

V. 19 # 12



NEW ONTARIO FARMS

IF you are interested in procuring a farm for yourself on Easy Terms write the Department of Crown Lands, Toronto, Ontario, for a copy of a new pamphlet on **LAND SETTLEMENT IN ONTARIO.**

Hon. E. J. DAVIS, Commissioner of Crown Lands, Toronto



"He who by the plow would thrive
Must never walk but always drive."

BE UP-TO-DATE.....

Save MONEY, LABOR and TEAM by using the

Ontario Riding Plow

This plow has a lighter draft than any other plow doing the same work. Anything a plow should be asked to do it can do with less strain on team or ploughman.

It is the simplest plow made and can be run by any man, woman, boy or girl who knows how to manage a team.

We make single and double Riding Plows with mouldboards adapted for any soil and cutting any width of furrow.

Apply for catalogue and particulars to

Ontario Riding Plow No. 3

THE PERRIN PLOW COMPANY, Limited
SMITH'S FALLS, ONT.

The *Atlantic Refining Co.* NO COMBINE
Elastic Carbon Paint
TORONTO.

Especially adapted for farm buildings; proof against weather, fire and rust; will not crack, run, blister or scale; will keep leaks, and last a lifetime; great protector for every thing from a hot boiler front to a plow, bridge, roof and fence. Our immense buildings are covered with Mastic Roofing and Siding and painted with ELASTIC CARBON PAINT. Write us for prices. We have received thousands of valuable testimonials from Canadian and American customers. Manufactured and Sold in Canada only by THE ATLANTIC REFINING COMPANY, Manufacturers and Importers of Illuminating and Lubricating Oils, Grease and Specialties, Foot of Jarvis Street, TORONTO, CAN.

Turn to page 252 and 253 FARMING WORLD of September 17.

Always Mention THE FARMING WORLD when writing to Advertisers

DE LAVAL

THE UNIVERSAL STANDARD

CREAM SEPARATORS

GUARANTEED CAPACITIES.

"MUNNING BIRD"	250 lbs. whole milk per hour,	\$ 65
"DAISY" -	350 " " " " " "	85
"BABY" No. 1	450 " " " " " "	100
" " " 2	600 " " " " " "	125
" " " 3	1000 " " " " " "	200
"DAIRY" TURBINE.	1000 " " " " " "	225

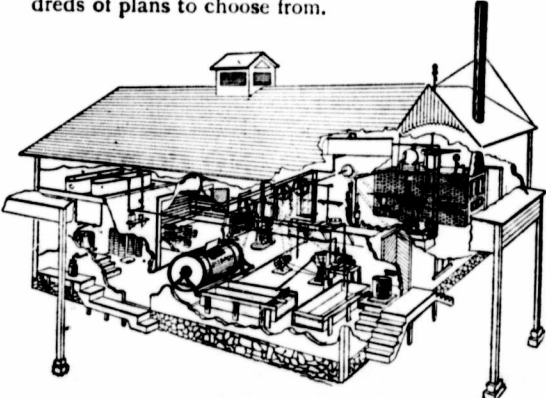
The small power required with these great capacities, together with the uniformity of product under varying conditions, simply place the close skimming, easy running, patent protected, "Alpha-Disc" machines beyond attempted competition.

Send for new catalogue with full particulars.

The De Laval Separator Co.

New York Chicago San Francisco	Ontario Offices: 77 YORK STREET TORONTO	Montreal Winnipeg Philadelphia
--------------------------------------	--	--------------------------------------

If you contemplate building a Creamery, we will furnish suitable plans free, if given an opportunity to make prices on the machinery. Hundreds of plans to choose from.



Creamery Package Man'g Co.

COWANSVILLE, QUE. LIMITED

A full and complete line of butter and cheese machinery and supplies for the farm dairy, creamery and cheese factory.

Business Muscle...




BELLEVILLE, ONTARIO

We teach full Commercial Course
 Full Shorthand Course
 Full Civil Service Course
 Full Telegraphy Course

Our graduates in every department are to day filling the best positions.
 Write for Catalogue. Address,
J. FRITH JEFFERS, M.A.,
 Principal

SHEPHERDS

X



SHEEP DIP

Kills Lice and Ticks, destroys all disease germs. Disinfectant and antiseptic. Is healing. Prevents and cures skin diseases.

Having so much confidence in this preparation we will give to any farmer who personally brings this advertisement to our warehouse a full-sized bottle for trial.

Any Dealer who has not got it in Stock can get it for you from us.

Put up in Qt. Bottles. Price 25 Cents. Manufactured by
THE LYMAN BROS. & CO. Limited,
 Wholesale Druggists,
 71-73 Front Street, Toronto.

Do You Want the Best?
 then buy the

U. S. Separator

that is the kind that



GETS ALL THE CREAM

PLEASES its USERS

INCREASES the PROFITS

Reduces the Expenses.

Send for catalogues containing much information it will be to your interest to know if you are thinking of buying some other make

Our market reports are reliable and up-to-date. They are written specially for The Farming World and are of inestimable value to every farmer.

The Farming World

For Farmers and Stockmen

Vol. XIX.

SEPTEMBER 17th, 1901

No. 13

The Selection of Judges at Fairs.

NEXT to the exhibits themselves the judging and the awarding of the prizes is the most important feature of any great show. In many respects a fair would have very little educational value were it not for the fact that experts select the meritorious exhibits and single them out for the visitor to examine and study. A fair does not exist alone for the purpose of dividing a certain amount of prize money among a certain number of exhibitors. It has an educational value that should not for a moment be lost sight of.

The educational value of any show can be made or marred by the class of judges appointed to make the awards and we are afraid that the managements of our larger fairs lose sight of this fact in making selections of suitable men. There is a tendency to cater more to the likes and dislikes of the exhibitor, in selecting judges, than to the effect their judgment will have upon the educational side of the show. Especially is this true of the selection of judges in many of the live stock departments and very often a competent and experienced judge is set aside because of the whim, or otherwise of some exhibitor. There was more than one instance of this kind which came under our notice at the recent Industrial Fair.

While we believe that the wishes of the exhibitors should be consulted in a large degree as far as practicable in the selecting of judges, there is great danger in catering too much to their wishes. When this is done the educational side of the show is very often sacrificed and the visitor receives a wrong impression as to the type of animal best suited to the purposes for which it is intended. The effect of such erroneous impressions are very far reaching indeed, and an observant visitor often returns home with entirely wrong ideals as to the type best adapted for commercial or other purposes.

We are not reflecting at all upon the ability or honesty of any of the judges at our large fairs, when we state that the time has come when the selecting of such judges, should be placed upon a much higher plane than heretofore. Exhibition Associations should look more to the onlookers' side than to the exhibitor's side, and select

judges whom they know are competent, reliable and above reproach. If they are not acceptable to the whim of some exhibitor let the selection stand so long as the authorities have faith in the judge's ability to give a thoroughly unbiased and just judgment. It sometimes happens that a position as a judge is given to some friend of the Fair, who has only a meagre knowledge of the classes he is judging and whose judgment must work lasting injury to the community, in creating false ideals in the minds of persons who have come to the show to learn something about stock. In no case should anything like this be done. Merit and the ability to give an honest and fair judgment should be the only qualifications looked for, whether there be one, two or three judges selected. Other things being equal, we believe that a thoroughly competent and reliable single judge will give better allround satisfaction than two or more judges.

Looking at this question from the exhibitor's point of view, we believe he will be better satisfied if the educational side is considered in the selection of judges than otherwise. No reputable breeder or exhibitor will hesitate to submit his stock of whatever kind, to the decision of a thoroughly reliable and trustworthy judge. It is the fellow who has some inferior stock, that he knows, will not be in the prize list unless he has some hold on the judge, that will raise the kick. And it would be better to let him "kick," rather than sacrifice the first object of a show to his whim. Where a thoroughly competent judge is selected, who will do the right thing without favors to any, his judgment should be of as great educational value to the exhibitor as to the onlooker; in that it will show him wherein his animal is lacking and the winner excels.

The selection of judges then, looked at from both the exhibitor and the onlooker's standpoint, is a most important problem, that should receive more attention than it gets at the hands of the Exhibition Associations. There should be no catering to any special interest whatsoever, but an upright and above-board selection, looking to the effect the awards will have on the bearing or best working of the industry represented. We do not say that the selections made for this season's fairs have not all been of the kind we have indicated, but we have

good reasons to know that some of them have not. Let there be then an effort made to have every judge selected on the higher plane that we have pointed out, that of looking altogether to the educational value of the show.

A Sure Market for Canadian Farm Products.

In commenting upon the article in our annual autumn number, dealing with, "The Census and the Farmer," the Globe of Sept. 10th, says:—

"Without any exaggeration it does seem as if a farm on the North American continent is going to be a splendid asset. The development of manufactures in the United States is creating consumers of food at a rapid rate, and, as we tried to show recently, the time seems not very far off when the United States will consume all its own wheat. There is no danger of the surplus food supply of Canada going begging for customers. The only danger is the development of a landlord class, with tenant farmers and "peasants" under them. The richest land will not stand the burden of maintaining a class of idlers in extravagance."

Some weeks ago, in discussing some new conditions affecting the American corn market, we pointed out that the consumption of corn is being gradually directed into new channels such as for the manufacture of glucose and starch, and for other commercial uses. We tried to show that the day is not far distant when large quantities of cheap corn for cattle feeding will be no longer forthcoming. Our reasoning was based upon the fact that there is little possibility of the total acreage devoted to the corn crop in the United States, being increased to any appreciable extent; that during the past five years there has been a tremendous increase, amounting to nearly 400,000,000 bushels in the foreign and domestic demand for corn, and that this new demand for corn is increasing at a very rapid rate. When the day of cheap American corn is past the western farmer and feeder will not be the formidable competitor of the Canadian cattle feeder in the English market, that he is at the present time, and has been for years past.

If therefore, in addition to this, there be good grounds for believing that, the Globe's contention that the time is not far distant when the United States will consume all

its own wheat, is correct, we have a condition of affairs most encouraging for the Canadian farmer. With the two leading cereals grown by the American farmer directed into new channels, and no longer available, the one for cheap cattle feeding, and the other for export for human food, a sure and profitable market is assured not only for our food products, but for our beef cattle for all time to come. It is little wonder then that citizens in other walks of life are beginning to look upon the owners of Canadian farms with feelings almost akin to envy. Truly great things are in store for the tiller of the soil. He is no longer the down-trodden and benighted son of the earth, that he was once thought to be, but the man of the century, with a brighter outlook and a wider sphere opening up before him than has been at any previous period in the history of the world. Who would not want to be the possessor and tiller of one of Canada's fertile farms?

Two Injurious Pests.

In last week's issue, Mr. C. W. Nash, in his weekly review of insect and bird life on the farm, gave some valuable hints to wheat growers, as to the best means of exterminating the ravages of the Hessian fly. Farmers would do well to give heed to authorities like Mr. Nash on this subject. The ravages of the fly the past season have been confined to certain districts of Western Ontario, and seemingly the most simple and practical plan for eradicating the pest, is for the farmers in each affected district, to cooperate and not sow their wheat till all danger from the fly is past. The fact that nineteen farmers in a district observe this rule while the twentieth continues in the old path will not suffice. All must cooperate and proceed along one definite line in the same way and at the same time if any good is to be accomplished.

In this issue, Mr. Nash deals with another pest, that is beginning to branch out into the rural districts. For a number of years the Tussock moth has played havoc with the shade trees in the city of Toronto. And while measures have been taken by the city authorities from time to time to check its ravages, there seemingly, either through neglect or a thorough misunderstanding of the needs of the case on the part of the officials whose duty it was to enforce these measures, has been no advancement made in eradicating the pest. In fact, it has thrived so well under the treatment, that to-day it is no longer confining its attacks within the city limits, but is spreading out through the province and we know not where the damage to the foliage of the country will end. It certainly is about time that some higher power, such as the local Government took the matter up and adopted vigorous measures to prevent further ravages of this persistent insect. We have reason to

know that had proper measures been taken when this pest first appeared by the city authorities there would be no need for special action at the present time.

Ontario Stock for British Columbia.

One of the largest, if not the largest shipments of live stock that has ever left this province for the Canadian West, was sent from London on Monday of this week. It consisted of three car loads made up of Shorthorn, Ayrshire and Jersey cattle; Shropshire, South-

down and Oxford Down sheep and Yorkshire, Berkshire, Tamworth and Chester White swine.

This shipment was sent under the auspices of the Dominion Live Stock Associations, and the selections of animals were made by F. W. Hodson, Live Stock Commissioner, A. P. Westervelt, Secretary of the Associations, and Mr. A. W. Smith, Maple Lodge. They were purchased under order from the British Columbia Government, and will be sold at Victoria, B. C., by public auction on October 3rd. Further particulars regarding this shipment will appear in next week's Gazette department.

Our Western Letter

Bovine and Human Tuberculosis. Live Stock in the West

Winnipeg, Sept. 5th, 1901.

A Doctors' Convention, while of importance to mankind in general, is usually of very little special interest to the farmer. In this respect the convention of the Canadian Medical Association, which has just closed its proceedings here, was an exception to the rule. The convention was addressed by some of the best known medical authorities of the continent, and the sessions were attended by large numbers of persons outside the profession. The recent tuberculin conference, held in London, England, naturally came up for discussion on many occasions, particularly in connection with the lecture by Professor Russell, of the University of Wisconsin. The Professor claims that, though human and bovine tuberculosis are doubtless different, yet we must not suppose that the human being is safe from bovine tuberculosis or vice-versa. Bovine tuberculosis being more virulent than human, man more frequently contracts it than cattle contract the disease from men. He advocated the treatment of milk to remove all danger of infection from dairy products. Dairy herds suffer more than beef herds from the disease, and the tuberculin test should be employed to separate the unfit from those which are fit for use. The danger of infection from meat, Professor Russell considers unimportant, but has yet seen no evidence to prove that there is no danger in milk and butter.

The discussion which followed brought out the fact that even scientific men are not thoroughly familiar with the theories recently announced by Dr. Koch. Many seem to think that he pronounced bovine tuberculosis absolutely non-communicable to man, whereas, all he claims is that it is not nearly so dangerous as has been generally supposed. There has been a tendency in some agricultural papers to suppress a part of the facts. But the great German scientist was more honest. He admitted that some of the cattle experiment-

ed upon with human germs, contracted tuberculosis, and that there was no evidence to prove that a certain proportion of the disease in the human being was not bovine in its origin. He hopes to be able at a later date to prove conclusively that man cannot contract bovine tuberculosis, but until this is conclusively proven it will not do to adopt any measures of a re-actant nature.

The breeder is likely to have his innings now, but let him be moderate in his demands. Any attempt to secure the removal of all the precautionary measures considered so essential in the past, may result in failure. Better to go slowly and the object will be more sure of attainment. After all that has been said there has been no attempt to deny that the disease is contagious among cattle, and while this condition holds good there will be a necessity for every precaution against its spread.

Hon. R. P. Roblin, Premier of Manitoba, has entered suit against D. W. Mills, charging him with the theft of \$16,000, being the property of a partnership between plaintiff and defendant. The firm owned cattle at various points in Manitoba and the N. W. T., which defendant sold for much less than value. It is claimed by Mr. Roblin that the proceeds of sale were not placed to the credit of the partnership, and that Mills was about to leave the country with the money in his possession, when arrested. Owing to the prominent position of the plaintiff the case is exciting more than ordinary interest.

The number of sheep in Manitoba continues to decline, as will be seen from the following figures for the past eight years: In 1893 there were 35,400 sheep in the province; in 1894, 35,430; 1895, 35,766; 1896, 33,811; 1897, 32,680; 1898, 32,053; 1899, 33,092; 1900, 25,813.

The reason for this startling de-

Studies in Nature

A Review of Insect and Bird Life on the Farm

Edited by C. W. Nash

crease, where we should naturally expect the opposite, is hard to find. Many farmers who handle them are increasing their flocks, claiming large profits from the business. Sheep here are not subject to disease, fodder is low, and prices good. There are large areas of land excellently adapted for sheep-farming to be had at low prices. Sheep are not in fashion just now. If someone understanding the industry were to set the fashion with a large ranch and a few thousand sheep we would doubtless soon see our farmers flocking, one and all, great and small, into the business.

Hog raising, on the other hand, is becoming more popular each year. Some three years ago there was a sudden drop in the number of hogs marketed, but since that date there has been a large yearly increase, which gives promise of continuing.

Manitoba visitors at the Minnesota State Fair, held last week in St. Paul, pronounce it a "hammer." Exhibits in all classes were good, but nothing attracted more favorable comment than the exhibit of Manitoba grown apples. Our Minnesota cousins, like our Ontario relatives, are inclined to regard Manitoba as the "Farthest North," and are somewhat surprised to find that we can grow apples equal to the best. Mr. A. P. Stevenson, of Nelson, Man., was the exhibitor.

Markets show no change from last week, but every kind of produce is in good demand. Implement houses are still very busy shipping twine and repairs, as well as a goodly number of new machines; this latter item consists chiefly of threshers and threshers' sundries.

Wheat cutting is now over, but a great deal of oats remains standing. Weather has been excellent up to the present date; just sufficiently unsettled to keep the farmer on the "qui vive," without doing any damage.

Returning visitors pronounce the Toronto Industrial the "greatest show on earth." It is a great satisfaction to us, even away out here in the West, to feel that the foremost agricultural exhibition of the continent is a Canadian institution.

M. B.

Jenkins—Baby not well, eh? You ought to call Dr. Brown. We sent for him last week, and the moment he saw our baby he guessed what the trouble was.

Jackson—What was it?
Jenkins—Pins.—The Rival.

Nellie (aged 5)—Our family is awfully exclusive. Is yours?

Bessie (aged 4)—No, indeed! We haven't anything to be ashamed of.—New Orleans Times-Democrat.

The editor of this department will be glad to identify for subscribers any specimens of natural history sent to this office for that purpose and will answer any questions on the subject that may be asked through the Farming World.

BIRD NOTES.

Every night now, the birds that immigrate during the darkness are to be heard as they stream over southward. Last Saturday night, (Sept. 7th.) was particularly noticeable in this respect, the day had been very hot and still, but towards evening a breeze sprang up from the north-west, which, later on developed into a strong gale and then moderated, so that by midnight only a good breeze was blowing and then the air was full of birds of various species taking advantage of the favoring wind to help them on their course. The travellers seemed to be principally Thrushes, Warblers and Flycatchers and the following day I noted a marked diminution in number of the representatives of these families. Almost every day marks the disappearance of some species, its place however being taken by some other from the north, so that as yet the number of birds to be seen in a walk is in no way diminished, in fact, there are more birds to be seen now in the woods and fields than at any other time of the year, but alas there is no bird music.

Like most other people I visited the Industrial Fair, and of course spent some time in the natural history building and left it very much disappointed with the exhibit made there. The collection of snakes was good enough of its kind, but they were all southern or western forms, only two species out of the lot being ever found in Canada. The birds were well mounted specimens and a credit to the taxidermist who set them up, but they were from all countries except our own. If my memory serves me right there was not a single Canadian bird amongst them. The living fish made an interesting display and were the most creditable feature of the department, the collection was too small and should be increased and specimens suffering from fungus disease should be cured before being sent, or left out. The insect exhibits made by some young people were very creditable indeed, though I noticed several instances of wrong classification from an economic standpoint. The natural history department of the show could be made a very efficient educator if it was properly conducted,

as it was this year a certain amount of curiosity may have been excited, but not much could be learned.

INSECTS.

TUSSOCK MOTH.

I saw a paragraph in the "Globe" the other day, which stated, that the powers that be in Toronto had conquered the Tussock moth. This aroused my curiosity a little, so the next time I went into town I cast my eyes about the trunks of the shade trees and along the fences when I came near any; but I certainly failed to observe any signs of a conquest of this abominable pest. The larvae ceased feeding some time ago, and formed their cocoons; from the chrysalis which was in the cocoons the moths have emerged and the female, which is wingless, has deposited her eggs upon the empty cocoon. These are to be seen everywhere, and from them next spring will be hatched enough larvae to stock all Ontario. It seems strange that no proper effort is made to destroy these eggs, they are quite conspicuous and easy to get at and might nearly all be destroyed between now and hatching time next spring if they were looked after.

CORRESPONDENCE

W. B. S.—Asks, I would like to know if you have ever seen a black Ground Hog? We saw one not long ago near our place. Are they rare?

Ans.—I have only seen two or three black ground hogs in my life. They are certainly very rare. The peculiar coloration arises from an excessive amount of coloring matter in the skin. A condition known as melanism. It more frequently occurs among the carnivorous animals and birds than amongst those that are vegetable feeders.

A. L. N.—The insects commonly called "Darning needles" are properly known as Dragon flies. They certainly cannot sting, but are perfectly harmless to man or beast. Not only are they incapable of inflicting injury, but they are very beneficial, their food consisting entirely of other insects, amongst others mosquitoes are destroyed by them in large numbers, in all their stages.

One Volunteer—If you really believe you won't die till your time comes, what makes you dodge every bullet comes along?

Second Volunteer—There is a time to die and also a time to dodge.—Indianapolis Journal.

The Western Fair at London

The Western Fair was unfortunate this year in having rain both on Wednesday and Thursday—usually the two best days of the Fair, and this because of showery mornings caused a great falling off in the attendance. The Directors did their part and got together an excellent show of stock and manufactures, but the weather was against them. The Western, more than any other of the leading Fairs in Ontario, has a large farming constituency. For nowhere else can so many farmers and their families be seen at their annual outing. It may be that more farmers go to Toronto, but for an exclusively farming crowd, no place equals London. There was much of interest in the main building. Indian arrows and relics, entomological collections and native plants and weeds were well shown, and in large quantity. Exhibits of special manufactures and of useful articles were large and varied. The ladies' work was excellent and all new and fresh—up-to-date work in fact, and of the very best quality, both in goods and work. The picture gallery had some pleasing sketches and paintings and there was a large collection. There were many fairs, some of the Midway were reported as but flimsy value for the ten cents demanded as admission fee, but the open gambling and wheels of fortune were not seen.

HORSES.

The London District has long been famous for its light-legged horses, both of a good harness type and for saddlers. This year while there were many good ones, others were hardly fitted for the show ring, and the average was believed to be under that of former years. There has been a falling away from the past reputation of the London District in the matter of good harness horses. Thoroughbreds in the female classes, more especially, were an improvement on those shown at Toronto, but that is not saving much in their favor, as Toronto this year was unusually backward in this class. For aged stallions, Dermont by Master Kildare, was first, and won the sweepstakes ribbon. Second went to Joseph Mossop, Thornedale, and third to W. D. Smith, Etterick, Ont. There were no young stallions. For thoroughbred mare, John Coventry, Woodstock, was first; D. H. Porter, London, second, and Jesse Jonathan Ohsweken, with the winning mare at Toronto, was third. D. H. Porter had first for a nice young foal. W. Clark, Goderich, had a three-year old filly which won the sweepstakes ribbons as the best mare in the class. The Roadster classes were quite different from those shown in Toronto.

In the aged stallion class S. P. Thompson, Woodstock, was first with James McKee, Denfield, second. There was a good ring of three-year old roadster colts. John Hill, Port Burwell, was first; A. St. Clair, Aylmer, second; and John Dewar, Nairn, third. In two-year olds, John W. Coulter, Talbotville, was first and in the yearlings, G. W. Kennedy, Ilderton had the winner. S. P. Thompson won the sweepstakes with his aged stallion. In mares of the roadster type, H. Ziner, Listowell, was first, with Bessie by Oliver Wilkes, a very good type. Andrew Venning, Belmont, second, and C. N. Amett, Glencoe, third. H. Ziner had the winning foal, the third prize at Toronto. A. St. Clair, second, and F. I. & T. B. Thompson, Elmfield, third. H. Ziner also won for best three-year old filly and sweepstakes for the best roadster mare any age. In the three-year old class J. W. Tooley, Delhi, was second, and L. W. Fleming, London, third. Two-year olds were headed by P. Farrell, Woodstock, with a very nice bay with dark points and clear, blood-like legs. M. I. Seddale, Denfield, was second, and N. Campbell, Belmont, third. In the yearling filly class F. I. & T. B. Thompson, Elmfield, was first; H. V. Little, Verschoyle, second, and Jeffrey Bros., Hawley, third. There was but one pair of matched roadsters shown by Dent Dalton, Delhi, of 15½ hands and over. For those under that height John Watson, Listowell, was first with a speedy pair by Wedgeblock, Harold Curry, Mapperton, second, and Peter O'Dell, Belmont, third. For single roadster, P. Farrell, Woodstock, had the winner, a bright bay by Wisdom. J. A. Dawson, Lambeth, was second, and G. W. Kennedy, Ilderton, third. This was a capital class with a lot of good ones in it. In the class for under 15½ hands James Adamson, Lambeth, won both first and second, with J. A. Kelly, Listowell, third.

CARRIAGE HORSES.

There was a good show of carriage horses, high-standing, proud-looking fellows, with good stately action. In this class speed does not count as much as style. For stallions, 4 years old and upwards, Entricken and Crerar, Tavistock, had the winner, and they also got sweepstakes for the class. W. C. Brown, Meadowvale was second with Prince George, by Prince Victor, and W. H. Guest, Ballymote, was third. In the high class, Dent Dalton, Delhi, had first; W. Bernard, London, second, and O'Neil & Co., third. For three-year olds, W. C. Brown won with Auctioneer, a son of Prince George. In the yearling class, Thomas McComb, Masonville, was first, and Dr. I. Watson, Howick, Que., was second.

For a matched carriage team there were several good entries—a fine pair of bays—dark bays and black points, with a little white about the heels, were first for James McCartney, Thamesford. They are by the German coach horse and are very well matched. Second went to George Matheson, Bennington, and third to Adam Beck, London. For single carriage horse in harness, first went to Buttry & Rapley, Strathroy; second to G. W. Kennedy, Ilderton, and third to Wm. McCoy, Falkirk. For three-year old filly of the carriage type, Philip Yake, Kintore, was first; Andrew Routledge, Lambeth, second, and third fell to W. E. Lumley, Shelden. In the two-year old class D. G. Hammer, Mt. Vernon, was first; H. H. Quinn, Listowell, second, and P. Farrell, Woodstock, third. Yearlings, T. Hardy Shore, was first; T. Hickley, Strathroy, second, and H. F. McNeice, Byron, was third. For brood mares, the winner at Toronto got again the red ticket here. She was owned by W. C. Brown, Meadowvale, and is named Princess Royal, by Prince Alexander. T. Hardy Shore, second, and W. I. Travers, Talbotville, was third. The foals followed with the same tickets for first and second, and H. Nichols, Ilderton, had third. As will be readily seen this was very much of a farmers' show, and the dealers did not win all the money as they largely did at Toronto.

HACKNEYS.

For Hackneys, the Toronto winner, Dr. I. Watson's "Bell Boy" was placed first with old Jubilee Chief a good second. It was quite wonderful how much of the get of the old World's Fair winners were decorated with prize ribbons at this Western Fair. R. M. Wilson, Delhi, had the third place for his exhibit. Oswald Sorby's two-year old, "Guelph Performer," won in his class, and Bawden & McDonnell's Cannought's Heir, as a three-year old—with "Bell Boy" as the sweep. In the class for mares, Sorby's "Miss Barker" was again an easy winner. A. St. Clair, Aylmer, won with a three-year old filly. W. I. Travers, Talbotville, had the best two-year old, with John W. Coulter, of same place, second, while A. Venning, Belmont had first for yearling filly; Dr. I. Watson, second and W. I. Travers third. For Hackney foals W. I. Travers was first; J. McMillan, Belmont second, and O. Sorby, third. For stallion and four of his get, A. St. Clair, Aylmer, won with Jubilee Chief, and his get were specially good. The same exhibitor won first for a very fine pair of high steppers, with splendid knee and hock action. In the class for style high steppers, Jas. McCartney, Thamesford, had first for a fine bay gelding with three white feet. Campbell and Thomas, Berlin, had

second with a stout Hackney type, and A. St. Clair was third.

SADDLE HORSES.

The London district was years ago famed for high-standing, blood-like saddle horses, and there are many good ones yet. The entries were not as large as could be wished. Adam Beck, of London, had the best of the winnings, both for saddle horses and for hunters. In light-weight hunters he had first and third, with O'Neil Bros., of London, second. In the heavy-weights A. Beck captured first, second and third, and he did the same thing, winning all three, in the class for best saddle horse.

CLYDES.

In the class for aged Clydes, the Toronto winner, "Cloth of Gold," (2959), owned by Oswald Sorby, Guelph, was first. He is a good, thick horse with fine bone and soft scanty leather. Second went to Robert Ness, Howick, Que., for Merchiston (10236), a blocky bay by Prince Alexander (8899). Third went to O. Sorby for Lord Charming (2284), sire of the first prize horse, both bred by Col. Holloway, Alexis, Ill., U. S. For three-year-olds, first and second went to R. Ness, for Copyright (10724), and Baron Frederick (10601), both Scotch bred. Third went to Jas. Henderson, Belton. In the two-year-olds R. Ness had first for Laurettian, and O. Sorby second for Charming Lad (2923). In yearlings, the Toronto winner, shown by Whelihan & Slack, of St. Mary's was first. He is a bay with three white feet and well made type of a draught horse. Is by Bold Boy and is a very promising youngster. Second went to O. Sorby for Lord Stanley (2537), a colt with white nose and face, and white legs; and third to Whelihan & Slack, for a big rangy colt, by MacMaster, not as good quality as the first prize one and very bare in the legs. For fillies, three years old, R. Dingman, Maplewood, was first, and James Bowman, Guelph, second. For two-year-olds O. Sorby was first with Miss Eva Charming. Second went to W. Dundas, Ingersoll, and third to R. Ness for a daughter of Lawrence Again. For yearling fillies W. Dundas was first, and John Savage, Gourock, second. For brood mare O. Sorby was first for Miss Stanley (2307), and H. Sims, Thamesford, second. O. Sorby won for best mare, any age. For span of either Clydes or Shires, H. H. Sims, Thamesford, was first, and O. Sorby, Guelph, second. In the class for heavy draught teams, D. A. Murray, Bennington, was first with a big, high-standing pair of bay geldings, weighing about 1850 pounds each at three years old. James Henderson, Belton, second, and M. W. McKenzie, Youngville, third.

SHIRES.

There was not much new in the Shire class. Bawden & McDonell of Exeter, had their excellent exhibit which were shown at Tor-

onto, with Belshazzar at the head of it, a fine specimen of a Shire. They had first and second, with E. C. Attrill, of Goderich, third with Desford Marquis (16639), a horse unplaced at Toronto. The Morris, Stone & Wellington fillies were out and placed, as before, one first in each class. The only difference from the Toronto list being the class for mares. In this the places were reversed, Leta-101—moving from second to first. She is owned by Morris, Stone & Wellington, and Bawden & McDonnell's Nelly-122—taking second place. There was an agricultural class, and some good light-draught teams were shown. John McIntosh, Maplewood, was first. John McCarty, Thamesford, second for a pair of iron greys, and O'Neil Bennett, Kirwood, third. There were many servicable animals in this class.

CATTLE.

The show of beef cattle was good but not equal to that seen at Toronto, where the battle of the year took place. W. D. Flatt had gone to the New York State Fair at Syracuse, Hon. Thomas Greenway to Buffalo, and for the contest for aged Shorthorn bulls, W. C. Edwards & Co., Rockland was first with his big roan Gwen Allan; J. A. Crerar, Shakespeare, second with the three-year old, red Captain Mavily, and Geo. D. Fletcher, Binkham, third for Spicy Robin, a nice roan bred by the Messrs. Watt of Salem. For two-year-olds, James Snell Clinton, was first, and for yearlings James Gibb, Brooksdale, had a good roan with long quarters, which was placed first, though he was not in show condition. For calves, Jas. Leask, Greenbank, was first with his Toronto winner, second went to T. Douglass & Son, Strathroy, who also won with Diamond Jubilee for best bull and four of his get. Goodfellow Bros., Macville, were third with a red Shming Light, and W. K. Fairbank, Tedford, fourth. W. C. Edwards won the award for bull any age.

For Shorthorn cows Goodfellow Bros., were first and second with J. A. Crerar third. For three-year-olds, J. A. Crerar was first with his imported cow, Gem of Ballechine, bred in Scotland. He was also first with her two-year old stable companion, Ballechine Daisy 2nd, and first for heifer calf of the same breeding. Goodfellow Bros. followed with three seconds in the same classes. The three-year old of their own breeding, the two-year old imported roan, Watercress, and the yearling, Golden Pansy. G. D. Fletcher had the third prize three-year old. T. Douglass & Sons the same ticket for two-year olds, and W. C. Edwards & Co., for the Aberdeenshire bred yearling Scotia 2nd. For heifer calves W. C. Edwards had first and second, W. K. Fairbank, Thedford, third, and G. D. Fletcher fourth. J. A. Crerar won for best herd and for female, any age; W. C. Edwards & Co.,

second for aged herd and first for young herd, with T. Douglass & Sons, Strathroy, second.

Herefords—Were shown by the F. W. Stone Stock Co., of Guelph, W. H. Hunter, The Maples, and O'Neil Bros., Southgate, near London, and the prizes went very much in the order named. The Stone Stock Co. had first for their imported bull, Baronet, first for yearling bull, third for cows, first and second for three-year olds, also for two-year olds and yearlings and first for the herd. W. H. Hunter had first for two-year old bull, first and second for bull calves, and first and second for cows and heifer calves, with second for herd. O'Neil Bros. had second for two-year old bull, third for bull calf and the same for heifer calf.

Polled Angus—Walter Hall Washington, and W. Stewart & Son, Lucasville, had the herds here they showed at Toronto. James Bowman was absent and the judging was much the same as at Toronto. Scarcely any change in the position of the animals made at Toronto. Hiram Jones, of White Oak, had a few head here and won second for a yearling bull and third place for both bull and heifer calves. Walter Hall got nearly all the firsts, his cattle being much fatter than those of Stewart & Son. The latter won first for heifer calves and first for four best calves.

Galloways.—The four herds shown at Toronto were here, but part of the McCrae herd had gone on to Buffalo. A. M. & R. Shaw, of Brantford, got first for herd, with D. McCrae second and John Sibbald, Annan, third. The Messrs. Shaw were first for two-year old bull and first for bull calf, reversing the Toronto decision. In cows he was first with Gem 3rd, the second prize cow at Toronto, and McCrae's imported cow Jewel first and sweepstakes at Toronto, was placed third here. Decision on the two-year old heifers were also changed, J. Sibbald's second prize one at Toronto holding the same place here, beaten by one of those behind her at Toronto. In yearlings again the second and third winners at Toronto were beaten by an unplaced one there. The Galloway exhibit was a good one. D. McCrae won first for his recently imported bull, Viceroy of Castlemilk, a very chunky fellow, with great heart girth. T. Lloyd Jones & Sons, Burford, were second with College Gambler, and second for a yearling heifer. The Polled Angus and Galloways were judged by the same judges at Toronto, and by a single judge at London, in both breeds there was only the change of animals away. In the Polled Angus class, which more nearly approaches the Shorthorn type of frame and form, there were no changes in the judging. In the Galloway class there were no less than seven reversals of the Toronto decisions, and those evenly distributed amongst the different exhibitors.

Fat Cattle.—In the fat and grade classes James Leask, of Greenbank had all of the first prizes and most of the seconds.

Ayrshires.—A. Hume & Co. and W. Stewart & Son, both of Menzies, Ont., were leading exhibitors of Ayrshires. The former had the aged bull prize for Prince of Bar cheskie, and second for two-year olds, with White Cockade, and third for bull calf. Stewart & Son had first for the two-year old bull, Have a Blink, first and second for yearlings and first and second for bull calves. They had also first and third for cows, third for two-year olds, and second for yearling heifers. Hume & Co. had a lot of the ribbons for females, with second for cows, second and third for three-year olds, second for two-year olds, first and third for yearlings, and first, second and third for calves. Stewart & Son had first for herd and Hume & Co. for four best calves.

Jerseys.—B. H. Bull & Son, Brampton, had first for Bim of Burlington, the Toronto winner, second to W. G. Landlaw, Wilton Grove, and third to John O'Brien, London west. In two-year olds, J. C. Treblecock, London, was first, and P. H. Lawson, Niles town, second. For yearlings Bert Lawson, Crumlin, was first, B. H. Bull & Son second, and R. & E. Edmunds, London West, third. B. H. Bull & Son, as at Toronto, got a clean sweep in the bull calves, and here they also got the sweepstakes. For cows B. H. Bull & Son won with his three-year old Mermaid, John O'Brien, London West, was second, and R. & E. Edmunds third. In the two-year old heifers there was a good class with W. G. Landlaw, Wilton Grove, first, John O'Brien second, and B. H. Bull & Son third, the same place she had at Toronto with two different men above her. They had first and second in yearlings, and John O'Brien third. In herds, B. H. Bull & Son first, Jno. O'Brien second and Bert Lawson third. There were no Gurnseys shown, and but one herd of Holsteins, that of Rettie Bros., Norwich, and no French Canadians.

SHEEP.

Cotswolds made a good display, and there were many admirers of the big, long-wooled fellows. John Park & Sons, Burgessville, A. J. Watson, Castlederg, and T. Hardy Shore, Glanworth, were the chief exhibitors. Leicesters. Herd—A. W. Smith, Maple Lodge, John Kelly, Shakespeare, and James Snell, Clinton. In the rams, John Kelly had the winners, except in the aged class, where A. W. Smith managed to get the red ticket. A. W. Smith had the winning ewes, and John Kelly the lambs. Lincolns were well brought out by J. H. Patrick, Iderton, who got all the prizes in this class. Shropshires had two good flocks shown, D. G. and J. G. Hammer, of Mount Vernon, and John Campbell, Woodbridge. The Toronto decision in

aged rams was reversed here and John Campbell got first and third, with Hammer second. Shearlings, John Campbell had all the prizes, while Messrs. Hammer had first and second for ram lambs. For ewes, Campbell had first and third, with Hammer second, and this was just reversed in the Shearlings. Campbell won for pen of five lambs, Oxford Downs saw a good contest between J. H. Bell, Mount Vernon, and Spurr Evans, Gourock, near Guelph. The former had most rams, but the latter had first for Shearling lambs and also for pen of ewe lambs, and second in all the classes but one in which he was first and third. For pen of Hampshire, John Kelly of Shakespeare, was first, and Telier Bros., Paris, second. In the Southdown classes, John Jackson & Sons, Alton, was first in most of the classes and won all the ten prizes. For pair Shearling ewes, Telier Bros., Paris, had the winners, and Robert McEwan, Byron, had a good flock and got several minor prizes with them.

Dorset.—Horns, J. A. Milligan, Elzbridge, was first in all the pens and most of the classes, having the lot of home bred and imported, he showed at Toronto. R. H. Harding, Thernale, won for pair of Shearling ewes and several seconds. For fat wethers, any one T. Flood Jones, Burford, was first, John Campbell, second, and John Park & Sons third with his Cotswolds. For ewes, J. H. Patrick was first, and John Campbell again second. For best six fat sheep for shipping, W. E. Wright, Glanworth was first, W. O. Peattie, Wilton Grove, second, and Telier Bros., Paris, third.

SWINE.

Perkshires were headed by Geo. Green, Fairview, with James McEwan, Kerich, a moderate second. For young sow under six months, Geo. A. Dewar, Kerich, was first. Large Yorkshires were a splendid class. D. C. Platt & Son, Millgrove, had a fine lot out, mostly imported stock. Brethour & Saunders, Burford, also made a good showing. J. Featherstone & Son, Streetsville, and H. J. Davis, Woodstock, also showed. Brethour and Saunders, had two firsts for young boars, and a second and third for young sows. H. J. Davis had several thirds, which was a good deal to get with such heavy competition. Tamworths were a large class. John C. Nichol, Hubrey, was most successful, beating some of the Toronto winners. Norman M. Blam, St. George, Nelson, Wiley, Wisbeach, and W. Murdoch, London, were also prize winners. In Poland Chinas, the Toronto exhibitors, J. C. Smith, Fairfield Plains, and W. M. Smith were the only exhibitors. Chester Whites, H. George & Son, Crampton, and W. E. Wright, Glanworth; and for Duroc Jerseys, Wm. Tape, Bentpath, and A. W. Smith, Scotland, were the chief

exhibitors. The show of hogs was a very good one and was largely visited.

POULTRY.

There was a fine exhibition of poultry, one of the best seen at this show, and that is saying a good deal, for the London poultry fanciers have always taken a high place, and at this show they are put upon their mettle by exhibitors from other parts of the province. The show of Plymouth Rocks and of Wyandottes was large and of excellent quality. These far excelled any other varieties in the show. The Barred Rocks were especially good and the buff and white not far behind. Both black and white Wyandottes were also good though the silver were the larger class. The pet stock and fancy varieties were also well brought out. Pheasants were in large variety and very handsome, and the pigeons and rabbit were out in quantity.

DAIRY PRODUCTS.

A good representative display of cheese and butter is always made at the Western, and this year was no exception to the rule. One thing quite noticeable in these exhibits in recent years is the marked improvement in the finish and make up of the exhibits. There was hardly a badly finished cheese on the shelves at London and about the only fault of this kind was the discoloration from mould.

Both the cheese and butter were judged on the pro-rata plan, on number of units or points scored over 90. A silver medal in addition being given to the highest score. Mr. A. F. McLaren, M. P., judged the cheese and Prof. H. H. Dean the butter.

In the colored August cheese there were twenty-two exhibitors, twenty of whom scored over 90 points, the highest score being 97½ made by Miss Mary Morrison, Newry. Others who scored high in the class were Walter Hamilton, Listowel, J. S. Isard, Paisley, and Thos. A. Boyes, Lambeth. For white August there were 20 competitors, 17 of whom scored over 90. The highest score was 98, made by Walter Hamilton, who won the silver medal. Other high scores were made by Mary Morrison and R. H. Green, Trowbridge. There were four exhibitors in the colored Junes and Julys, all getting under the list. J. W. Claridge, Glen Huron, going highest. In white Junes and Julys all competitors reached the 90 points, the highest being G. E. Goodhand, Milverton.

In the creamery classes W. H. Brubacher, Fergus, had the best for prints at 98½ points, securing the silver medal, while T. J. Sleightohn, Strathroy, had it for the packages at 98 points. Other exhibitors who made good scores were J. W. Bell, Wincheslea, Isaac Wenger, Aytton, and Jas. Ireland & Son, Beachville, Ont.

The Model Dairy Form

By J. S. Woodward.

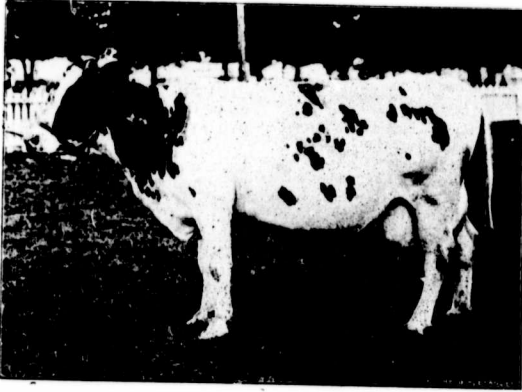
"If we begin at the head to describe the model dairy cow, we shall want her wide between the horns, with horns rather small and tapering, turning slightly inward and upward. The eyes should be large, bright, prominent and wide apart; the face a little dished, with a broad nose and large nostrils, her

evolved from the blood. There are many styles of udders and each in turn has been the fashionable one, but one fully filling the space between wide open thighs and extending well up behind and well out in front of the legs is much to be desired.

"I do not like a low swinging ud-

der of a size large enough to be easily grasped by the hand when milking and they should be set well apart on the udder. What I despise most is a cow with teats so small and close together that they can be milked only with the thumb and one finger.

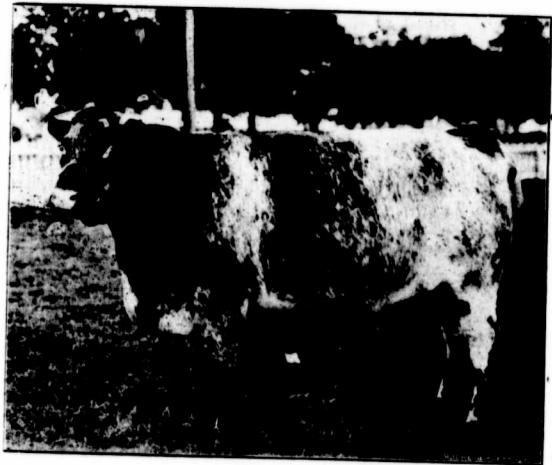
"The milk veins are also of great importance, and should be well developed. The larger and more tortuous and more branched they are the better. It is a fine indication to have one branch run up well between the fore legs. The opening where these milk veins enter the abdomen should also be large; if so large that the end of the fingers be well run into them so much the better. I do not place too much reliance on the escutcheon or milk mirror, though I like to see a well-defined one, running well up and broad, with soft, fine hair. The legs should be slender and not too long. I like the cow to stand near the ground. In the shoulders, just on the point in front, there should be found a depression, or "pit" and the larger it is the better the indication, even if the ends of the four fingers can be placed in it as far as the second joint. I would specially urge the importance of a capacious abdomen or stomach of the model dairy cow. The fact should not be lost sight of that this is her storeroom, into which her food is taken to be commingled or mixed and soaked ready for eating. When we say the cow eats, she is not eating at all, but merely gathering food ready to be eaten, and were she to stop here she would starve, even with the stomach full of food. But when she has what she considers sufficient for a full meal, she gets into some quiet corner and commences to eat, chewing the cud. Rumination is really eating, so no matter whether we give her food



Isoco's Pride, 26596, champion Holstein cow, Toronto Industrial Fair, 1901. Owned by George Rice, Curries Crossing, Ont.

jaws should be large and muscular as they will have a large amount of work to perform in eating so much food. In short, this end of our model cow is the important end, and should show the ability to gather and ruminate an abundance of food to furnish the material from which to elaborate so much milk. Her neck should be long and slim—in fact, a regular ewe neck comes very near the model. A large chest, wide and well down, will be needed to contain a large, well-developed set of lungs, as she needs to have her blood kept pure and well filled with the red corpuscles and kept in rapid circulation. Her back should be long, with the ribs well apart, so that the ends of the fingers can be dropped well down between them. If she is a little hollow backed it will be all the more desirable. Her abdomen should be very large, so large that when standing squarely behind her you can scarcely see her chest or fore shoulders. It is very necessary that this should be large, because it is the storehouse into which her food is first to be put and mixed together and soaked preparatory to being digested. She should be wide and high in the pelvic arch, so as to render parturition safe and easy. Her tail should be long and slim, with the breast down to or below the gambrel joint. The thighs should be slim and stand well apart, so as to give ample room for a large capacious udder. This is a very important organ in which the milk is in some way

der; it betokens a weakness of constitution, and is liable to be injured by the legs in walking, and to get soiled when going in dirty places. It is much better to have it held up with good, strong udder cords. When the udder is milked out it should be soft and flabby, and feel a good deal like a sack partially



The celebrated Shorthorn cow, "Cicely," champion Industrial Fair, 1901, the property of W. D. Flatt, Hamilton, Ont. She was bred by Her late Majesty, Queen Victoria, and is a noted royal winner. She is valued at \$6,000.

filled with soft, flabby cotton. A flesh-hard udder is a poor indication, and to be avoided. The teats should not be too large, but

two or three times a day she really eats nearly all the time. Hence the great importance of an ample storeroom or abdomen."

Poultry at the Industrial Fair

(Specially Reported)

The general verdict among poultrymen is that the dates of Industrial Exhibition should be later or else the poultry exhibit be only held the second week.

Nine days in August weather is very hard on young birds especially.

In the year 1888 the dates for poultry were Sept. 17th to 22nd, so that it can plainly be seen how much better condition old birds would be in and how much larger chicks would be if exhibition had been kept about those dates. As it is at present, the prizes are not awarded for quality but almost altogether for condition. Notwithstanding all this however the quantity of birds was about up to last year there being about 2,800 entries, and 117 breeding pens. LIGHT BRAHMAS. Good entry and fine in quality, much better exhibit than last year. DARK BRAHMAS. Quality good but small entry. COCHINS. All varieties, were not strong classes but quality well up. DORKINGS. A large number of Silver Grey and very good. A fair exhibit of colored and a few whites. LANGSHANS. A fair class and quality choice. The writer has often wondered why Black Langshans are not more popular as he admires them more than any variety he has not bred. It seems strange for they are so large and handsome and are generally admitted to be good winter layers.

BLACK ORPINGTONS. A few nice birds.

BUFF ORPINGTONS. A good exhibit of fine large birds. If the breeders of this variety do not confine themselves too much to color and breed for size they will eventually crowd the Barred Plymouth Rocks to the wall as a suitable fowl for export. That is the prediction of the writer. They are large birds with very little offal.

GOLDEN WYANDOTTES. A moderate class.

SILVER WYANDOTTES. First rate in numbers and quality.

WHITE WYANDOTTES. A nice lot but do not seem to be so popular in Canada as they are across the line.

BUFF WYANDOTTES. Good entry and nice color, 1st hen carrying her color well to the skin.

WHITE PLYMOUTH ROCKS. A fair class with quality to burn. Females in 1st prize breeding pen extra good.

BARRED PLYMOUTH ROCKS. This grand variety had somewhere about 90 birds in line. 1st cock not a large one but otherwise all right. 2nd must have pushed him hard. 1st hen a choice one, hard to beat. 2nd had a pair of very pale legs under her but at this season of year not a very serious fault 1st cockerel not large but well barred, 2nd and 3rd about even and

choice ones left. 1st pullet a beauty, 2nd choice but small, 3rd a fine one. 1st breeding pen was grand.

BUFF PLYMOUTH ROCKS.—About average in numbers and quality.

BLACK MINORCAS.—Were out in force and winners good.

WHITE MINORCAS.—small exhibit but nice.

BLACK LEGHORNS were better than usual.

R. C. BROWN were not a big class but show great improvement over last year.

R. C. WHITE LEGHORNS.—In old birds probably the best Leghorn class in the show. In young birds the poorest I have ever seen at Industrial. This refers to both quantity and quality.

S. C. BROWN LEGHORNS.—Not a large number but quality up in G.

S. C. WHITES.—A fair class first hen being prominent. Chicks were not so good as usual and neither were the old birds. Some of the awards in this class I could not agree with.

BUFF LEGHORNS. A fair number and choice quality.

It is strange the amount of admiration that is bestowed upon the game classes.

I think no variety has the hold on the fancy with BLACK RED GAMES. Birds are imported at long figures nearly every year to win here. All varieties make a fair showing here. Of them all I think the Indian Game should prove the most useful being a heavy bird but are not counted good layers.

RED CAPS. A fair exhibit.

ANDALUSIANS.—Not many, but quality that brings firsts from New York and Boston.

HOUDANS. Not a large number but good. Other French varieties were small exhibits.

HAMBURGS and POLANDS are divided into so many classes that they make up quite a show, but with two or three exceptions are divided between three exhibitors.

BANTAMS and Pet Stock were of the usual quality at Industrial.

In the Massey-Harris competition there was a large entry in American Varieties and Ducks. In the former, what seemed to be good Plymouth Rocks won 1st and 2nd, and in the latter Pekin Ducks. In Asiatics, entry was not large. Buff Cochins scored. I could not find the exhibit of eggs in egg competition.

BRONZE TURKEYS. Old males not up to usual quality at this show. I would have put 2nd at the top. Old females not many but first and second good. 1st in best condition, 2nd larger bone. Young birds were a good class for

so early in season, but without an exception all breeders of this variety claimed 1st prize female was a gobbler. The owner thinks not however.

WHITE HOLLANDS were not numerous but quality very good. In ANY OTHER VARIETY a pair of birds of a bluish shade won 1st and also the medal for best pair of turkeys in show. A pair of Buffs without any ticket showed they were a utility breed by dropping an egg on different days during the show, being the first time I have known a turkey to lay in the show room. While dealing with the turkeys I might state that all the breeders complain of a short crop this season, a large number having died from various causes.

TOULOUSE GEESE. Not a large class by any means but 1st old pair are choice, young well grown.

BREMEN OR EMBDEN GEESE were a small class but did not in my opinion take second place for beautiful exhibit. Quite a large exhibit of CHINESE GEESE and a few nice pair in ANY OTHER VARIETY class which some claim are Africans and others say are only Chinese. At any rate there is very little difference except those in A. O. V., are larger and have a larger knob and dewlap.

PEKIN DUCKS. In old birds not numerous but young a fine class and choice birds.

AYLESBURY DUCKS. Small class but good.

ROUEN DUCKS are not so extensively shown as formerly and not as high in quality. 1st young drake here very fine however.

BLACK CAYUGA DUCKS.—Which were very extensively shown the past two years are giving away to INDIAN RUNNER DUCKS which are not a beautiful variety and very small. Fair classes of both here. A few Muscovy ducks in any other variety class. There was a very fair exhibit of poultry appliances consisting of Incubators, Brooders, Bone Cutters, Drinking Fountains, Feed Boxes, Leg Bands, etc. A new invention in this line is the Hens "Vigilant" Nest. It consists of a nest made of pressed hay and clover chaff rounded the shape of a hen's nest except at the back side which is left flat and the bottom of nest inclines to this side where a space between nest and box (which encloses the nest) is left wide enough for an egg to drop through. Underneath factory cotton is tacked to catch the egg as it drops from nest. The idea is to prevent hens eating their eggs. This will be useful to persons in towns and villages where hens have very little range but on farms where fowl have the freedom of farm yards and fields they seldom eat their eggs.

An exhibit outside of main building consisting of Mallard and Call Ducks, Silkies, Silver and Golden Pheasants was a great hit. The Pheasants especially are a very beautiful bird and in the poultry building might be overlooked which they certainly were not outside.



Imported Royal Cairnton [2730] Champion Clydesdale Stallion, Toronto Industrial, 1901. Owned by Graham Bros., Claremont, Ont.

Modern Stable Construction No. 2

WRITTEN BY HERBERT SHEARER.

LOCATION.

The proper location for a dairy stable is one of the most important considerations in the construction of the most important adjunct to the dairy business. To be able to start right it is necessary to consider the subject from different standpoints. Fresh air and a plentiful supply of pure water, good drainage, protection from cold winds, plenty of sunshine and convenience in regard to feeding arrangements, are the essential features to be considered.

Fresh air and drainage may be provided by selecting an elevation. Protection from cold winds is secured by planting a tree belt along the northern exposures, but it is not always easy to combine with a location of this nature the proper water supply which is a very essential feature. Generally speaking the elevation also assists in providing a water supply as the pumping should be done by wind power, a rise of ground naturally gives an uninterrupted wind approach as the derrick may be high enough to lift the wind above the tree wind break. In no case should the water supply be poor, limited or inconvenient.

In addition to the tree belt a high board fence should enclose a breathing space; this fence should be well constructed and the joints between the boards battened tight. If, in addition to this, a shed roof is provided opening to the south, winter yard conditions will be about as good as they can be made, provided, of course, that the ground is supplied with proper drainage. The filthy, miry con-

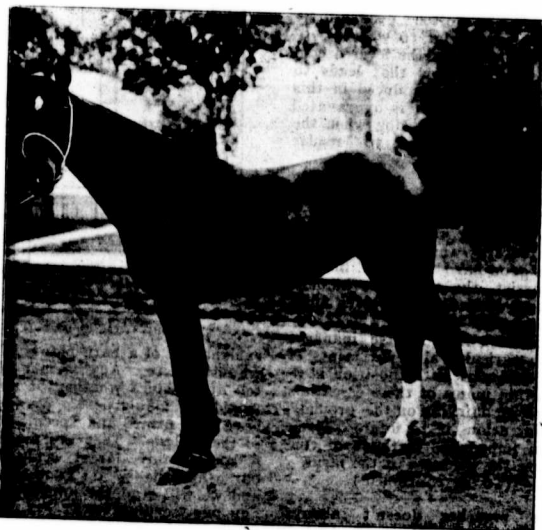
dition of so many barn-yards is sufficient excuse for laying so much stress on the importance of this feature. The abomination that is permitted to exist year after year in connection with farm barns and stables is little short of criminal. Ideas in this respect, however, are fast changing, domestic animals are recognized as possessing certain inalienable natural rights that owners are bound to respect. The old-fashioned notion that any kind of an old shed planted in any sort of a mud hole, in any hap-hazard location, is good enough for cattle has given away before recent

scientific investigations. This is particularly true in the older States of the East and middle West as well as throughout the better dairy sections of Canada.

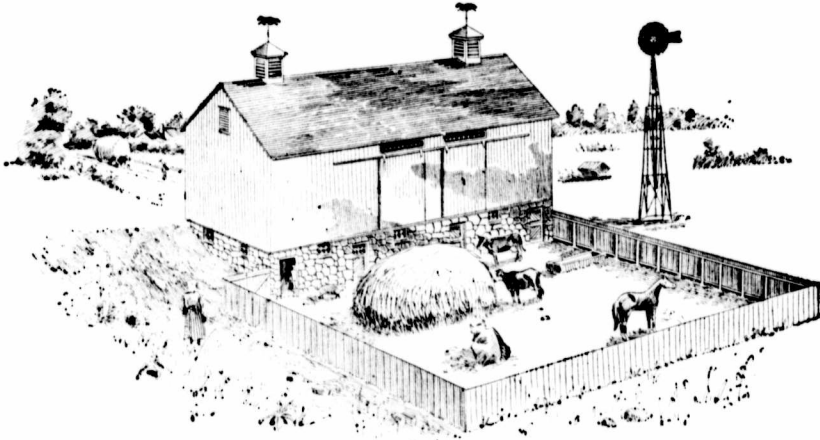
Boards of Health and State Boards of Agriculture have inaugurated a system of inspection that has exerted a salutary influence, especially in milk shipping districts. Humane considerations have had a good deal to do in bettering conditions in this respect, but mercenary interests and the general health of humanity have combined to bring the subject home to many interested people in a very forceful manner. The fact is now recognized that it pays to take good intelligent care of domestic animals, which is simply producing at all times natural favorable conditions which are always the most economical in the end. Dairy cows return dividends, the ratio of which increases in direct proportion to the care and intelligent consideration bestowed upon them.

So little attention is now being paid to pasture that the fence and long lanes leading from the stable to the fields, which were formerly such an all important adjunct to a well regulated farm, does not enter into the consideration. Pasturing is too expensive in these days of keen competition.

North of parallel forty-two there is an average of only six weeks of good pasturage. Summer droughts sandwiched in between late spring and early fall rains are responsible for this condition. A run-way, consisting of about one-fourth of an acre per cow is a better and more satisfactory arrangement. It should be enclosed with a good moveable fence and shifted occasionally for the benefit of the land; this, however, is largely a matter



First Prize Three-year-old Hackney Filly Hermis, Industrial Fair, 1901. She was champion at the Horse Show last spring. Owned by Robert Beith, Bowmasville, Ont.



of personal opinion as well as convenience. A permanent pasture that has never felt the plow offers advantages that no artificial production can equal. Where a running stream of good water exists within a reasonable distance of the stable the question of a pasture run will settle itself. On the great majority of farms artificial water supply must be depended on, a condition that should be met by a never failing well with a wind-mill sufficiently powerful to carry the water not only to the stable, but to the pasture lot. A drinking trough should be placed in a sandy spot and water conducted to it by pipes placed under ground, sufficiently deep to be cool in summer and beyond the reach of the frost in winter.

Too much stress cannot be placed on the importance of plenty of pure water provided conveniently for dairy cows. Fever conditions which affect the condition of the milk are too often produced by cows going too far to water.

Tainted milk, or the fevered conditions of the cow that leads to tainted milk, is produced in this way: too often it is aggravated by the presence of a dog when the udders are so full as to render every step painful.

Silage crops are so thoroughly distributed over the farm that the location of the stable makes very little difference in the work of filling the silo though easy grades and a good hard track will materially assist the aggregate amount of forage hauled with a given number of loads.

Mr. Frank A. Converse, manager of the agricultural departments of the Pan-American Exposition is illustrating many of these essentials to modern dairying on the grounds. The intention is to interest farmers in improved methods of conducting the business of the farm.

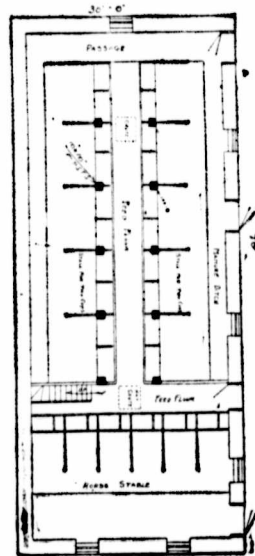
(To be continued.)

The preacher doesn't always take it as a sign of approval when he sees members of the congregation nodding.—"Tit-Bits."

A Barn Plan

On this page we give the perspective view and floor plan of a small barn. This barn plan, and three others that we have of somewhat different patterns, were drawn by men who have made barn-planning and barn-building a study. The plans were afterwards gone over by our regular architect, and, as they come to our readers, are as nearly complete as plans can be.

There is not much to be said in



Sectional View of Barn.

explanation of a barn plan such as we show here. Any farmer could tell at a glance whether or not it would suit his purpose. We do not have blue prints and specifications of these plans. They are made on a considerably larger scale than our other plans, on good paper, and we will send the four plans to any one sending us \$1.00. These plans can be worked from by any carpenter capable of working from any kind of a plan.

A Maritime Agricultural College

Premier Murray of Nova Scotia, in his address to the electors on the occasion of the dissolving of the local legislature has this to say in regard to the proposed Agricultural College for the Maritime Provinces:

"Some years ago an Agricultural School with a Model Farm was established at Truro with very good results, but hardly equalling the expectations of those who believed in the value of higher agricultural education. During the past year we have been in negotiation with the Government of our sister Province, New Brunswick, and have entered into a satisfactory arrangement with them under which the Government of Nova Scotia has provided the sum of \$50,000 to purchase a farm and erect suitable buildings for an Agricultural College in the most desirable location in the Province. After this institution is established in Nova Scotia, the expense of the management of it is to be assumed by the two Provinces practically on the basis of population, the pupils from the Province of New Brunswick having precisely the same privileges and advantages as those of Nova Scotia. By thus securing the co-operation of our sister Province we are able to give the institution greater resources and a larger constituency, and we will be able in a very short time to point to an Agricultural College of which the people of the Maritime Provinces may be proud."

Mr. Fitznoodle (sitting in stern of boat steering, while his fair companion plies the sculls!—"Do you know, Miss Jessie, I have a great mind to fighten you by wocking the boat." Miss Jessie (a self-reliant young lady)—"A young man like you tried that with me once, and the boat upset." Mr. Fitznoodle—"Did it weally? And what did you do?" Miss Jessie—"Swam ashore and notified the coroner!"

How to Fatten Chickens

The late summer and fall is the time when the farmer disposes of his fowl. To dispose of these to the very best advantage some attention should be given to the work of fattening and preparing them for market. Too many farmers neglect this, and at the same time expect to reap a large profit out of their poultry. It is now agreed that the very best way of fattening poultry is to enclose a few fowls in a small compartment and feed them all they will eat of good fattening food. Messrs. Scott, Ashton & Co., 33 St. Nicholas street, Montreal, exporters of poultry, etc., have just issued an important circular containing instructions for fattening chickens, based largely upon English methods, from which we take the following:

industry as the pioneer that shall eventually enable us to compete successfully with other countries in poultry products as a whole. Our desire is to offer, to all whom it may concern, every facility that we are able in assisting to promote the welfare of that much abused, and much neglected industry, commercial poultry-keeping.

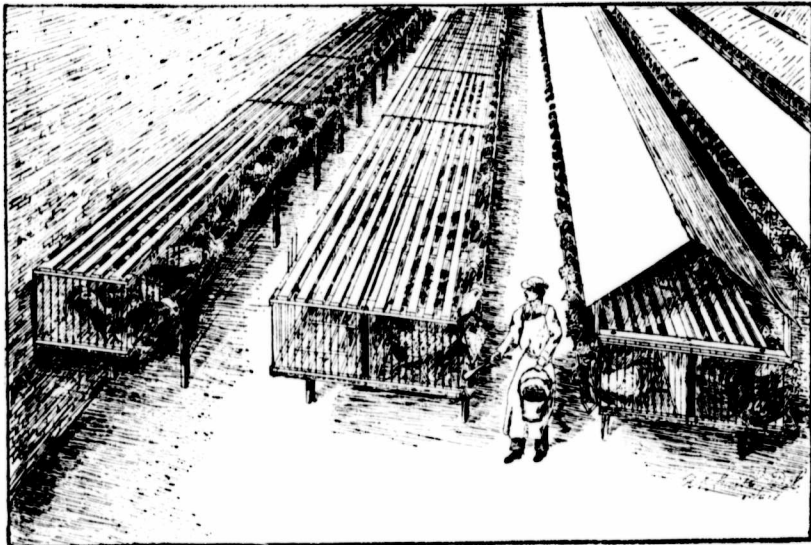
TIME OCCUPIED IN FATTENING

The usual time required to properly fatten a fowl is about three weeks. But good-sized, well-conditioned pullets often "make-up" in a fortnight, whereas very large-framed cockerels will take four, and sometimes as much as five weeks, before they are fully fatted. A fatter, however, does not care much how long a bird may take to fatten, provided that he is putting

whole is sufficiently thickened. Ninety gallon casks sawn in half are admirably adapted for mixing the food, and also make capital receptacles for storing milk.

METHOD TO OBTAIN FAT.

A good-sized copper should be erected out in the open, not too close to any dwelling house, as the preparation of fat for the fowls is not a pleasant operation to have performed just under an open window, especially if the wind happens to be blowing in that direction. Empty in one or two hundred weights of rough fat (which can be bought from most butchers at about 2c. a pound) according to the size of the copper, and pour in sufficient water to cover the whole several inches deep. After an hour or two's boiling, the fat will



A Modern English Poultry Fattening Establishment.

The question of fattening fowls is a most important branch of commercial poultry keeping. In fact, we do not consider we are extolling the many advantages it possesses too highly if we say it is the important branch of industrial poultry farming. Of what use is it instructing the agriculturist to rear innumerable chickens if, when he has got them he is at a loss to know what to do with them? Country markets can quickly be overdone, but Great Britain has apparently an inexhaustible demand for really prime quality well fatted fowls. But the breeder must either be capable of fattening the birds on his own place, or must be able to hand them to a fatter, if the fowls are eventually to find their way to England. Therefore, it is that we look to the fattening

on flesh the whole time, and that when he is in a fit condition to kill he will be worth a good round sum at the finish.

GROUND OATS FORM THE STAPLE FOOD.

As a rule, fatters do not give the food otherwise than in a cold state and we think that during the summer time this is to be preferred. But we are fully convinced that in cold weather greater benefit will accrue by warming the milk or water used, and thereby making the food not hot, but nicely warm, when taken by the birds. The best way to mix up the food is, to place what milk or water is required into a pail, then add in the ground oats a little at a time, and stir well with a wooden ladle. Continue to add more meal until the

rise to the top, and should then be skimmed off with any convenient skimmer, and put into a pail. Have ready in some cool place a few milk pans, and pour the hot fat from the pail into one of these, then, when cooled a little, pour in a cup full of cold water. This latter will sink to the bottom, and prevent the fat from sticking to the same. Continue in like manner until all the fat has been boiled out of the rough pieces. The next day these milk pans may be emptied by sliding a knife around the edges of the pan, when the whole mass will come away in one solid block; these can be carefully stored until required.

THE MILK SUPPLY.

When milk is given to the youngsters to drink, it should

never be allowed to become sour, as in such condition it often causes diarrhoea to set up. But we consider that in the case of fattening fowls it is quite different. Not only is sour milk not injurious to fattening fowls, but we will go further and say that sour milk is infinitely superior to new milk for this purpose.

INSECTS

Not one in a hundred fatters ever bother themselves about trying to free their birds of insects, when they are brought home for fattening. Nevertheless nothing interferes more with the continual process of fattening than the fact that the fowls are infested with these troublesome creatures. The insect powders sold for this purpose are too expensive to be used for fattening fowls, but great benefit to the birds will be gained by giving them a good dusting in flour of sulphur, and the best and quickest way we know of is to have half of a small tub filled about one-third full with the sulphur. Let one man take the bird's head in one hand, and the feet in the other, and let someone else rub the sulphur well into the roots of the feathers. Knock any loose sulphur off, and place the birds for ten minutes in some unused shed, or any handy place where they can give themselves a shake and get rid of the pests.

FATTENING COOP.

The chickens should be put in a coop on small round bars. They should be from 1 to 1½ inches apart, and always put long ways, so that the birds can stand and eat out of the troughs. The bars in front of the coop should be about two inches apart. One coop three feet long and about sixteen inches wide is large enough for six birds. It should be eighteen inches high. The fattening coops are best kept in a shed or outhouse where it is quiet and a little dark. After placing the birds in the coops they should be left without any food for at least twelve hours. The exception being when they have been travelling many hours before arriving at their destination, when it is advisable to feed them as soon as convenient. There are many farmers who would never think of putting the birds in a coop to fatten, but shut them in a pig pen or out building, and give them a lot of food in a trough, so that they can run to it when they like. This is wrong. When fowls are shut up in such places they ought to be fed carefully, so that they clean up every particle of food. If proper care and attention cannot be given to the birds while in the fattening coops, we strongly advocate the principal of allowing them their liberty.

TIME TO FEED.

The proper times to feed are as early in the morning as convenient, say, in summer at six o'clock, and in winter at half past seven, then

again in the afternoon about five o'clock in summer and four o'clock in winter. There are, nevertheless, some exceptions to this rule. Young spring chickens require an extra feed at noon, and some large birds quick at "emptying" may also, with advantage, be fed three times a day. But do not follow the plan recommended by some, of feeding fattening fowls generally "little and often." They will sicken of their food very quickly, and this means a lot of useless and unnecessary labor.

FIRST WEEK'S FOOD.

The usual method adopted for feeding the fowls during the first week of the process, is to give what most fatters term "water gruel." This consists of nothing but the ground oats mixed up with water into a rather sloppy consistency. The idea is, that during the first week the bird's system is not trained to rich living, and many fatters prefer to do what they term "go steady with them at first." We are, however, persuaded, that if milk (we refer of course to either skim milk or sour pure milk) be added in proportion of one-half to that of water, the extra cost is amply repaid by the impetus thus given to the fattening process.

SECOND WEEK'S FOOD.

During the second week we increase the quantity of milk regularly each day, so that by the end of this week we have discontinued the use of water entirely, the solid portion of the food being still the ground oats. Twice during this and the following weeks the troughs should be filled at noon with some sharp flint grit, in order that the birds may replenish their stock of grinders, that are often by this time becoming rapidly used up. Towards the end of this week a little of the prepared fat should be melted and mixed up in the food.

AFTER FOOD.

During the third week, and for so long a time as it may prove necessary, fat should be added to the ground oats and milk, in the proportion of about a tablespoonful to each bird.

MODE OF FEEDING.

Take a flat piece of wood about three inches broad, and 1½ inches thick, round off the upper portion to serve as a handle, and thin off the lower end in the shape of a broad flat blade. This will serve the double purpose of mixing up the food, and doling the proper quantities out to the birds. Having allowed the fowls to fast for a sufficient period, as previously recommended, the fatter should, with his wooden ladle, put a little food into the troughs, and as this becomes cleared up more should be added. A good fatter will never (anyhow with "green" birds) put in all the food that he thinks necessary into the trough at once, but will keep on replenishing with small quantities until

he notices the birds are showing signs of having had enough, when he will at once discontinue, and having left them for half an hour or so to thoroughly clear up what remains in the troughs, come back and turn the feeding troughs upside down. This latter he does for several reasons, one being, that if the troughs are left in the ordinary way, the droppings from the fowls are liable to get into them, and this is most undesirable. Then, too, the birds will often keep pecking away at the troughs, which in time become so worn that they often swallow slivers of wood, which are injurious to them, and again, should it come on to rain the troughs become full of water, and the fowls are liable to fill their crops with it, and thus not take nearly so much of their proper fattening food when placed before them at the next meal.

She Couldn't "Set Him."

"Maud Muller" still goes on being parodied. Here is the latest from an American source, though the usual "might have been" stanza appears to be missing —
Maud Muller, on a summer's day,
Set a hen in a brand-new way;

(Maud, you see, was a city girl
Trying the rural life a whirl.)

She covered a box with tinsel gaw,
Lined it snugly with new-mown hay,

Filled it nicely with eggs, and then
Started to look for a likely hen—

Out of the flock selected one;
And then she thought that her work
was done;

It would have been; but this stub-
born hen
Stood up and cackled "Ka-doot!" and
then

Maud Muller came, and in hurt sur-
prise
Looked coldly into the creature's eyes.

Then tied its legs to the box, "You
bet,"
Said she, "I know how to make you
set."

But still it stood, and worse and
worse,
Shrieked forth its wrongs to the uni-
verse,

Kicked over the box with its tinsel
gaw,
And ignominiously flapped away.

Then a bad boy, over the barnyard
fence,
Tee-hee'd, "Say, Maud, there's a dif-
ference"

"Tween hens, you know, an' it is that
One says 'Ka-doot!' an' one 'Ka-
dat!'"

Then Maud recalled that the ugly
brute
She tried to set had said "Ka-doot!"

And ever since that historic day
She blushes in an embarrassed way,

To think of the hobble she made once,
when
She tried to set a gentleman hen.

The Sugar Beet World

Devoted to Sugar Beet Culture in Canada and Allied Industries. Specially
Representing the Farmers' Interests

Edited by JAMES FOWLER

ONTARIO BEET SUGAR ASSOCIATION. OFFICERS FOR 1901.

President, John Parry, Dunnville; First Vice-President, J. M. Shuttleworth, Brantford; Second Vice-President, B. B. Freeman, Warton; Third Vice-President, T. A. Smith, Chatham; Fourth Vice-President, W. S. Caron, Aylmer; Secretary-Treasurer, D. H. Price, Aylmer; Solicitor, N. B. Gash, Toronto.

EXECUTIVE COMMITTEE.

E. R. Blow, Whitby; Charles Kelly, Usbridge; S. A. Perry, Warton; T. Elliott, Brantford; Ald. Parnell, London; Hugh Blain, Toronto; T. A. G. Gordon, Alvinston; F. G. Ramsay, Dunnville; D. A. Jones, Beeton; J. H. Glover, Aylmer; John A. Auld, M.P.P., Amherstburg; Charles Cain, Newmarket; J. R. McCallum, Welland; T. W. Stewart, Mount Forest; George E. Bristol, Hamilton; Howard Annis, Whitby.



Sugar Beetlets.

The soon-to-be ubiquitous beet has invaded Canada, and seems as contentedly at home there as in Southern California.

Fuller Bros., cattle men of Chino, Cal., have arranged to feed 3,000 head of cattle on beet pulp from the Chino sugar factory.

Havemeyer proposes to be found in the coming tower of safety whatever happens. He's quietly investing in sugar beet stock.

For the year 1901, according to high authority, we shall produce about 550,000 tons of sugar, and of this amount 300,000 will be beet.

Michigan's beet sugar product in '98 was 5,000,000 pounds. Last year it was 52,000,000, while for 1901 it is now estimated at 120,000,000.

Wisconsin capital and brains and enterprise and intelligently manipulated muscle will invest largely in the beet sugar industry the coming year.

The Ciro, Mich., sugar factory has a molasses process department of a daily capacity of 50 tons, and the daily consumption of lime in this establishment is 45 tons.

Ogden's, Utah, beet factory is now at work making brown sugar from last year's molasses product. The beet crop will not begin to "deliver" before the middle of this month.

The beet sugar industry in the United States—36 factories in operation last year—has grown up since 1890, but mainly since the favorable tariff legislation in 1897-8.

State Chemist W. A. Withers, of North Carolina, is zealously working to introduce beet growing in that state. He thinks that they can produce a beet with a requisite per cent. of sugar.

Japan does not propose to buy her sugar much longer. April 1st last a law went into effect in the

Island Empire which will lead to the establishment of the sugar industry in that country.

Spain, Italy and the Balkan States not only produce the sugar they use, but are now exporting, and Egypt, which a few years ago annually bought 50,000 tons, now exports sugar to the United States.

Spreckles' vast beet factory, at Spreckles, Cal., is 502 feet long, 102 feet wide, five stories high, cost three millions, handles 3,000 tons of beets daily, turns out 500 tons of granulated sugar every day, pays out \$5,000 every twenty-four hours for labor and \$12,000 for beets.

It is stated by experts in this line of statistics, that the increase in the consumption of sugar is about 250,000 tons annually for the entire world.

It will require 1,600,000 acres of land to raise beets to supply the United States with sugar. Devoted to beet culture every acre becomes at once worth \$125, putting the beet area at a valuation of \$200,000,000, an addition of not less than \$100,000,000 in value owing to its devotion to beet raising.

Manager Cutter of the Utah Sugar Co. states that the crop of that commonwealth for this year will be about 10,000,000 pounds, the biggest sugar crop in the history of the industry in Utah. He says the growers will receive higher prices this year than ever before.

During the past year 30,000 tons of sugar beets were raised on newly drained marsh land on the Kanakakee river, near Shelby, Ind. Thus swamp and high mesa alike prove congenial soil for the cosmopolitan sugar beet. Beets from the above lot, selected at random, yielded 14 per cent. sugar of 85 per cent. purity.

Beets have been raised at Indio, out on the desert in southeastern California, this year. They plant

out there about the first of the year and harvest the roots in June. These desert beets are loaded to the guards with sweetness, having an average sugaring of 19 per cent.

Our saccharine crop in the United States this season will be about 14 pounds per capita. We are using about 65 pounds per capita, nearly five times the amount we produce. From which unpalatable, though sugar-coated fact, it must be apparent at a glance that there is enormous room for expansion in this industry before we can turn exporter, or even be self-supporting.

Before the war Cuba produced 1,000,000 tons of cane sugar. This was only a year or two before she began her struggle for freedom, and it was the highest yield ever scored by the "Queen of the Antilles." The year which noted this greatest cane sugar product in Cuba saw Germany manufacture from her beet fields 1,850,000 tons.

In 1840 the world's production of sugar was 1,150,000 tons, and of this total 1,100,000 tons was cane sugar; that is, 95.65 per cent. was cane and only 4.35 was beet sugar. Last year the total output was 8,500,000 tons, of which 67 per cent. or 5,700,000 tons was beet and only 33 per cent. was the product of cane. Thus in sixty years the increase in production and consumption of sugar has been 735 per cent. To meet this demand the supply of cane sugar has increased 260 per cent. since 1840, while the production of beet sugar has increased 11,150 per cent.

How Many Plants?

The numerous projected sugar plants are just beginning to find out "where they are at," and the next few weeks will decide how many factories we are to have for next season's campaign. Already places which a few weeks ago were certain they were going to have a factory and spent considerable time and money in promoting the business begin to realize that it requires a little more than a "Hurrah, Boys," to build a sugar factory, and some of them regret now their hasty action. While the promoter is in evidence every town in the province can have a sugar factory upon certain conditions (on paper of course) but when it comes down to plain hard facts and money to build, it is an entirely different story. The 24 different projects will not be carried out, not this year, nor next either, and the sooner the people realize it the better for all concerned. It is better

to concentrate capital and labor upon two or three factories in different parts of the province and demonstrate what can be done before plunging.

The many efforts being made to induce farmers to sign acreage contracts for a factory at points, when there is no possibility of a factory being built, this year at least, is an injury to the farmer, and the industry at large, and should not be encouraged.

The German Beet Root Sugar Campaign, 1900-1901.

In March, 1902, the German Beet-root Sugar Industry will celebrate with due enthusiasm the centennial jubilee, for it was at that time that the first small beetroot sugar factory was opened at Kunern, (Prussia Silesia) by Karl Achard—some people wanted to celebrate the great event this year, but it has now finally been settled that the factory was only in progress of building at that time, sugar making began only in March, 1802.

What enormous progress has the German Sugar Industry made during those hundred years, and the figures which we will give to-day, and which are taken from the official reports, may explain this progress best.

The campaign, 1900-1901, was generally begun in the second part of September, 1900, and as a whole finished by the end of December, although some factories worked until February, 1901; 443,460 hectares of land were given to the growing of beetroots, an increase of nearly 4 p.c., compared with 1899-1900.

In all, 305 beetroot sugar factories (no refineries are included in this number) were in full operation and handled in a comparatively short time of about three months the enormous quantity of 13,252,261 tons of fresh beetroots, producing therefrom 1,870,782 tons in raw sugar value, an increase of 179,524 tons against 1899-1900. This result is in first line due to the excellent quality of the roots which yielded an average of 14.12 p.c. sugar against only 13.58 p.c. in 1899-1900 and it took 7.08 tons of beets to produce one ton of raw sugar!

The import of sugar is in Germany naturally enough very insignificant and consists principally of cane sugars, which are used in confectioneries, etc., thus the total import in 1900-1901, figured up to only 1,347 tons raw sugar value.

The export during the last campaign was the second largest ever known in Germany—1896-97 was the "record" season with 1,237,521 tons, 1900-1901 it amounted to 1,144,250 tons.

Raw sugar value, viz: 549,431 tons refined sugar, equal to 610,479 tons raw sugar, and 533,771 tons raw sugar.

For the first time since the existence of a German beetroot sugar industry, the export of refined surpassed that of raw sugar, and this fact is merely due to the introduc-

tion of sugar duties in England and Japan, in consequence of which both countries bought as much as possible before the new duties became law.

The consumption of sugar within the German Empire is not increasing as satisfactorily as might be wished, it has even decreased against the year 1899-1900, and amounted in 1900-1901 to 767,575 tons, 1899-1900 847,131 tons, or, with a population of 56,000,000 a consumption of 13.56 kilograms in 1900-1901 against 15.23 kilograms in 1899-1900 per head.

Of melasse, 425,018 tons were produced during the last season, and of this quantity 270,858 tons were manufactured into sugar, while a good deal of the remaining is finding now a ready sale as a splendid feed for cattle, etc., an only very recently patented mills grinds the straw into a fine meal and one pound of this meal, mixed with three pounds melasse furnishes a kind of cake (briquette) which will keep any length of time and is willingly taken by the cattle; until now it was found impossible to mix more than 2 pounds melasse with 1 pound strawmeal, but the new machine has the capacity raised to a proportion of 1 to 2.

R. Bach.

The Beet Crop

The beet crop as a whole is looking remarkably prosperous, and unless we get too much wet weather in the next two weeks, to start the beets growing again, the results will surpass our most sanguine expectations, and the farmers are jubilant over the prospects for next year. Acreage contracts for factories at different points are being freely signed, and many are only waiting to assure themselves that a factory will be built in their locality before signing. We know of a case where one party is willing to sign a contract for 100 acres, the only question being as to the location of a factory to deliver the beets to. In other cases farmers are willing to grow beets, but are holding back from signing contracts, because they favor their own locality and would give that preference. Farmers are satisfied there is money in beet raising.

The Ontario Sugar Company.

The Ontario Sugar Co., Limited, Toronto, are actually engaged in getting ready for business. Experts are employed looking over different parts of the province with a view to settling upon a location, and the provisional directors are holding meetings almost daily upon matters connected with the company. At the first meeting of the Provisional Directors, the following officers were elected: Hugh Blain, chairman; Jno. Flett, treasurer; James Fowler, secretary.

The company have gotten a business swing on, and development of their plans may be expected in a few days. No location has yet been decided upon.

Beet Sugar By Products.

The Bureau of Animal Industry, United States Department of Agriculture, in a recent report says:—

Something should be said of the use as feed of sugar beet pulp and tops, which, though comparatively recent, is very common in some localities. Sugar beets are extensively raised in the vicinity of beet sugar mills, of which there are several in the state. Three such districts were visited, namely, Alvarado, Watsonville, and Salinas. As a matter of general interest it may be stated that a good crop of beets run about 15 tons to the acre, and the price for the year 1899, as agreed upon in advance by the sugar companies and the farmers, is \$4.50 per ton. During the harvesting season there is on some days an almost continuous procession of two, three, four and six horse beet wagons on every important road leading to the factories. The roots are loaded onto strong nets in high wagon racks and are quickly tumbled into the bins by raising one side of the net with the aid of a steam engine and tackle.

Sugar Beet Pulp.—Sugar beet pulp, which is the principal by-product in the manufacture of beet sugar, is usually sold for 25 to 30 cents a ton at the factory. Last year the price was as high as 50 cents. As it can be held a long time in silo and is fed to best advantage when old; it is available the entire year. The use of fresh pulp is said to reduce the milk flow. It is supposed to be good when a few weeks old and better at six months, and will keep two or three years.

When fresh the pulp is piled or placed in a silo where it remains undisturbed until needed for use. The material is so soft and moist that if a large pile is dumped in the corner of an inclosed space it will gradually settle until the surface is almost level. Of course, the top part decays, and after a time the entire mass is covered with a protecting layer from three to six inches in thickness. Within a few months the individual pieces of beet, which were originally two or three inches long and quite slender are broken down, and the appearance of the material reminds one of cold mush, grayish brown in

E. H. DYER & CO.

Builders of

SUGAR MACHINERY

Cleveland, Ohio

Will contract to build complete beet sugar plants, including all machinery and buildings; also furnish the necessary technical and skilled help to operate them.

color. Three tons of fresh pulp make about one ton cured.

Pulp has a tendency to fatten, and it is given to beef cattle without the addition of any other food, but for milk cows its effect is found to be best when used with a little grain or hay. Without these latter it is supposed to produce a thin and watery milk. One feeder uses corn with pulp; another feeds about three pounds of bran daily.

When pulp is fed in considerable quantity the animals do not care for water, and may go for months without a drink. A feeder who has been using this by-product several years complains that when his cows have been fed for a long time on pulp their calves are likely to come weak and be troubled with scours. Another dairyman of less experience, who feeds the pulp fresh states that in his observation it has no bad effect on the calves.

A herd of 200 milk cows kept near a sugar beet factory about 40 miles south of San Francisco is given a daily ration of 60 pounds of pulp, 5 pounds of mixed ground grain, and a little hay. The cows were seen in the pasture and appeared to be in good health and flesh. The milking cows averaged almost two gallons each per day. Their milk is shipped to a dealer in San Francisco, who pays 12½ cents per gallon for it the year through and 11-6 cents per gallon for railroad freight. The production is greatest from February to May. Butter made from milk of this herd, for experimental export, was found to have exceedingly good body, a satisfactory flavor and an apparently first-class keeping quality.

On a ranch near Watsonville, which supplies milk to a creamery, pulp has been used a few months each year for the past eight years. About 100 pounds a day are given to each animal.

It is the general opinion that pulp causes the butter to be hard.

Sugar Beet Tops.—By "beet tops" is meant the leaves and the extreme top parts or crown of the beets cut off when the beets are being piled ready for hauling. They are available during the harvesting of the crop, which lasts about three months.

This portion of the crop has some fertilizing value, and it is often plowed under on that account. Indeed, some beet sugar companies which own large tracts of land forbid the removal of the tops. But considerable quantities of beet tops are fed, and good results are claimed. The market value of this feed depends almost entirely on the prices of other feeding stuffs. When feeds are high tops sell for \$3.50 to \$4 per acre on the ground. This year (1899) the price is about \$2.50. It is best to allow the tops to wilt two or three days before being gathered and fed. They are then easily handled and not so liable to physic the cows as when used fresh. If they become crisp, a few green leaves are mixed with them before feeding. Unlike the pulp,

they cause the animal to desire a large amount of water. Many farmers feed the tops alone, but it is claimed to be better to use a little bran with them. Evidently they are satisfactory to the cows, as little else is eaten when the cows are turned out to pasture, some people claim that beet tops give a peculiar flavor to the butter, but only a few make this criticism.

One dairyman brought his entire herd of 90 grade Durham and Holstein cows from his own ranch to a beet farm, where he had bought the privilege of using the tops. After the crop has been gathered he will move back to the home place. At the date of the visit of the writer the cows had been fed on beet tops five days and were running on wheat stubble. The owner stated that their milk yield had doubled in that short time, the average being almost two gallons a day. Before the removal hay was the principal feed. This man makes the butter himself and sells it in the local market at highest San Francisco prices. It is always hard when he is feeding beet tops. A dairyman who feeds beet tops two or three months each year states that one September he sent a barrel of butter made from beet top milk to a mining camp. It was packed in rolls and covered with brine, and it lasted so long, remained hard and kept so well under unfavorable conditions that it attracted much attention and orders were received for more of the same kind.

Hundreds of Dollars

HAVE BEEN PAID OUT TO WOMEN IN THE CULTIVATION OF SUGAR BEETS.

Probably few people realize the great benefits which this section of the state and especially Saginaw county, is receiving from the prosecution of the beet sugar industry. The large amount of labor that has been employed in the construction of the numerous factories in the Saginaw valley, and the labor that will be employed in the factories which run during the season twenty-four hours a day are one phase of the benefits derived. During the entire summer months the cultivation of the sugar beet in itself gives employment to a large number of men, women and even children to some extent, and

this labor will also be brought into action in the fall at harvest time.

One prominent Saginawian, who has in cultivation sixty-nine acres of sugar beets, illustrated this to the News in a statement made the other day, when he said that he alone had paid out about twelve hundred dollars to the women who had been engaged in weeding the beets in his fields. He said that they were happy in the work, too, and all were anxious to be engaged for the harvesting in the fall. He expects his beets to be ready for the factory by September 25, though cutting operations will not begin at the Saginaw factory, which will consume his product, before October 1. This gentleman says that the crops in this county will be very fine, and some fields will yield twenty tons to the acre, and nearly all will come up with fifteen to eighteen tons.—

Pay Day at Chino.

Wednesday was the first pay day for the sugar factory employes. It only covered the first eight days of the campaign, but it is distributed \$7,000 among the men. This means about \$900 per day for the pay roll, and when a full month is up the factory employes alone will draw some \$27,000, not to mention the amount of wages earned in other lines of the industry, such as harvesting, railroading, lime quarrying, etc.

Next Thursday will be the first pay day for beets, being for the July deliveries—only eight days. Some \$20,000 will be paid out on that day for the eight days' deliveries.

Inside the factory all is progressing smoothly and without trouble or mishap. From four to five carloads of sugar are being shipped out daily.

Utilizing Beet Sugar Waste Products.

The rapid growth of the beet sugar industry of late years has raised several interesting questions as to what shall be done with the waste products. All who have had any experience with them readily concede their nutritive value. If free from dirt they are an available addition to the list of silo plants, yet a recent writer claims that those who have given the subject most attention

The Kilby Manufacturing Co.

Founders and Machinists

Corner Lake and Kirtland Streets, CLEVELAND, OHIO New York Office: 220 Broadway.

Builders of Complete Machinery for Beet, Cane and Glucose Sugar Houses and Refineries.

aver that the leaves are more valuable when left on the ground in the fields as a fertilizer, inasmuch as they contain exactly the right elements that the soil needs, and in an available form.

This view is not disputed by Mr. Ernest Anders, an acknowledged German expert on sugar beets, who claims that the chief reasons which prevent the rational utilizing of these agricultural by-products as stock food is due to the fact that they become mixed with earth and dirt, and their rapid fermentation. Another cause is that the fresh leaves are said to contain a poisonous matter, and the effect of this upon an animal which has been fed with fresh leaves is to produce severe purgation, and a continued use of the fermented leaves produced fractures of the bones. The question of feeding beet leaves to stock threaten to become one of doubtful economy on account of this, but the difficulty seems to have been overcome.

After many unsuccessful attempts, a German farmer in the district of Magdeburg has succeeded in making an easily digestible food from the heads of the beet, together with the stems and leaves which are cut off at the harvest, by the following process: Cleansing of the leaves from earth and dirt, almost complete destruction of the poisonous matter contained in the leaves, conservation of sugar contained in the heads, slicing of the entire material, and, finally, drying and storing of the same. Each of these five points is important, and while the entire process is too lengthy to be described in our columns, we would suggest to our readers who are interested in the subject, that they write the Department of State, which has just issued a special report upon it. In fact, it would be well for the beet raisers of America to keep in touch with all new literature on the subject, for scarcely a day passes now that some new discovery is not made in regard to that wonderful plant, which has already had such a far-reaching effect upon the well being of thousands of

our farmers, for in growing beets, the same as in any other business, the man who is familiar with the work will have more chance for success than the one who is not.

Deep plowing for the beet field will repay the cost of an extra horse in weeding time. Weed seed will germinate at about two inches and this should be put down deep enough to smother, and deep enough so that cultivation will not bring them to the surface. Shallow cultivation will not disturb them if they are down deep.

College Bulletin

The Michigan Agricultural College has issued in pamphlet form a bulletin concerning experiments with sugar beets, a summary of which follows:

1. Clay loam soils produce largest tonnage and highest per cent. of sugar.
2. Muck soils may produce beets of a high per cent. of sugar, but most pure muck yield beets showing a per cent. of sugar too low to work with profit.
3. Seed planted between May 10 and 24 gave a crop of the largest money value per acre, although any time between the last week in April and the last of May is safe for planting in this latitude.
4. Planting beets three years in succession on the same ground has not yet developed any serious fungous disease nor encouraged the spread of insect enemies.
5. Beets planted in rows 21 inches apart gave 5 per cent. greater yield than in rows 18 or 24 inches apart.

Sugar Beet Industry.

VALUE OF SUCH A PLANT IN A FARMING REGION.

"Few persons who have not investigated the tremendous industry that the establishment of a sugar beet factory in this city brings to our doors, have an adequate idea of what it means to the

city and country," says D. E. McClure in the Lansing State Republican. "Seven thousand acres of land are required to feed the Lansing sugar beet factory. The cultivation of the beet requires hundreds of helpers to weed, thin, hoe, pull, top, prepare the soil, drill in the seed, haul the crop to the factory, change the beets to sugar. This industry is not a temporary affair, but a business that has come to stay, and means a steady stream of money, alternating between the city and the country; it means better roads leading from the country to the factory, for the problem of transportation of the sugar beet crop is a costly one, and will need good roads to reduce it to the minimum; it means a better preparation of the soil for the crop, since sugar beet culture, to be successful, means the very best cultivation of the soil; it means diversification of agricultural productions, and a husbanding of the resources of the soil. The delivery of the crop to the factory will commence about October 1."

Beets Will Stand Drought.

It is an ill wind that blows nobody any good. The recent prolonged drouth in Nebraska and elsewhere served to show in a surprising manner the vitality and strength of sugar beets in resisting unfavorable climatic conditions. While other crops were literally burned up, sugar beets continued to grow and to make sugar rapidly and when the rains came the beets recovered in a remarkably short time, whereas for other crops the relief came too late to secure even an average crop. This lesson will not be lost upon the observing farmer.

"Have you ever read the article on how to tell a bad egg?" "No, I haven't; but my advice would be, if you have anything important to tell a bad egg, why, break it gently."—Tid-Bits.

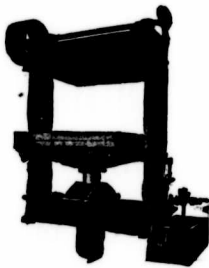
BEET SUGAR MACHINERY

ESTIMATES AND INFORMATION

—ON—

BEET SUGAR MACHINERY, BEET CULTURE, ETC.
HYDRAULIC PRESSES FOR CIDER PRESSING, ETC.
FILTER PRESSES FOR BEET SUGAR FILTERING,
CREAMERIES, ETC.

Send for our Catalogue



William R. Perrin & Company

MANUFACTURERS

122 Church St., • Toronto, Ont.

The Agricultural Gazette

The Official Bulletin of the Dominion Cattle, Sheep and Swine Breeders' Association, and of the Farmers' Institute System of the Province of Ontario.

THE DOMINION CATTLE, SHEEP, AND SWINE BREEDERS' ASSOCIATIONS.

Annual Membership Fees:—Cattle Breeders', \$1; Sheep Breeders', \$1; Swine Breeders', \$2.

BENEFITS OF MEMBERSHIP.

Each member receives a free copy of each publication issued by the Association to which he belongs, during the year in which he is a member. In the case of the Swine Breeders' Association this includes a copy of the Swine Record.

A member of the Sheep Breeders' Association is allowed to register pigs at 50c. per head; non-members are charged \$1.00 per head.

A member of the Swine Breeders' Association is allowed to register sheep at 50c. per head, while non-members are charged \$1.00.

The name and address of each member, and the stock he has for sale are published once a month. Over 10,000 copies of this directory are mailed monthly. Copies are sent to each Agricultural College and each Experiment Station in Canada and the United States, also to prominent breeders and probable buyers resident in Canada, the United States and elsewhere.

A member of an Association will only be allowed to advertise stock corresponding to the Association to which he belongs; that is, to advertise cattle he must be a member of the Dominion Cattle Breeders' Association, to advertise sheep he must be a member of the Dominion Sheep Breeders' Association, and to advertise swine he must be a member of the Dominion Swine Breeders' Association.

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 30th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

A. P. WESTERVELT, Secretary,
Parliament Buildings, Toronto, Ont.

List of Stock for Sale.

DOMINION CATTLE BREEDERS' ASSOCIATION.

Shorthorns.

Boneycastle, F., & Sons, Campbellford.—2 yearling bulls, 9 bull calves, cows, heifers and heifer calves.

Milne, David, Ethel.—bull, 21 months; bull, 16 months; 6 bulls, six to eleven months; cows and heifers.

Sibbald, F. C., Sutton West.—12 bull calves, 7 heifer calves.

Weber, L. K., Hawkesville.—3 bulls, 10 to 12 months; 2 heifers, 1 to 2 years; 2 cows.

Aberdeen Angus.

Sharp, James, Rockside.—Bull, 2 years; bull 18 months; 4 bulls, 10 months; females.

Ayrshires.

Taylor, F. W., Wellman's Corners.—3 yearling bulls, choice spring calves, both sexes.

Yuill, J. & Sons, Carleton.—2 bull calves, 9 months; bull calf, 5 months; females, aged.

DOMINION SHEEP BREEDERS' ASSOCIATION.

Licesters.

Armstrong, Geo. B., Teeswater.—Rams and ewes, various ages.

Wright, John, Chesley.—Ram, 2 shears; 3 shearing rams, 8 ram lambs, 10 ewes, shearing ewes and ewe lambs.

Cotswolds.

Boneycastle, F. & Sons, Campbellford.—7 yearling rams, 15 ram lambs, ewes and ewe lambs.

Dorsets.

Hunter, John, Wyoming.—Ewes and ewe lambs, rams and ram lambs.

Shropshires.

Wren, C. Uxbridge.—Shearing rams and ewes, ram and ewe lambs, aged ewes.

Yuill, Jos. & Son, Carleton.—Ram, 2 years; shearing ram, 6 ram lambs, females, all ages.

DOMINION SWINE BREEDERS' ASSOCIATION.

Berkshires.

Boneycastle, F. & Sons, Campbellford, Ont.—Young pigs from 2 to 4 months.

Yuill, Jos. & Son, Carleton.—Boar, 6 months old; boar, under 6 months; sows, all ages.

Boyd, A. Kars.—Young stock, both sexes, 3 weeks.

Tamworths.

Hawkshaw, W. S., & Sons, Glanworth.—9 boars and sows, 6 months; 15 boars and sows, 3 months; 20 boars and sows, 5 weeks; 2 sows, 10 months.

Boyd, A. Kars.—Young stock, both sexes, 4 weeks.

Yorkshires.

Maloney, F. A., Chapeau, Que.—2 aged boars, 3 sows, 30 young stock, both sexes.

FARM HELP EXCHANGE.

The Farm Help Exchange has been started with the object of bringing together employers of farm and domestic labor and the employees. Any person wishing to obtain a position on a farm or dairy, or any person wishing to employ help for farm or dairy, is requested to forward his or her name and full particulars to A. P. Westervelt, Secretary, Live Stock Associations. In the case of persons wishing to employ help, the following should be given: particulars as to the kind of work to be done, probable length of engagement, wages, etc. In the case of persons wishing employment, the following should be given: experience and references, age, particular department of farm work in which a position is desired, wages expected and where last employed.

These names when received together with particulars will be published FREE in the two following issues of the "Agricultural Gazette" and will afterwards be kept on file. Upon a request being received the particulars only will be published, the names being kept on file.

Every effort will be made to give all possible assistance, to the end that suitable workers, male or female, may be obtained. Every unemployed person wishing to engage in farm or dairy work is invited to take advantage of this opportunity.

Help Wanted.

Wanted in Kent County, a man who is careful and competent, to do all kind of farm work. Good wages and steady employment to suitable person. Address, Jos. Hawley, Mull, Ont. a.

Wanted, married man to work a 100 acre farm, good, reliable,

honest, trustworthy man, who understands general farming, feeding and care of stock, a good milkman and capable of taking temporary management. Good comfortable house with stone cellar provided, large garden and other privileges given. Three-quarters of a mile from school, post-office and Catholic church. Permanent position. No. 852. a.

Boy wanted to work on a farm; must be smart and willing. Apply to Wm. J. Stoneman, Maple Lake Station, Ont., stating age and salary expected, at once. b.

Boy wanted to work on a farm; must be smart and willing. Apply to William J. Stoneman, Maple Lake Station, Ont., stating age and salary expected, at once. a.

Hired man wanted, young and willing to learn; not necessarily experienced. No. 851. a.

Man wanted to work on a farm near Goderich. Must thoroughly understand farming, raising and care of horses, cattle and pigs. A man from 45 to 55 preferred, with wife and either grown or half grown family, who would be willing to work under their father and mother. Must be willing, capable and trustworthy in every respect. No. 842. a.

Wanted by September 1st.—Competent farm hand, to work by the year on a farm in Brant County. Must be able to milk and tend to stock; must be thoroughly trustworthy and capable of taking temporary management. Young man with some education preferred; also one who neither uses tobacco nor any alcoholic liquors. Good wages and permanent employment for the right sort of man. Correspondence solicited. No. 843. a.

Man wanted to look after bees, poultry garden, and to help on a farm. Married man preferred. State wages expected. No. 844. a.

Man wanted to work on a 300 acre farm near Toronto. Everything very convenient. Good wages paid to suitable person. No. 845. a.

Single man wanted to work on a farm. Must be steady and willing to do his best. Farm consists of 250 acres and all kinds of live stock is kept. Man must be a good milker and kind to stock. Wages \$200.00 per year to right man, with board. No. 846. a.

Farm hand wanted by the year to attend to stock in winter and work on the farm in summer, must have some experience in feeding stock or willing to learn. Married or single, if married a convenient house with wood provided. May commence work in October. Permanent situation for suitable man. No. 847. a.

Comfortable house for man and wife on a fruit farm, would not object to one child. No. 848. a.

Man wanted for year to work on farm. Must be good ploughman and milker and willing to do all kinds of farm work. Married man preferred. House and wood furnished, also garden. No. 849. a

Situations Wanted.

Position wanted between Simcoe and Toronto if possible, by a good, honest, steady man, who can do all kinds of farm work. Address, Alf. Sheppard, Springvale, Ont. a

Position wanted by first-class young married man, to manage small farm. Address, Smith Woodhouse, Gait, Ont. a

Position wanted by a man 34 years of age, who has a wife and one child 4 years old, has been foreman on a farm for past two years, his wife having charge of the dairy. Address, B. A. Bisbee, Saltford, Ont. a

Man wants a position on a farm, Has been on a farm all his life. Can do all kinds of work; aged 24. Family consists of self, wife and child. Does not drink or use tobacco in any way. Wages asked, \$25 a month. House, wood and garden furnished. No. 946. a

Position wanted by a single man 32 years of age, who has been on a farm all his life, and had large experience in feeding and attending all kinds of stock. Good milker, teamster and ploughman. Steady, good health, no bad habits. Wages expected \$25 a month. No. 947. a

Position wanted on a farm by a married man, three of a family. Able to do all sorts of farm work. Fuel and house required. Apply John Kittle, Powle's Corners, Ont. a

Position wanted on a farm by an Englishman, 22 years of age. Good references furnished. No. 945. a

Experienced stockman, Scotchman, wants a position as stockman on a dairy farm. Age, 28 years. Recommendations from last employer. Salary \$25 a month, with board and washing. No. 943. a

Position wanted by young man 23 years of age. Englishman with three years training at an Agricultural College, and six years practical farming. Thoroughly understands butter making also breaking young horses and horse breeding. Strong and not afraid of work. No. 944. a

N.B.—Where no name is mentioned in the advertisement, apply to A. P. Westervelt, Parliament Buildings, Toronto, giving number of advertisement.

Meeting of Poultry Association Directors.

A meeting of the Directors of the Ontario Poultry Association, was held in the Farmers' Institute tent, at the grounds of the Toronto Industrial, on Thursday, September 5th, at 2 p. m. President A. W. Tyson in the chair.

An offer was made by the Turkey Club that they would add a fourth and fifth prize to the prizes

for turkeys, provided James Anderson, of Guelph, was appointed judge, and that sufficient cooping be provided to allow the turkeys to be cooped separately. This offer was accepted by the Directors. It was also decided that before the entries on turkeys are accepted that a statement must be given by the exhibitor, giving information as to how his exhibits have been bred and fed.

Moved by William McNeil, and seconded, that 50 cents be added to Toulouse and Bremen geese, making the prizes \$3.50, \$2.50 and \$1.50. Carried.

Moved by William McNeil, seconded by J. W. Kedwell, that in sections where there are twenty or more entries the prizes will be \$4, \$3, \$2, \$1 and 50 cents. Carried.

Moved by William McNeil seconded by James Ramsey, that in the class for Belgian hares, the males and females be shown separately. Carried.

Moved by W. R. Graham, seconded by W. J. Bell, that money prizes won on dressed poultry be withheld until a statement has been received, giving information as to how the exhibits have been fed. Carried.

The following judges were appointed, on motion of William McNeil and Allan Bogue: S. Butterfield, London; T. H. Smelt, Woodstock; L. Jarvis, Montreal; Charles Wagoner, Toronto; James Anderson, Guelph.

It was also included in the motion that the salaries of the judges be the same as last year, and that they would be expected to be in attendance at the Fair from Tuesday noon until Friday noon. That they also prepare a report on the classes over which they have judged, and also be prepared to address meetings, to take the birds on the stand and give their reasons for any decision which may be asked by the officers; that the money be paid when their duties had been satisfactorily performed. Carried.

J. Saunders, of London, was appointed superintendent.

A petition was presented, that the names be kept off the coops until after the exhibits had been judged.

Moved by D. C. Trew, seconded by John Ramsey, that the names remain on the exhibitors' tickets as heretofore. Carried.

Moved by William McNeil, seconded by John Ramsey, that the changes in the Winter Fair building be left in the hands of the Winter Fair Committee. Carried.

It was also resolved that the exhibits must arrive at the buildings on Monday night, December 9th. Entries will close on December 2nd.

The meeting then adjourned.

Poultry at Pan-American Exposition

Poultry will be on exhibition at the Pan-American Exposition, Buffalo, October 21st to 31st.

In order that there may be a first-class exhibit of Ontario poultry, it has been decided that the Departments of Agriculture will pay the transportation of exhibits from a central point to Buffalo and return. Through the assistance of the Ontario and Dominion Departments of Agriculture, exhibitors will only be required to pay 50 cents for each entry of poultry in the open class, and \$1.50 for a poultry pen.

Entries should be made at once to Mr. A. P. Westervelt, Parliament Buildings, Toronto, from whom entry blanks may be obtained.

Birds will be inspected.

Farmers' Institutes.

Under this head the Superintendent of Farmers' Institutes will each week publish matter relating to Institute work. This will include instruction to secretaries and other officers, general information about Institutes and Institute work, suggestions to delegates, etc. He will also from time to time review some of the published results of experiments conducted at the various Agricultural Colleges and Experiment Stations of Canada and the United States. In this way he hopes to give Institute members some valuable agricultural information which they might not otherwise receive, on account of not having access to the original publications. If any member at any time desires further information along any of the lines discussed, by applying to the Superintendent he will be put in direct communication with the Institution that has carried on the work.

G. C. CREELMAN,
Superintendent Farmers' Institutes.

Poultry Production.

By A. G. Gilbert.

(Continued from last issue.)

MAY FOR CHICKS.

"The best time to have the chicks come is in May. Leave the little ones with the mother until 'nest ripe'—or about twenty-four or thirty-six hours. Then put the chicks in a basket and give the mother liberally of food and drink. Give her chicks no food for the first day, but when feeding does begin, feed every two hours or so—a little at a time. Make the first feed of stale bread, broken up into dry crumbs. Afterwards give stale bread and milk, not sloppy, but crumbly. This is a good feed, by the way, for turkeys also. Granulated oatmeal will make a suitable mash, about the eighth or ninth day. Giving young chicks cornmeal and cold water will cause acute indigestion, and they die off like flies. Giving whole grain too soon to chicks is as bad as feeding steak to children. About twelve or fourteen days after hatching they may be given a little whole grain at night.

THE CRITICAL PERIODS.

"The first five weeks cover the most critical period in a chicken's life. They are then making bon?, muscles and feathers very rapidly. All this causes a serious drain on the chicken's vitality, and if it suffers a check then, it will never recover.

EGGS WANTED EVEN IN SUMMER.

"It is not only in winter there is a demand for absolutely fresh eggs. There is a demand in summer, also. In fact, my experience is that it is more difficult, in cities to obtain a supply of really well-flavored eggs in July than it is in January. I have known cases where eggs have been purchased from grocers in mid-summer.

mer, half of which were of objectionable flavor, and the other half positively bad. This is not all due to dishonesty on the part of farmers—it is not all owing to the action of people knowingly sending stale eggs to market.

ONE CAUSE OF BAD FLAVORS IN SUMMER.

"I will tell you one cause to which is due the development of objectionable flavor in so many summer eggs. Summer is the natural breeding season of the fowl, and eggs—where males run with the hens—are then strongly fertile. There are also a lot of broody hens about at the same time. Now, what follows when, as is usually the case, eggs are gathered late in the evening, or possibly, only once in two days? One hen lays an egg early in the morning; another follows suit later; perhaps a third or fourth or fifth comes and lays in the same nest. By this time the first egg is getting pretty well warmed up. Then a broody hen comes and occupies the nest until evening or next morning. What is the result? Foster and Balfour tell us that some development takes place in the germ of the egg with eight hours' covering. If an egg in that condition is taken to market, the cell will be ruptured in handling, and then decomposition sets in, and the flavor is ruined.

HOW TO AVOID ALL THIS.

"As a remedy, collect your eggs once or twice a day, or better still, keep the males separate from the hens, and sell not less frequently than once a week. In any case, make it an absolute cast-iron rule that no egg shall be sold unless you are absolutely certain of its positive freshness.

"Another thing: Don't keep all the big eggs at home and send all the little ones to the store. Don't even put in six small ones and then six big to balance. The buyer will judge the whole by the smaller ones. Have your eggs of even size and inviting appearance.

MARKET FOR CHICKENS.

"Is there a market for your chickens when produced? Undoubtedly. There is a large local market, and an almost unlimited demand in England. One firm in Toronto say they could sell ten tons a week in the Old Country if they could but get the material with which to meet the demand. In one case an order for 40,000 tons went to the States, because it could not be filled here."

THERE IS MONEY IN CHICKENS.

"I am satisfied," said Mr. Gould, at the conclusion of the lecture, "that there is money in this industry for every man who is adapted for the work."

Fred Wilkinson said he had cleared \$1.00 per head on his fowls last year. "I am satisfied by my experience," said the gentleman, "that there is more money in poultry than anything else."

And this opinion is borne out by what Mr. Snedden, of Almonte, said some little time since. Mr. Snedden said he was making more out of 200 hens than from ten cows.

President Cullis, of East Victoria Institute, is satisfied with hens, too, and may well be. He keeps his house going in groceries, etc., with the output of eighty to ninety hens.

The Growing of the Sweet Pea.

BY MRS. J. R. EAKINS, MILBROOK, OF THE WEST DURHAM WOMEN'S INSTITUTE.

The sweet pea as a cut flower for decorative purposes cannot be excelled in its variety of shades, fragrance and gracefulness, and it will remain fresh looking for a considerable time after cutting, making it a most desirable flower for the table, for hospitals, flower missions, etc.

How to Grow—The seed should be sown as early in the spring as the ground can be prepared and the soil should be a rich clay loam or clay well mixed with manure, taking care, however, not to place too much manure in the bottom of the trench as it burns the young plants. A good way is to put manure in the bottom of the trench, and covering well with clay, before planting the seed. The trench should be from seven to nine inches deep, and should run north and south in order that the sun may have access to both sides of the plants. Plenty of seed should be sown, and covered to a depth of from one to two inches. As the plants grow keep adding the soil around them until they are one inch from top of trench, leaving this space so that when watering the plants the water will lie in the trench and soak down to the roots of the plants. Water them freely as they require a great deal of water.

In the matter of support for the plants, coarse wire netting or poultry netting, it is called, or cord fastened to rods and drawn from one end of the trench to the other, or even small dead branches may be used.

Two rows of plants with the wire netting between them give a good effect, or a cheaper way, and quite pretty, is to have a small bushy birch tree, eight or ten feet high, one with branches which bend easily, put it in the ground, dig the trench around it, plant the seed as before mentioned, and when the plants grow at first it may be necessary to twist or tie them to the branches to train them properly.

If the seed is not well covered with soil the heated ground often destroys the plants before they reach the blooming period.

Sweet peas should bloom very freely and the blossoms picked every day lest the flower goes to seed and the plant dies.

In case it is desired to save any seed, a few plants may be sown in a separate place and the blossoms allowed to go to seed. There are two kinds of seed, the dwarf and the long stemmed kind, but the dwarf kind are not very suitable for bouquets, as the blossoms so often fall before they are in full bloom.

The better way to buy the seed is in bulk, by the ounce or pound, much cheaper than by the package. You

can buy mixed seed or in separate colors.

Names of some separate colors: Mars, a brilliant red; Venus, a straw color; Black Knight, the best dark; Duchess of Sunderland, pinky white; Lady Balfour, a beautiful mauve; Prince of Wales, bright rose; Lady Mary Currie, a bronze pink; Chancellor, orange pink; and many others.

Construction of an Ice House.

By R. Thompson, St Catharines.

A few years ago I had the task placed in my hands of constructing an ice-house for the storing of ice to supply the refrigerator fruit cars leaving St. Catharines' station, and in the erection of the same a difficulty was encountered, a difficulty which is increasing over our province, viz., the scarcity of sawdust, and which cost us \$2 per load, delivered. A year ago I had to overhaul my own ice-house, and, after the experience I had had, and from what I could learn from ice-men who had adopted the improved methods of construction, I concluded to build an ice-house for myself on the following plan. It may appear a little expensive, but when I take into consideration the cost of sawdust, and the fact that I had to draw the ice three miles and pay twenty-five cents per load for it, I could not afford to draw the ice home and have it waste to any extent.

I have learned that there were two or three weak points in ice-house construction—the first was a poor foundation and lack of drainage; the second, the roof, on which the sun generates such intense heat that the inside of the house is more like an oven than a place for keeping ice. I desired a house that would hold over forty tons of ice, and built on the following plan. I will give a few general directions for others who are located differently. While little scope is usually given in the selection of a site, there are certain precautions to be taken in order to secure a good bed of ice.

If the site chosen be on a little rise above the adjacent ground level, surface drainage will give no trouble; otherwise provision for it, as well as the water from the melting ice, must be made. For preparation for the foundation of the house, which can be placed on stone or cement walls, or on cedar posts set in the ground two feet at least, excavate at least one foot below sills, and fill with cobble stones or very coarse gravel the whole of the inside between sills, smoothing off the surface with fine gravel or cinders. If the digging shows a clay soil a drain should be put in to carry off surplus moisture, carrying drain well under the gravel. Scantlings can be bedded in the fine gravel on which to place a floor of cheap lumber, placed one inch apart to permit the water to pass through readily.

It takes on an average from 40 to 45 cubic feet to hold a ton of ice, consequently a building 12 by

16 feet by 12 feet high would hold about 45 tons of ice well packed. I used 2 inch by 12 inch sound pine plank for sills, and for uprights 2 by 6 scantling 12 feet long, placed two feet apart, at each corner putting in an extra piece to catch lining on the inside. On the top I spiked 2 inch by 6 inch scantling doubled for plates. On the outside of house I nailed sheeting of common lumber, on which I tacked a double thickness of building paper, then strips 1 by 2 by 12 feet long. Over this a double thickness of building paper and finished with matched siding. This gives a hollow space of dead air of one inch to prevent heat of the sun penetrating to inside lining, care being used to see that the space is well cut off at top and bottom. On the side I nailed sheeting, filling the six inch space with cinders, shavings or sawdust, as is most convenient (I used cinders); over this sheeting I nailed a double thickness of paper, on which was nailed half-inch strips again, and on these, sheeting, thus making two hollow spaces of dead air one inch each and one space of six inches filled, six thicknesses of building paper, three of sheeting and one of good siding.

For the roof I used 2 inch by 4 inch for rafters, lining the underside and filling between the rafters with dry shavings; under the shingles I placed two thicknesses of building paper, placing a ventilator in the centre of the roof, made so that it can be closed inside if desirable. The door should be made in two halves, and a door in the gable over the plate to put in and take out the ice for two top layers. The gables should be built the same as the walls. If the outside of the building is painted white it will help to keep the building cool. At the time of writing (July 22nd) there has been no waste of ice around the outer edge. I believe I have secured a good house at the cost of \$65 and my own time in building. Any farmer should be able to do this work himself in slack times.

In filling the house I placed the ice on its edge, placing every alternate layer crossways. Ice will keep better and come out easier packed this way. Opposite the doors I laid short pieces of boards and filled the door space with shavings. When the house was filled I placed two feet of straw over the ice, tramping it well. Marsh hay would answer the purpose better. We are using the hay and straw for our cold storage house, and all of the large ice-houses are using the same. I can keep my ice through the summer with the loss of only a ton of ice.

Old Lady—I desire to leave all my property to charity.

Lawyer—Your relatives might try to break the will; why not give the property to charity at once?

Old Lady—Oh, dear, no! They'd put me in a lunatic asylum.—Funny Cuts.

Cold Storage and the Transportation and Marketing of our Perishable Products.

BY G. C. CASTON, CRAIGHURST.

The question of preserving and marketing our perishable products, in good condition, is one that has for the last few years aroused considerable interest. The interest in this subject would be still greater if we knew exactly how many thousands of dollars were lost to the country every year, through deterioration in the quality of these products while in transit, and the large quantity that goes to waste and is a total loss for lack of the proper facilities for their transportation. Besides, there is the question of preservation of many of these products in a fresh and wholesome condition for home use. With our changed conditions of agriculture, there is a large and constantly increasing proportion of our farm products that may be classed as perishable. Fresh meat, dressed poultry, butter, eggs and we may say all our varieties of fruit, with the exception of winter apples. This is why the allied questions of cold storage and transportation are of such live importance in this country to-day.

The Hanrahan Cold Storage System. Cold storage has been for a number of years in the experimental stage. A number of systems have been tried, with varying degrees of success. But the one known as the Hanrahan system, seems to commend itself as at once the cheapest, simplest and withal the most effective yet introduced. It is with that system I propose to deal in this article. And just here the question may be asked, "What do you know about it?" It is comparatively a new question, "What experience have you had in it?" And the answer would be, "personally, very little." But we are pretty safe in judging of a system by the results attained, and when we find that by this system such perishable products as ripe peaches, pears and grapes were shipped from the southern part of this province, and laid down in the British market in perfect condition, then it must have in it the elements of success.

A Low Temperature and Constant Circulation of Pure Air. The fundamental principles of this system are, first, a low temperature, and second, and equally important, a constant circulation of dry, pure air through the products. All decay and deterioration in perishable products is caused by germs. The air is full of them. The conditions under which they propagate most rapidly is the presence of warmth and moisture. They are known as moulds, yeasts, bacteria, etc., and there is an endless variety of them. But when the temperature is reduced to within a few degrees of the freezing point they become dormant, and decay is arrested. But it is in the second point, viz., circulation of a

current of cold, dry pure air, that this system seems to excel.

A Chain of Cold Storage. For the successful transport of perishable products a chain of cold storage is required. First the house where the products can be stored must be properly cooled and kept at a low temperature until ready to ship. Then we must have the refrigerator car and the Hanrahan car is as great an improvement on the ordinary refrigerator car, as the modern binder is on the old reaper. Then, if the products have to cross the water, there must be proper cold storage apartments on board the vessel. And to complete the chain there should be cold storage houses to place them in at the end of the journey. Fruit decays rapidly in the presence of warmth and moisture. There is a point just here that is important. The question is often asked, "Why is it that products, more especially fruit, that have been carried into cold storage, spoil rapidly when brought into a warm atmosphere?" Well, the reason is plain. Warm air will condense and precipitate moisture rapidly when it comes in contact with a cool surface, hence the product brought from a cold chamber suddenly into the warm air is soon covered with moisture, and then you have the very conditions under which the germs of decay operate most rapidly, viz., the presence of warmth and moisture. The shipment of produce in cold storage has been often criticized owing to this fact, by people who did not understand the cause. This points to the desirability of having proper places at the market end of the route to place the goods in until sold. But above all that no product should be suddenly removed from the cold chamber into a warm atmosphere, but excluded as far as possible from the air, until it is gradually raised to the temperature of the store-room where it is to be placed for sale. If this fact is properly understood and acted upon it will obviate the difficulty.

The ice chamber, when filled to the top, is perfectly insulated, as will be seen from the construction of the walls, there being really four walls.

The centre space is filled with sawdust, and then a dead air space on each side, between the inside lining and outside covering. The walls of the refrigerator room are constructed in the same manner, while the top of both is covered deeply with sawdust in the attics. Thus the ice is well insulated from the outside air as it would be when buried in sawdust in the ordinary ice house. The refrigerator has closely-fitting double doors for entrance, with an air space between, and a small window on each side, with four sashes in each, giving three dead air spaces between the sashes in each window. To secure perfect insulation at the bottom the foundation is laid in dry sand.

(To be continued.)

The Farm Home

"A Four-Leaved Clover."

What seek you, my maid, my pretty maid,
 With the wistful eye, the nut-brown braid,
 Where the rose-red clover blooms and blows,
 The yellow honey bee comes and goes,
 And the tangled grass is long and sweet,
 A maze of green for your little feet.

A four-leaved clover? O foolish child,
 Was ever a summer dream so wild:
 A gerdoun of luck—a charm 'gainst fate?
 Youth and beauty have only to wait;
 For happiness happens, so they say,
 And blossoms come in the month of May.

Down by the stile in the shadowed lane
 There is some one watching all in vain,
 For a slender shape of girlish grace,
 A sunny smile and a flower-like face;
 Search no more in the rose-red clover,
 Haste away to your waiting lover.

"Sheila."

Comfort for Country Homes.

CORNELL READING COURSE FOR FARMERS' WIVES.

The reading course for farmers, conducted by the College of Agriculture, Cornell University, Ithaca, N. Y., has been so heartily received that a similar course for women was suggested. Last year a circular letter was sent throughout the State to ascertain the general feeling in regard to such a course. The first problem in house-keeping proposed for discussion was the saving of the housewife's steps. Many letters were received in response to the circular, and their suggestions have been edited by Miss Martha Van Rensselaer, and published as Reading Lesson Supplement No. 1, under the title "Saving Steps," and a second bulletin bears the title "Home Sanitation." These will be followed at regular intervals by others of equal practical value.

The following paragraphs, abridged from these bulletins, will be suggestive to housekeepers everywhere and especially to those having homes in the country. From the letters of the farmers' wives, these points are gleaned:—

One woman had learned from her mother and in turn was impressing her own children with the necessity of "making their heads save their heels."

Another does not rise as soon as she wakes in the morning, but plans the work of the day.

Before she learned to do this, she rose at once and had the feeling of hurry, which soon became worry, and ended in exhaustion; now the work goes smoothly and more is accomplished.

"Men are often censured for indifference when it is only thoughtlessness. Just remind them that you haven't any water to get dinner with, and your pail will be filled, and the wood-box also. Don't do it yourself."

"As a rule, we farmers' wives do our own washing, ironing, taking care of the milk, meat, chickens, which women of other callings do not do. If you can make us understand that it is just as necessary to rest the body by using the mind a little to read—if the floor doesn't get scrubbed so often—you will do much good."

"Before beginning to get a meal, stop and think how many things one will need from the cellar, and bring as many as possible at one time, and not climb the stairs as many times as there are articles needed."

"I think that many of the unnecessary steps I take are caused by forgetfulness; another cause of extra steps is putting up things that some one else has left out of place. I find a great saving in having the stove near the sink and cupboards."

When we visit a neighbor and she gives us about three times as many kinds of foods as we need, what is there left for us to do when she visits us?"

"I tried to count my steps while getting breakfast this morning. I traveled about two miles while preparing this meal, doing the dishes, preparing chicken feed, pig feed, and waiting on the children, for I have five small ones."

"What housekeeping needs is just what farming has needed,—the application of thorough scientific knowledge and methods."

"My kitchen is off from the main part of the house about seven feet, and there are two steps for me to go up and down. I often wondered just how many times I went back and forth in a day. One morning I counted twenty times."

"It is wealth to the farmer whose wife's steps are made few, and everything about the house as convenient as possible, securing her health in order that she may be the helpmeet of her husband."

"Build the sink and tables high to avoid stooping. A high stool should stand in every kitchen, upon which the mistress can sit while compounding foods, washing dishes and cleaning vegetables."

The editor, in reviewing these letters, gives some wise hints.

For the housekeeper who now has to carry waste water to an outside door, down a flight of steps

to a safe distance from the house before throwing it on the ground, a tiled drain should be constructed. Tile can be had for four cents a foot; the drain should be laid according to the situation of the well. If the work is done by the farm help, the actual cost will be about \$6.25 for a permanent means of carrying off the waste water used in the kitchen.

An ice-box should be constructed and this can be home-made. The provision saved in one season by the use of a refrigerator more than pays the expense of one, and saves the housekeeper many trips to the cellar. A large ice-house at the creamery may answer for a community, and the patrons who bring the milk may carry away the ice needed for their own homes.

A window cupboard in dining room or pantry saves many steps.

In a small kitchen a drop shelf is an advantage, and zinc-covered tables are helpful.

The same alcove kitchen, shown on page 216 of the American Kitchen Magazine for March, 1901, is used in this bulletin to show how work can be confined to a small place and thus save the housekeeper's steps.

The bulletin on sanitation is accompanied by a letter from Miss Van Rensselaer, stating that nearly six thousand women in the State of New York are enrolled in this Women's Reading Course.

The old farmhouse as it was is described. A brook flowing through the farm acres may bring dangers from above or acquire them here and transmit poison to the lands below. At the side door for many a year a woman has appeared several times a day to fling the contents of a dishpan as far from her as possible. Here, too, the water from washing clothes, hands, and milk cans, joins to make a soil rich in bacteria, and in similar cases this too often is near the well.

Other wrong conditions discussed by this bulletin are the unused parlor and spare room, the clothes-line at an exposed corner of the house, and the cellar which is not properly drained.

Many improvements with small outlay of money or labor are suggested, such as good drains, a drilled well, a cement floor in the cellar. Sanitation usually appeals more strongly to women than to men, and much depends on them, although in many cases it seems impossible to overcome the difficulties.

In every one's life there comes a waking-up time, and it's well for them if it comes at the beginning and not at the end, when it is too late to mend the past. These times are private revivals and do more good than any public ones.—September Ladies' Home Journal.

Hints by May Manton.

Woman's Waist No. 3896, to be made with or without vest to correspond with fancy sleeves.

Blouse effects with revers and vests are exceedingly fashionable and make most satisfactory waists for street costumes as well as for indoor wear. The original of the smart model shown is made of tucked golden brown tamine with



3896 Woman's Waist,
32 to 40 bust.

vest of the plain material, full front undersleeves and stitched bands of taffeta in the same shade, small jeweled buttons, revers, stock and cuffs of Russian lace, but all soft materials suited to tucking are appropriate.

The foundation for the waist is a fitted lining. On it are arranged the full front, vest portions and back and fronts of the waist proper, which are laid in fine tucks, while the fronts are finished with revers. The sleeves are made over a smooth lining to which the puffs are attached, and which can be covered with the material when plain sleeves are desired. The flare cuffs are attached, and which can be covered with the material when plain sleeves are desired. The flare cuffs are attached to the lower edges of the upper sleeves and the stock is joined to the full front and closed invisibly at the centre back.

To cut this waist for a woman of medium size, $3\frac{1}{4}$ yards of material 21 inches wide, 3 yards 27 inches wide, $2\frac{1}{2}$ yards 32 inches wide or $1\frac{1}{2}$ yards 44 inches wide will be required, with $1\frac{1}{2}$ yards of taffeta, $1\frac{1}{2}$ yards of all-over lace and $3\frac{1}{2}$ yards of stitched bands to trim as illustrated.

The pattern 3896 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

The price of above pattern post-paid is only 10 cents. Send

orders to "The Farming World, Confederation Life Building, Toronto, giving size wanted."

Chicken Salad

Cold cooked chicken, two ounces of ham or tongue, four tomatoes, four large cooked potatoes, one small beetroot, one lettuce, one hard-boiled egg, two large tablespoonfuls of mayonnaise sauce. Cut the chicken meat into dice, removing the skin and sprinkle over a dessertspoonful of tarragon vinegar. Cut the ham also into dice. Cut the potatoes (which should be firmly boiled, but not broken) into oblong cubes, also the beetroot and tomatoes. The leaves of the lettuce should be arranged round the edge of the salad bowl. Put the mayonnaise into a basin and carefully stir in the chicken, ham, potato, tomato, beetroot, and, if possible, a few slices of celery. Then turn the mixture into the center of the salad bowl. Put the heart of the lettuce in the center and decorate round the salad with the hard-boiled egg cut into quarters. For the mayonnaise take two raw yolks of egg, add a little pepper and salt, and stir in, drop by drop, one fourth pint of salad oil. Season well with tarragon and malt vinegar, one-half teaspoonful of castor sugar and one-fourth teaspoonful of mixed mustard. It is then ready for use.

To Make Furs Look Like New.

SOME SIMPLE SUGGESTIONS FOR CLEANING AND RENOVATING WINTER WRAPS AT HOME.

When furs become worn or soiled at the neck they may be renovated by gently rubbing with cotton batting saturated with gasoline, which should not be used in a room that has artificial heat or light. Axle grease, tar, paint and pitch may be removed by rubbing first with oil of turpentine and then with ether. Dark furs may be cleaned with fine cedar or mahogany sawdust which has been heated in an oven. Alaska sable, seal, electric seal, fox, etc., should be beaten with a switch until free from dust, then laid with the fur side up, and the hot sawdust rubbed in. Be lavish with the sawdust and vigorous with the rubbing. After this place the garment upon feather pillows with the furry side down, and beat well until all traces of the sawdust have disappeared. Then hang out in a shady place. White furs may be cleaned in the same way, using white cornmeal instead of the sawdust, or if only slightly soiled, by rubbing well with magnesia in cakes. Wet furs should never be dried near the fire, but shaken and hung away in a cold room, then brushed.—September Ladies' Home Journal.

How the Fall Waists Will be Made.

Separate waists of cashmere, albatross, vivella, and Scotch and French flannel will be worn this autumn. The colors most used

will be bright and dark red, tan, the light, dark and French blues, gray, pink, and dark and reseda green. Buttons of steel, gilt, and white and smoked pearl will be used on the new waists, which are made with plain backs, long shoulder seams and stitched or tucked fronts with long-waisted and slightly bloused effects. The latest sleeve is a bishop shape with a trifle more fullness at the top than that of last year. The wristbands are made large enough to permit the hands to slip through. The "necktie finish" is now seen on almost all waists, particularly the more dressy ones.—September Ladies' Home Journal.

House Plants for the Winter.

SOME OF THE VARIETIES WHICH ARE EASIEST TO GROW INDOORS.

The best time to get decorative plants to be grown indoors during the winter is early in September. At that season artificial heat and high, moist temperature have been dispensed with, and plants are growing more naturally than at any other time in the year. There are but few which one can expect to grow well in the house in winter. The aspidistra is a plant which cannot be killed by ordinary neglect. Give it all the water it needs, an occasional application of fertilizer, and a reasonable amount of light. The agave is a stately plant, and a well-grown specimen always attracts attention. For the hall it will be found quite as ornamental as a palm. Because of the semi-succulent nature of the foliage it will not require much water except when it is growing. Asparagus Sprengeri is another plant which grows as well for the veriest amateur as it does for the owner of a greenhouse. Plant it in a soil of rich loam, and give it a liberal allowance of water when it needs it, a shady place to grow in, and a frequent shower-bath. Begonias are not often classed among the very robust plants, but there is one variety which I have found sure to grow well under difficulties. This variety is *B. argentea guttata*. Give it a soil of sandy loam, well drained. Be careful not to over-water, but shower it frequently.—Eben E. Rexford, in The Ladies' Home Journal for September.

ALBERT COLLEGE

Business School Founded 1877

\$37.00 pays board, room, tuition, electric light, use of gymnasium and baths (all but books and laundry) for 10 weeks—longer time at same rate—in either department:

- (a) Bookkeeping
- (b) Shorthand & Typewriting
- (c) Telegraphy

287 Students enrolled in the College last year. Send for specimen of penmanship and special circular.

Address—

PRINCIPAL DYER, D. D., Belleville, Ont.

The Farming World.

PAPER FOR FARMERS AND STOCKMEN.

Publisher, D. T. MCANISH.
Editor, J. W. WHEATON, B.A.

The Farming World is a paper for farmers and stockmen, published weekly, with illustrations. The subscription price is one dollar a year, payable in advance.

Postage is prepaid by the publisher for all subscriptions in Canada and the United States. For all other countries in the Postal Union add fifty cents for postage.

Change of Address—When a change of address is ordered, both the new and the old addresses must be given. The notice should be sent one week before the change is to take effect.

Receipts are only sent upon request. The date opposite the name on the address label indicates the time up to which the subscription is paid, and the change of date is sufficient acknowledgment of payment. When this change is not made promptly notify us.

Discontinuances—Following the general desire of our readers, no subscriber's copy of THE FARMING WORLD is discontinued until notice to that effect is given. All arrears must be paid.

How to Remit.—Remittances should be sent by cheque draft, express order, postal note, or money order payable to order of THE FARMING WORLD. Cash should be sent in registered letter.

Advertising Rates on application.

Letters should be addressed to:

THE FARMING WORLD,
CONFEDERATION LIFE BUILDING,
TORONTO.

Turkey Club of Canada.

A meeting of this club was held in Board Room of Industrial Fair Association, Toronto, Sept. 4th, W. H. Beattie president was in the chair. It was decided to hold the annual meeting on Tuesday of Winter Fair week in Guelph at 3.30 p. m., and also that the membership or annual fee be \$1.00. It was moved by Mr. Anderson and seconded by Mr. Shore, that in consideration of the small attendance, the passing of Constitution and By-laws, be left over until annual meeting. Carried. Moved by Mr. Bell, seconded by Mr. Shore, that the Ontario Poultry Association Directors, be requested to appoint Mr. Anderson, of Guelph, as judge of turkeys at Guelph Winter Fair. Carried. It was also decided on motion of Mr. Shore and Mr. Wright, to grant the sum of \$17.50 as a fourth and fifth prize of 75¢ and 50¢ respectively to above association, on condition that they provide coops for single birds in all turkey classes of the same dimensions as coops in which pairs were cooped last year and accept the club's choice of judge. It was also recommended that the secretary of O. P. A., withhold prize-money from exhibitors in turkey classes who do not furnish along with their entry an account of how their birds were bred and fed. Some of the members referred to the dying of turkeys from various causes and Prof. Graham, of O. A. C., who was present stated if breeders would send the birds to the Professor of Bacteriology, O. A. C. Guelph, the case would be investigated and any information they could give would be cheerfully given. Those present were Prof. Graham, Guelph; Beattie, Wilton Grove, Anderson, Guelph; Wright, Glanworth, Scanlan, Ennotville; Foulds, Aurora; Shore, White Oak; Bell, Angus;

Laidlaw, Guelph, and Brown Durham.

W. J. Bell, Sec'y.

A Maritime Winter Fair.

At a meeting of the Executive Committee of the Maritime Stock Breeders' Association at Amherst, N. S., on August 30th, at which the Dominion Live Stock Commissioner, Mr. Hodson, was present, it was decided to hold the Maritime Winter Fair, combining a fat stock show, block test, dairy test and poultry show, at Amherst, N. S., on the 17th, 18th, and 19th of December. Over \$2,000 will be offered in prizes. The prize list, somewhat revised and added to since its first publication, will be shortly republished. Every evening during the show the Maritime Breeders' Association will hold a public meeting in the Town Hall, when the best live stock authorities on the continent will give addresses. The annual business meeting of the Association will be held on Thursday morning. The lectures on the beef and pork carcases and poultry will be given on Thursday afternoon, and the show will close at 10.30 p.m. that night.

The Eastern Townships Fair.

The 17th annual fair of the Eastern Townships' Agricultural Association, took place at Sherbrooke, Que., from Sept. 2nd to 6th. The exhibition was in many respects superior to any ever held before, the entries in the different departments exceeding those of previous years. The show of horses was a very good one, and exceeded in numbers and quality any exhibit of recent years. Though there was increased accommodation for cattle, the exhibits in this department were so large that there was an overflow and a number had to be temporarily housed elsewhere. The quality of the cattle shown was fully up to that of past years, the best known breeding establishments of the province being represented. The swine and sheep departments were well filled and kept pace with other years.

The other branches including poultry, horticultural, dairy and agricultural products were well filled and a good all round agricultural show was to be seen. This show is the leading annual fair in the Province of Quebec and is fast gaining a name for itself in the other provinces of the Dominion.

The Swine Exhibit at Buffalo.

The swine exhibit at the Pan-American, which closed on Sept. 7th, was really a contest between Canadian and American breeders. There were some 300 hogs in all on exhibition, and because of the rivalry between the Canadian and American breeds, attracted considerable attention. Canadians exhibited in three classes only—Berkshires, Yorkshires and Tamworths, and as the following list shows were fortunate in capturing

a large share of the awards. The Canadian exhibitors were, T. A. Cox, Brantford, in Berkshires; Brethour & Saunders, and D. C. Platt & Son, Millgrove, in Yorkshires; and J. C. Nichol, Hubrey, and Reid & Co., Hintonberg, in Tamworths.

T. A. Cox, in the Berkshire class was pitted against the celebrated Belmore Farms' herd. He, however, took no second rate place and succeeded in bringing away some of the best awards, notably as follows: First for boars under six months, for aged sows; for sows under one year; for sows under six months, and second for aged boar and boar under one year. There were three types on exhibition: the English, Southern and Canadian, and consequently the judges, Prof.

Public Institutions have found Pain-Killer very useful. There is nothing equal to it in all cases of bowel troubles. Avoid substitutes, there is but one Pain-Killer, Perry Davis'. 25c. and 50c.

LOW HANDY WAGGONS

Wide Tire Wheels

Made to fit any axle.



Send your address on a post-card for a catalogue, and learn the advantages of a Low Handy Wagon. You can do your farm work in just half the time, which is money in your pocket.

Dominion Wrought Iron Wheel Co.

9 and 11 Brock Ave., TORONTO, ONT.

For Best

PORTLAND CEMENT

Address—

The Rathbun Company

310 Front St. West, Toronto

ST. LAWRENCE COFFEE HOUSE

78 and 80 King St. East

"RESTAURANT" TORONTO

Dinner for 20c.

6 Dinner Tickets \$1 Served from 11.30 to 3
for : : : : and from 6 to 8
Farmers and their wives visiting Toronto will find this to their taste.

WILSON'S HIGH-CLASS SCALES

SPECIAL PRICES THIS MONTH

On 2,000 lb.

Diamond Steel Bearing

SCALES

Write To-day.

C. WILSON & SON



60 Esplanade St. E., TORONTO, ONT.

Day, O. A. C., Guelph, and Aaron Jones, South Bend, Ind., had no easy task.

In the class for Yorkshires, the awards went thus: Aged boars—First to Summerhill Victor 6th, owned by D. C. Flatt & Son, Millgrove, Ont.; second and third to Brethour & Saunders, of Ontario; fourth to Mrs. A. J. Wilson, of Ohio. Yearling boars—First to Flatt; second to F. B. Stewart, Esplanade, Pa.; third to Mrs. Wilson. Boar under one year—First, fourth and fifth to Brethour & Saunders, second to Flatt, third to Mrs. Wilson. Boar under six months—First, second, fourth and fifth to Brethour & Saunders, third to Flatt. Aged sows—First, fourth and fifth to Brethour & Saunders, second and third to Flatt. Yearling sows—First and fourth to Flatt, second, third and fifth to Brethour & Saunders. Sows under one year—First and third to Flatt, second, fourth and fifth to Brethour & Saunders. Sows under six months—First and fifth to Flatt, second, third and fourth to Brethour & Saunders. Sweepstakes on boar to Flatt & Son; sweepstakes on sow to Brethour & Saunders. Judges in the class were Prof. Day, A. Jones and Thomas Teasdale of Ontario.

Prof. Day and Mr. A. Jones judged the Tamworth classes also, of which the awards were as follows—Aged boars—First and fifth to John C. Nichol of Ontario; second and fourth to R. Reid & Co., of Ontario; third to R. S. Hartley of Pennsylvania. Yearling boars—First to Reid, second to Nichol, third to Hartley. Under one year—First to Nichol, second and third to Reid, fourth to Hartley. Under six months—First, second, third and fourth to Nichol, fifth to Reid. Aged sows—First, second and fourth to Nichol, third and fifth to Reid. Yearling sows—First to Nichol, second and third to Reid. Under one year first, fourth and fifth to Nichol, second and third to Reid. Under six months first, second and fourth to Nichol, third to Reid, fifth to Hartley. Sweepstakes boar—Nichol; sweepstakes sow—Nichol.

Canada at Syracuse.

Canada is winning plenty of honor abroad these days. At Glasgow and at Buffalo during the past few months Canadian exhibits have taken a first place in the classes in which they have competed. Last week the New York State Fair was held at Syracuse, and a number of Canadian breeders made exhibits, and in nearly every case, coming off with flying colors, and at the head of the lists, showing that Canadians are very formidable competitors in any live stock ring.

In Shorthorns, Canada was represented by W. D. Flatt's splendid herd. W. A. Boland, of Michigan, who exhibited at the Industrial the week previous, was also there, and the decisions at Toronto as between these two competitors remained the same showing that the Canadian herd was able to

take a first place on American soil. There was one other strong competitor in Hanna's herd from Ohio. Three minor herds were also represented, but still the Ontario Shorthorns were to the front. The show of cattle compared favorably with that of Toronto.

There were three Canadian breeders entered in the sheep classes in Leicesters. Mr. A. W. Smith, Maple Lodge, Ont., about swept the board, securing all the firsts, for best flock for pen of four lambs and sweepstakes for the best ram and ewe any age. There were four other exhibitors, so that competition was strong. In Southdowns, Hon. G. A. Drummond, Beconsfield, Que., had things all his own, winning all the firsts and the sweepstakes from strong competitors, while Graham Walker, Ilberton, Ont., had the very same standing in the Lincoln classes.

In swine T. A. Cox, Brantford, Ont., was to the front with his Berkshires, winning several of the chief prizes.

Honey at the Industrial.

Another department of the Exhibition requiring a new building is that of honey. This year this exhibit which is usually an attractive one was out under canvas. The location of the tent was rather a good one, though beekeepers state that it was not a good one for sales. They do not require a large building but one or part of one sufficient to display their wares to good advantage. The exhibit this year was about the same as that of last year, with a better quality. There was one new exhibitor, Mr. G. E. Saunders, Hornby. The two old exhibitors were Geo. Lang, Milton, and W. H. Smith, St. Thomas. This is only an average year. There was not so much comb honey shown but more of the extract.

Manufacturers at London.

There was a large and good show of carriages, cutters, etc. The leading makers being well represented. Wm. Gray & Sons, Chatham, A. B. Greer, London, The J. B. Armstrong Carriage Co., Guelph; John Campbell & Son, London; Tudhope Carriage Co., Orillia; McLaughlin Carriage Co., Oshawa, and Palmerston Carriage Co., all had fine lines of goods on exhibition. Other manufacturers were not well represented, unless in the main building, where there was a very good show of leather and textile fabrics. Agricultural products were not large in quantity, but there were many excellent specimens, both of grains and roots, and a very large show of honey.

A Boston Sunday school teacher gave her class a rather graphic description of how Eve was created from the rib of Adam. "Mamma," said the youngest member of the class that same evening, pressing his hand to his side, "I'm afraid I'm going to have a wife."

WANTED

FARM of 500 Acres for an Old Country client wanted at once. Must be first-class stock farm. For SALE. Splendid farms of from 50 to 100 acres in good localities, cheap. If you want to find speedy sale for your farms send description to me. S. G. READ, Grand Central Land Agency, Brantford.

Milk Tickets

EVERY PATRON OF EVERY FACTORY

Should insist on receiving a monthly statement of the milk delivered from his farm. Our Ideal Milk Ticket is used by all the best factories. 25c. a hundred, \$2.00 a thousand.

Sample Card Free

Address—

THE FARMING WORLD

Confederation Life Building,
Toronto

Salt In Butter

When you buy Salt for butter-making you want Salt, not lime or other impurity. You want Salt that dissolves quickly. Salt that will give a delicate flavor to the butter. YOU GET ALL THIS IN WINDSOR SALT.

Windsor Salt

Sample copies of The Farming World will be sent to any address, free of charge, upon request. Send us the name of a friend who does not subscribe and we will send the paper for two weeks free on trial. Address, The Farming World, Toronto.

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement will be welcomed. Our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

Horses

The North British Agriculturist in regard to Alex. Galbraith's recent importation of horses, says:

"On Saturday last, Mr. Graham Galbraith, a son of Mr. Alex. Galbraith, Jenesville, Wisconsin, shipped from Glasgow a large lot of high-class stallions and colts, bought from Messrs. A. & W. Montgomery. Among the older horses in this lot were the M'Venne horse Coroner, a prize-winner at the "Highland," and holder of the Lanark and other premiums; Lancheater, got by the champion horse Holywood out of a mare by the great horse Castlereagh; Mont-rave Ruler, got by the £3,000-horse Prince of Albion out of Mont-rave Rosebud, a daughter of the invincible mare Moss Rose; the Macgregor horse Archer, which had the Bute and other premiums; and the Baron's Pride horse Guarantee, which had the east of Fife premium this year. Among the three-year-olds in the lot are Gold Medal, which had the Auchtermuchty premium this year; Pretoria, which had the Caithness premium this year; Alicks Pride, which had the Kinross premium this year; and a son of Mr. M'Connell's good breeding horse Prince of Galloway. The two-year-olds include colts got by Prince of Quality, King of the Roses (the champion at the Perth "Highland"), and Montrave Florist. A very good yearling, sired by Up to Time, was also included in the shipment. The whole shipment made up a lot of capital animals which should do credit to the breed in the New World.

Cattle

Some of the animals purchased by Prof. J. H. Grisdale for the Central Experimental Farm, Ottawa, are referred to by the North British Agriculturist as follows:

"The famous Berkeley Castle herd, in which the record priced bull Duke of Connaught, which was bought at the Dunmore Sale in 1875 for 4,500 gs., served with so much success for a long term of years, is again in a very flourishing condition. Mr. James Peter, who for the last twenty-seven years has been estate agent for Lord Fitzhardinge, has recently sold some good animals from this herd. The three-year-old cow Darlington 61st, sired by Blanco, has been sold to H. R. Hamkens, of Schleswig-Holstein. Mr. Peter also sold the five-year-old cow Darlington 65th, sired by Duke of Barrington, to Mr. J. H. Grisdale for the Dominion Experimental Farm, Ottawa, but most unfortunately the cow got stung in the udder so

badly by wasps that blood poisoning set in, and she died, to the great disappointment of both buyer and seller. Mr. Grisdale, however, was so greatly pleased with the cow that he secured her bull calf, which was sired by Baron Blanche, the highest priced bull at the Bristol bull sale last season. Mr. Peter's son, who holds the farm of Browns Mill, adjoining the Berkeley Home Farm, also sold to Mr. Grisdale the Waterloo heifer call Duchess of Vittoria 59th, got by North Star out of Duchess Vittoria 34th. This is a heifer of quite phenomenal promise and the very best breeding.

While Canada is receiving her usual quota of Shorthorns from Great Britain, the United States is not lagging behind. The following item from an English exchange, in reference to a recent importation will be of interest to Canadian breeders:

"On Friday last, Mr. Forbes, of Henry, Illinois, U. S. A., shipped a grand lot of twenty-seven Shorthorns, which he had recently purchased after a careful inspection of the leading herds in the country. This consignment consists for the most part of yearling heifers, all of the best breeding and quality, and mostly all drawn from some of the best herds in Aberdeenshire. The shipment also includes two very fine yearling bulls. One of these was Cock Robin, which won for his breeder, Captain Graham Stirling, of Strowan, the first prize at the Edinburgh and Stirling Shows, at which latter show he won the Shorthorn Society's prize. The other bull in the shipment is Bapton Sovereign, which won for his breeder, Mr. J. Deane Willis, numerous first prizes at the south of England shows. Bapton Sovereign is sired by Prince of Sanquhar, and is out of a cow of the Spicy family, which is one of the most noted strains of blood in the Bapton Mauor herd. Mr. Forbes and his herdsman, Mr. Ross, considered these the two best yearling bulls they had seen in Great Britain, with the single exception of one they saw at Collynie. But the pick of the bunch in the shipment is a heifer calf, bred at Saphock, Old Meldrum, and got by the Uppermill-bred bull Spicy King out of a cow of the Clara family. This is an animal of quite phenomenal style, quality, and promise, and Mr. Forbes had to give a very long price before he could call her his own. Mr. Forbes intends to return to Scotland for the October sales, and if he picks as good a lot then as he has picked this time, the Shorthorn breed in America will be the better, and the Shorthorn

Horse Owners Should Use
GONBAULT'S

Caustic Balm

The Great French Veterinary Remedy.
A SAFE, SPEEDY AND POSITIVE CURE.



Prepared exclusively by J. E. Gombault, ex-Veterinary Surgeon to the French Government Stud

SUPERSEDES ALL CAUTERY OR FIRING
Impossible to produce any cure or Almond. The greatest best Blister ever used. Takes the place of all treatments for mild or severe action. Removes all Bunches or Blomishes from Horses or Cattle.

As a HUMAN REMEDY for Rheumatism, Sprains, Sore Throat, etc. it is invaluable. **WE GUARANTEE** that one tablespoonful of CAUSTIC BALM will produce more actual results than a whole bottle of any liniment or ointment ever made. Every bottle of Caustic Balm sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by Druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, etc. Address
THE LAWRENCE-WILLIAMS CO., TORONTO, ONT.



Third Annual Sale

OF THOROUGHBRED Stallions, Brood Mares and Saddle Horses

The property of Mr. WILLIAM HENDRICK, proprietor of the Valley Farm, Hamilton, Ont.

At Auction and Without Reserve, at Grand's Repository, Adelaide St. W., Toronto

TUESDAY, Sept. 24, 1901

At 11 o'clock, a.m.

Walter Harland Smith, Auctioneer

AGENTS WANTED

for the NEW PICTORIAL STOCK DOCTOR AND LIVESTOCK CYCLOPEDIA, revised to 1901 with the assistance of the Professors of the Ontario Agricultural College, Guelph. The finest illustrated, cheapest and best book of its kind ever published. Large wages for agents. Particulars mailed free. Address—

World Publishing Co., Guelph, Ont.

Spooner's "PHENYLE" Powder
"Phenyle" **GERMICIDE DISINFECTANT..**

KILLS CHICKEN LICE

and Lice on Horses and Cattle, and Ticks on Sheep. Keeps them Healthy. Easily applied; no dip required.

20lb. boxes, 1lb. packages.....50c. lb.
70lb. pails.....15c. lb.
400lb. barrels.....10c. lb.

If your Druggist does not sell it, send direct to

ALONZO W. SPOONER,
Laboratory, PORT HOPE, Ont.
Will cure and prevent hog cholera.

breed in this country will be the poorer, on account of so many of the best animals of the breed being transferred from the Old World to the New."

Colonel Judy, of Williamport Indiana, who recently bought some well-bred polled cattle from Mr. Lindlay, of Aberlour, has acquired three very good animals from Sir Geo. Macpherson-Grant, Bart. One of these is the famous champion bull Prince Ito, 12869, winner of the gold medal at the Edinburgh Show of the Highland Society two years ago. The other two are heifers, one being the two-year-old Erica Equatoria, 28473, and the other the yearling Pride heifer Pride of Aberdeen 150th, 30140. Both are very superior animals, and with the bull make up the best trio that has left Ballindalloch for some time. Colonel Judy has also secured seven animals, three of which are cows, from Mr. Shew Adamson, of Careston, Brechin; five from Mr. Chalmers, of Aldbar; four from Mr. Geddes, of Blairmore; three from Colonel Smith-Grant, Auchincloch; a similar number from Mr. Macpherson, Muller; three also from the Earls of Airhie, Cortachy Castle, and smaller numbers from Mr. Skinner, Drumlanrig, the Earl of Strathmore, Glamis, Mr. Forbes, Woodhead, Kinloss, the Countess Dowager of Seafield, Cullen House, and the Royal herd at Abergeldie. Two very useful cows have also been purchased from Mr. Grant, Laggan. The whole of the cattle are of the highest breeding and quality, and with the draft acquired from Aberlour will make one of the best selections of the breed that has been exported to America for some years. It is to be hoped that their plucky purchaser may have luck with them, both on the voyage out and afterwards.—North British Agriculturist.

Poultry.

Mr. W. H. Baldwin, Deer Park, Ont., has recently made some notable sales of his high class Wyandotts to American breeders. He sold a first prize pen to George Brown, Cleveland, Ohio, the noted poultry breeder of that State, and also four pullets to Halko & Blain of the same State.

A physician describes a remarkable case of a patient's confidence in his medical adviser: "When I was a student in London I had a patient, an Irishman, with a broken leg. When the plaster bandage was removed and a lighter one put on in its place I noticed that one of the pins went in with great difficulty, and I could not understand it. A week afterward, on removing the pin, I found it had stuck hard and fast, and I was forced to remove it with the forceps. What was my astonishment to find that the pin had been run through the skin twice, instead of through the cloth.

"Why, Pat," said I, "didn't you know that pin was sticking in you?"

"To be sure I did," replied Pat, "but I thought you know your business, so I hit me tongue."

Sheep

SHROPSHIRES

Bred from the best Imported Stock.
Also Silver and White Wyandottes.

W. D. MONKMAN, Bond Head, Ont.

OXFORDS

AT FARNHAM FARM

50 Superior Yearling and Two Year Rams.
2 Extra Fine Imported Lambs.
100 Ram Lambs.
And a number of good Yearling Ewes and Ewe Lambs.
—PRICE REASONABLE.

HENRY ARKELL, Arkell, Ont.



ROCK SALT for horses and cattle, in ton and carlots. Toronto Salt Works, Toronto

FOR SALE

Pure Bred Improved Yorkshire Pigs

ANNANDALE FARM,
TILSONBURG, ONT.

NO SPAVINS

The worst possible Spavin can be cured in 45 minutes. Curbs, Splints and Ringbones just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.

Write today. Ask for Pamphlet No. 1.

FLEMING BROS., 58 Bay St., Toronto, Ont.



FATTENING AND CONDITION POWDER

THE great Blood Purifier for Cattle, Horses, Sheep and Hogs. A handful of this wonderful Purina mixed with the usual feed strengthens the nerves, hardens the muscles, and generally invigorates. Recommended by eminent veterinary surgeons in Canada and United States.

Gustave LaBelle & Co. Montreal, Q. ue.

OAK LODGE YORKSHIRES



are acknowledged to be the best type of bacon hog to produce the ideal carcass for the best English trade. CHAMPIONSHIP HERD AT TORONTO INDUSTRIAL EXHIBITION FOR NINE YEARS also sweepstakes on Dressed Carcass at Provincial Winter Show. We have on hand now a large herd of different ages. Our prices are reasonable and the quality is guaranteed to be choice. Write

BRETHOUR & SAUNDERS,
Burlford, Ontario

CHICKENS
DUCKS
GEESE
TURKEYS

WANTED

We forward empty crates to any express office in Ontario, and pay express charges both ways. As we have a steady demand for all the birds we can procure we would be pleased to purchase poultry at all times of the year and in any quantity. Write to us for further particulars, and if you have any time to purchase for us you will find it a very profitable employment.

Toronto Poultry and Garden Produce Co., Limited - Davisville P.O.
Toronto Telephone, North 1030.

Stock

MAPLE LEAF HERD OF LARGE YORKSHIRES

...Young Stock for Sale

ROBERT NICHOL, Brantford, Ont.

IMPERIAL HOLSTEIN-FRIESIAN STOCK FARM

10 Young Bulls from one month to four months, bred from Winnie K's De Koi.

W. H. SIMMONS,
New Durham, Ont.

RETTIE BROS.

HOLSTEIN-FRIESIAN BREEDERS

A few choice young animals for sale. RETTIE BROS., NORWICH, ONT.

Glen Crescent Shorthorns and Oxfords.

Shorn of both sexes and all ages, and two bull calves in imported sire for sale.

J. W. WIDDIFIELD,

Uxbridge, Ont.

The Up-to-date Herd Tamworths

Bred from sweepstakes herd.
Young stock of both sexes for Sale.

W. H. McCUTCHEON, Brantford, Ont.

MAPLE LODGE SOCK FARM.

Shorthorns For Sale.

A few choice young bulls, and some excellent heifers and young cows. Our cows were awarded first prize at Prov. Dairy Test, 1899 and 1900. Imp. Knuckle Duster, and Imported Sir Wilfrid, at head of herd. Leicester shorn, imported and home-bred. The best A. W. SMITH, Maple Lodge P. O., Ont.

Market Review and Forecast

Office of the Farming World,

Confederation Life Bldg.

Toronto, Sept. 16, 1901.

Though things are reported quiet in wholesale circles, the volume of business being done is quite up to that of last year at this time, and fair for this season. It is thought by some conservative merchants and bankers that there is a little too much speculation about and that a little caution is necessary. Money keeps in fair demand at from 4 $\frac{1}{2}$ to 5 per cent. on call. Discounts continue at from 6 to 7 per cent.

Wheat.

The future of wheat is hard to forecast with any degree of certainty and the bulls and the bears are somewhat at sea as to what the outcome will be. From reliable sources it is claimed that there are ample supplies for the world's needs till the next harvest is ready, and that future markets are more likely to favor the buyer than the seller. On the other hand the small weekly increases in the visible supply in the United States and Canada are taken as favoring higher values. Generally speaking business at the moment is quiet, both on this side and in England where last week's cable despatches showed a declining market. The Canadian markets are generally quiet while the situation in the United States remains unchanged. The market here is dull at 67c for old red and white, and 65c for new middle freights. Goose is quoted at 60c and new spring at 60c east. Manitoba No. 1 hard is quoted at Fort William at 69c to 70c, September delivery. On Toronto farmers' market red and white bring 65c to 66c for new and 73c to 74c for old goose, 67c and 68 $\frac{1}{2}$ c and spring life 69c for new per bushel.

Oats and Barley.

The English market keeps firm and active for Canadian oats. Locally trade is firm and steady at 34 $\frac{1}{2}$ c for No. 2 white, and 33 $\frac{1}{2}$ c to 34c middle freights. On the farmers' market old sell at 41c to 41 $\frac{1}{2}$ c and new at 37 $\frac{1}{2}$ c to 39c per bushel.

Barley keeps steady at from 42c to 48c middle freights. On the Toronto farmers' market, barley brings 49c to 54 $\frac{1}{2}$ c per bushel.

Peas and Corn

Peas continue to maintain good prices, though little business is doing at the moment. The market here is firm at 70c to 71c at outside points and 70c on the local farmers' market.

Corn prospects in the United States have improved somewhat and it is now expected that the yield will exceed 1,400,000,000 bushels. American No. 3 is quoted here at 62c, Toronto and Canadian yellow at 54c and mixed at 58c west.

Beans and Shorts.

Ontario bran is quoted at \$15 to

\$15.50 in car lots at Montreal, and shorts which are scarce, at \$17.50 to \$18. Manitoba bran is quoted at \$15.50 to \$16 in bags in car lots. City mills here sell bran at \$15 and shorts at \$16 in car lots l.o.b. Toronto.

Potatoes and Beans.

Potatoes are easier at Montreal, owing to increased supplies. They sell there in a jobbing way at 60c per bag, which is 15c lower than a week ago. Here there is a fair demand with light receipts at 70c to 75c. On Toronto farmers' market potatoes bring 65c to 75c per bushel.

The bean market continues firm. Montreal quotations are \$2.15 to \$2.25 per bushel. Beans sell here in a jobbing way at \$2.55 to \$2.65 per bushel.

Hay and Straw.

There is a good demand for new hay reported at Montreal, No. 2 Timothy selling there at country points at \$7 l.o.b. and clover at \$5 to \$5.50 per cwt. Stocks of old hay are becoming depleted, while large shipments continue to be made to England. Montreal quotations for new baled hay on track in car lots are \$9.50 for No. 1, \$8 to \$8.50 for No. 2, and \$6.50 to \$7 per ton for clover. Baled hay is a little easier here at \$8.50 to \$9 for car lots on track and \$5 to \$5.25 for baled straw. On Toronto farmers' market hay brings \$9.50 to \$11, sheaf straw \$10 and loose straw \$6 per ton.

Eggs and Poultry

Canadian eggs continue to sell well in Great Britain. Pickled stock is in demand on this side for export, and some shipments of fresh eggs have been made. The total exports so far this season are 19,240 pkgs., as compared with 32,217 pkgs. for the same period of 1900. At Montreal prices are higher at 13 $\frac{1}{2}$ c to 14c for straight candled stock and 10 $\frac{1}{2}$ c to 11 $\frac{1}{2}$ c for seconds. At some western Ontario points 11c to 11 $\frac{1}{2}$ c have been paid for large sized lots and as high as 13c l.o.b. east. Here the market is steady at 13c to 13 $\frac{1}{2}$ c for best selected stock and 12c to 12 $\frac{1}{2}$ c for ordinary in case lots. On Toronto farmers' market new laid eggs bring 15c to 16c per dozen.

The poultry market is steady at 40c to 50c per pair for live chickens.

Choice dressed young turkeys are quoted at 12c and old gobblers at 10c to 11c per lb., in a jobbing

way. On the farmers' market live chickens per pair bring 35c to 60c, spring 40c to 65c and ducks 60c to 75c. Turkeys bring 10c to 12c per lb.

The Canadian Produce Co., 36 and 38 Esplanade east, Toronto, will pay for week ending Sept. 19, for ducklings not under 4 lbs. each, 4c per lb., and spring chickens, not less than two lbs. each, 5 $\frac{1}{2}$ c per lb. For hens (including last year's birds) 4c per lb. These prices are for live weight on arrival.

Fruit

Early apples are quoted at Montreal at \$1.25 to \$2 per bbl. and peaches at 75c to 90c, plums at 40c to 50c and pears at 25c to 35c per basket. The offerings here have been large yet the market is brisk. Peaches, Crawford, are quoted at 75c to \$1.10, white, 40c to 60c; pears 20c to 30c and plums 25c to 50c per basket and apples at \$2 to \$2.50 per bbl.

Cheese.

Receipts of cheese in England during the week have been large and the market has an easier tendency. The English dealer seems determined not to advance the price, and seems to be of the opinion that the Canadian make is large and that stocks are accumulating very fast, when the very opposite is the case. The easier market has already stimulated more active buying. On this side the situation has not change much and last week's quotations would nearly hold good for this also. Finest Westerns are quoted at Montreal at 9 $\frac{1}{2}$ c to 9 $\frac{3}{4}$ c for colored, and 9 $\frac{1}{2}$ c for white and finest eastern at 9 $\frac{1}{2}$ c to 9 $\frac{3}{4}$ c. From 9 $\frac{1}{2}$ c to 9 $\frac{3}{4}$ c were the ruling figures at most of the local markets east and west at the end of the week which are a shade higher than a week ago.

Butter

There is more enquiry in England for Canadian creamery which has advanced 2s. But this has not affected the situation on this side very much. The Trade Bulletin in writing of last week's trade says:

"The market has ruled very quiet during the past week; quite a number of factorymen who came into the city to see for themselves, found that in order to sell, they had to accept 20c to 20 $\frac{1}{2}$ c for choice fresh creamery; 20 $\frac{1}{2}$ c being top for fancy. Some very fine lots however, were disposed of at 19 $\frac{1}{2}$ c. Seconds have sold at 19c to 19 $\frac{1}{2}$ c.

MR. AND MRS. FARMER!

Every Chicken you can possibly spare we want you to be sure and send to us.

WE PAY CASH AND BIG PRICES FOR LIVE CHICKENS

For particulars write to

THE CANADIAN PRODUCE CO., TORONTO

Of course special makes as usual bring higher figures; but some of these are said to be on contracts. Most holders report the market very quiet with little or no snap to it. Western dairy sells at 15½¢ to 16½¢ in round lots as to quality.

Creamery is firm here at 20¢ to 20½¢ for tubs and boxes, 19¢ for early makes and 21¢ to 21½¢ for prints. There is a fair demand for dairy butter at 16¢ to 16½¢ for best tubs and pails and 12¢ to 14¢ for lower grades. On Toronto farmers' market lb rolls bring 20¢ to 22¢ and crocks 16¢ to 19¢ per lb.

Wool

There is no change in wool so far as it affects the local trade. The mills seem to be working on a hand to mouth basis. The finer grades are a little firmer. Prices here are a little lower at 14¢ for washed and 8¢ for unwashed fleece.

Cattle

There was a light run of live stock on Toronto cattle market on Friday, consisting of 265 cattle, 1,100 hogs, 842 sheep and lambs, and 30 calves. The quality of the fat cattle was not the best, there being only a few good ones. Because of the shortage of vessel space and inferior quality of the stock, the bulk of the shippers sold at \$4.35 to \$4.60 for light and \$4.85 to \$5.05 for heavy. Many drovers, however, complain of having paid too high prices in the country. Local dealers here are finding it hard to get all the choice butchers' cattle they want, and consequently prices for these were firm. Good milch cows are scarce and only a limited number of all kinds were offered.

Export Cattle.—Choice loads of these are worth from \$4.85 to \$5.05 per cwt., and light ones \$4.35 to \$4.70 per cwt. Heavy export bulls sold at \$4.00 to \$4.25, and light ones at \$3.60 to \$3.75 per cwt.

Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters, weighing 1,075 to 1,150 lbs. each, sold at \$4.40 to \$4.50 per cwt., good cattle at \$4.00 to \$4.35, medium at \$3.50 to \$3.70, and inferior to common at \$2.50 to \$3.15 per cwt.

Feeders.—Heavy, well-bred steers from 1,100 to 1,200 lbs. each, sold at \$3.50 to \$3.75, and other quality at \$3.25 to \$3.40 per cwt. Light steers, 900 to 1,000 lbs. each sold at \$3.25 to \$3.40 per cwt.

Stockers.—Yearling steers, 500 to 800 lbs. each, sold at \$3 to \$3.25, off colors, and inferior quality at \$2.50 per cwt.

Calves.—These are steady at Buffalo. Good to choice veals bring \$7.50 to \$7.75 per cwt. At Toronto market ordinary calves bring \$2 to \$10.00 each.

Milch Cows.—Milch cows and springers sold at from \$30 to \$50 each.

Sheep and Lambs

Prices for these continue firm. Sheep sold at \$3.35 to \$3.50 per cwt. for ewes and \$2.50 to \$3.00 for bucks. Spring lambs sold at \$4.50 to \$3.50 each and \$3.75 to \$4.25 per cwt. Erick Bros., East

Buffalo, N. Y., in a special report of that market of date Sept. 11, say:

"Take to-day for instance, it is hard to get over 5¢ a pound for the best Canadas, a strictly choice load possibly might bring a little more money, but they would have to be pretty near all ewes and wethers and extra quality. Of course the rough kind and bucky grades are slow sellers at \$4.50."

Hogs

The hog market has got out of the rut it has been in for several weeks back and prices have advanced a little. On Friday select bacon hogs sold at \$7.37½, and lights and fats at \$7 per cwt. Unculled car lots sold at \$7.20 per cwt.

The Wm. Davies Co., Toronto, for the week ending Sept. 21, will pay \$7.37½ per cwt. for select bacon hogs and \$7.00 for lights and fats.

Horses

Last week's Montreal horse market is reported by an exchange as follows:

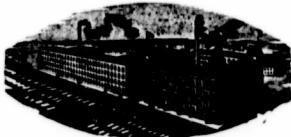
"The past week has been a very quiet one in horse trading so far

as the local business is concerned. But there is still a good demand for export, quite a number of re-mounts having been secured since our last report. About 1,000 head will be put on board the Steamer Maplemore for South Africa in a few days. We quote prices as follows:—

Carriage horses..... ..\$175—\$300
Heavy draughts..... .. 125— 225
Light roadsters, drivers and saddles..... .. 100— 250
Remounts 110—140"

General business was somewhat quiet last week at Grand's. Some important sales were made, however. Three car loads of heavy horses for the lumber camps were sold, two to go to Three Rivers, Que., and one to Parry Sound, Ont. These horses weighed from 1,400 to 1,700 lbs. each and sold at an average of \$145 each at Toronto, which would mean an average of \$130 at country points or for the farmer. Drivers were rather slow. A few sold privately at fair prices. The auction sales were well attended, but only from \$80 to \$125 were realized for good classes of drivers.

BELL . . PIANOS . . . AND BELL . . ORGANS.



Built to last a lifetime
By the Largest Makers
in Canada



BELL is the Musician's Favorite

The BELL ORGAN AND PIANO CO., Limited, GUELPH, Ontario.

Catalogue No. 41 Free

TOLTON'S No. 1 Double Root Cutter



POINTS OF MERIT

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. The united force of both wheels is always used in doing the work in either capacity.
4. The hopper is between the wheels, and does not choke.

THE ONLY DOUBLE ROOT CUTTER MANUFACTURED

Fitted with ROLLER BEARINGS, STEEL SHAPING, and all that is latest and best in principle, material and construction.

TOLTON BROS., GUELPH, Ont.

See our exhibit at Toronto Industrial Fair.

Are you going to buy a CREAM SEPARATOR? If so try the "New Century American"



Mr. JOHN ROSS, Streetsville, Ont., writes: "I have been using your separator for three months. It is the best I have ever used here, as there are five (5) other different makes and every one likes ours the best."

Write for circulars and information to

C. Richardson & Co.

Box 1053

ST. MARY'S, ONT.
AGENTS WANTED.

Remainder of the Year Free!

THE FARMING WORLD is published 52 times a year, and is the only weekly agricultural paper in Canada. It is written and edited for the up-to-date farmer by experienced and successful farmers.

The Farming World Is the Paper for the New Farmer

19th YEAR OF PUBLICATION.

Our Programme

for the coming season is a most attractive one. **THE FARMING WORLD** will in the strictest sense be a money-making Farmers' Paper.

The **FARM HOME DEPARTMENT** will be improved.

Free to Jan. 1st

Send us \$1.00 at once, and we will mail you **THE FARMING WORLD** every week from date to Jan. 1st, 1903.

This Applies to New Subscribers Only.

PRESENT SUBSCRIBERS sending in a new one will have three months added to their paid up dates.

Address: **THE FARMING WORLD, Toronto**

CUT THIS OUT

THE PUBLISHER,
THE FARMING WORLD,
CONFEDERATION LIFE BUILDING, TORONTO

Dear Sir,—Please send **THE FARMING WORLD** every week from the present date to 1st January, 1903, for which I enclose \$1.00.

NAME _____

POST OFFICE _____

Maxwell's
"Favorite"
Churn.

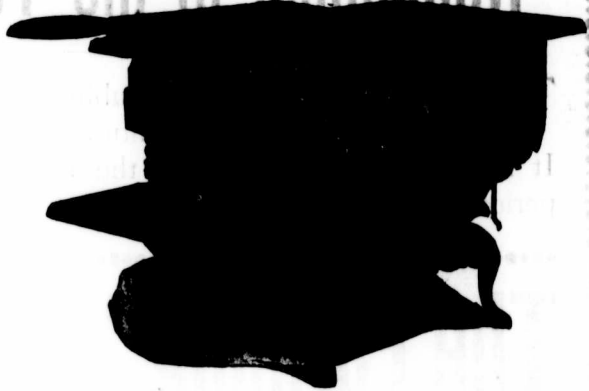


Patent Foot and Lever Drive.	No.	Height	Capacity
Patented Steel Roller Bearings.	10	40 in.	10 gal.
Improved Steel Frame.	12	42 in.	12 gal.
	14	44 in.	14 gal.
	16	46 in.	16 gal.
	18	48 in.	18 gal.
	20	50 in.	20 gal.

Superior in Workmanship and Finish
DAVID MAXWELL & SONS
St. Mary's, Ontario, Canada.

Mount W T Exp Farm 1 Jan 03

"GOOD CHEER"
Stoves and Ranges



The "Good Cheer" Sunshine
A FIRST-CLASS COAL AND WOOD COOK
EVERY STOVE GUARANTEED
SOLD BY LEADING DEALERS EVERYWHERE
The JAS. STEWART Mfg. Co., Limited
WOODSTOCK, ONT.
Our "Good Cheer" Lucky Pocket Piece mailed on request.



There is no Chopper equal to the
"New Champion" or "Joliette"

Don't fail to look for it at the
London and Ottawa Fairs.
Remember that it takes one-third less power
to do the work than any other.
The price is right, too.

108 Front St. East, Toronto. S. VESSOT & CO.

"EAGLE" in 100's and 200's. "VICTORIA"
EDDY'S Parlor Matches

Are put up in neat sliding boxes convenient to handle.
No sulphur. No disagreeable fumes.
Every stick a match. Every match a lighter.

FOR SALE BY ALL FIRST-CLASS DEALERS

The Mutual Life of Canada

FORMERLY THE ONTARIO MUTUAL LIFE, ESTABLISHED 1870.

A Company
Of Policyholders
By Policyholders
For Policyholders.

Head Office: WATERLOO, ONT.

A POLICY IN IT
PAYS

Assurance in force January 1st, 1901	\$29,531,076
Cash Income, 1900	1,171,944
Assets, December 31st, 1900	5,182,614
Reserve for Security of Policy-holders, 1900, 4 and 3 1/2%	4,837,734
Surplus over all Liabilities, December 31st, 1900, Actuaries' 4 and 3 1/2%	310,280
Surplus on Government Standard, 4 1/2 and 3 1/2%	516,010

The Oldest, Largest, Strongest and Best Life Assurance Co's in the World are Mutual.

All desirable forms of insurance and annuities are issued by this Company. We have the best of everything that is good in life insurance. The 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, Churches, etc., at lowest current rates. Terms of payment easy. Costs low. Debentures purchased.

Robt. Melvin,
President.

A. Hoskin, K.C.
B. M. Britton, K.C., M.P.
Vice-Presidents.

Geo. Wegenast,
Manager.

W. H. Riddell,
Secretary