the safest. Quick, sharp cut. Cuts from four sides at once. Cannot crush bruise or tear. Most humane method of dehorning known. Took highest award World's Fair. Write for free circulars before buying.  
**KEYSTONE DEHORNING CO.** Picton, Ont.

**CANCER** CURED WITHOUT KNIFE OR PLASTER. FULL PARTICULARS FREE.  
**F. STOTT & JURY,** Bowmanville, Ont.

## Must be Above Suspicion.

Good Cheese and Butter must be above suspicion of impure salt if they are to bring their price.

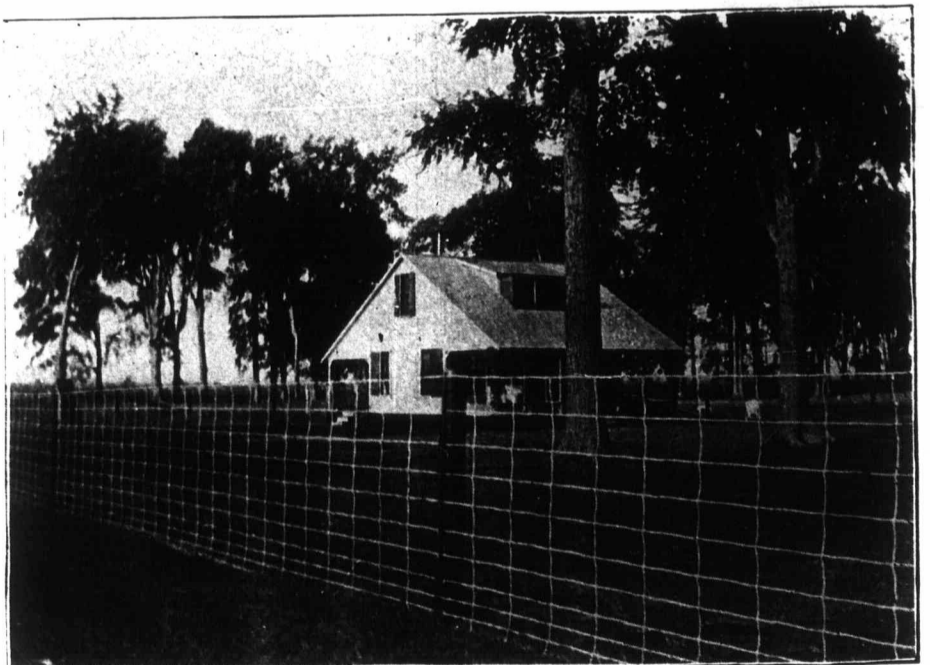
USE  
**WINDSOR SALT**

AND YOU WILL BE TAKING NO RISK.

**THE WINDSOR SALT CO.**  
LIMITED,  
WINDSOR, ONT.

## PAGE WOVEN WIRE FENCING

During the year 1900 the Page Fencing will be cheaper than ever when compared with the cost of all other kinds. Nothing else can compete with it. Let us send you next season's Price List, and see for yourself.



Keep in mind the following, which are a few of the good points in Page Fencing: Special quality wire, none other like it; 16 cross wires to the rod; standard farm style, 58 inches high; top wire No. 7; all horizontals coiled, and the coil stays there, which cannot be said of coiled wire sold by others. More Page Fence in use than all other kinds of woven fence together. Why these great sales? Reason: Exceedingly good quality, combined with very low prices.

SEND FOR OUR 1900 CALENDAR.

**THE PAGE WIRE FENCE COMPANY,**  
LIMITED,  
WALKERVILLE, ONTARIO.

**THE GOLD STANDARD HERD**



OF LARGE ENGLISH BERKSHIRES are still leading. Some fine young sows of spring litters for sale. One nice January sow, due to farrow in October. A grand litter farrowed July 19th off Rosamond, and sired by Fitz Lee. Several litters of August and September pigs at nominal prices; also some fine large B. P. Rock Cockerels. Send me an order. I will treat you right.

**J. A. MCGILL, Neepawa, Man.**



**6 young bulls**, by Mani and Robbie O'Day, out of some of our best cows.  
**9 Berkshire sows** of choice quality and breeding, from 5 months to 3 years. The standard of our Yorkshire herd is steadily improving. Our stock bears the sweepstakes at last Industrial, the other recently imported from England, are grand specimens of the breed. A choice lot of sows ready for breeding. About 50 B. P. Rock Cockerels, strong, healthy birds, of great size and good markings. All at reasonable prices.

**ANDREW GRAHAM,**  
Forest Home Farm, Pomeroy, Man. Roland, N. P. R.; Carman, C. P. R.

**Fort Rouge Poultry Yards**

**FOR SALE:** 25 Pekin ducks, 15 Bronze turkeys, 30 Plymouth Rocks, 15 Light Brahmas, 3 trios Golden Wyandottes, 1 trio Langshans, 2 trios and 1 breeding pen C. I. Games 5 pairs Pearl guineas, fancy pigeons, and Belgian hares. Included in the foregoing are a number of prizewinners at the late Winnipeg and Brandon shows. All stock in first-class condition; and several of the pullets are already laying.

**S. LING & CO.,**  
WINNIPEG.

**PLYMOUTH ROCKS**  
HIGH-CLASS STOCK.  
**WILLIAM LAUGHLAND, - Hartney, Man.**



SAMPLE PLATE, NO. 427.

Ordinary

CEILINGS AND WALLS

SOON GET SHABBY, BUT OUR

**Metallic Finish**

Retains its artistic beauty; doesn't need re-newing, and is fireproof and sanitary. Practical people everywhere are using it, both in old and new houses, stores, churches, etc.

More Expensive?

Not at all! We will give an estimate, if you send an outline showing the shape and measurements of your ceilings and walls.

**METALLIC ROOFING CO., Limited,**  
1182 KING ST. W., TORONTO.

**READ THIS LETTER FARM HARNESS**

If You Own Horses or Stock.

Prairie Home Stock Farm,  
Crystal City, Oct. 12th, 1899.

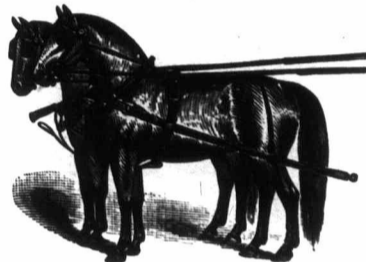
**WESTERN VETERINARY CO., WINNIPEG:**  
Dear Sirs,—We have used Dr. Warnock's Ulcer-kure in our horse stables this summer, and would not now be without it. It is the only preparation we have used which would heal up sore shoulders while the horses were working hard.

Yours truly,  
(Signed) **JAS. YULE.**

**For Scratches use Ulcerkure. It will do better in Burns, Scalds, and Frostbites, than any other Medicine used for Man or Beast.**  
**WESTERN VETERINARY CO.,**  
Winnipeg, Man.

Cutters and Sleighs.

**Mr. A. C. McRae,** wholesale and retail carriage dealer, advises us that he has a full line of cutters, which he is going to sell out at very close figures, which will be seen by prices quoted in his advertisement in this issue. He also handles a splendid line of farm and bush



For all purposes. The best made and at right prices. Write or call on

**WRIGHT & VANVLEIT,**  
Harness, Saddlery, Etc.,  
284 WILLIAM ST., - WINNIPEG,  
(South side Market Square.)

sleighs, harness, robes, blankets etc., and will be pleased to furnish price list to all from country points who will drop him a card giving their address.

**TWO JERSEY BULLS FOR SALE**

Of high-class breeding. Prices right.

Write to **William Murray, Dugald, Man.**

**Galloways for Sale**

**6 Bull Calves for Sale**

at right prices.

Also heifers and cows at reasonable figures. Stock all well pedigreed and first-class quality.

Apply to **T. M. CAMPBELL, Manager,**  
Hope Farm, St. Jean Baptiste, Manitoba.

**LEICESTERS!**

40 Ram Lambs, 8 Shearlings, 50 Breeding Ewes, for sale.

**A. D. GAMLEY,**  
Box 193. BRANDON, MANITOBA.

**Norwood Bridge Poultry Yards,**  
WINNIPEG, MAN.

Breeder of high-class T. C. B. Minorcas, Houdans, and White Wyandottes; also Bronze turkeys, Pekin Bantams, Pekin ducks. Young stock for sale of all varieties. Write or call.

**SOUTH SIDE FARM CO.,**

White Bear, Minn.,

Have fine butter-bred Holstein Friesian bull calves for sale at reasonable prices. Johanna Rue 2nd's Paul De Kol at head of herd.

**SHORTHORNS**

AND PLYMOUTH ROCKS.

Will sell at once a very good Short-horn Bull, and grand lot of Plymouth Rocks. Also breed Berkshires and White Leghorns. Write or call.

**WM. KING,**

BREEDER,  
Dauphin YORK RIVER,  
District, Man. Farm 1 mile from station.

**Wherever This Paper Goes**

PLEASE receive it as a personal call, bearing a most cordial invitation to visit our store to see the large stock of

**Winter Clothing**

which must necessarily be good to be comfortable. You can go poorly clad in summer, but about this time of the year you want to be thinking of the best there is in comfortable clothing—both cheap and good. Some clothing is made to sell—some to wear. Some clothing is made for both—THAT'S OUR KIND.

We want you to see our assortment.

The suits themselves can tell you more in five minutes than we can do in one hour.

We await your coming.

**White & Manahan**

500 Main Street, -m WINNIPEG.

**9 CORDS IN 10 HOURS**



BY ONE MAN with the FOLDING SAWING MACHINE made at Essex Centre, Ontario. NO DUTY TO PAY NOW. Send to Main Office for FREE catalogue showing LATEST IMPROVEMENTS, and testimonials from thousands. First order secure agency. Address: Folding Sawing Mach. Co. 55 N. Jefferson St. S 71, Chicago.

**Under New Management.**

**D. W. BEAUBIER, PROPRIETOR.**  
Newly furnished throughout. All modern conveniences. Most centrally located hotel to the business part of the city.

**PALACE HOTEL.**

Accommodating porter meets all trains. Open day and night. Good stabling in connection. Rates, \$1 per day. Eighth St., BRANDON, MAN., near Rosser Ave.

**Fat Stock**  
is always found where a  
**FAMOUS EVAPORATOR**

is used.

Foods can be Cooked Quickly and with Little Fuel



Size of Fire Box.  
Width. Depth. Height.  
19. 40. 11.  
Size of Firing Door, Ins. Capacity of Boiler.  
11x12. 50 gals. Imp.

**BOILER** is made of galvanized steel, thoroughly tight and removable for cleaning. Has support under bottom.

**FIRE BOX,** grates and linings are made of cast iron, which will not burn out quickly.

**BODY** is made of steel, which heats quickly, and is properly protected against warping and burning out.

**FOR BOILING SAP**  
THEY HAVE NO EQUAL.

Being Light, they can be carried about in the bush.

Only Made in Canada by

The **McClary Mfg. Co.,**

London, Toronto, Montreal, Winnipeg, Vancouver.

If your Local Dealer cannot supply, write our nearest house. -om



**PIONEER HERD OF SHORTHORNS**  
 Won the gold medal at the last Winnipeg Industrial Exhibition; also first for bull and two of his get, first for cow and two of her progeny, and numerous prizes for individuals. They were bred right here, and I can usually show a few generations of their ancestors, and am always pleased to show them.

WALTER LYNCH, Westbourne, Man.  
 P. O., Railway and Telegraph.

### HEREFORDS

I keep only the best. For stock of all ages  
 Write or call. WM. SHARMAN.

"Ridgewood Stock Farm." SOURIS, MAN.

### STEEL BROS., Glenboro, Manitoba,

BREEDERS OF Ayrshire Cattle.

Choice young stock for sale. 24-2-y-m



### The Good Enough Sulky Plow

CAN NOT BE BEAT.

The Price will please you and its work will surprise you!

Write for illustrated circular. It will pay you.

MINNESOTA MOLINE PLOW CO.

H. F. Anderson, Agent, Winnipeg, Man.

# BINDER FARMERS' TWINE

PURE MANILA, 650 FEET,  
 SPECIAL MANILA,  
 TIGER,  
 STANDARD.

Farmers! Don't be taken in. There is none "just as good." These twines will not bunch at the knoter, and a Binder will run all day without stoppage, thus saving time, annoyance and a "lot o' cussin'."

We pack our twine in bags of the size of ordinary grain bags, and we are not ashamed to put our name upon it. Don't take any other.

## CONSUMERS' CORDAGE CO.

Limited.

MONTREAL.

**J. C. & A. W. FLEMING,**  
 Rosebank Stock Farm, Pilot Mound, Man.  
 Breeders of Poland-China pigs and Cotswold sheep of choice quality, offer select seed potatoes of eighty varieties. Write for catalogue.

### BLACK MINORCAS.

Young stock for sale—some beauties.  
 Satisfaction guaranteed.

A. M. ROBERTSON, KEEWATIN, ONT.

## For Sale.

The Samuel Hanna Estate,  
 at Griswold.

As this estate must be closed out, it has been decided to offer for sale all those splendid farms owned by the late Samuel Hanna, and comprising about seventeen hundred acres within a few miles of Griswold. The land will be sold in parcels. It is highly improved with buildings, fences, and cultivation.

A great opportunity is here offered to any one desiring a first-class farm.

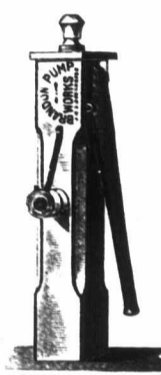
For particulars apply to

Edmund W. Hanna,

Box 243,

GRISWOLD.

Or to  
 Goldwell & Coleman,  
 Barristers,  
 Brandon.

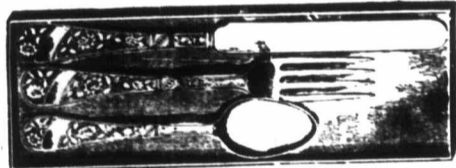


## WHY NOT

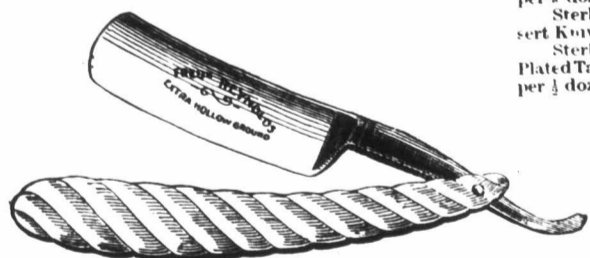
Get your PUMP repaired now before the winter sets in? It can be done cheaper and better now than when everything is all ice. We have full stock of wood and iron pumps, and repairs for all kinds of pumps.

Write us and get your pump put in good shape before the winter.

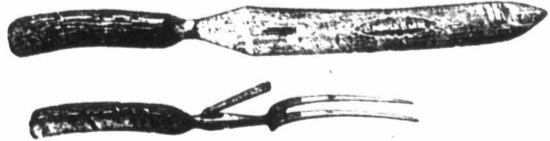
Address H. CATER, Brandon, Man.



CHILD'S KNIFE, FORK AND SPOON—guaranteed the best sterling silver plated all in a beautifully lined box, sent by mail, all postage prepaid by us, to any address in Canada upon receipt of only \$1.00.



ENGLAND'S GREATEST RAZOR. A magnificent article of the very finest quality; doubly hollow ground; handle is made of veined celluloid and is transparent. This razor is worth \$3.00. That is what they were made to sell for. Our price is only \$1.00. We send them, postpaid, to any address in Canada upon receipt of only \$1.00. The selling of this razor for only \$1.00 has already made us famous.



Finest quality CARVING KNIFE AND FORK—made with handsome, strong, well-secured stag-horn handles, and best of steel blades, made in Sheffield, England, by best makers. Mailed, postpaid, to any address in Canada for only \$1.15.

The above goods are all guaranteed by us to be first-class. Our guarantee goes with every piece. Please do not confound them with the cheap grades of goods commonly advertised in newspapers. There is no duty and no postage for you to pay on them. Upon receipt of the price we will promptly send them by mail to you, all postage being paid by us. Send your money by registered letter; then it can be traced right into our hands. Order at once and we will send them by return mail. Any of them will make acceptable Xmas, New Year's or birthday presents. Remember the quality is guaranteed by us, and if, upon receipt of the articles, the goods are not as we represent them, then promptly return them to us, and we will return your money in full.

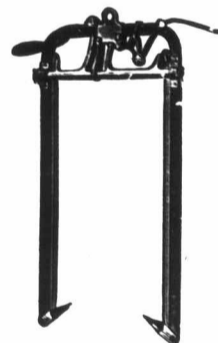
Address Always:

LETTER ORDER DEPARTMENT,  
 STANLEY MILLS & CO.,  
 HAMILTON, ONTARIO

Finest quality guaranteed  
 STERLING SILVER PLATED  
 TABLEWARE—the best quality  
 manufacture. Each half-dozen  
 is in a beautifully lined box.  
 The prices are as follows, all  
 postage prepaid by us to any  
 address in Canada:

- Sterling Silver Plated Coffee  
 Spoons, per dozen, \$1.60.
- Sterling Silver Plated Tea  
 Spoons, per dozen, \$1.85.
- Sterling Silver Plated Dessert  
 Spoons, per dozen, \$2.70.
- Sterling Silver Plated Table  
 Spoons, per dozen, \$3.25.
- Sterling Silver Plated Forks,  
 per dozen, \$2.70.
- Sterling Silver Plated Desert  
 Knives, per dozen, \$2.50.
- Sterling Silver  
 Plated Table Knives,  
 per dozen, \$2.75.

## Provan's Patent Reversible Carriers, Fork and Slings.



HAVE now become a Standard of Excellence with the Farmers of Canada and the United States. At the World's Fair, Chicago, 1893, the only Medal and Diploma given on Hay Carriers, Forks and Slings was awarded to us on these Implements.

Following is a copy of the Judges' Award:

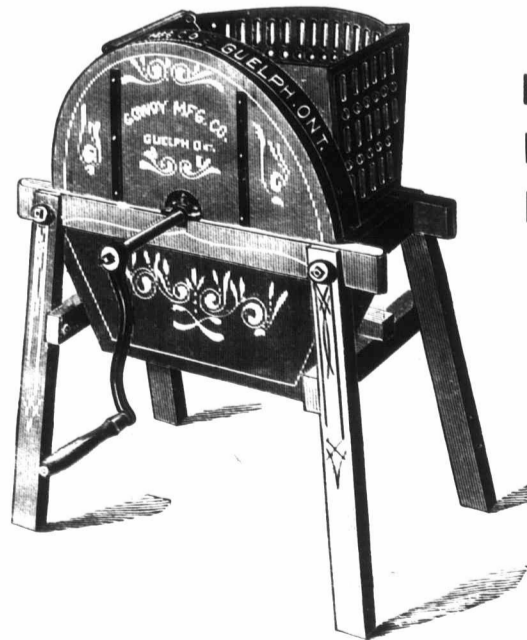
AWARD. "For open trip hook to receive the sling; automatic clutch, adjustable for size of load desired; ingenious design of stop block, which enables perfect control of carriage; no springs required for locking car, which has motion in all directions; compact form of fork, which can be tripped in any position; the car is reversible and of double action; for novelty, ingenuity, and usefulness. Excellence of material and construction."

Correspondence solicited. Special discount for cash.

Manufactured by **James W. Provan,** OSHAWA, ONT., CANADA.

Agents for Province of Quebec: Massey-Harris Co., Ltd., Montreal.

## ROOT PULPERS



Improved Roller Bearings.  
 Ensilage and Straw Cutters.  
 Horse Powers.  
 Feed Boilers, 30 and 45 Gals.  
 Plows, Harrows, Turnip Drills,  
 and other  
 Farm Implements.

WRITE US FOR PRICES  
 BEFORE YOU BUY.

The GOWDY MFG. CO., Guelph, Ont.

## We Sell Watches

As well as repair them. Reliable watches are the only kind worth having—the only kind you want—and the only kind we will sell you if you buy from us. We offer you a gentleman's 18 size gold-filled case, warranted to wear for 20 years, stem wind and screw bezel, fitted with a genuine Waltham, 15-jeweled movement, for the exceedingly low price of \$12.00 (post-paid). A guarantee that guarantees goes with each watch. You run no chances in buying from us.

D. A. REESOR, "THE JEWELER,"  
Brandon, Man.  
Issuer of Marriage Licenses.

## BARLEY WANTED

WE STILL REQUIRE A FEW THOUSAND BUSHELS MORE OF GOOD BREWING BARLEY. FARMERS WILL DO WELL TO FORWARD US SAMPLES.

EDWARD L. DREWRY  
Redwood Factories,  
Winnipeg, - Manitoaba.

PLEASE MENTION FARMER'S ADVOCATE.

# SPRAMOTOR

The Time to Order a

is Now.

This cut shows what is beyond question, the most valuable article any person who has spraying, whitewashing, painting, disinfecting and all work of kindred character can own.

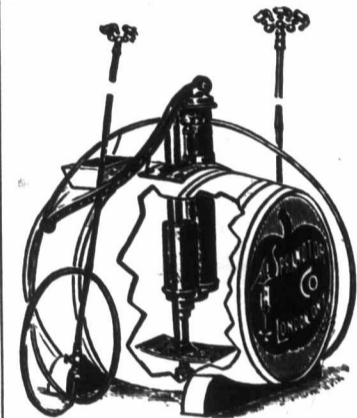
It is the recognized standard in all countries. It is used and adopted by all the great institutions,—every department of the Government, Experimental Farms, Breweries, large manufacturing concerns, and railway corporations. It would take 100 pages such as this to give the names only of prominent purchasers.

It is as near perfection for the purpose intended as human ingenuity has yet devised, and our treatise contains the sum of all knowledge on the subject of spraying down to the present time; classified for instant finding by a system of indexing superior to that of any other work ever published.

During the months of March, April and May of 1899, our reserve stock melted away like magic. Our staff could not keep up with the sales, delays came; extra help saved matters until redoubled selling called for a still further increase. We answered it, but it wasn't easy. You see, the Spramotor make-up is the highest grade of work—not many men can do it.

Now we're caught up, but the selling season is just before us. They're already leaving us in scores where we hardly looked for dozens. Now, all this means one thing. If you contemplate ordering for present or future delivery, send us in your order now, and we'll book your name, and in this way your order will take precedence over those that order afterwards. It costs you no more, and may be less, than if you delay.

We have increased our plant and premises tenfold, and it looks like we must enlarge again. You make no mistake, the Spramotor is guaranteed in every way. If not perfectly satisfactory, your money back, of course.



AGENTS WANTED IN Unoccupied Territory.

If you are in doubt as to size, ask us to send full particulars, and we'll send you a treatise on the diseases affecting fruit trees, and their remedies, as well as all about the Spramotor.

Address -

THE SPRAMOTOR CO.,  
London, Ontario.

68 to 70 King St.,

## STEAMSHIP Tickets

If you are going to the Old Country, or sending for your friends, apply to our nearest railway or ticket agent, who can supply outward and prepaid tickets at lowest rates.

Steamers leave Portland, Maine, every Saturday; St. John, every Wednesday; New York, every Wednesday and Saturday.

WILLIAM STITT,  
General Agent, C. P. R. Offices,  
Winnipeg.

## THE MANITOBA Fire Assurance COMPANY.

ESTABLISHED 1866.

HEAD OFFICE, WINNIPEG.

Licensed by a full deposit with Manitoba and Territorial Governments.

Farmers should patronize a home institution.

The Hon. H. J. MACDONALD, President.  
H. H. BECK, Vice-Pres. and Man. Director.

Reliable, Energetic Agents Wanted.

## GEORGE GRIEVE, Taxidermist

247  
MAIN STREET,  
WINNIPEG, MAN.



Artificial Eyes of Birds and Animals for sale.

## THE BEST TEAS.

We carry one of the best selected and largest stocks of teas to be found anywhere, and if after buying tea from us you don't feel that you have saved from 15c. to 20c. a pound, you are invited to return it to us, at our expense, and get your money back.

This seems about as fair as an offer can be.

We have just unloaded a carload of Japan tea, containing 435 chests and caddies and we have a carload of Empress tea due to arrive in about a month.

We buy our teas direct from the growers, and sell to consumers at prices just as low as other grocers pay when they buy.

Our Empress Pure Indian tea, if it could be got by other dealers, would be considered by them good value to sell at 60c. per pound.

When you buy it from us at 35c. per pound, you are getting value that cannot be got anywhere else.

The Japan tea that we sell you at 35c. per pound would cost 50c. in other stores.

When you buy 25c. Japan or Black tea from us, you get tea that would cost you 40c. elsewhere.

If you buy a full chest or 50 pounds of tea at a time, we will allow you 2c. per pound off, except on Empress tea and Japan siftings.

For \$4 cash with order, we will deliver (express prepaid) 10 pounds of Empress tea, or 10 pounds of 35c. Japan, at any railway station in Manitoba; for \$4.25 we will deliver at any railway station in Assinibola or Saskatchewan, or for \$4.50 we will deliver it at any railway station in Alberta or in British Columbia as far west as Revelstoke.

The amount you can save by buying your winter's supply of tea from us is worth considering.

Send your name and address for our fall grocery catalogue.

SMITH & BURTON,  
Grocers, Brandon, Man.

## "PASTEUR"

# Black-Leg Vaccine

THE original and genuine preventive vaccine remedy for Blackleg. Officially endorsed in all the cattle-raising States. Successfully used upon 1,500,000 head in the U. S. A. during the last 4 years. Write for official endorsements and testimonials from the largest and most prominent stock-raisers of the country. "Single" treatment vaccine for ordinary stock; "Double" treatment vaccine for choice herds.

REGISTERED "BLACKLEGINE" TRADE-MARK.

"Pasture" single treatment Blackleg Vaccine ready for use (no set of instruments required). No. 1 (10 head), \$1.50; No. 2 (20 head), \$2.50; No. 3 (50 head), \$6. Easily applied. No experience necessary.

Pasteur Vaccine Co., W. J. Mitchell & Co.,  
65 Fifth Avenue, CHICAGO. WINNIPEG, MAN

**THE McLAUGHLIN CARRIAGE CO**

THE McLAUGHLIN CARRIAGE CO.  
No. 202, Jarvis "A Young Man's Cutter"

**ONE GRADE ONLY AND THAT THE BEST**

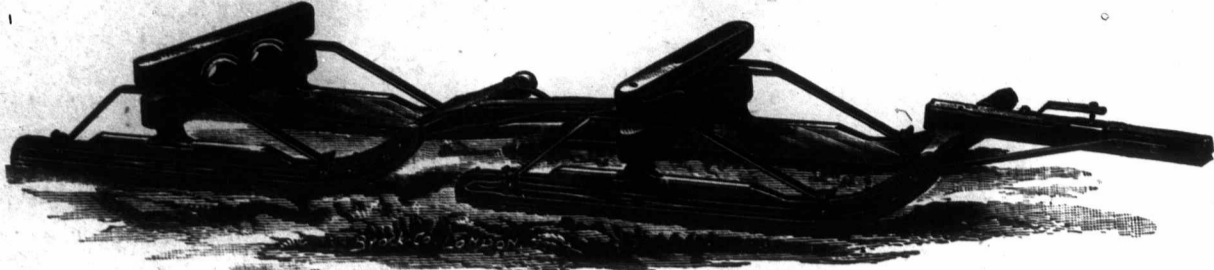
**OSHAWA ONTARIO**

**McLAUGHLIN**  
Carriages & Sleighs  
ARE ALWAYS RELIABLE.

NEVER THE CHEAPEST. ALWAYS THE BEST.

# The Challenge Sleigh

Manufactured by **THE STEVENS MANUFACTURING CO.**



**EXTRA HEAVY CAMEL-BACK RUNNERS** with side plate from draw-rod to rave clip. **OSCILLATING KNEE**, making easy draught on rough or smooth roads. **TRUSSED RAVE**, secured to runners by steel clips, relieving the strain and allowing free movement. **IRON GUARDS**, to prevent bolster from catching on pins or raves. **BEST SPRING STEEL SHOES.**  
**MADE OF THE VERY BEST MATERIAL, BY EXPERT CANADIAN MECHANICS.**

**Stevens Manufacturing Co.,** = **London, Ont.**

BRANCH DEPOT: Grain Exchange Building, WINNIPEG, MAN.

## ABOUT MANITOBA SEEDS

IT ONLY COSTS YOU A CENT TO SEND FOR THE BEST CATALOGUE OF SEEDS ISSUED FOR THIS COUNTRY. THE WHOLE EXPERIENCE OF THE BRANDON EXPERIMENTAL FARM IS BEHIND THE SELECTION OF

**FLEMING'S SEEDS.**

MAIL US YOUR NAME.

**FLEMING & SONS,**  
BRANDON.

D. Hysop & Son, of Landzer Stock Farm, Killarney, advertise in this issue Cotswold sheep. They recently purchased a pair of very fine Cotswold ewes imported from England, by Robert Millar, Stouffville, Ont.

THERE ARE MANY IMITATIONS OF

## "Rodgers" Cutlery



None genuine without this  
EXACT MARK on each blade.

Sole Agents for Canada :

**JAMES HUTTON & CO.,**  
MONTREAL.

## COPP'S Farmers' Boiler

Registered 1898.  
Nos. 30, 45 and 60.



With pleasure we draw the attention of our farmers to our

### EXCELLENT MODERN FEED BOILER,

which is constructed on new lines. It has a strong and well-devised Cast Iron Front and Back, with bagged out Flue and Collar Top, so as to receive a straight pipe, which is preferable to the elbow attachment.

The sides are made of Steel plate with a band at the bottom.

The Feed Door is large and the body of the Furnace is very roomy, calculated to admit the roughest kind of wood.

The Boiler is designed to set on the ground or brick foundation.

Without doubt this is the Best, Cheapest, Most Economical and Practical Agriculture Furnace in the market. Already it has commanded a large sale.

**THE COPP BROS. CO.,**  
HAMILTON, ONT.

W. G. Styles, of Rosser, inserts an advertisement in this issue. He has Shorthorn cattle, Yorkshire and Tamworth swine, and also makes a specialty of conducting auction sales of farm stock. Mr. Styles is secretary-treasurer of the municipality of Rosser, and does a considerable real estate business in wild and improved farms in this fine farming district so convenient to Winnipeg.

It is but 6 months since the **CANADIAN DAIRY SUPPLY COMPANY** took hold of the

## De Laval Separator Business

in Manitoba and the N.-W. T. Notwithstanding working against great odds, and coming into

COMPETITION WITH MACHINES SOLD AT ALMOST ANY PRICES, THE SUPERIORITY OF THE

# "ALPHA BABY" SEPARATOR

IS ACKNOWLEDGED AND ESTABLISHED, AS TESTIFIED TO BY ITS MANY USERS.

Kildonan East, Fernton P. O., Man., Nov. 15th, 1899.

THE CANADIAN DAIRY SUPPLY COMPANY :

MR. A. LINDBACK, Western Manager.

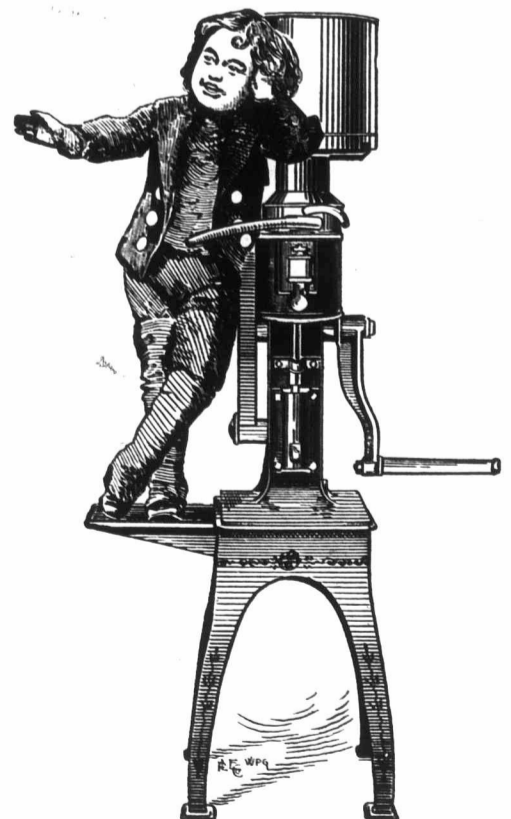
GENTLEMEN :

I purchased, two years ago, one of your No. 2 De Laval Cream Separators, and after two years' experience there is no doubt in my mind but that every dairy farmer should have one. I have been making butter for over thirty years in this Province, and have noted the advancement made in buttermakers' utensils during that time, but I do not think a utensil of greater value to the western dairy farmer than the De Laval Cream Separator ever reached the West. My experience with its use is such that I would not now be without one. It is easy to operate, does its skimming thoroughly, and I never raised better calves by hand than those I raised since I used the Separator and feed them the warm separated milk. I would certainly advise farmers who keep cows, and make butter to any extent, to purchase a De Laval Cream Separator.

Very truly yours,

DONALD McIVOR,

Riverside Farm, Fernton P. O., Man.





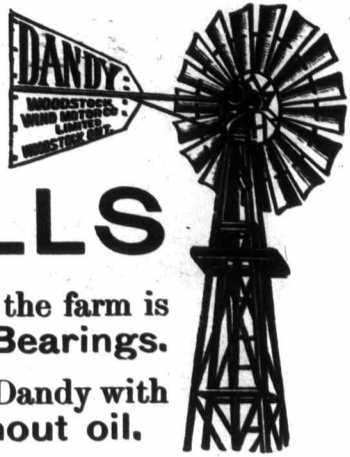
**WOODSTOCK  
STEEL**

**WINDMILLS**

The most economical power for the farm is a Woodstock Mill with Graphite Bearings.

For power and pumping, get a Dandy with Graphite Bearings. They run without oil.

Other manufacturers are starting to use the Graphite which we have used for years.



Our new Grain Grinder is made specially for wind-mill use. We supply everything for power or pumping outfits.

- Pumps.
- Tanks and
- Tank Fixtures.
- Watering Basins.
- Grain Grinders.
- Saw Benches.

**Woodstock Wind-Motor Co., Limited,  
WOODSTOCK, ONT.**

*It's a mistake to offer your friends inferior tea, when you can just as easily give them Blue Ribbon Ceylon.*

**Are You Thinking  
of Building?  
IF SO, TO YOUR ADVANTAGE TO WRITE  
Dick, Banning & Co.,  
WINNIPEG, MAN.**

Durability Combined with Cheapness!

**OUR HARNESS**

HAS STOOD THE TEST. IT WEARS BETTER AND LOOKS BETTER THAN ANY OTHER MAKE, AND CHEAPER.

**PEIRCE BROS.**

HARNESS MANUFACTORY  
WINNIPEG, MANITوبا.

**THAT'S RIGHT!**  
Read the Papers  
and you will be surprised to learn that you have been paying too much money for your stationery. We have everything you want—Account Books, School Supplies, Municipal Forms, etc., and we'll do your printing neatly and cheap. Give us a trial order, or write for prices.



**The FORD STATIONERY CO.,**  
One door north of P. O.,  
P. O. Box 1273. 407 Main St., Winnipeg.

*THE Very Best*

PLACE FOR THE FARMER'S SON TO SPEND THE WINTER MONTHS IS AT THE  
**Winnipeg Business College.**

WRITE FOR HANDSOME CATALOGUE (FREE).  
G. W. DONALD, SECRETARY.  
PLEASE MENTION FARMER'S ADVOCATE.



**SHOPPING  
BY MAIL**

Is made easy on application to

**The Hudson's Bay Stores.**

The Fifth Session of the

**Manitoba Dairy School**

Will open with the Home Dairy Course on January 8th, 1900, and continue until February 3rd.

The Second Home Dairy Course will begin on February 5th and continue until March 3rd.

The Third Home Dairy Course will begin on March 5th and continue until March 31st.

The Butter and Cheese Makers' Course begins on February 5th and continues until March 31st.

A competent staff of Instructors will give both theorizing and practical instruction in Buttermaking, Cheesemaking, Cream Separating, Preparation of Starters, Milk Testing, and all work pertaining to the Dairy Industry.

Write for circulars of information and application forms to

**C. A. MURRAY,**

DAIRY SUPERINTENDENT.

WINNIPEG, MANITوبا.

**NEW IMPROVED  
American Cream Separator.**



IMPROVEMENTS IN BOWL BEARINGS AND STOOL.

The bowl bearings will last forever. As a simply and strongly built machine, and a close skimmer, it has no equal in the market.

SEND FOR PRICES AND PARTICULARS.

NEW AND SECOND-HAND ALEXANDRA SEPARATORS ON HAND.

ADDRESS:

**S. M. BARRE, 240 King St., Winnipeg.**

**The Weekly Free Press, \$1.00.  
Semi-Weekly Free Press, \$2.00.**

16 pages every Thursday of the NEWS OF THE WEEK.  
8 pages in addition every Monday in the Semi-Weekly.  
The latest telegraphic despatches from South Africa.  
The fullest and most reliable record of the World's happening.  
Canada's remarkable progress reported.  
The Farm, the Household, our Institutions—all discussed intelligently.

GOOD READING FOR EVERYBODY.

To the End of 1900 for the Price of One Year.

**The Manitoba Free Press Co., Winnipeg.**

**W. A. DUNBAR,**  
VETERINARY SURGEON,  
5 1/2 JEMIMA STREET, WINNIPEG.

Communications by letter or telegraph promptly attended to.  
TELEPHONE 56. 25-2-y-m

**R. A. BONNAR,**  
Barrister, Notary Public,  
Conveyancer, Etc.

Office 494 1/2 Main St., Winnipeg, Man.  
Special attention to collections. Solicitor for "Farmer's Advocate," Winnipeg.  
24-a-m

THE DEMAND FOR

EDDY'S

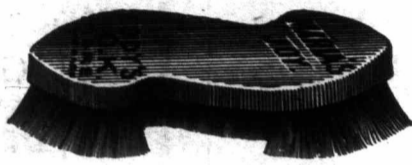
O. K.



FIBRE

CREAMERY,  
HOUSE, HORSE, SCRUB AND STOVE

AND TAM



PICO

BRUSHES

IS RAPIDLY INCREASING, OWING TO THE REPUTATION THEY HAVE EARNED  
FOR DURABILITY.

ONCE TRIED, ALWAYS USED. FOR SALE BY ALL FIRST-CLASS DEALERS.

**R. A. LISTER & COMPANY,**  
LIMITED.

232 KING ST., WINNIPEG.

The only Steam Turbine Cream Separator that works  
by hand or a jet of steam.Simplest, Lightest-running, most durable, most reason-  
able in price, and best value for your money.

FOR DAIRIES OF SIX TO SIXTEEN COWS OUR

**Alexandra Hand  
Cream Separators**

HAVE NEVER BEEN BEATEN.

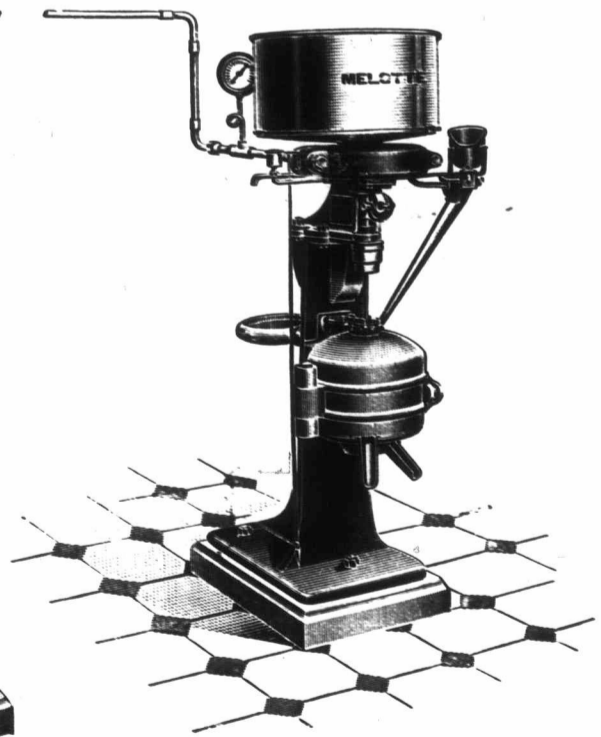
MEADOW LEA, MAN., 2nd Dec., 1899.

Dear Sirs,—Having purchased a No. 11½ Alexander Separator in March, 1898, the said Separator having been in continuous operation, summer and winter (365 days in the year), ever since, and not costing one cent for repairs, and having given entire satisfaction both for easy running and clean skimming, I have much pleasure in recommending the same to the farming community.  
Yours truly, DAVID WRIGHT.

If your herd has increased till you have the milk of 16 to 30 cows to handle, and you have no Power, a little extra outlay, as first cost, will procure our "Melotte," the largest Hand Separator made, and requiring 35 to 55 per cent. less power to run than any Separator offered by other makers.

Our Small Feed Boilers, at \$50 each, with 15 pounds of steam will run two No. 5 Turbine Melottes, each separating 85 gallons of milk per hour!

Our Catalogue for 1900 is now ready. Besides much useful information on matters pertaining to the farm, it contains probably the most complete directions for buttermaking that have ever been submitted to the farmers of Manitoba and the Canadian Northwest. Send your address on a postal card and procure a copy. You will prize it highly.



TURBINE OUTFIT.

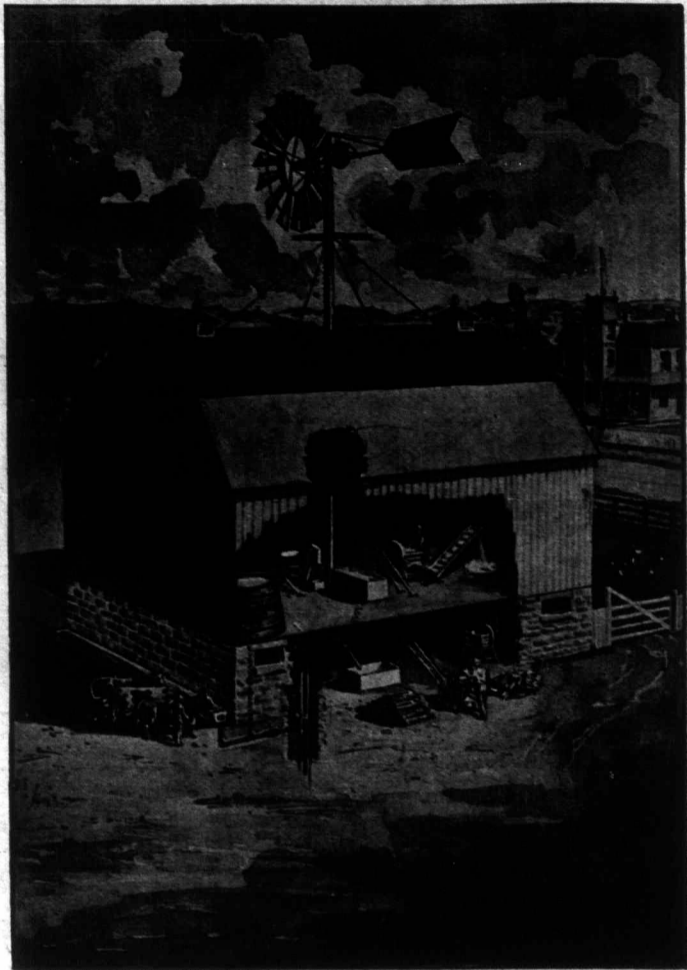
232 KING ST., WINNIPEG.

**R. A. LISTER & CO., Ltd.**

# FACTS FOR FARMERS.

**FACTS** { Wind is the Cheapest Power.  
 The Canadian Airmotor the best Windmill. } **DO YOU NEED** { Water in the Barn  
 Purchasing one will Save Money. } Water in the House ?  
 Water in the Pasture

**THE Canadian Airmotor Will GRIND your FEED, CUT STRAW RUN PULPER, CHURN and RUN GRIND-STONE, Thereby Saving CASH, TIME, LABOR and TEAMING.**



We built a machine to do the work, not merely to sell.

**FULL SUPPLY Tanks, Saw Frames, Hay Tools.**

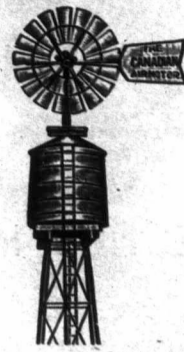
There is no greater luxury in this world than a good supply of water convenient.

**The CANADIAN AIRMOTOR**

will put it where you WANT IT.

WE ERECT

**Water Supply Outfits** OF ALL KINDS.



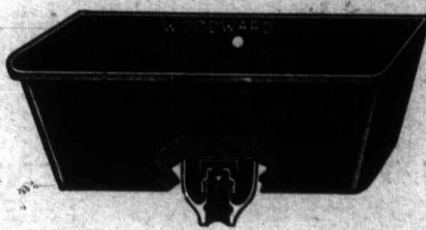
A never-failing supply in summer drought.

**When** winter's frost is on you can still have a supply on hand to draw from without

**Going Outside.**

**WOODWARD WATER BASINS.**

There are "Cheap John's" on the market, but only one **WOODWARD.**



**Will Pay** For themselves in **TWO SEASONS.** SAVES Time, Money and Labor.

Result is Richer and Greater Flow of Milk.

Have you seen the **TORONTO GRINDER.** THE LATEST.

**ONTARIO WIND ENGINE & PUMP CO. LIMITED.** TORONTO, ONT.

## HAMILTON ENGINE AND THRESHER WORKS

ESTABLISHED 1836

THE OLDEST, LARGEST AND MOST SUCCESSFUL THRESHING MACHINE FACTORY IN CANADA.

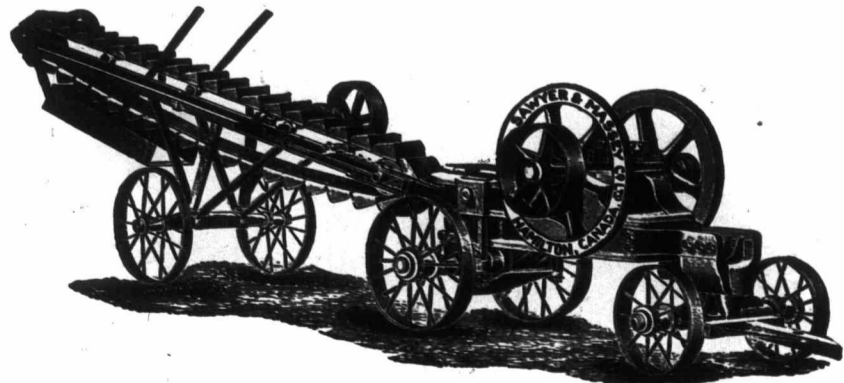
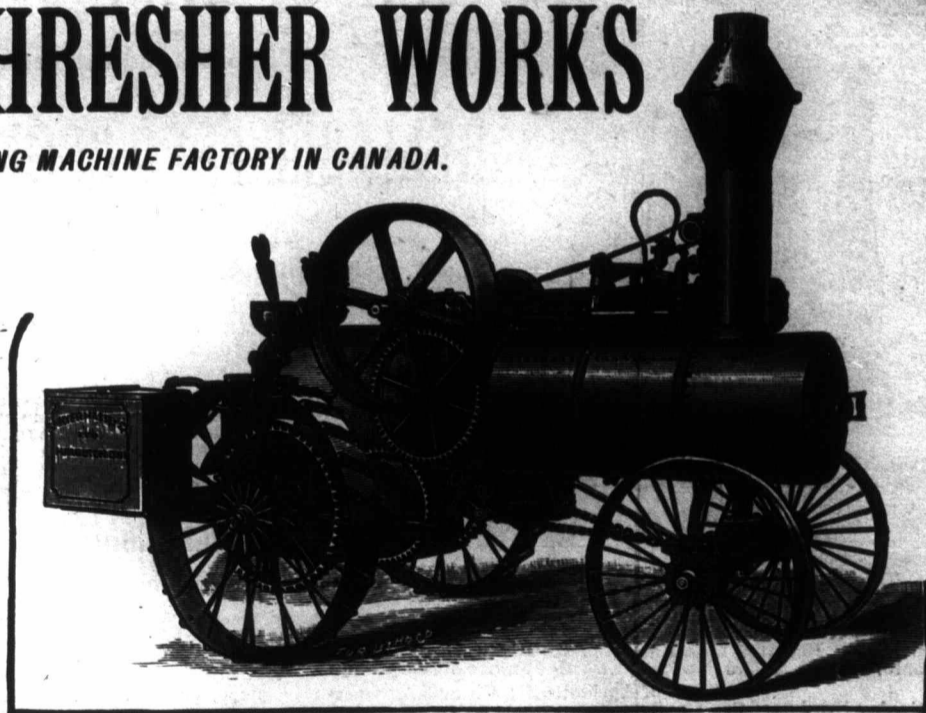
THE MOST PERFECT, MOST POWERFUL AND ONLY SUCCESSFUL

COMPOUND CYLINDER

### Threshing Engine

MADE IN THE DOMINION.

We also make the celebrated L. D. S. Return Flue Boiler and Engine, Peerless Daisy and Eclipse Separators, Monitor Clover Mills, Pitt's 8, 10 and 12 Horse Powers, Tread Powers, Saw Mills, etc.

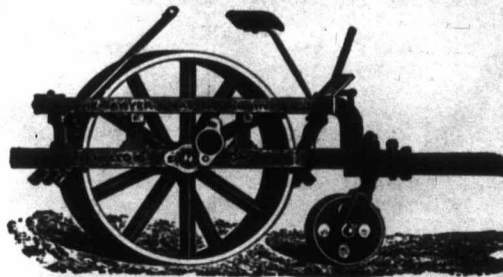


### ROAD-MAKING MACHINERY.

We are the Only Company in Canada that Makes and Sells Its Own Road Machinery, and we Can Therefore Guarantee Our

**ROCK CRUSHERS, ROAD ROLLERS and GRADERS**

As being strictly first-class, and can furnish the highest testimonials from purchasers.



ILLUSTRATED CATALOGUES AND FULL PARTICULARS SENT ON APPLICATION TO

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

# THE CANADA PAINT CO., LIMITED

THE MOST EXTENSIVE MAKERS OF

Factories at Montreal, Toronto, and Victoria.  
Head Office: 572 William St., Montreal.

## Colors, Varnishes and Paints IN CANADA.

SPECIALTIES IN READY MIXED PAINTS IN OIL AND VARNISH  
FOR ALL PURPOSES.

Mixed Paints for Interior <sup>AND</sup> Exterior House Decoration.

Mixed Paints for Floors, Specially Hard Drying.

Mixed Paints for Carriages, Buggies and Sleighs.

Mixed Paints for Outhouses, Roofs, &c.

Mixed Paints for Wagons <sup>AND</sup> Implements, <sup>HARD AND GLOSSY.</sup>

Enamels for Beautifying Everything Indoors.

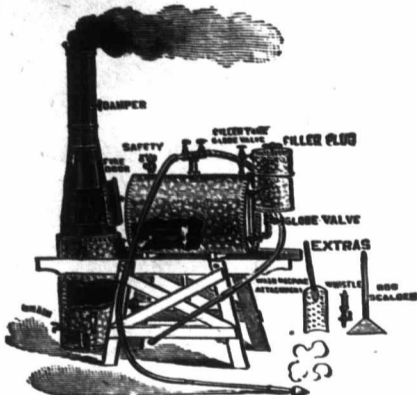
Varnishes in Every Kind for Every Purpose.

ALL PUT UP IN CONVENIENT PACKAGES TO SUIT BUYERS, AND EVERY  
PACKAGE BEARING THE NAME OF THIS COMPANY CAN BE DEPENDED  
UPON AS THE BEST THAT CAN BE BOUGHT.

COLOR CARDS TO ASSIST IN SELECTING PAINTS  
FOR EVERY KIND OF WORK CAN BE HAD FREE  
FROM THE PRINCIPAL PAINT DEALERS IN EVERY  
TOWN IN CANADA.

## The Canada Paint Co., Limited.

## Read Our Christmas Offer which Will Hold Good for 30 Days Only!



This offer will be a special reduced price from  
our regular price on our

### RELIABLE FEED COOKER

In order to get one introduced in each locality,  
THEY HAVE NO FLUES TO FILL WITH  
SOOT, RUST OUT OR LEAK.

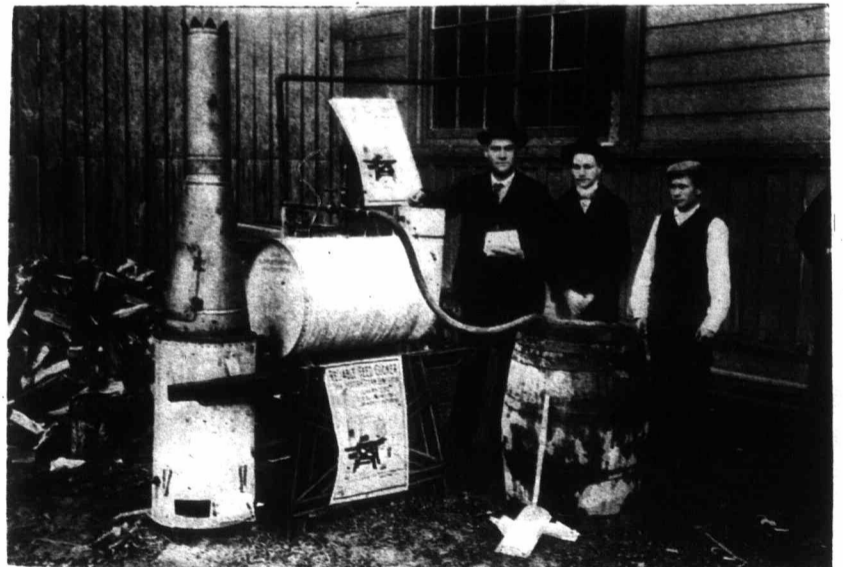
Hogs, Cattle, and Dollars

The swine and cattle breeder  
who means business—who isn't in it simply for his health—  
realizes that to get the most dollars out of his hogs and  
cattle, he must take advantage of every possible means of  
maturing and finishing off his hogs and cattle to the best  
advantage. He has learned the great value of steamed,  
cooked food. He knows that it goes farther and makes more weight because it does not tax the animal's  
digestive organs. It helps him make dollars. The best way to prepare cooked feed is with the

### Improved Reliable Feed Cooker and Tank Heater.

The best breeders in the country use the Improved Reliable, and have only words of praise for it. It  
is a multiple-purpose machine—a feed cooker, a water heater, a steam generator, and is especially good  
for heating water tanks, etc. They are made of the best galvanized steel (excepting the smokestack);  
they are riveted together, and cannot be any possibility blow up. They are built upon honor, and sold  
on merit. Received medal and diploma at Omaha Exposition, 1898; diplomas at Dallas, Texas, and To-  
ronto, Canada, in 1899; and first awards at numerous State fairs.

Office of Agriculturist, Ontario Agricultural College, Guelph, Ont., Nov. 13, 1899.  
Ripley Hardware Co., Grafton, Ill.:  
I have your favor of the 11th inst. You may book our order for two No. 2 Cookers, F.O.B. Grafton,  
as per your previous offer. Yours truly,  
G. E. DAY.



THE ABOVE CUT SHOWS OUR COOKER BOILING A BBL. OF  
WATER AT A DISTANCE OF 60 FEET FOR THE BUTTERMAK-  
ERS' CONTEST AT THE TORONTO EXHIBITION, 1899.

Burford, Ont., Canada, Feb. 4, 1899.

Ripley Hardware Co., Grafton, Ill.:  
Gentlemen,—I am in receipt of your letter of January  
19th. I would have replied earlier, but I wished to thor-  
oughly test the Cooker before making any statements. I  
have made a pretty thorough test of it, and I am satisfied  
that it does all you claim for it. My hogs have done much  
better since I started using your Cooker. I am feeding  
ground grain, which I scald and feed while warm. I am  
also using the cooker as a means of heating my hog pens,  
by having steam pipes running through the pens. Last  
week, when the thermometer was several degrees below  
zero, the pens were quite comfortable, and I saved several  
litters of young pigs that I am sure would have perished  
with the cold. I take pleasure in recommending your  
Cooker. Yours truly,  
J. E. BRETHOUR.

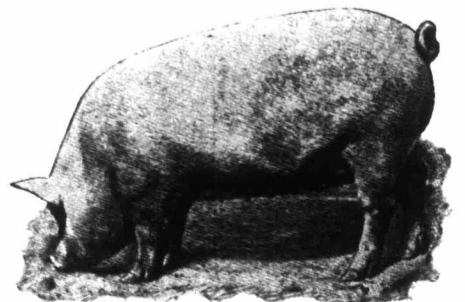
We guarantee our cooker to heat water in stock tanks 150 feet from cooker: to cook 25 bushels ground  
feed in two hours; to heat bbl. water hot enough to scald hogs in 30 minutes; to cook more feed, and heat  
more water, in less time, with less fuel and attention, than any cooker on the market. It can be attached  
to a chimney or used outside; it is as safe as any cook stove. It is not necessary to stir the feed to keep it  
from burning. Write for our 29th century catalogue and special offer at once.

Patented in  
Canada and  
United States.

### RIPLEY HARDWARE CO., Grafton, Ill., U. S. A.

MFGRS. AND PATENTEES.

BOX 100.



DECEMBER 20, 1900

THE FARMER'S ADVOCATE.

# THE WILKINSON PLOUGH COMPANY

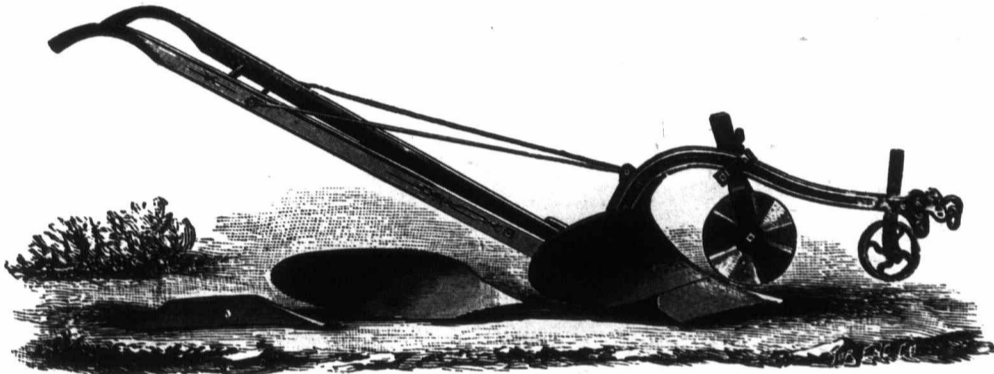
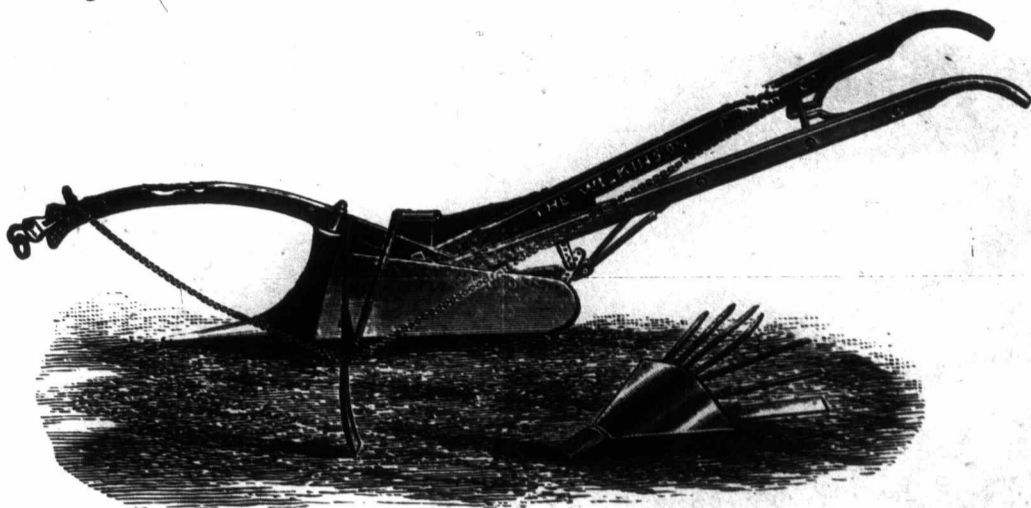
TORONTO, ONTARIO.

(LIMITED)

## PLOUGHS



ALL KINDS  
FOR ALL  
PARTS OF THE  
DOMINION.



STRAW CUTTERS,  
HAND AND POWER.

ROOT CUTTERS,  
CYLINDER AND  
SIDE WHEEL.

DRAG HARROWS.

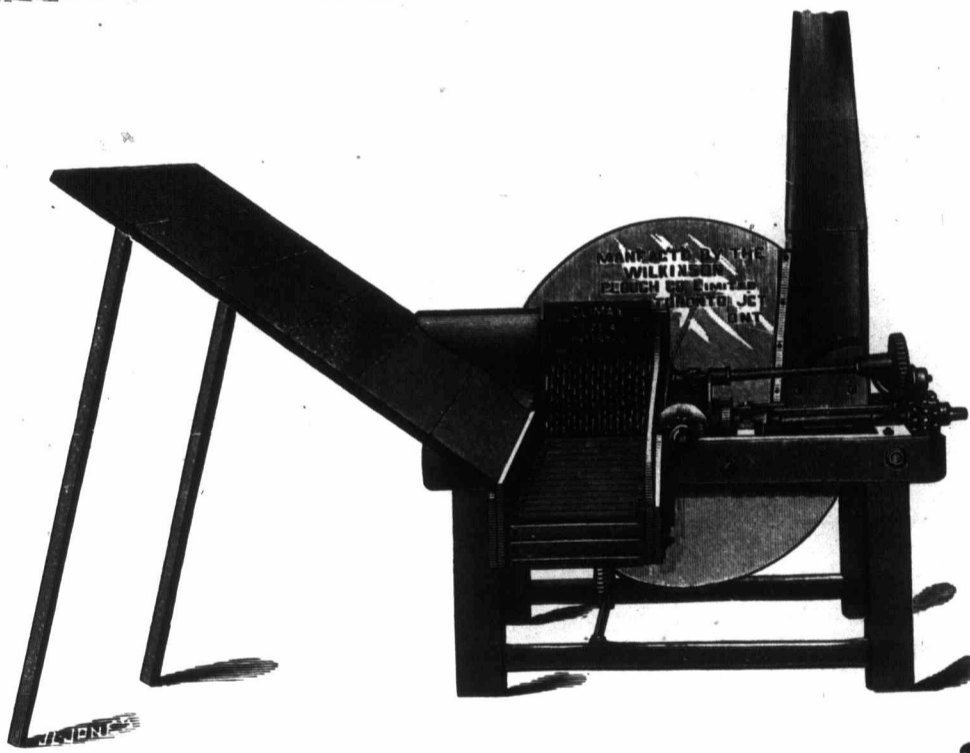
SCRAPERS,  
WHEEL AND DRAG.

TURNIP DRILLS.

WHEELBARROWS,  
ALL KINDS AND  
SIZES.

## PNEUMATIC ENSILAGE CUTTERS,

Unlimited Capacity.  
Testimonials from  
the leading stock-  
raisers, threshers,  
and agricultural  
colleges.



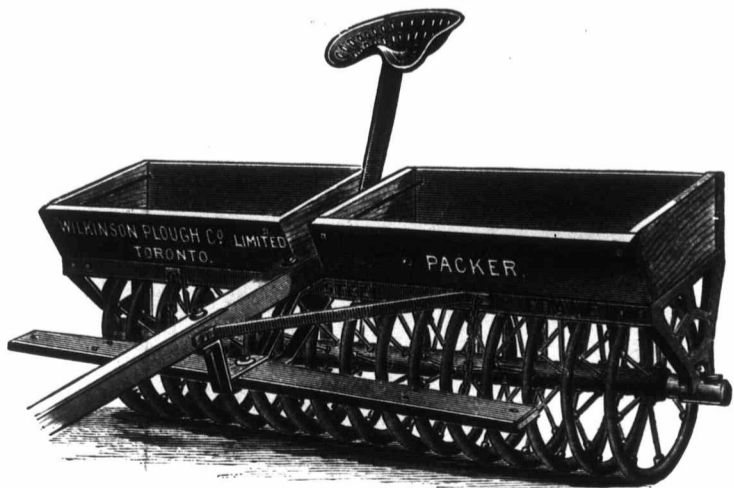
## LAND ROLLERS,

27 in. and 30 in. Diameter.

5 to 10 feet long for  
the East.

10 and 12 feet long  
for Manitoba.

HEAVY STEEL,  
SOLID STEEL HEADS,  
POLISHED STEEL AXLES  
and CENTER BEARINGS.



**PACKERS FOR MANITOBA**  
KEEP THE MOISTURE  
IN THE GROUND.

THE enormously increasing demand for our implements proves more than anything we can say. Our whole energies are continually devoted to improving our implements, regardless of cost. Many lines we are the originators of, and all lines have the benefit of the long experience of one of the oldest firms in the business.

Insist upon getting our make. Our name is in full on most parts of all implements, saving the customer from imposition and disappointment.



**Our Name in Full on All Cast Points and Soles.**

"THEY LAST TWICE AS LONG."

THE FARMER'S ADVOCATE.

FOUNDED 1861

# THE GEORGE WHITE & SONS Co.,

LONDON, ONTARIO.

LIMITED.

MANUFACTURE

## Threshing Machinery

THAT WILL PLEASE YOU.

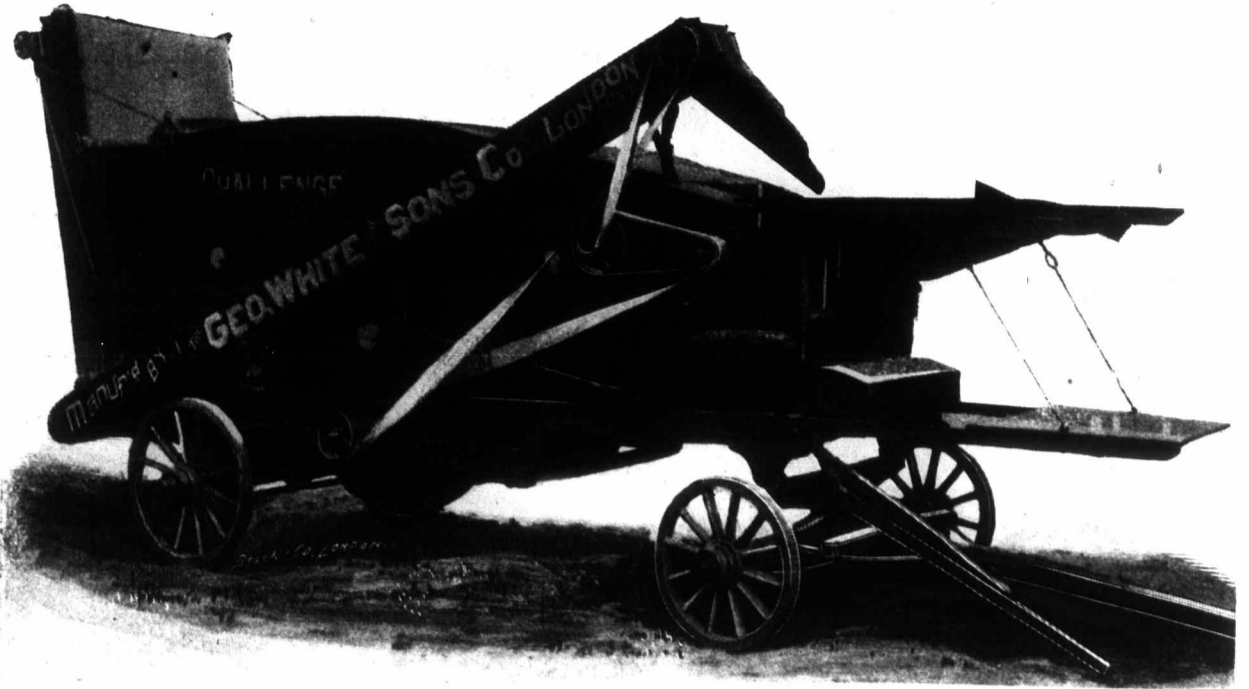
THE **WHITE** LOCOMOTIVE STYLE

## TRACTION

IS NEAT IN DESIGN, HANDSOMELY FINISHED, AND THE MOST POWERFUL

## Traction Engine

ON THE MARKET.



## THE CHALLENGE THRESHER

WILL LAST A LIFETIME.

IT WILL SAVE ALL THE GRAIN, AND CLEAN IT FIT FOR MARKET. WRITE FOR ILLUSTRATED CIRCULAR.

## Portable Engines

NEW AND REBUILT, ALWAYS ON HAND READY FOR SHIPMENT.

The George White & Sons Co., Limited, London, Ont.

# J. B. ARMSTRONG MFG. CO.

(THE GUELPH CARRIAGE GOODS CO.)

LIMITED

GUELPH, - CANADA.

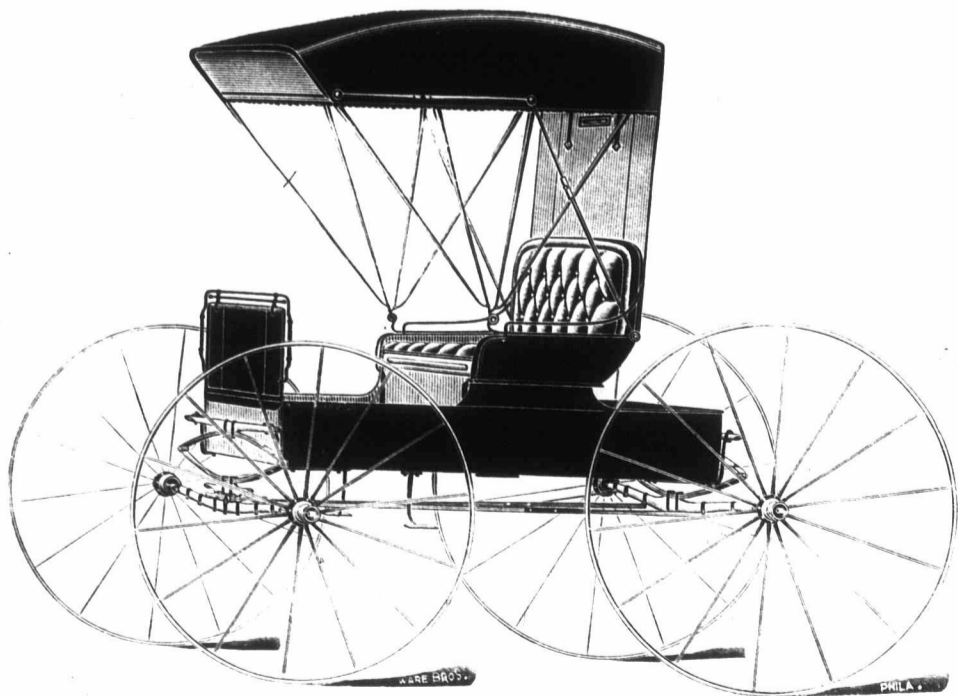
Wholesale Manufacturers of \_\_\_\_\_

STRICTLY HIGH-GRADE

## VEHICLES



INCLUDING \_\_\_\_\_



WAGONS,  
BAGGIES,  
TRAPS,  
SEATS.

DUPLEX and  
3-SPRING WAGONS,  
TRAPS,  
SURREYS, Etc.

Catalogue Freely Mailed to all Enquirers.



# A NICE PAIR



We are Ready for the Twentieth Century

Get Ready FOR THE NEW CENTURY AND FOR 1900 BUY ONLY THE BEST Machines

with the Best Binder and Mower in Canada.



## Our No. 2 Binder—and—Our No. 8 Mower

ARE THE NEATEST, LIGHTEST DRAFT, BEST MADE, AND MOST PERFECT WORKING MACHINES IN THE MARKET.

MADE IN CANADA, BY CANADIAN WORKMEN, FOR CANADIAN FARMERS. We appreciate your patronage, and thank you for what we have received in the past. We build our reputation on the quality, not the quantity, of goods we make. If you want the latest and best, see samples of our machines for 1900 before you buy. May we all do our part and help each other to have a Happy and Prosperous New Year.

WITH "CHRISTMAS GREETINGS TO ALL," WE REMAIN,

# THE Frost & Wood Company LIMITED.

HEAD OFFICE AND WORKS:  
SMITH'S FALLS, ONTARIO.

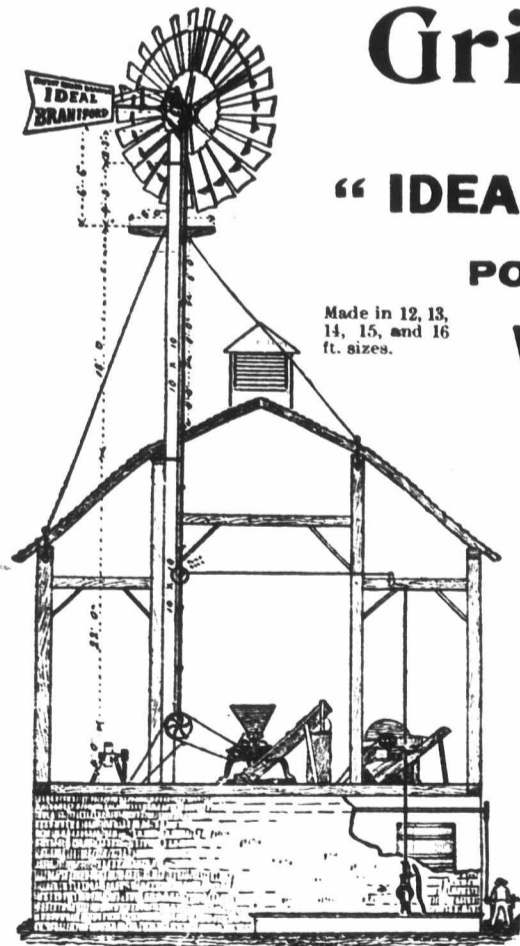
TORONTO BRANCH:  
77 JARVIS ST., TORONTO.

WINNIPEG BRANCH:  
MARKET SQUARE, WINNIPEG.

Agencies in all parts of the Dominion.  
Send for Catalogue.

## BRANTFORD Steel Windmills Grinders, Pumps, Etc.

GALVANIZED, ROLLER-BEARING



"IDEAL"

POWER

Windmills.

Made in 12, 13, 14, 15, and 16 ft. sizes.



### "Steel King"

PUMPING MILL.

MADE IN 8, 10, 12, 14, AND 16 FT. SIZES.

Fitted with Patent Interchangeable Steel Roller and Ball Bearings. Sprocket Drive. Gears not Used. The Easiest Running. The Most Powerful. Angle Steel Frame. Will Last a Lifetime.

Also manufacturers of Galvanized "Ideal" Pumping and Geared Power Windmills; Galvanized Steel Towers (3 and 4 posts) of all heights; Patent Galvanized Steel Flagstaves; Maple Leaf Grain Grinders; Iron, Wood and Spray Pumps; Fanning Mills; Beekeepers' Supplies, etc.

"IDEAL"

WOOD

Lift Pump.



Catalogues Sent on Application. Correspondence Solicited.

Fig. 4x—Ideal Lift Pump.

This pump we consider the best on the market. It is built with wood handle, fitted with malleable ends, all wearing parts being iron and steel. For deep wells we fit this pump with iron or galvanized iron tubing, and iron or brass cylinders, which makes it one of the easiest working pumps on the market, and also the most durable.

CODE WORD:  
Oddity..... No. 20, with 7x7 head..... \$6 25  
Odious..... No. 21, with 8x8 head..... 7 25

We make four other styles of wood pumps and two iron house cistern pumps. Send for pump catalogue, and if you want a quotation tell us the depth of your well, and the kind of head you desire.

Will Grind Grain, Cut Feed, Saw Wood, Pump Water, Run Lathe, etc., etc.

The best Canadian farmers from the Atlantic to the Pacific are using Brantford Ideal Power and Pumping Mills, and recommend them strongly as the best farm power.

OLD SHAPLEY & MUIR CO. LIMITED BRANTFORD CAN.

