

Toronto, Canada

One Year, Strictly in Advance, SIXTY CENTS.
Two Years, " " " ONE DOLLAR.

15 August, 1904

All Subscriptions Promptly Discontinued on Expiry Unless Renewed.

The Farming World



AND CANADIAN FARM & HOME

International Exhibition ST. JOHN, N.B.

1904

17th to 24th SEPTEMBER.

SEND FOR PRIZE LIST—It is particularly interesting, and contains various new features and additional prizes.

EACH DEPARTMENT this year will be replete with attractiveness.

IN THE FARMERS' PAVILION addresses will be given by Eminent Stockmen, including F. W. Hudson, Dominion Live Stock Commissioner; also by Dr. Fletcher, Dominion Entomologist, and G. H. Vroom, Fruit Inspector for Nova Scotia, and others.

DAILY HORSE SHOW before the Grand Stand. A magnificent display already secured.

\$3,500 IN PRIZES FOR THIS DEPARTMENT

Prize List and Programme on application.

AMUSEMENTS—A galaxy of brilliant features, including Adrie's Lions, the most thrilling show of recent years; the world-famed English Meister Singers; the Vitaphone Moving Pictures, with all the latest Russo-Japanese Battle Scenes.

FIREWORKS—The most Elaborate and Expensive Display ever arranged for a St. John Exhibition.

MUSIC—Five Bands engaged, including the leading Military Band of the Continent.

CHEAP FARES FROM EVERYWHERE.

R. B. EMERSON,

President.

W. W. HUBBARD,

Managing Director.



There is just one way to make the most money out of any business. The way to make the most money out of dairying is the Empire Way. The

Empire Cream Separator

makes dairying easier, pleasanter and more profitable. It saves time, trouble and temper. It saves work because it is easy to operate and easy to clean. It saves worry because it is all

ways ready, skims cleanly and is made to last. Our books about the money-making Empire Way of dairying are free to everybody. They are just common-sense talks in plain language, plainly printed for busy farmers and dairymen. Send for them. They are free for the asking.

Empire Cream Separator Co.,
25-30 Wellington St., West, Toronto, Ontario

OTTAWA'S GREAT FAIR

Is to be held _____

SEPTEMBER 16 to 24, 1904

Begins at close of London Show.

**Breeders' and Farmers' Great Prize Meeting. Special Prizes, including
Thirty-five beautiful Gold Medals.**

Write the Secretary for a Prize List.

W. HUTCHISON, President.

E. McMAHON, Secretary.

*The Central
Canada
Exhibition*

Gourlay, Winter & Leeming

188 YONGE STREET, TORONTO

AUGUST CLEARING

OF

PIANOS

At Bargain Prices

HERE'S a magnificent opportunity to save money in the purchase of a fine Piano—one you should not miss, even though you had not intended purchasing for some time; one you should not miss, even if just now it means considerable effort.

The offering is rendered imperative by the anticipated arrival of our Exhibition stock of Gourlay, Gerhard Heintzman and Mendelssohn Pianos. The display of new and special styles will be so comprehensive that every inch of available space is needed, and every other instrument, no matter how nearly new, has to be sacrificed.

TERMS OF SALE

1. We guarantee every piano, and agree to pay return freight if not satisfied.
2. A discount of 10 per cent. off these prices for cash.
3. A handsome stool accompanies each piano.
4. Every instrument safely packed without extra charge.

TERMS OF PAYMENT

Pianos under \$150—\$10.00 cash and \$4.00 per month.
Pianos over \$150—\$15.00 cash and \$6.00 per month.
Pianos over \$250—\$15.00 cash and \$7.00 per month.

If monthly payments are not convenient, please state what method you prefer—quarterly, half-yearly, or at certain fixed dates. We wish to know what terms will suit you.

Read the list carefully, and call or communicate with us at once, about the instrument of your choice, or else the one you most want may be sold.

HEINTZMAN & CO. 7-Octave Square Piano, by Heintzman & Co. Rosewood case, with handsomely carved legs and lyre, plinth mouldings. Has full iron frame, overstrung scale, etc. Is in perfect order. **Was originally \$400.** Now..... **\$113**

HAINES BROS. 7-Octave Square Piano, by Haines Bros., New York. Handsome Rosewood case, with carved legs and lyre, etc. A splendid square Piano, solidly built and thoroughly re-made. Were it an upright it would bring nearly double the price. **Was originally \$450.** Now..... **\$123**

DOMINION 7-Octave Upright Piano, by the Dominion Organ and Piano Co., Bowmanville. Dark finish case, with polished panels attractively carved in relief. Is in thoroughly good order. **Was originally \$350.** Now..... **\$159**

NEWCOMBE 7-Octave Upright Piano, by Newcombe & Co. This Piano has been carefully reconstructed, new parts having been supplied throughout, and is to-day as good as when new. **Was originally \$350.** Now..... **\$174**

MASON & RISCH 7-Octave Upright Piano, by Mason & Risch. Attractive design of case; nicely panelled in burr walnut and carved in relief; trichord overstrung scale; a rare bargain. **Was originally \$350.** Now..... **\$189**

MENDELSSOHN 7½-Octave Upright Piano, by the Mendelssohn Piano Co.; medium size. Handsome walnut case, double veneered throughout; in new design. Cannot be told from new. Used less than a year. **Regularly \$340.** Now..... **\$238**

GERHARD HEINTZMAN 7½-Octave Boudoir Grand Piano, by Gerhard Heintzman, in handsome walnut case of simple and artistic design, with full-length panel and music desk; contains all the improved ideas for which the name Gerhard Heintzman stands, and could not be told from new. **Regularly \$400.** Now..... **\$298**

GERHARD HEINTZMAN 7½-Octave Gerhard Heintzman Piano, in handsome walnut case with full-length panel and music desk; carved in relief, Boston full-board, etc. A piano possessing a tone rarely equalled, and a case that will add to the beauty of the best appointed room. **Regularly \$425.** Now..... **\$315**

GOURLAY, WINTER & LEEMING

188 YONGE STREET, TORONTO

The Farming World

Devoted to Country Life in Canada
J. W. WHEATON, B.A. - Editor
D. T. MCANISH, Manager

The Farming World is a paper for farmers and stockmen, devoted to country life in Canada, published on the 1st and 15th of each month, with illustrations.

Subscription Prices:—One year, strictly in advance, sixty cents; two years, strictly in advance, one dollar.

Postage is prepaid by the publishers for all subscriptions in Canada, the United States and Great Britain. For all other countries in the Postal Union add five cents for postage.

Discontinuances—All subscriptions are promptly discontinued when time paid for expires, unless renewed.

The address label of each subscriber's paper shows the date to which paid.

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

Receipts are sent only upon request. The change of date on address label is sufficient acknowledgment of payment. No change is made promptly notify us.

How to Remit—Remittances should be sent by postal note or express order, payable to THE FARMING WORLD. Cash should be sent in registered letters, and stamps accepted for amounts less than \$1.00.

Advertising Rates on application.

Letters should be addressed to

THE FARMING WORLD,

90 WELLINGTON STREET WEST, - TORONTO
Eastern Agent of "Non-West Farmer."

Always mention THE FARMING WORLD when answering advertisements. It will usually be an advantage to do so.

Table of Contents

The West	579
The Dominion Fair	579
The Farmer's Boy at the Fall Show	579
The Dead Meat Trade Urgently Needed	579
Ontario Fruit in the West	580
To Kill Insect Pests With Ants	580
The Importance of Pedigree	581
Exmoor Sheep	581
Training the Saddler	582
Sheep for Tread Power	582
Heaves in Horses	582
The North-West Lien Act	582
Shearing Time	582
Fall Wheat in Western Ontario	583
The Outlook for Fruit	583
Nova Scotia Farm Prospects	583
The Dominion Fair	584
A Well-known Dairyman Passes Away	586
A Tribute to the Cow	586
Cows Scouring	586
How a Good Dairyman Does It	586
A Fruit Conference at Winnipeg	587
Nature about the Farm	588
THE HOME WORLD	
Twilight on the Farm	589
Fa and the Calf	589
About Cattle	589
The Clover	590
Why She Liked It	590
The Boys and Girls	591
In the Kitchen	591
Health in the Home	593
Sunday Afternoon	593
In the Sewing Room	594
Some Advantages of Soiling Crops	595
Building Farm Houses	595
Judging Ages in Stock	595
Colic in Horses	595
Why Sows Eat Their Pigs	595
Condiments for Live Stock	595
Prevention of Malaria	595
Calves	595
Killing Weeds and Thistles	597
Winter Manuring	597
Weeds	597
Grants to Agricultural Societies	597
Questions and Answers	598
About Rural Law	598
In and About Quebec	598
Prince Edward Island	598
Exhibition of Seeds	599
In the Poultry Yard	600
Farming World Man on the Wing	601
Market Review and Forecast	605

The Farming World

And Canadian Farm and Home

VOL. XXIII

TORONTO, 15 AUGUST 1904

No. 16

The West

IT is only by a personal visit that one can understand and appreciate the clear spirit of the west. That rarified, clear atmosphere of which western Canada may justly boast, seems to permeate every citizen. Hope is in the air as well as in the man. The people have the fullest confidence in the future of their adopted country. From no source or from no citizen comes a despondent note. Hope and faith in the land assert themselves on every hand.

It would indeed be a poor country that did not respond to such confidence and faith in its people. But such a land is not the Canadian west. It is a great country, with a great people at its back. This in itself means success. But the people are great because they are active and pushing. There is no lagging behind. The newcomer is at once imbued with the aggressive spirit of the country and sets to work immediately to do his share towards developing its resources and making a competence for himself. Some few there are who, seemingly, cannot harmonize their own individuality with the new conditions. Their sojourn is short. They are not wanted, and if they remain are only as a millstone about the necks of those who are pushing forward to greater achievements in their country's development.

Such is the west. Its progress during the past few years has been marvelous. Beyond Manitoba, in the Territories far to the north, the south, the east and the west, appears the settler. He is going on the land, bringing new areas under cultivation and increasing at an enormous rate the country's wheat producing possibilities. Not only that, the older settled portions of Manitoba and the Territories are increasing their herds and flocks. Perhaps no other country of its age in the world could put up as fine a show of stock as was to be seen at the Dominion Fair a week ago. With these magnificent herds to draw from, the live stock interests of the west are destined to take no second place among its industries. But the country is big and the uncultivated areas large, and for years to come wheat will be the staple article of commerce. To produce No. 1 hard will be the goal of the ambitious westerner for many a day. In this we wish him success. The more of this quality he can produce the better for Canada and for her citizens in whatever calling they may be engaged.

1904 promises to be one of abundance for the west. If the present stand of wheat matures and is properly gathered in many millions of dollars will be added to the wealth of the country. Reports so far are on the whole favorable. From a few sections come the news of too

much rain or too much dry weather. But the area in crop is large, and even with a few isolated cases of this kind, there is bound to be a large surplus wheat crop no matter what comes. However this may be we can only hope that present indications may be fully realized. But whether they are or not will make little difference with the progressive spirit of the west. The people are there to stay and with the large increase in numbers which each year's influx of settlers brings, will make the great prairie lands of the Dominion the granary of the Empire.

Our Big Number

Next issue will be our Annual Exhibition Number, and we can promise our readers something of real merit. An important feature will be a series of articles showing the outlook and trend of agriculture in each of the provinces of the Dominion, prepared by experts. Mr. A. Blue, chief of the Census Division, Ottawa, will contribute a valuable article on the farming industry of Canada. There will be several other notable features which we have not space to enumerate here. A number of original and suitable illustrations are being prepared.

We are sure you will like it. Let your friends and neighbors know, and have a copy sent to them. Copies will be mailed free to all names and addresses received before Sept. 1st.

The Dominion Fair

The city of Winnipeg is to be congratulated upon the successful outcome of the second Dominion of Canada Exposition. When the big city of the west was selected as the place for holding Canada's second national fair, there were doubts in the minds of not a few as to the outcome. But Winnipeg and the west have measured up to the occasion in a way that is most creditable. While the accommodation for exhibitors and visitors was not all that could be desired, a marked improvement in the grounds and buildings was noticeable as compared with a few years ago. However, the exhibition was a success and will pass into history as one of Canada's great displays of live stock and manufactured products.

The Farmer's Boy at the Fall Fair

Harvest is nearly over, and the time of the fall shows is again at hand. Every farmer's boy should be encouraged to try and land one or more of the numerous prizes offered for competition. Encourage him to prepare something for the show, and show it himself. There is an opportunity to win honors in ne-

ly everything raised or grown on the farm. To the fall show is due in a great measure the advancement in the quality of live stock, cereals, roots and all farm produce that has characterized the past decade. It has been the great educator of better methods and their advantages, and the time spent attending it is never lost, if one considers what he sees, and it is a commendable enterprise for any boy to try and fit or prepare something to take along and compete for honors. To win a prize with some pet that he has tended is at once a satisfaction and an inspiration to do better next time, and just such a beginning as this has been the starting point of many a successful stock farmer, on his future road to fame. Every farmer who wishes to have his son remain on the farm should be a liberal patron of the local fair.

The Dead Meat Trade Urgently Needed

Each successive month brings with it additional reasons why there should be no delay in establishing the dead meat trade in Canada on a large and permanent basis. The need is more urgent, perhaps, for the ranching country of the west. Situated as these ranches are at a great distance from the seaboard, a large share of the profits of the rancher are eaten up in exporting the live animals. This could be saved to a large extent by the establishment of Abattoirs near the source of supply. A little additional feeding would put the ranch cattle in good shape for the mock and enable the producer to get more out of the business than he is doing at the present time. Not only does the long journey necessary to get the live animals to the consumer eat up the profits in freight charges, but the animal itself depreciates in value and when landed in Great Britain is intrinsically worth very much less for beef than when he left the ranch. The long haul thus cuts in both ways, and of course the producer suffers.

The need, while, perhaps, not so urgent, is just as great for Ontario. In this province the production of beef cattle, while it has grown somewhat, is not nearly what it ought to be, considering our facilities. In our opinion the chief reason for this condition of things is because the market is more or less circumscribed. With only one way of exporting cattle, that of having them slaughtered within ten days after landing in Great Britain, there is no room for expansion and no incentive to the producer to increase his output. The dressed meat trade, established at a central point in this province and on a sufficiently large scale to make its influence felt on the market, would greatly stimulate the beef cattle trade and make it possible for our farmers to engage in the business with greater assurance of success. If we were given to pro-

policy we would like to give this warning: that if Canadians are not willing to take hold of this business themselves and push it, not many moons will pass before the great American packer takes a hand in the game. To the producer it makes little difference who starts it going, though we would like to see it kept and managed by our own people.

The question of aiding this industry and securing its establishment on a satisfactory basis, is being considered by the Minister of Agriculture, and through him, by the Government. What shape assistance, if any, is likely to take we do not know. There are several ways in which it might be done. Direct assistance might be given in the way of bounties or grants. Some, for good reasons, object to a bounty. But we have accepted the bounty principle in this country so far as the steel and kindred industries are concerned. Then why not for dead meat? More people would be directly affected than by aiding any of the industries now receiving aid. Alderman Dunn, of this city, who has just returned from England, suggests that the Government aid the dead meat trade by erecting at Liverpool, Southampton, London and Glasgow, cold storages for the reception of cargoes of chilled meat from Canada. This would be substantial aid, and if it could be supplemented by aid in securing efficient cold storage facilities from the abattoirs to the seaboard and thence on board the ocean vessels to England, so much the better. Whatever conclusion the Government may come to, it cannot but be fully convinced that the time has come when something should be done to secure the chilled meat trade for Canada.

The following, given by Alderman Dunn in a recent interview, bears out our contention that there should be no delay in securing for Canada the early establishment of the export trade in dead meat:

"I have on former occasions predicted a great future for our cattle trade both in dressed meat and live cattle. On each of my visits to England within the last ten years I have found a great increase in the consumption of chilled meats, imported from the United States, South America and other countries. This fact is, no doubt, having a great effect upon our live cattle.

"The prejudice of eight or ten years ago against chilled meat has almost entirely died away, and chilled meat is quoted in England today at 10c. to 12c. per pound, or within a fraction of the quotation for the live animal. When the difference in the cost of transportation of the living and the dead is taken into consideration, it may easily be seen that with proper facilities the chilled meat business is much the safer, but it will require a strong company organized in this country to start a concern of sufficient magnitude to compete with the American who is well established in the British market."

To Save Time

The Parson—I intend to pray that you may forgive Casey for having thrown that brick at you.

The Patient—Mebbe yer riverence 'ud be savin' time if ye'd just wait till Oi git well 'n then pray for Casey.—*Brooklyn Life.*

Ontario Fruit in the West

The conference of fruit men at Winnipeg, a report of which appears elsewhere in this issue, is of more than passing interest to the Ontario fruit grower and shipper. In Manitoba and the Territories the eastern fruit grower has one of the very best markets for his surplus fruit. The people there want only good quality, and are willing to pay for it. Not only must the quality be good but the fruit must be carefully and honestly packed and landed in Winnipeg in good condition. With this guaranteed the Ontario orchardist has in the west a profitable market for a large share of the fruit which he can grow so easily and so well.

With this opportunity before him one would imagine that the Ontario grower and shipper would have made some special effort to gain and retain that market for himself. But he has not done so. By sending inferior quality, by bad, we need not say dishonest, packing, and by a carelessness which is hard to account for, the packer and shipper, or whoever may be responsible, has gotten Ontario fruit into disrepute in the west so much so that dealers there are beginning to look elsewhere for their supply. True, things have shown an improvement in recent years, but there is still not that confidence between the shipper and grower of the east and the buyer of the west that there should be in order to increase trade and put it on a satisfactory basis. The recent conference, if followed up, will do good and we look for an improvement in the fruit trade relations between this province and the west from this on.

One of the serious complaints made was in regard to transportation. It seems to be in no way adequate and satisfactory. The refrigerator cars are not at all suitable for the safe carriage of fruit. The icing methods are bad and frequently carloads of the most perishable kinds of fruit are lost through neglectful and careless treatment on the part of the transportation companies. No attempt is made to ice the cars enroute as they should be, especially in warm weather. Then the time from Ontario points to Winnipeg seems to be unnecessarily long. The subject is certainly one that should be brought to the attention of the Railway Commission. With proper cars and facilities for icing enroute and a reasonable time limit for shipments to arrive, a very serious drawback to building up a successful fruit trade with western Canada will be removed.

How far the Ontario shipper is to blame for the unsatisfactory condition of the trade at the present time is hard to say. From the remarks of one or two Winnipeg dealers at the conference, the average fruit shipper of this province is looked upon as dishonest and unreliable by the people of the west. This seems to be a little far fetched. No doubt there are cases, and, perhaps not few in number either, where the western dealer has had dishonest fruit loaded upon him. But the average fruit shipper

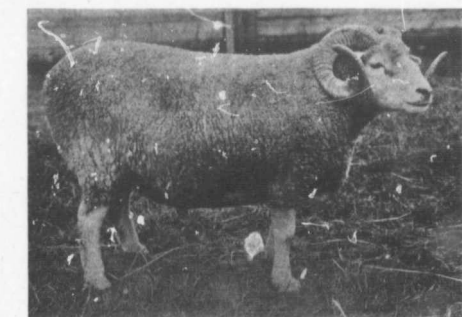
is just as honest as other citizens and will deal fairly. In fact if he is in the business to stay he must do so in order to retain his trade. For the cases of dishonest packing so frequently reported from the west, the shipper of the fruit is not always to blame. The trouble is due largely, as was pointed out at the conference, to many of our shippers expanding their business beyond a point where it can be personally supervised by the heads of the concern. For instance, in the apple season, a large shipper will have men in all parts of the province packing and shipping fruit. Though instructions may be given that the fruit shall be honestly and carefully packed, they may not be followed in every particular, and shipments may go forward that are not what the label calls for and for which the shipper is in no way to blame, though held responsible for the acts of his employees. A remedy for this condition of affairs is co-operation on the part of the growers in packing and getting their own fruit ready for shipment. In this way all the fruit in a section could be uniformly and honestly packed and sold to the highest bidder when ready.

While the conditions of the trade at the present time are not as satisfactory as they should be, the grievances are not so serious but what they can be removed by a free discussion of the question. Let there be frank and honest dealing between the consignee and the consignor and we feel assured a profitable trade can be developed with the west. The west wants our fruit, not the worst, but the best of it; and is willing to pay the highest prices for it. With this before him the Ontario grower and shipper should aim to supply the trade with what is wanted. If this is done we believe the dealer of the west will do his utmost to enlarge the market and keep Ontario fruit to the front. British Columbia and California are the Ontario growers' chief competitors in the west. Both these countries adopt up-to-date methods in packing and shipping fruit and this will have to be done by the Ontario grower if he wishes to retain the trade of western Canada.

To Kill Insect Pests with Ants

For years the cotton-boll weevil has been a serious menace to the cotton crop of the south. The United States Department of Agriculture will try the experiment of destroying this pest by introducing among them what is known as the cannibal ant. These ants come from Guatemala and several colonies have arrived in the south and the test will begin at once. They are known as entomological cannibals and do not injure vegetation in their native habitat. They live by preying solely upon insects and it is hoped that their introduction will rid the cotton belt of the boll-weevil.

And old lady, being told that a certain lawyer "was lying at the point of death," exclaimed: "My gracious! Won't even death stop that man's lying?"



An Exmoor Ram. First prize Royal Show, 1903

The Importance of a Pedigree

"My first lesson in the value of a pedigree, came to me unexpectedly while I was helping the owners deliver two bunches of feeders to a firm that fed several thousand head annually. One bunch was made up of northern bred cattle in the days before improved blood had been introduced. The owners were native bred, from Central Ohio, from superior sires. It was autumn and both bunches had grazed side by side in the same pasture during the whole season. When the first lot went over the scales the owner protested that the scales the owner protested that the scales were short weight and had the scales carefully tested. The weighing again proceeded, but with no better results. The better bred cattle were then driven over the scales and the weight recorded, to the astonishment of the first owner, who again thought the weights must be wrong and could not understand how the little ones could weigh more than his big ones. The buyer quickly remarked, 'Blood weighs.' That was all that buyer said, but it set me to thinking and ever since I have been a believer in the value and potency of blood.

I believe in pedigree for man and beast, I would not buy a dog without a pedigree and unless my judgment were at fault I most certainly would not buy a pedigree without a dog. There was a mingling of dry humor and philosophy in the words of two Scotch cattle breeders recently, when, as one led out a bull to be inspected, and remarked, "He has a grand pedigree," the other replied, "I never saw a beast that needed one more."

A pedigree is an authentic record of the ancestors of an animal. It ought to, and sometimes does, contain more than a mere record of ancestry. Pedigrees are very generally overrated or underrated. The error is usually manifest in one extreme or the other. Pedigrees wreck some breeders and make others. In one case pedigree is the key to success, and in another the rock upon which the ship founders. To others who as breeders are never made or unmade by anything, and who never attain a creditable rank, pedigree is nothing.

The first essential in a pedigree is completeness. A pedigree to be of the highest value must be full and explicit in all particulars. The second is authenticity. Without this the entire pedigree is worthless. The third is the individuality or excellence of ancestry found in the pedigree. All pedigrees are more or less incomplete in regard to this requisite, except as

they furnish the show ring or prize winning record of the ancestry and the foot note commentaries.

The next requisite of a good pedigree is integrity and reliability of the breeder, and in importance this deserves to take rank at the top of the list. The pedigree itself naturally affords no information as to this important feature. This must come from other sources and yet it is of such vital consequence as to be virtually an inherent part of the pedigree.

We need to study individuality of breeders as well as individuality of cattle and hogs, or other animals. The next requisite, and closely connected with the one preceding, is the skill of the breeder. The value of the pedigree is affected by the ability as well as the integrity of the breeder. It does not require a careful observer at the sale ring to note the fact that the names of the men appearing as breeders of a line of ancestors in a pedigree can easily make a difference of twenty-five or fifty or one hundred per cent. in the selling value of an animal and the breeding value may be affected to even a larger extent.

The last requisite which I will enumerate is prepotency. It is a common and fairly well grounded saying that even the most successful breeders never succeed in getting more than one or two really great sires in a lifetime. Most of the world's greatest breeders owe their reputation primarily to one such sire. Many breeders do not secure even one in a life time. There are comparatively few strongly prepotent breeding animals.

The only absolute evidence of such prepotency is that which comes from actual test in the breeding herd, although most animals which possess this quality in marked degree have certain unmistakable indications of their strong breeding qualities, and this quality, when found, is quite generally transmitted by the offspring.

Pedigree is a means of good or evil in stock breeding. I have never known a successful breeder of any kind of stock who was not a careful student of pedigrees. Yet the field of breeding is strewn with wrecks and failures due to false standards of the value of pedigree. A pedigree craze followed blindly means certain disaster. There is always great danger of pushing the so-called fashionable and popular lines of breeding to the danger point. Pedigree followed blindly is fanaticism in breeding.

A good pedigree never makes a good

animal, yet it is a significant fact that a superior animal almost invariably has a good pedigree. This is worth noting. It means that a good pedigree is an essential factor in producing a good animal.

A good pedigree without a good animal is worthless, and even a positive injury. As a practical breeder once put it: "Of all the screws in existence, deliver me from the pedigreed screw!" He was right, for the prepotency that comes from the concentration of blood lines is just as certain to perpetuate bad qualities as good ones. There is no greater fallacy in breeding than the assumption that practically any kind of a pure-bred or pedigreed animal will do, and that all the animals belonging to any particular breed possess the highest and best characteristics of that breed. It is that kind of credulity which furnishes customers for gold bricks.

Many breeders who breed and feed stock only for the market think the question of pedigree is of no concern to them. This view is entirely erroneous. There is no place where good bloods counts for more than on the block. It has made a difference as high as 25 to 50 per cent. in the value of the finished product, or the carcass, in experiments conducted at the Ohio experiment station. It may be truthfully asserted that you can, as yet, get a piece of best steak or a choice roast in any of the markets today without a good pedigree back of it. This at first seems like an extravagant statement, but it is literally true. Go onto the market any day of the year and look at the cattle that sell at the top price and you will observe unmistakable evidence of good blood. These things do not come by chance.

Every good steer you find in a feed lot has a pedigree and the better the pedigree the better the steer. There are inherent reasons for animal excellence. The main reason is generations of good breeding. The animals that top the market may not have a written or recorded pedigree. The pedigree is none the less genuine, however, and none the less a potent factor in the product. A pedigree in its fullest sense is in brief a summary or record of all that operates to make an animal what it is. No successful breeder of any class of live stock ever ignores pedigree. It is only when we place undue stress on "blue blood" and follow pedigree blindly that its influence is injurious.—From an address by Prof. C. F. Curtis, Iowa Experiment Station.

Exmoor Sheep

The Exmoor breed of sheep are among the few true survivors of the old forest or mountain breeds of England. The Exmoors have white legs and faces, and black nostrils, and are horned, the horns curving closely to the head. They are delicately formed about the head and neck, but the carcasses are narrow. They are exceedingly hardy and when fattened at 2½ or 3 years old arrive at 12 or 14 lbs. weight per quarter. The county in which the Exmoors are reared is generally surcharged with water after the autumn rains; yet the hardy character of these sheep enable them to withstand such adverse conditions. Their summer pasture is scanty, while their winter food consists chiefly of what they pick up while ranging over extensive tracts of pasturage, with the assistance, in extreme weather, of a little indifferent hay, obtained from the coarse herbage of the marshes. By reason of their superior hardiness of constitution and more especially their power of resisting wet, generally so injurious to sheep, they maintain their position in the south-west of England, under circumstances where other sheep would fail to thrive. H. A. S.

Training the Saddle Horse

From Kentucky have come many good saddle horses and runners. Mr. Chas. L. Bailey, of that State, gives his views on training the saddle horse as follows:

A saddle horse is one that can be ridden with a light hand on either the curb or snaffle, or both.

He should guide by the neck, be responsive to heel and hand, so that he can be readily collected and made to go in form.

A well-trained horse goes without pulling or yawing his head, and can walk well and fast, trot handily, flexing both knees and hocks at equal height, this giving ease in posting and not tiring the back.

The horse should set off on a quiet, easy canter when asked—any horse can gallop—and lead with either foot at the will of the rider. If these characteristics can be found in connection with a finished conformation, one might say that he owned a typical saddle horse.

The layman has but a small conception of the time, trouble, patience, perseverance and skill required to educate a saddle horse.

Horses are like people—some learn more readily than others—but no horse can be properly mouthed and thoroughly trained in less than a year, some requiring even longer.

When a horse comes into my school his lessons begin with a plain snaffle bit, regardless of any previous experience the horse may have had. With this bit his jaws are thoroughly flexed and supplid, so that he responds and yields to the slightest pressure on bit and rein.

He is taught to back (not forced) and to stand while being mounted in six weeks the bit and bridle, properly the double bridle, is put on, and the same lessons are given over again.

After the horse has been accustomed to the double bridle lessons in walk, trot and canter begin. What is meant by flexing and suppling of the neck and jaw of a horse cannot be defined on paper.

It might be comprehended by illustration, but much more clearly by actual observation of the work when being done by skilled and competent hands.

Anyhow, this system is separate from anything and everything like force, and is directly opposite to that of Kentucky trainers, which they term "setting the head," by pulling his nose in with the curb and forcing him against it with the spurs, which results in the horse carrying himself in bad instead of good form.

A horse thus fitted is fighting the bit more or less, which unbalances his action and detracts from his comfort to the rider.

A woman's saddle horse is the most difficult to obtain, however great a price one may be willing to pay, because the horse must closely approximate perfection.

For, owing to her side seat and her comparative lack of strength, a woman has but little control over a horse, thus rendering it imperative that her horse should be of even temper, with great courage and perfect manners, and a light mouth, true and level trot, so that she can post easily or sit close, as she may select.

Another stamp of horse very rare is what is termed the weight carrier; and it is a mistaken idea that beef and bone are the sole essentials of a weight-carrying horse. More depends on how the animal is put together.

The leg should be wide and thin, the sinews of whipcord texture, shoulders oblique, with great depth of girth and short back. A horse so conformed

should cleverly carry 19 per cent. of his weight.

A well-bred, a well-trained saddle horse is not only your servant, but becomes your companion and is first of all physicians.

Sheep for Tread Power

Forest Henry describes the use of sheep on a tread power for separating milk, as follows:

"Of late we have been using a sheep power for turning the separator and find it a complete success. We use a sheep that weighs around 150 pounds and would not recommend one any smaller. I expected some trouble and found it in training one for the work. In ten days, however, he would run and jump into the power of his own accord on being turned loose.

I think, though, it is more for the feed that he finds in the little box just in front of the power than it is for the fun he gets in treading it. We don't care which, so long as he does the work. The great thing in training a sheep for this is to keep your temper and use your ingenuity in getting him to work. For a few days we were compelled to set a fork behind ours in such a manner that if he worked close he would get pricked. He soon learned that the best place for him was up to his place, so he did not come back many times against the fork and never hard enough to draw the milk. We find that the tread power runs the separator much more steadily than it is possible by hand. Altogether we find the separator with the power the best paying machine on the farm.

Heaves in Horses

Speaking of heaves in horses, Wal-laces' Farmer in a recent issue said:

"In mild and recent cases the heaves may often be cured entirely by turning the horse out to pasture for two or three months. If it is necessary, however, to work a horse affected with this trouble, he can be relieved greatly by feeding no hay except at night, and then only a very small amount of clean and bright hay, entirely free from dust. If there is any danger of dust it is well to dampen it, but only bright hay should be given. Roots will be found helpful; beets, turnips, potatoes, and anything of that sort that the horse will eat. The amount of water should be limited as much as possible, and no horse with heaves should be given water for one or two hours previous to going to work. Dr. Law recommends a rice in five-grain doses daily, and continued from a month to two months, as especially valuable, and says that the bowels must be kept easy by laxatives if necessary. By treatment of this sort a heavy horse can be greatly relieved. When the disease first comes on it will pay to turn the horse to grass, with the hope of effecting a cure at once and before the disease progresses to the extent where it becomes incurable."

The North-West Lien Act

In the North-West Territories they have a very good lien act that might with advantage be copied in some of the older provinces, especially in Ontario. Some of its chief provisions are as follows:

"(3) Every person, firm or company standing or travelling any stallion for profit or gain in the North-West Territories shall cause the name, description and pedigree of such stallion to be enrolled in the department and shall procure a certificate of such enrollment as hereafter provided.

"(4) The owner of any stallion shall post up and keep affixed during the

whole of the season, a copy of the certificate of such stallion issued under the next preceding section in a conspicuous place both within and upon the outside of the main or leading into every stable or building where the said stallion stands regularly for public service."

Three different forms are provided on which the certificate of a stallion shall be filled in accordance as the animal is (1) a pure-bred and registered in a stud book approved by the Commissioner of Agriculture; (2) the offspring of sire and dam not of pure breeding; (3) the offspring of pure-bred sire and dam, but not of the same breed. By this arrangement the certificate shows the exact breeding of the stallion, and the farmer can ascertain in a moment what kind of a stallion is being offered him. Other important sections of the act are:

"(8) Every bill, poster or advertisement issued by the owner of any stallion for breeding or advertisement or used by him for advertising such stallion shall contain a copy of its certificate of enrollment.

"(10) The owner of any stallion holding a certificate of enrollment for such stallion under section 5 of this Ordinance (that relating to the pure-breds) or his agent may file in the office of the registration clerk of the registration district for mortgages and other transfers of personal property in which the owner or person in charge of any mare upon which such stallion performs service r-sides, within twelve months after such service is performed, a statutory declaration setting forth:

1. The amount of service fee;
2. That the same is unpaid;
3. The fact of such service;
4. A reasonable description of such mare; and
5. The name and residence of the owner of such mare.

"(11) The owner of such stallion upon filing such statutory declaration and complying with the provisions of this Ordinance shall have a lien for the amount of said service fee and costs as hereinafter provided upon the colt or filly the offspring of any such stallion by reason of the service in respect of which such statutory declaration is filed, which lien shall take and have priority over any and all writs of execution, chattel mortgages, bills of sale, claims and encumbrances whatsoever.

"(12) If payment of the service fee is not made before the first day of January in the year following the year in which the colt or filly is born, the owner of said stallion or his duly authorized agent may at any time before the first day of May following take possession of the colt or filly upon which he has such lien aforesaid wherever the same may be found and may proceed to sell the same by public auction after giving the person in whose possession the said colt or filly was when taken ten days' notice in writing of such intention to sell which notice may be effectually given to such person by delivering the same to him personally or by posting it upon the door of such person's last known place of residence in the North-West Territories.

"(13) The proceeds of sale shall be applied first in payment of the reasonable expenses of the taking of possession, giving of notice, and conduct of sale, not in any case to exceed \$10 in all, and next in payment of said service fee, and the balance shall be paid forthwith by the owner of the stallion to the person from whose possession such colt or filly was taken.

"(14) Violation of any of the provisions of this Ordinance shall be an offence for which the offender shall be liable on summary conviction to a penalty not exceeding \$25.



Sheep Clipping in Yorkshire, England.—A Familiar Scene in the Springtime.

Shearing Time

BY OUR ENGLISH

CORRESPONDENT

Sheep shearing is an important part of farm life in England during May and June. Fortunately there is a better outlook for the product than there has been for some time. Shearing time is very different from what it was in the days of our forefathers, for then it resulted in a jollification and festivities reigned supreme. That was the time when the demand for wool greatly exceeded the supply and when Englishmen wore genuine woollen clothes and not shoddy. Prospects this year are fortunately better in consequence of an important rise in the markets for the kind of wool. The sorts that were quoted last spring

from 17 to 18 cents and 20 cents per lb., were only worth from 10 to 12 cents per lb. a year or two ago, and some wools were even placed as low as 9 cents per lb. Flockmasters are thus congratulating themselves upon this welcome change, and by the tone of the markets there appears to be no immediate prospect of any relapse from the upward movement. Cloth has already gone up in price, especially for the best qualities, which are made from new wool, and as far as I can ascertain buyers and manufacturers anticipate will go higher than they are at present. The sheep owner can only devoutly hope that it will be so.

Fall Wheat in Western Ontario

The wheat crop is one of the things to be reckoned as largely a failure throughout western Ontario. In most places it was seriously damaged by the severe winter, more especially in the southern parts, where a thick crust formed over the deep snow and smothered the crop; those who plowed the wheat down and sowed other crops have the most reason to congratulate themselves. Many instances are to be seen where the farmer simply sowed barley over the damaged portions, expecting thereby to get a crop of mixed grain that would make good meal and roughage. Further north, the crop appeared to fare better, and, while a considerable portion was killed or damaged, there were many fields to be seen that appeared in flourishing condition, and promised a bountiful harvest. Rust has attacked these, and the general sample of wheat to be found in the best looking fields of Ontario is about as poor as has ever been seen.

Rust is one of the things which scientific research and experiment seems unable to offer any remedy for. Given a dry, early summer, with later enough rain to produce fairly rapid growth, even a week's succession of heavy dews or foggy mornings, and damage from rust is about as sure as the coming of harvest itself. Generally speaking, too, it is the best varieties of wheat, under other circumstances, that suffer the most from rust. Such grains as goose wheat or speltz, are practically unaffected, while the grains that have become popular through their other commendable qualities are the heaviest sufferers through rust.

Various attempts have been made to place the credit for rust in various places. A short time ago a series of experiments seemed to give grounds for

the surmise that barberry bushes were fertile in imparting rust to cereals in their vicinity. These were ordered to be destroyed, other measures were taken, but the rust is still here. There is possibly a good field for investigation on the part of the pure-bred seed association in this department, and a trial to determine if seed of good sample, growing on stalks unaffected by rust, would not prove the progenitors of plants enjoying some comparative immunity from this plague. Thus far, other cereals seem to be unaffected to any serious extent, but the prospect is a very uncertain one, and farmers will congratulate themselves if they suffer no more losses through damage to their cereal harvests in this way.

The Outlook for Fruit

The Fruit Division, Ottawa, obtained during July a report from the Dominion, which is in part as follows:

Dividing the apple crop into fall and winter varieties the reports show a medium to full crop of the former. In the apple sections, from which the bulk of the winter fruit will be obtained for export, the crop is not as large as last year but may be classed as light to medium. A very clear distinction must be made between fall apples and good storing stock. The reports from Great Britain and Europe generally show a very large crop of fruit that will come into direct competition with our fall varieties and may slightly affect the market for winter fruit, but as to the present time European apples do not compete seriously with our fall keeping varieties. The apple industry in Canada appears to be singularly free this year from the attacks of insects and fungous diseases. It is quite probable that

the codling moth will not be a serious pest, but there are indications that the spot may yet develop to a slight, if not a serious, degree.

Fears, except in British Columbia, will be a light crop. There will be very few for export, but the quality of those will be good.

Cherries in British Columbia have been a full crop, but a light crop throughout Ontario. In the rest of Canada, wherever grown, they have been light to medium.

Only one or two districts report serious depredations of insects, and the indications at present are that fruit growers will be little troubled this year by either insects or fungous pests.

The reports from the United States, particularly those portions that compete with Canada, indicate a large but not an extraordinary crop of fruit. The indications in England, France, Germany, Holland and Belgium point to a crop somewhat above the average.

Nova Scotia Farm Prospects

The midsummer lull is now in evidence and trade generally is of a holiday character. In some lines in which farmers in particular are interested the markets are decidedly flat. Dairy products are extremely dull and dealers are stocking at unheard of prices. In fact, it is hard to say what is to be done with the surplus butter and cheese which the Maritime Provinces have this year to dispose of. There is little export outlet, and there is only one exporting house in the city that is now doing much buying. Last week a lot of cheese was offered on the board, and was withdrawn because only 7 1/2 cents was bid. A small number were sold at 7 1/2 cents. A number of factories in Nova Scotia and New Brunswick are willing to sell at 7 1/2 cents but buyers are few. Butter also is extremely dull and jobbers are paying only 13 1/2 to 15 cents for new made dairy. Eggs are scarce and there is some difficulty in getting orders filled in P. E. Island. The price here would be at least a cent higher were it not for some ill-feeling among jobbers which gives rise to a disposition to undersell each other.

Farmers throughout the province are now cutting their upland hay. Owing to the dry weather which prevailed for the last month the hay on the uplands will be only about 75 per cent. of an average crop. The bulk of the hay which comes to the market, however, is grown on the intervals and dyke lands surrounding the Bay of Fundy, and these have been much benefited by the rain as it is much later arriving than upland hay it will probably reach an average yield.

Grain and root crops are estimated below the average but conditions have materially improved since its publication. The apple crop still promises to be a very large one in this province.

Fishermen are doing very well, and as this industry is a very important one in Nova Scotia, a good fish year means much to almost every branch of business. Two Lunenburg Bankers have just arrived from their summer voyage, one with 1,500 and the other 1,000 quintals. Last year the vessel average for the entire season's work of three voyages was only slightly over 1,000 quintals.

Horse racing in Nova Scotia has received a setback. Some ten days ago the trotter "Drusil," owned by J. T. Prescott, of Sussex, N.B., dropped dead after winning a race at Springfield. Last week Amos, an Elite, specially made, "Yonita F." died on the train after a close race at New Glasgow. Horse racing is evidently a risky business with which farmers should have little to do.

—J. B.

The Dominion Fair

Generally speaking the Dominion of Canada Exhibition, held at Winnipeg, July 26 to August 5, was a success. The attendance on the whole was good, though it was felt that the rush of visitors from the big west was not so great as was expected. Still there was no lack of onlookers for the various events. To see the "Free for all," there was a regular jam on both days. If the management could be pulled up on an event of this kind every day the grand stand receipts would have been trebled. The westerner dearly loves a horse race. No expense or difficulty is seemingly too great to prevent his being present when the event comes off. The management endeavors to gratify his wishes as much as possible and consequently the horse race is the chief attraction of the Western Show. In fact, to an outsider it would seem as if the racehorse man was more than "in." He had the best attention in stabling, etc., and there were numerous complaints from stockmen as to the inconveniences they were put to in finding accommodation for their exhibits, all because the best had been given up to the racehorse fellow. While the horse race is a big drawing card, the interests of the regular stockman should not be neglected. He it is who gives a show permanence and character. The live stock show at Winnipeg was one of which any country might well feel proud, and those who made it so should receive every consideration. While the stabling arrangements for stock was fair, we heard many complaints about scarcity of bedding for stock. To ask a herdsman to care for his pets without proper bedding, and to arouse his ire up to the boiling point.

A large tent did duty as an arena for judging cattle, while a ring outside the Colonnade served the same purpose for horses, though the judge in some of the light classes had to place the ribbons without the protection of a suitable ring. But there is a reason for this. A little over a year was lost a time to get ready for a big Dominion fair, even for a country where they rush things as they do in the west. A great deal had been accomplished, however, and the grounds, buildings, etc., were much improved over what they were when we last visited Winnipeg's big fair in 1901. The present grounds are on the small side, and with the big prairie to choose from a larger and better location could be secured we think with little difficulty. The side show, which was very much in evidence this year, could then be regulated to some part of the grounds, where it would not continuously be before the eye of the visitor desirous of seeing what the west could do in live stock, grain, etc. But with an energetic manager and a board of directors we look for these things to be set right in the near future. Winnipeg's annual fair will continue to grow, and to be one of the leading shows of the Dominion. Every effort should, therefore, be made to equip the grounds and provide facilities for holding an up-to-date agricultural show.

From the farmers' point of view the live stock exhibit must be given first place. In Clydesdale horses, Shorthorn and Ayrshire cattle there were shown as fine a lot of animals as one could wish to see. The west has never seen a finer display, and outside of Toronto, Ontario has furnished no better exhibit.

HORSES.

The heavy horses were judged by Robert Ness, Howick, Que., who as usual did his worst. He is in Clydesdales there were placed before him as fine a lot as he has ever judged. The exhibit throughout was a grand one.

The number was not very much greater than has been seen at previous Winnipeg fairs, but the quality was better. The greatest interest centered around the aged stallion class. Fourteen fine animals entered the ring, among them being the first and second prize winners at Chicago last fall. Pleasant Prince, the Chicago winner of last year, was placed first. He was shown by J. A. S. McMillan, Brandon, and was in fine fettle. He is clean limbed and moves well. Baron's Gem, by Baron's Pride, shown by A. G. Mutch, Lumsden, Assa., was a close second and a popular winner.

Concord, the champion Clydesdale last year, was placed third, with Woodend Gartley shown by the Napinka Clydesdale Horse Breeders' Association, a second winner at Chicago, fourth. He was in good show condition and therefore had to drop down. The three-year-olds were a fair lot. The two-year-olds were a strong class. From this came the stallion championship in Baron William, by Baron's Pride, shown by J. A. Mitchell, Winnipeg, and imported by Graham Bros., Claremont, Ont. He is a big strong fellow of good quality, and already has a good show ring record. He was first at Toronto and Chicago last fall as a yearling. Second place went to Sonnie's best, shown by Wm. Moodie, De Winton, Alta., a representative type but without the size of a successful rival. Tully Elder, Brandon, and Jas. I. Davidson, Balsam, Ont., had third and fourth place. The latter took the red in the yearling class for a get of old Macqueen. A good ring of brood mares with foals by their side faced the judges. Mutch Bros. had first for Charming Lassie, a low set, smooth one, and a good mover. Tully Elder had second and Stephen Benson third in Princess Sonia, a clean cut good one. The class for brood mare and two of her offspring brought some good ones to the front. Jno. A. Turm, Calgary, had first with Sonnie Lass and a daughter and son. They made a fine trio and would be hard to beat in any company. Tully Elder had second and Andrew Graham, Pomeroy, third. Three-year-old fillies were strong with Princess Ethell of Mitchell's string first and Charming May, shown by J. B. Thompson, Hamiota, second. Mutch Bros. had the best of it in two-year-old fillies. In yearlings, a new man, M. E. Sutton, Roland, Man., had first honors. There was a big battle for the Association prize for best mare between Mutch Bros. imp. Montrave Geisha and Turner's Sonnie Lass, the champion of many show rings. Both were hard to beat, though the latter showed a little more style, and secured the coveted honor.

The show of Shires was small and away below in number what it was last year. It was disappointing, and why it should be so is hard to say, as there is certainly room in the west for this favorite English horse. Only three Percherons appeared in the ring and two of those were from Galbraith's stable at Brandon, he also showing two Suffolks.

The show of draft horses was not as large as might have been expected at a show of this magnitude. Generally there was not a heavy showing. The lack in other classes was more than made up in the draft teams. Never has a finer lot been seen in the west. They were six in number and of the true draft type. The entry for general purpose was fair, with some good useful animals to the front.

Generally speaking the show of light horses was not up to the mark. They were judged by Dr. D. G. Victoria, B.C. One or two fine specimens were shown. A brood mare shown

by C. F. Bromell, Winnipeg, with foal by her side, was worthy of special note. Wilson & Mathew, Regina, showed a yearling filly of magnificent quality. She showed great speed in both pace and trot. In roadsters the single drivers were very good, the strongest perhaps in the light classes. Thus, Kelly's entry came first, beating the first yearling of last year, and shown by J. & E. Brown, Portage La Prairie. Carriage horses made a poor showing. The entry for Thoroughbreds was not large and the competition was not very keen in any of the classes. The ribbons were placed by Dr. Rutherford, Ottawa. Though there was a class for them, the real high-stepper was conspicuous by his absence. In dogcart horses, J. A. Mitchell had one of fair action. In Hackneys, Puritan, winner in the two-year-old was male champion. He was shown by Wm. Moodie, De Winton, Alta., and was bred by Rawlinson Bros., who have produced some noted high steppers. The competition was not at all keen and not what one would expect at a Dominion fair.

CATTLE.

The cattle display throughout was a fine one and a credit to the Dominion. Shorthorns were to the front in the beef classes. The plums of the contest did not go to western breeders, though a fine display was put up by them. They were judged by J. M. Gardioux, Weston, Ont., and Walter Lynde, Langburn, in the absence of the regular judge, who disappointed. They had no easy task. For bulls four years and over some noted ones entered the ring. Spicy Marquis, recently bought by Sir Wm. Van Horne for a high figure, was among them, as was also Scottish Canadian, shown by Geo. Little, Neepawa. The latter was in splendid fit, level and flat at all over done. Spicy Marquis is a bull with lots of character, fine touch and great depth in front. He showed a little more roughness than the other, but was well handled. James Lyle, the judges placed Spicy Marquis first, Scottish Canadian second, Nobleman, a good masculine type of bull, though not in as good bloom as the others, third. Though the judges no doubt had good reason for placing as they did the decision was not a popular one, and many good judges would have reversed first and second place. Senator Edwards' Village Champion was an easy winner in the three-year-old class. In two-year-olds a Marquis of Zenda bull, shown by G. & W. Bennie, Castlereary, Man., was first. The senior yearling class was not a strong one. J. G. Barron had first for Nonpareil Victor, a big red fellow. The junior yearling class was a notable one, as in it was found the junior and grand champion bull. He is a level, smooth fellow, but with no outstanding features. He came from the Salinas, and was bred by Captain Robson, Ilberton. In senior bull calves, the red ribbon went to the Pine Grove herd, for a deep, masculine-looking calf by Village Champion. Barron had second and Edward third. In junior bull calves a get of Spicy Marquis carried first honors to Van Horne's herd. The senior championship went to Village Champion, Edward Dube's red bull, with some fine young stock to his credit. His competitor was Spicy Marquis, who is Marr bred. The honor was no mean one as both bulls were worthy of it. The females were even a stronger lot than the males, cows four years and over being a collection of good ones, among them being Missie 153rd, of \$6,000 fame. Edna had to be placed in third place, being beaten by Van Horne's Mayflower bred and Empire 12th. The former is a remarkable cow, with much substance, good size and quality. She is by Avery Sailer. She came in for the senior and grand championship honors, which

she well deserved. In the three-year-old class Edwards had first and third and Van Horne second in a not very strong class. The two-year-olds were a strong class, with Edwards first and second, with the thick, lowset, white Golden Bud and the red roan daughter of Missie 153rd, by Bapton Favorite. Honors in senior yearlings went to Van Horne. In the junior yearling class Barron's well maturated, thick roan got the red, and Edwards' Missie of Pine Grove second. The senior heifer calves were a good lot, with Van Horne first. Edwards had first in the junior calf class; Van Horne had the junior champion female in Spicy Duchess, a red roan of the right sort. Edwards' red Missie of Pine Grove 6th being a close second. In herds the Selkirk establishment had rather the best of it, while for bulls and their get Edwards was on top.

The Hereford display was not as large as expected, and in many ways disappointing, though some fine animals were to be seen. The exhibit was not at all what the white faces of the west can do. The contest was between Jno. Wallace, of Carteret, and J. A. Chapman, of Bereford, with honors pretty well divided. J. A. Elton, Winnipeg, entered a number, but chiefly for sale purposes. Champion females in the bulls went to Wallace, while Chapman had the champion female.

The Angus men made a good showing. It was the best show of Duddies ever seen in western Canada. The quality was good and the exhibits were in good fit. Ontario was represented by W. R. Stewart, Lucaville, and Butt & Fisher, Clinton, and Manitoba by Walter Clifford, Austin, and McGregor, Rounthwaite, and Jas. Cathrae, Carberry. The western breeders had rather the best of it, though Stewart stood up well in bull calves. McGregor & Martin had the grand champion bull and junior and grand champion female, and Nathan Uphena, a North Dakota exhibitor, the junior champion ship.

Though not strong in numbers, the Galloways put up an exhibit of merit. Wm. Martin, Winnipeg, and D. McCrae, Guelph, were the two exhibitors with honors fairly well divided. Martin had the senior and grand champion bull and junior and grand champion female, and McCrae, junior champion bull and senior champion cow. Two herds of Red Polls were shown, and attracted considerable attention. Dr. W. H. B. Medd, Willowdale, Ont., judged the beef breeds other than Shorthorns.

DAIRY CATTLE.

While the west is not a dairy country, Winnipeg puts up a good show of dairy cattle. While Holstein and Jerseys were well represented, the Ayrshires carried off the palm for a jam up good show. Reford's, Ogilvie's and Ness', the three best herds in Quebec, which means the best in America had good contingents out. But they did not furnish the whole exhibit; Ontario, Manitoba and the Territories were represented. Geo. Steel, of Glenboro, Man., acted as judge and had no easier task. The best honors, as would be expected, went to Quebec. Ness had the champion bull in King's Crest, a bull of splendid Ayrshire type. He is masculine but not coarse. Ogilvie's had the champion cow in Cara-gowen Maud Bell (imp.), a handsome young cow of fine form and finish though on the small side.

The Holsteins were numerically weaker than a year ago, but the quality and fitting was better. Only western breeders competed. James Herriot & Son, Souris, Man., had the champion bull in Sir Peterizee, a very large and fine smooth shouldered fellow, with silky skin. To A. B. Potter, Montgomery, Assa, went the female championship for a deep-bodied cow of good dairy form.

With the exception of one or two minor exhibits, B. H. Bull & Son, Brampton, Ont. supplied all the Jersey display, which was no mean one. They of course carried off the prizes, J. C. Russell, Winnipeg, securing second for aged bull. Though there was no competition, the Messrs. Bull deserve credit for going such a long way and putting up such a good show.

SHEEP.

The sheep display was somewhat of a disappointment for a Dominion Fair, and yet, taking it altogether, the show of sheep last week was the best ever seen at Winnipeg. In many of the classes there was little or no competition. Elgin F. Park, Burgessville, Ont., had it all his own way in Cotswolds. In Leicesters, A. D. Gamley, Brandon, met with no competition. In Oxford Downs, Alex. Wood, Souris, Man., and the well-known firm of J. H. Jull & Son, Burford, Ont., made a good showing, though a little better fitting would not have come amiss. Wood got the red and diploma for aged ram, and also for the best ram lamb. Jull was strong in yearling rams. There was a strong class of Southdowns out, the best sheep exhibit on the grounds. The sweepstakes male of this breed, shown by John Jackson & Son, Abington, Ont., was considered by the judge to be the best sheep at the show. He is a tidy, compact fellow of good size. The sweepstakes female went to J. T. & J. H. Wilkinson, Chilliwick, B.C., who were the only competitors of the veteran from Ontario. It was a good show, and honors were not lightly won. W. T. Lyttle, Beaconsfield, Man., was all alone in Lincolns. In Shropshires, D. C. Corbett, Swan Lake, had much the best of it, taking all the best prizes. W. L. Trann, Crystal City, and I. S. Preston were the other exhibitors.

SWINE.

The exhibit of swine was on the whole very satisfactory, but there was a lack of finish or show ring bloom on the pigs in all classes, only a few animals, and these were in the sections where matured animals were shown, gave any indication of having been fitted for the show ring. When we speak of show ring fitting we do not wish to be misunderstood. To be properly fitted for the show ring it is not necessary that the pigs should be overloaded with fat, but their skins should be clean and smooth, being in sufficient flesh to fill out any wrinkles, and showing a healthy vigorous body, that is in a condition to make the best use of the food given. The pigs shown in the younger sections were small for their age and were not as good in quality as those in the older sections. Competition in Berkshire was limited to two exhibitors: Mr. A. B. Potter, Montgomery, Man., showed an aged boar and an aged sow, both of good quality and each winning first in its section. Mr. Wm. Wilson, Brampton, Ont., had quite a large entry in each section, and among his exhibit individuals of high merit were shown. His first prize yearling boar, Willow Lodge Leader, is a pig that any breeder might feel proud to own. He possesses great length and depth of side with good bone and a well-fleshed back, showing, in a marked degree the correct type of bacon hog.

The exhibit of Poland Chinas was made by two exhibitors: W. M. Smith, Scotland, Ont., and W. L. Trann, Crystal City, Man. Each of these exhibitors had some good specimens of the breed, but the exhibit as a whole was not of a high order of merit.

Large Yorkshire brought out strong competition, but there was quite a variety in type and condition of the pigs shown. Andrew Graham, Pomeroy, Man., had the largest herd on exhibition and also secured a major portion of the prizes.

His pigs were of uniform quality and brought out in good condition. His aged boar was a useful pig but was slightly defective in the tail. In the aged sow class he exhibited two choice sows, that were formerly purchased from Major Hood of Guelph. One of these sows understood to be champion sow at Winnipeg in 1902, but was now a little unevenness of flesh, and for that reason secured only second place. Senior champion boar, grand champion boar, junior champion sow and first prize herd were among the honors secured by this exhibitor. S. J. Thompson, St. James, Man., exhibited a yearling boar, a boar under one year and a yearling sow, all of which were successful in winning prizes. W. H. Marsden, Brandon, Man., had a small exhibit, and was especially successful in the younger classes, his young pigs being of a very desirable type, showing plenty of quality. He secured first in calendar boar and calendar sow, also first in junior champion boar. A. B. Potter, Montgomery, Assa, had no real large exhibit to Andrew Graham, his pigs were well brought out, and he secured quite a number of prizes. Stephen Benson, Neepawa, Man., was very successful in the aged sow class, winning first in that section and also securing the senior championship for sows. The champion sow was in thin condition, but was without doubt the best type of sow at the Exhibition.

The Tamworths were a very strong class, in fact they were the best lot in the show and it is doubtful if a better exhibit of Tamworths has ever been shown at Toronto, in point of quality, especially in the senior classes.

R. S. Preston, Pilot Mound, Man., was the most successful winner. His aged bony, honest Sandy had great length and depth, with a good head, a deeper flank and hams than is usually found in pigs of this breed. He also proved himself to be a good sire, as a number of his pigs were winners in the younger sections. Senior champion boar, junior champion sow, grand champion boar and first prize herd went to this exhibitor. Bert Hoskins, The Gully, Ont., had perhaps the largest number on exhibition and he was quite successful in the different sections; his pigs were all brought out in fine condition and showed good uniform quality. W. L. Trann, Crystal City, Man., had also quite a large exhibit, and although successful in the different sections; his stock were well brought out, he was fortunate in securing first on aged sow, also senior championship. James Glennie, Longburn, Man., showed a very choice two-year-old sow, which secured 2nd in his class, also first as sow with litter. She had the appearance of being the most useful brood sow in the Tamworth exhibit.

DAIRY AND AGRICULTURAL PRODUCTS.

Though not a dairy province, Manitoba puts up a very good exhibit of cheese and butter. The exhibit of this year were judged by J. W. Mitchell, Superintendent of the Kingston Dairy School. He pronounced the butter exhibit a very good one from a mechanical standpoint. The creamery washes were very creditable. The creamery exhibit was not a very large one. The home dairy branch was well filled. The chief defect was bad flavor, due largely to over-ripe cream kept in unsuitable surroundings. An exhibit of butter put in cold storage on June 20th in Winnipeg, showed bad keeping qualities. It was off in flavor. More attention must be given to the care of the cream.

The mechanical part of the cheese exhibit was well done. Some lots were off in flavor, some had too much acid, one or two lots were very fine flavor. A good display of this year's roots

(Continued on page 607.)

In the Dairy

A Well-known Dairyman Passes Away

On July 27th last, death removed one of the best known and highly respected dairymen of Western Ontario, in the person of Mr. J. A. James. He was identified with the cheese industry as far back as 1867, when he first arrived in Canada. In the early days he built a factory at Nilestown, which has since always maintained a first place for fine dairy products. Not a few of the best makers in the west received their training at this factory under Mr. James' care and direction. He was always glad to impart information, and his kindly and generous disposition made him beloved by all who knew him. For several years Mr. James was a director of the Dairyman's Association of Western Ontario, and his genial handshake and kindly smile will be greatly missed at the annual gatherings of that organization, whose interest he worked faithfully to promote. His fine farm near Nilestown was long the home of one of the best Ayrshire herds in Western Ontario.

Mr. James was born in Caermarthin, Wales, in 1830. A widow, two daughters and three sons remain to mourn his loss.

A Tribute to the Cow

In opening a sale recently held at Springfield, Ill., Col. F. M. Woods, the well known auctioneer, delighted his hearers with the following eulogy on the cow:

Grand and noble brute! Of all the animal friends of man she is the greatest! To her we owe the milk. Examining all the different channels of commerce into which she enters and note the result should she be blotted out. A Sunday stillness would then pervade the great stock yards, and the great large cities and grass would grow in our streets. Fifty per cent, at least, of the freight that now plows the continent from ocean to ocean would be sidetracked, for there would be nothing for them to do. Fifty per cent of the laborers would draw no pay on Saturday night. Our stables would be bare of the greatest luxuries with which they are now covered. Oh! you who would abuse a cow. I wish that I, as you are about to sit down to the noon day meal, might slip up and remove from your table what the cow has placed thereon. 'Tie up the cup of milk waiting at baby's chair. I'd take the cream, the cheese, the butter, the custard pie, the cream biscuit, the steak, the smoking roast of beef, and leave you to make a meal of potatoes, beans, pickles and toothpicks. It's the self same cow that made the great western plains blossom like the rose, and were it not for her they would revert to the Indians from whence they came.

None others like the cow! There is not a thing from nose to tail but that is utilized for the use of man. We use her horns to comb our hair, her skin upon our feet, her hair keeps the plaster upon our walls, her hoofs make glue, her tail makes soap, she gives us our milk, our cream, our cheese and butter, and her flesh is the greatest meat of the nation, her blood is used to make our sugar white, her bones are ground to fertilize our soil and deliver phosphorus herself has put through the first chemical process necessary for the production of the best white cardboard paper and they have discovered that such paper can be made into the finest quality of false teeth.

No other animal works for man both night and day. By day she gathers food and when we are asleep at night she

brings it back to rechew and convert it into all things of which I speak. She has gone with man from Plymouth rock to the setting sun! It was her sons that turned the first sod in the settler's clearing; it was her sons that drew the prairie schooner for the sturdy pioneers as, inch by inch, they fought to prove that "westward the star of empire takes its way," and the old cow grazing along behind, and when the day's mowing was done she came and gave the milk to fill the mother's breast to feed the suckling babe that was, perchance, to become the ruler of his country. Who says that much of what we are we do not owe to man's best friend, the cow? Treat her kindly, gently, for without her, words fail to describe the situation.

Cow Scouring

I am asked by a correspondent what could be recommended for a cow suffering from diarrhoea both before and since turning out to grass. One time a cow of this sort was looked on as a "piner" or a "waster" as the result of tubercle, and was sent to the knacker, but we know better now. As far back as 1897, Professor McEadearn of the Royal Veterinary College showed that the trouble was in nearly every case due to the presence of a small round worm in the fourth stomach, and that anything that would kill this would cure the trouble. Mr. Ernest Matthews, who is a notable man in the Jersey world of cows, informs me that the continuous use of lime water to drink is generally effectual—i.e., a handful of lime in a bucket of water stirred up and given every time the animal is watered, for a week or so. If this is not effectual, then a dose of half ounce of shag tobacco given every morning for a week makes a perfect cure if the animal is curable at all. Probably any kind of tobacco will do, if the owner does not happen to smoke shag, if it is ground and cut up fine enough to be administered in a bottle of water. I have been successful myself by administering carbolic acid (Calvert's No. 5) in daily doses of one quarter ounce for several days. I stopped the treatment, however, after killing a cow by an overdose—experience being a very expensive commodity. It is, of course, necessary to shut the animal up in a loose box or tie up in a stall to regulate the drinking water and otherwise treat, though of course there is plenty of grass or other green forage to cut and hand feed now at this time of the year. If any or all of these treatments does no good in a week's trial then one may conclude that the animal is an actual "piner" and incurable.—Prof. McConnell, in "The Dairy."

How the Good Dairyman Does It

The good dairyman feeds his cows regularly on wholesome, well-balanced rations, and does not milk his cows while roughage is being fed, or when there is dust and bad odors afloat in the air. He sees to it that the cows have a clean dry bed and when he goes to milk he is careful to brush off the flank and udder so that dust, hair and deadly bacteria do not fall into the open pail. Dairyman, be clean about your work. Remember that innocent people are to use this product as food, a produce which is capable of carrying germs of disease to the human body. Please remember this and wash your hands before milking; clean your finger nails and do not milk with wet hands.

Best Salt

Windsor Salt

is famous for its purity and perfect quality. Butter-makers all over the Dominion say

Windsor Salt

is the easiest to work, makes the most delicious butter, and is the cheapest in the end.

Ask your dealer for Windsor Salt

MELOTTE CREAM SEPARATORS

are distinguished from all others by their self-balancing bowl. Intending purchasers should compare the extreme simplicity of this device with the clumsy arrangement of other separator bowls in which great friction is combined with constant liability to delays, losses and expenses owing to the bowl getting out of balance. For close skimming the Melotte is unexcelled.



Frictionless self-emptying and self-balancing bowl.

WRITE FOR BOOKLET.

R.A. LISTER & CO. LTD.
1107 ST. MARY ST.
MONTREAL.

FARMER'S SONS

Should get a GOOD EDUCATION—100 courses by mail—expert teachers—Special Rates to students enrolling before August 31st, 1904. Send a postal card for our Free Booklet. Address
CANADIAN CORRESPONDENCE COLLEGE, LTD.
Toronto, Ont.
WALTER JAMES BROWN, Principal.

Bill Nye as a Dairyman

When I was young and used to roam around over the country, gathering water melons by the light of the moon, I used to think I could milk anybody's cow; but I don't think so now. I do not milk the cow unless the sign is right, and it hasn't been right for a good many years. The last cow I tried to milk was a common cow, born in obscurity, kind of self-made cow. I remember her brow was low, but she wore her tail high; and she was haughty, oh, so haughty. I made a commonplace remark to her, one that is used in the very best society; one that need not give offense. I said: 'So—and she 'Soed.' Then I told her to 'Hist—and she 'Histed.' But I thought she overdid it. She put too much expression to it. Just then I heard something crash through the window of the barn and fall with a thud—sinking thud—on the outside.

If am buying all of my milk now of a milkman. I select a gentle milkman who will not kick, and feel as though I can trust me. Then, if he feels as though he can trust me, it's all right."



West Shefford Creamery, Proprietor J. S. Lawrence, West Shefford, Que. This Creamery shares with the Compton Model Farm Creamery the enviable distinction of turning out uniformly the highest quality of export butter made in the Province of Quebec.

A Fruit Conference at Winnipeg

Ontario Growers and Western Dealers Confer—The Needs of the Trade Discussed—Rascality said to Characterise the Ontario Packer

The bad condition in which a great deal of the Ontario fruit arrives in Winnipeg has been a serious grievance with western fruit dealers for years back. On the other hand Ontario shippers have complained of unfair treatment on the part of the western buyer of fruit, who appeared to him to be ready to take nearly everything and allow the shipper little or nothing for his trouble and expenditure. And thus matters have gone on for years, with very little harmony between the Ontario fruit shipper and the Winnipeg dealer, though it is only fair to say that things are improving and trade conditions are much better than they were five years ago. Conditions, however, are far from satisfactory, and with the hope of remedying matters a conference was held at Winnipeg on August 10th, at which were present representatives of the western fruit trade and of several members of the Fruit Division, Ottawa. Among those present were: A. McNeill, Chief of the Fruit Division, Inspectors F. J. Carey, Belleville, J. J. Philp, Winnipeg, Maxwell Smith, British Columbia, J. S. Scarff, Woodstock, Ont., Director Ontario Fruit Growers Association, W. A. McKinnon, late Chief of the Fruit Division, R. M. Palmer, British Columbia, and Messrs. Rubalee, Taylor, Bright, Scott and several others representing the Winnipeg fruit trade.

Mr. Scarff was asked to preside. In discussing the transportation side, Mr. Rubalee, of Foley, Lock & Larson, stated that the time made on shipments of fruit from Ontario was bad. Five days was good time between Niagara and Winnipeg, but frequently it took twice that time. The refrigerator cars used, though an improvement on those in use a few years ago, were not at all suitable for this trade. They should be modelled after the California fruit cars, in which fruit carries in better condition owing to their having ice overhead. The west wants both Ontario and British Columbia fruits, and better transportation facilities should be provided. Nearly 90 per cent. of the small fruits arriving in Winnipeg come from the United States. This does not apply to apples.

Following up this subject, Inspector Philp stated that there was not quick enough despatch. He advised shipping early apples in boxes only and ship in refrigerator cars and have them iced on the way.

Mr. Taylor, a large importer of fruit, stated that the icing enroute to Winnipeg from Ontario was very bad. He had had the best results by shipping two or three cars at once in charge of a messenger, whose special business it was to see that the icing was properly done in transit. The ice bunkers should be kept full, and he preferred to pay for a messenger rather than lose a car of perishable fruit. He stated that conditions on the Northern Pacific, over which a large share of the California fruit reaches the west, were perfect, and the Canadian roads could have them so if they wished.

Mr. A. Bright in discussing the condition of fruit on its arrival, said that Ontario growers and shippers were afraid to spend a dollar in putting their fruit in shape. It arrives in bad condition because of being badly packed. The two evils were: bad packing and bad stock. The face in every case should represent the barrel. A reference here to the work of inspectors in stamping out fraud brought on a pretty warm discussion, in which the inspectors came in for some adverse criticism. Mr. McNeill stated that the Fruit Marks Act was designed to protect from fraud. If a buyer bought fruit that turned out to be fraudulently packed or misrepresented he could go before any justice of the peace and have the seller or shipper prosecuted without calling in the inspector. It was never intended that the inspector should do this work. It could be done without the inspector just as well.

Dealing with the subject of small fruits, Mr. R. R. Scott stated that they arrived in bad condition. He claimed that no amount of packing or improved transportation can bring plums and peaches from Ontario to Winnipeg in good condition. They don't go into consumption soon enough and are liable to spoil before the dealer disposes of them. Grapes, if packed in 10 lb. baskets and

handled carefully, arrive in good condition, especially late in the season. He recommended growers to use a good strong basket (climax) with wooden covers. A basket with a canvas over the top was not so good. When a strong basket is used, tomatoes arrive usually in fair condition. All small fruits arrived in better condition in double decked cars. Pears, especially the Bartlett and Flemish Beauty, arrive in good condition. Twenty-five cents a barrel. Mr. Scott here waxed warm in discussing the "rascality," as he called it, of many Ontario shippers. The west wanted good fruit only and the dealer never lost money in handling it. "We don't want second-class fruit," was the way he put it. Twenty-five cents on a barrel of apples does not count so long as the quality is right. Referring to the non-carrying qualities of Ontario plums and peaches, he stated that they were too juicy to admit of shipment any long distance. The soft fruits of the Okanagan and Victoria districts of British Columbia will ship well. Mr. Taylor stated that he had shipped the Black Diamond peach and the Grand Duke plum from Ontario to Winnipeg with good success.

Being asked to speak, R. M. Palmer, Chief Fruit Inspector for British Columbia, stated that their fruit growers have adopted the California package and method of shipping. It frequently took from 11 to 13 days for freight shipment between Victoria and Winnipeg, which was too long. Fruit carried badly, but prunes and plums carried well though long on the road. Over 3,000 acres had been added to the fruit area of British Columbia during the past year. They wanted to extend their strawberry shipments to Winnipeg, but must have a better ventilated service. The smaller independent shipper did not do so well as the large one or the co-operative organization.

Inspector Carey followed. He was present to obtain information for Ontario shippers. In his opinion the packer was often times more to blame than the shipper. The latter often spread out too much and could not properly control the packing of his fruit.

Chief McNeil advised the Ontario grower and the western dealer to get together and to do business on a higher plane.

Mr. McKinnon thought that the principle of doing business was at fault. Dealers and shippers in Ontario have expanded too much and consequently there is a lack of supervision of the packing, etc. He looked to the co-operative movement to remedy matters.

Maxwell Smith, Dominion Inspector in British Columbia, speaking of the fruit trade on the Coast, said that he had found many Ontario apples in British Columbia and the Territories not put up in accordance with the Fruit Marks Act. He estimated that of all the Ontario apples he examined only about one-quarter were good. Many packers mark the best they have as XXX when they were only XX. The British Columbia people want Ontario growers to adopt a uniform apple box. The barrel was out of date. The apple should be handled as carefully as an egg. It takes an expert to pack a box quickly so that it will pay. The farmer is too slow. By co-operation experts can be employed. In British Columbia Chinamen and girls do the work best. The packing should be the same all the way throughout. Any kind of an apple can be packed in a box 20x11x10 inches, inside measurement, the standard for British Columbia.

Some of the Winnipeg dealers stated that while they preferred to have early apples packed in boxes, the late varieties sell better in barrels. Some customers seemed to like the barrel better than the box. J. W. W.

Nature about the Farm

Swallows—Cherry Birds—Bird Notes—Farm Forestry

EDITED BY C. W. NASH

BIRD NOTES.

The first signs of the autumn migration are already noticeable: the swallow tribe, blackbirds and others, which congregate before leaving, are assembling into large flocks, each according to the methods of its kind. The swallows after they leave their nesting places, have a particular fancy for gathering upon the telegraph wires, upon which they rest during the heat of the day, feeding only during the cool hours of the morning and evening. On the fifth of August I visited a favorite resort of these birds, where for fully a half a mile, as the wires were carried along the water's edge, the birds were clustered upon them, as thick as they could be. When alarmed they dashed off and the air was filled with swallows for a few moments, but they quickly settled back again to their sun-bath. Towards evening they left their resting place almost simultaneously and scurried hither and thither over the grasslands and along the water's edge in pursuit of the flying insects upon which they feed. The number of insects consumed by this one flock of birds every day, would astonish most people, if expressed in figures. The fact is that without the services of the swallow tribe, the air would be so filled with small flying midges, gnats, mosquitoes, etc., as to be unendurable by either man or beast, and all forms of plant life would be destroyed.

After the swallows have taken their young away from their nesting place and joined the flock, they do not return again, even at night, but resort to some large marsh, where the rushes are thick; upon these rushes they roost, crowded so closely together that they almost bear the plants down to the surface of the water. The numbers that gather into these places just before migration takes place is simply marvelous. I am often asked where the birds all come from. That is easily answered: they are the accumulation of the season gathered from over the surrounding country. Another question, however, arises, viz.: what becomes of them all? and this is not so easily disposed of. The majority of them are lost in some way, during the long flights of their migration and while they are in the south, for it is easily apparent that the numbers returning here each spring bear no sort of proportion to the numbers which leave in the autumn.

After writing of the Cedar Waxwing or Cherry bird for our last issue I thought I would give over my field notes on this species, to see what details I had of its feeding habits, when to my surprise, I found that on the first of June, 1884, in Manitoba, I had seen a small flock in the act of feeding upon the blossom buds of the Hawthorn. If these birds will occasionally feed upon the buds of the thorn, they will undoubtedly also do so on the buds of fruit trees, but the habit does not seem to be general and is probably only indulged in when insect food is scarce.

Along the lake shore bird life is becoming abundant; on the fifth, several Yellowlegs, a few Turnstones, Baird's Sandpipers and Teast and Semi-palmated Sandpipers were feeding, and in the marsh, a good many Blue Herons, erroneously called Crows, were stalking in their solemn but dignified way. In Great Britain, where these birds were at one time much sought after, the Heron is extremely wary and almost unapproachable, they have been taken so by long and bitter experience. Here, however, our birds have not yet gained

sufficient wisdom to keep out of gun-shot, with the result that they are much scarcer than they used to be. From an economic point of view, perhaps, this is not altogether to be deplored, but to the lover of the beautiful in nature, their absence will mean the loss of one of the most interesting forms of life to be found at the waterside.



The Cedar Waxwing.

FARM FORESTRY

When considering the advisability of devoting any portion of the land for the purposes of a wood lot, the fact that trees may be successfully grown in soils and situations which are not adapted for raising ordinary farm crops, should be carefully borne in mind. The necessity for extensive tree planting in this province is very great and the benefits the country would derive from systematic operations in that direction are very important. Yet, no one would advocate the withdrawal from cultivation of first-class arable land and the conversion of it into wooded land. Such a policy would not be profitable to the owner nor beneficial to the country. In the most favored district of Ontario, however, one rarely sees a farm, every acre of which can be worked to advantage. On the contrary, much land is now under cultivation which never paid for the labor put upon it. It is only necessary to drive through some of our best coun-

ties to realize how much land there is lying idle or which is unprofitable. Ridges crop out, upon which the soil is too thin to support a growth of cereals. Swampy places there are, of large extent, too wet and sour for cultivation, and small irregular fields which cost more than the crop is worth to work. All such places as these and the odd corners and fence rows would support a growth of timber which would not only be valuable in itself, but which would have a wonderful effect upon the fields and orchards, by acting as wind breaks and be of the greatest benefit to cattle, etc., in providing shade.

CORRESPONDENCE.

M.T.D. Winthrop.—1. How many different kinds of Humming birds are there in the Province of Ontario? Ans.—Only one Humming bird visits this Province: the Ruby throated.

2. Do Ruby-throated Humming birds come as far north as Huron and do they breed here? Yes. The Ruby-throated ranges north to Hudson's Bay and breeds all through its range.

3. Are there Black-headed Woodpeckers in this locality, or is there another name for them; if so, what is it? There is no Black-headed Woodpecker in Ontario, perhaps you mean the Black-backed or Arctic three-toed Woodpecker; a northern bird which sometimes occurs here in winter.

4. I have sent the books you asked for. C. T. N. Brampton.—Does the Bluebird ever stay in Ontario through the winter? Ans.—I have only once heard of Bluebirds here in winter; on that occasion several remained on Pelee Island through the season.

A Subscriber.—Could you please tell me the best means of destroying wild Morning Glory? Ans.—If four acres is infested. Have not cropped it this year, but have been sowing salt over it; on account of the roots being so deep in the ground, I am afraid that this method will not destroy it. I am now plowing it to the depth of about eight inches. Would it injure the ground to add more salt? On the same piece of land there is a small patch of sow thistle; what means would you adopt to eradicate it?

1. Ans.—The Bindweed (wild Morning Glory) is a very difficult weed to exterminate; constant cutting below the surface of the soil, until the roots cease to throw out shoots, is the only certain method of getting rid of it.

2. You do not say how much salt you have already sown to the acre. In any case, if you put enough salt on the land to destroy Bindweed, you may be certain that you would destroy any other plant life. Under some circumstances and for some crops, salt may be used beneficially, in quantities not exceeding 300 lbs. to the acre, half that being usually enough. Keep on plowing and cultivating and you will conquer the Bindweed.

3. Frequent cultivation will destroy the sow thistle. If it is the annual species cultivate after harvest, two or three times and you will get rid of it.

Through the Post-Office

No matter where you live, our Savings Department is made accessible to you without the slightest inconvenience. Avail yourself of the security our great strength affords.

Send your address for our Booklet

SAVING MONEY BY MAIL.

Canada Permanent Mortgage Corporation

Toronto Street, Toronto



Those who have most happiness think the least about it. But in thinking about and in doing their duty happiness comes, because the heart and mind are occupied with earnest thought that touches at a thousand points the beautiful and sublime of the universe.

—Thackeray.

Twilight on the Farm

The dews come down, and shadows gather in field and lane,
Low in the west a band of black gives promise unto rain,
It is the twilight hour—and given o'er to calm and rest,
It brings to home a benediction and is blest.

The boys come and bathe their faces at the cooling well,
Afar and faint, then near and sweet, tinkles the lead cow's bell,
It is the twilight hour—and stars are starting from the deep
High heaven's herald sent to watch that men may sleep.

The father comes, a man of many years of toil and care,
Who smiles to see the candle in the self-same window there;
It is the twilight hour—and with the farm work amply done
He feels a poor man's joy to think the food is won.

Then all sit down to eat the evening meal, and far away
A wagon rumbles out the neighbor's name who loves delay;
It is the twilight hour—and free from day's unending quest
It brings to home a benediction and is blest.

Pa and the Calf

"It seems to me, Maria," said a kind, hearted city man who lived in the suburbs, "that it is wicked to keep that calf shut up in a close pen this warm weather."

"That's right, John. I have told you several times that the calf should be exercised and have an opportunity to enjoy the sunshine and the fresh air. It is positively sinful to keep animals confined as this calf has been."

"It's a pretty hot day to exercise the calf."

"Don't put off this job on account of the hot weather. You always have some excuse," replied Maria.

At this prod of his wife John sallied off to give the calf an airing. John used to be spry and nimble, but after seventy years battling with life's care and rheumatism, he had lost much of his youthful alertness. He attached a long rope to the neck of the calf and led him confidently out into the wide expanse of lawn that bordered the house. The calf at first seemed to be dazed by the bright sunshine, but after a moment's hesitation galloped off with frantic speed, taking him unawares, almost throwing him instantly. John's legs were not extremely long, but the speed of the calf forced him into taking remarkably long strides, as he held onto the end of the rope.

When the calf arrived at the end of the enclosure he turned around and looked at John as though he desired further acquaintance. John approached the calf hauling in the rope hand over hand. When he reached the centre of the rope the calf started off again in the opposite direction, and John again began to measure nearly ten feet at every stride with his short legs. John was amazed at the wondrous strength of the calf. He knew that oxen, with the force of their necks, could draw heavy loads, but he was surprised to find that this calf, using the rope about its neck for a yoke, could haul him about so mercifully.

At this moment the rope came in contact with a tree, and John came to and the calf at the other. Then the calf started in the opposite direction around the tree, and John was in great danger of being wound up and tangled in the rope. After succeeding in disentangling the rope he again attempted to approach the calf, having decided that he had had exercise enough for one day. But the calf

thought differently and started off on a gallop down the lane toward the highway, John being compelled to follow in the race at the end of the rope as before.

It happened that John had an aristocratic neighbor, and John was exceedingly anxious to be held in good esteem by this neighbor. On this hot day in August the neighbor had a gathering of friends upon the lawn. These neighbors were astonished to see a cloud of dust down the road from which in a few minutes emerged a calf followed by a man whose white hair was flowing wildly in the wind. The calf made directly for the gathering upon the lawn. The women ran screaming in every direction, chairs were upset, and there was a wild scrambling for the piazza.

As the calf disappeared around the corner of the house John made his appearance, holding firmly to the end of the rope, still taking long strides, his face bearing expression of much anxiety. He was utterly heedless of the aristocratic neighbor, who called upon him for an explanation. Around the lawn, among the bushes and flower



A Farm Girl, and She's Proud of It.

Photo by Sallows.

beds, the wild calf dragged the unlucky John, followed by the men of the party and his aristocratic neighbor, who was bent upon preserving as much of the property as possible from destruction.

Finally the calf was cornered and John was able to gather up half of the rope. Then the calf made a dash sideways, bringing the rope in contact with a beehive, which was immediately upset. The bees without delay attacked both the calf and John. The last sect of the calf he was crawling under the low-hanging currant and gooseberry bushes in order to scrape off the bees. On returning home John addressed his wife as follows:

"It's a fine day, Maria."
"What in the world is the matter with you?" asked his wife.

"Oh, nothing. I've simply been enjoying myself; taking a little exercise in the fresh air and sunshine."

"And what has become of the calf?"
"I don't know, and I don't care. When I show sympathy again for a calf you will know it."

"But what is the matter with your face? It is all swollen up and you look as though you were ready to melt with the heat."

"I wish," replied John, "you would stop asking me fool questions. I am going to bed. Give me a cloth wet with arnica and plaster it over my face."

"I heard that a spread of mud was a good remedy for bee stings, if that is what's the matter with you," remarked his wife. But by this time John had slammed the door and was out of hearing.

Old-fashioned Philosophy

Scorn not the homely virtues. We are prone

To search through all the world for something new;
And yet sometimes old-fashioned things are best—

Old-fashioned work, old-fashioned recitade,
Old-fashioned honor and old-fashioned prayer,

Old-fashioned patience that can bide its time,
Old-fashioned firesides sacred from the world,

Old-fashioned satisfaction with enough
Old-fashioned candor and simplicity,
Old-fashioned folks that practice what they preach.

About Neatness

There is one charm every woman may possess, and it is a very attractive one—neatness. The plainest woman is a delight to look upon if her toilet is one of exquisite neatness in every respect. Her hair must be done up securely and not look as if it were ready to tumble around her shoulders at any moment. Her gloves must be always mended, her boots in perfect condition and never any tag ends at the bottom of her skirts. Most men know nothing about fashion, but will notice whether a woman is neat or not, and it is the quality they most admire in woman.

"We have our friendships, our affections, our interests in each other. But our real lives, of work, we must live by ourselves."

The Clover

Some sing of the lily, and daisy, and rose,
And the pansies, and the pinks, that do
the summertime throw;

In the green, grassy lap of the medder that lays

Blinkin' up at the skies through the sunshiny days

But what is the lily, and all of the rest

Of the flowers, to a man with a heart in his breast

That has dripped brimmin' full of the honey and dew

Of the sweet clover blossoms his babyhood knew?

I never set eyes on a clover field now,
Or fool round the stable, or climb in the mow,

But my childhood comes back, just as clear and as plain

As the smell of the clover I'm sniffin' again;

And I wander away in a barefooted dream,

Where I tangle my toes in the blossoms that gleam

With the dew of the dawn of the morning of love,

E'er it wept o'er the graves that I'm weeping above.

And so I love clover—it seems like a part

Of the sacreddest sorrows and joys of my heart—

And whenever it blossoms, oh, there let me bow,

And thank the good God as I'm thankin' Him now;

And I pray to Him still for the strength when I die,

To go out in the clover and tell it good-by

And lovingly nestle my face in its bloom,
While my soul slips away on a breath of perfume.

James Whitcomb Riley.

Twins

Bishop Potter was preaching one Sunday evening in a small town in the back country. When the services were over, a tall, gaunt man, with the air of a back-woodsman, came up to the bishop with outstretched hand.

"I've heerd ye preach twice afore this," he said, "an' I like yer preachin'."

"I allus I'arn somethin' new from ye. I rid ten mile tonight to hear ye, an' I rid ten more, fer, as usual, I heerd somethin' new tonight that I never knowed afore."

"Well, I'm glad of that," said the bishop, shaking the outstretched hand, "and what was it you learned tonight?"

"Why, bishop, I found out fer the first time in my life that Sodom and Gomorrah wuzn't twins."

Armor-Plated Boys

One of the chief means of protection to our great battlefields are huge armor plates. It is important in these days that there should be armor-plated boys.

A boy needs to be iron-clad on:

His lips—against the first taste of liquor.

His ears—against impure words.

His hands—against wrong-doing.

His feet—against going with bad company.

His eyes—against dangerous books and pictures.

His pocket—against dishonest money.

His tongue—against evil speaking.

The Christian armor on her citizen gives more security to the nation than all the armor plates that are on her ships.

When You Think It Over

The gardener who grows cabbage ought to get ahead in the world.

Even the single potato is pared.

The farmer who waits for something to turnip will never get rich.

To grow the best small fruits requires the biggest men in the business.

The farmer can run a bar without keeping a saloon.

The worst tax on the married man is carpet tacks at housecleaning time.

The man who would butt against fate needs a hard head.

It requires a tall person to see over a "spitefence."

There should be no key to the door of the closet that contains the family skeleton.

The pig is the one creature that is applauded for "making a hog of himself."

The existence of the sheep-killing cur should be curtailed.

The 13-ounce pound, or the 3-quart gallon, or the 1,800-pound ton man will probably never get close enough to heaven to be thrown out.

The railroad car always tied down.

—A. B. Salom, in *New York Farmer*.

What is a Blush?

According to a Southern medical journal, this is an accurate definition of a "blush": "A blush is a temporary erythema and calorific effulgence of the physiognomy, etiologized by one perceptiveness of the sensorium when in a predicament of inequilibrium from a sense of shame, anger or other cause, emanating in a paresis of the vasomotor filaments of the facial capillaries, whereby, being divested of their elasticity, they are suffused with a radiance emanating from an intimidated praecordia." It makes one blush to read it.

Why She Liked It

"I like to go to church," announced Dottie, aged five, "because they sing nice hymns about flowers and insects and things to eat, and the man in the nightgown talks about birds."

"Why, Dottie," said her mother, "I don't think there are any hymns about insects and things to eat."

"There is so," insisted Dottie, "last Sunday we sang a beauty hymn about 'Bringin' in the Cheese, and today we sang one what began, 'Just As I Am Wishing on the Fish, and every one got through the man talked about a hawk and two pigeons.'"

Subsequent inquiry revealed the fact that the text had been, "Why halt ye between two opinions?"

Of all the lessons that humanity has to learn in life's school, the hardest is to learn to wait.

Not to wait with folded arms, that claim life's prizes without previous effort, but, having struggled and crowded the slow years with trial, seeing no result such as effort seemed to warrant—may, perhaps disaster instead—to stand firm at such a crisis of existence, to preserve one's poise and self-respect, not to lose hold or relax effort, is greatness, whether achieved by man or woman.

ROSE TEA IS GOOD TEA

THE BOYS AND GIRLS

The Boy That Lives on Our Farm
The boy lives on our farm, he's not
not

Afear'd o' horses none!
An' he can make 'em lope, er trot,
Er rack, er pace, er run.
Sometimes he drives two horses, when
He comes to town an' brings
A wagonful o' taters nen,
An' roasin' ears an' thins.

Two horses is "a team," he says—
An' when you drive er hitch,
The right'un's a "near horse," I guess,
Er "oll"—I don't know, which.
The boy lives on our farm, he told
Me, too, 'at he can see,
By lookin' at their teeth, how old
A horse is, to a!

I'd be the gladdest boy alive
Ef I knowed much as that,
An' could stand up like him an' drive,
An' jst push back my hat,
Like he comes skallyhootin' through
'Our alley, with one arm
A-wavin' fare-ye-well to you—
The boy lives on our farm!

How Many Can You Guess?

Why is bread like the sun? Because when it rises it is light.

Which was the largest island before Australia was discovered? Australia.

What trade should be recommended to a short person? Grocer (grow sir).

When is money wet? When it is due (dew) in the morning and missed in the evening.

What is the difference between the Prince of Wales, an orphan, a bald-headed old man and the gorilla? The first is an heir apparent, the second has ne'er a parent, the third has no hair apparent and the fourth has a hairy parent.

What is larger for being cut at both ends? A ditch.

Why is a watch-dog bigger by night than by day? Because he is let out at night and taken in in the morning.

Which is the most dangerous season of the year to walk in the woods, and why? In the spring, because the trees shoot and the flowers have pistils.

If the alphabet were invited out to supper, which of the letters would get there late? All those letters which come after "L."

What One Brave Girl Did

A few weeks ago the Toronto papers told about a brave deed done by a girl sixteen years old, a proof of what girls can do where there is need of it. The story is as follows:

About half-past 5 Wednesday afternoon a canoe containing three people upset about half a mile off the Island. The beach was crowded, several men being among those present. The unfortunate people in the water were clinging to the upturned boat and calling for help, but no one made any move to go out to assist them.

"Well," Rae Petrie said, "if no one else will go out, I will."

Miss Petrie has been in a canoe often enough, but does not claim to be an expert canoeist. In spite of this she jumped into a canoe which was on the beach and started out. A r'n on the beach called to her to come back and get some one to go with her, and she did so and persuaded a boy to get in the canoe with her.

They went out together and went alongside the upturned canoe. The people clinging to the boat were Mr. Murdock, Miss Cosgrave, and Miss Kidner. By the time Miss Petrie reached them Miss Kidner had let go her hold and had sunk once. When she came up Mr. Murdock caught her and held on to Miss Petrie's canoe. Miss Cosgrave also caught hold of the canoe.

In the meantime Miss Cosgrave, a sister, had started out in another canoe. Mr. Murdock got Miss Kidner into this boat and got in himself. Miss Petrie succeeded in getting Miss Cosgrave into her boat, and all returned to shore safely.

On landing Miss Petrie received quite an ovation, and has been the recipient of many congratulations.



Helping Mother.

By her pluck and prompt action she succeeded in preventing a very serious drowning accident, and all the Island residents are enthusiastic in singing her praises.

A Homesick Boy

Homesickness will drive the oldest and wisest to desperate deeds. What wonder, then, that to an eleven-year-old boy it is irresistible? The small son of a rector in one of the large cities, was sent to a preparatory school about thirty-four miles from his home. As a barrier between him and his family those miles seemed endless to the lad. He had been at school only three days when homesickness got the better of him.

He was walking out at noon recess with some of his mates when he remembered where the railway station

was. It ought to be easy just to follow the rails, and it had not taken "dad" and him very long to come by train. So he slipped off by himself.

The other boys did not think anything of it when their comrade cut off into the woods, but when the roll was called at dinner-time and he was still missing, things looked serious. Searching parties were organized; the older boys were sent out, and all night long the country was scoured, but when daylight came there was still no boy. The father was notified by telephone, and started at once for the school.

All this time the little runaway had been plodding steadily along the track. It was very lonely sometimes, and he grew so sleepy and tired that he longed to lie down and rest, but he kept on. All the time it seemed that it could not be much farther.

At last, just as the sun was coming up, he reached the ferry. He had five cents with which he intended to buy a ferry ticket, but a thirty-mile walk before breakfast makes a little chap very hungry, and he purchased a loaf of bread instead.

It did not seem exactly right to walk on the boat without paying, but he had to get home.

About five minutes after the rector had left the house on his way to the school, his son, heavy-eyed and sore-footed, trudged up and rang the bell.

"Weeah has yo' been, chile?" exclaimed the colored man who opened the door.

"I got homesick, that's all," replied the boy. "I want my slippers; my feet are tired."

A telephone message was immediately sent to the school. When the rector returned the little boy was timidly lurking in the shadows of the hall.

"I wanted to see you so, dad, that I just couldn't help it," he pleaded.

The clergyman opened his arms and the boy sprang into them. Everything was all right at last.

IN THE KITCHEN

Beating Eggs

When a recipe calls for "slightly beaten eggs," one should use eggs that have received about fifteen strokes of an egg whisk; eggs that are slightly beaten are not separated; that is, the yolk and white are beaten together, and when picked up on a fork, they will run from the tines. "Well beaten eggs" means eggs that have been beaten until they are light, and pale yellow in color.

Eggs should never be beaten in a tin vessel of any kind, as it is apt to impart an unpleasant flavor to the egg. Nor should a single egg be dropped into a large dish or bowl, where it is almost lost when one tries to beat it. Long, narrow beaters may be purchased, that will just fit into a tumbler, which is the best of all things in which to beat an egg.

When the white of an egg is to be beaten alone, it should be made very cold, first of all, and a pinch of salt added just before it is whipped. The white should be beaten in a narrow vessel like a cup or tumbler, for in this way it will froth more readily; two whites beaten separately instead of together, make more froth than they do when beaten both at one time. Eggs are beaten "to a froth" when they are sufficiently stiff to stand alone. They are "beaten till dry" when they lose their certain shiny appearance, and, when the bowl is inverted, fall out all in a lump, and leave the bowl without a trace of froth in the bottom.

Stray Hints

Eat less meat and more fruit and vegetables in hot weather.

If in ironing you scorch an article soap-suds and the hot sun will remove it.

Wash small fruits by putting them a few at a time in a wire sieve or colander.

Brush the stove-pipe over with equal parts of kerosene and linseed oil when put away for the summer.

If the children leave food on their plates, do not compel or hire them to eat, but serve them with less and avoid waste.

Bake your bread in small loaves and very thoroughly, else the uncooked germs in the centre will speedily destroy the loaf.

Ripe bananas, sliced thin and mixed with shredded pineapples or sliced oranges, make a delicious salad. Good for dinner on a hot day.

It is a misfortune for children to be untaught in table requirements. Unless they are observant, their lack of teaching will follow them through life.

In Season Now

APPLE TAPIOCA—One-half pound tapioca soaked over night in cold water. Make a quarter of a peck of apples into nice, rich sweet sauce. Put the soaked tapioca in the sauce and let cook slowly until the tapioca is dissolved. Flavor with lemon or orange peel; sweeten to taste. Serve with cream sauce.

PEACH SWEET PICKLES—Pare good ripe cling peaches, leaving in the pits. Heat over a brisk fire vinegar and sugar in the proportion of one pint of vinegar to one pound of sugar. Into each peach stick one or two cloves, and drop into the boiling

symp. Allow the peaches to cook slowly and seal in glass jars.

PEACH POPOVERS—Make a batter with two cups of flour, two teaspoonfuls of baking powder, one-half-teaspoonful of salt, two well-beaten eggs, and enough milk to just make it stiff enough to drop from a spoon. Butter deep iron gempans, and have them sizzling hot. Put a spoonful of batter in each, then a layer of thinly-sliced peaches, and some more of the batter. Bake in a quick oven and serve at once.

STEWED IRISH POTATOES—Peel and cut eight potatoes into long thin slices, and let them simmer gently for fifteen minutes in the following gravy: Into a hot skillet put three ounces of butter, and stir into it two tablespoonfuls of flour, one-half pint of broth and two tablespoonfuls of vinegar. Add salt and pepper to taste; also a bay leaf.

When You Break Things

A capital cement for broken china and bric-a-brac that can be made at home is obtained by mixing half an ounce of gum arabic with half a teaspoonful of boiling milk and adding enough plaster of paris to produce a creamy paste. To use successfully have the pieces that are to be mended warm and apply the cement warm with a small brush. Objects repaired with this cement have to be set aside for a week before they can be used, but after that they can be washed in either warm or cold water with safety. Soaking, however, they will not stand.

Household Helps

Common wheat flour put into a dry spider or frying pan, clean from grease and dirt and then set on a hot stove and constantly stirred until it becomes scorched a light brown color makes the best powder for chafing. Put in a bottle to use when needed. It is the best thing to use on young infants, and will heal when all other remedies fail. It is far superior to talcum powders for all chafing on old or young.

Cornstarch will remove grease most effectually. Rub a little fresh, dry corn starch into the soiled place, and it will at once begin the process of absorbing the grease. Brush the used off carefully from the garment, and proceed in the same way with more until the disfigurement has entirely disappeared.

In cutting breakfast bacon lay the rind side down on the meat board, cut down to the rind as many slices as are needed, then cut it off in a block. Turn edgewise and cut off one end, then the other end, the inside, and last the rind, and you will have trimmed all the slices nearly as quickly as you could have trimmed one.

In making hard sauce for puddings, it improves the flavor very much to let the butter brown before beating in your sugar a little maple syrup and flour, adding your boiling water after the other ingredients are well blended. When maple sugar is scarce, add three times as much granulated sugar as syrup, a little water, and boil till it is syrup. Do not boil too long or it will all return to sugar when cold.

Results from common soaps; eczema, coarse hands, ragged clothes, shrunken flannels.

SUNLIGHT SOAP

REDUCES EXPENSE

Ask For the Octagon Star

Splendid Cook Book FREE

THIS book is without doubt, the best of its kind ever published. The price of one dollar is really far too low. Ten dollars would not cover the value of the useful information contained in this excellent volume.

One of the notable features is the latter portion of the book which is devoted exclusively to sick room cookery; and the treatment before the doctor arrives, of persons suddenly taken ill or meeting with an accident.

The book contains altogether, over one thousand recipes which have been most carefully compiled, with the help of friends in the British Isles, France, Germany and the United States.

Grouped together in black-face type at the commencement of each receipt, is a statement giving the kind and quantity of ingredients required. The book is bound in substantial oilcloth cover for the kitchen.

We will send the book free to any one sending us two new subscriptions at 60c. a year.

ADDRESS

The Farming World

90 Wellington St. West
TORONTO, ONT.

HEALTH IN THE HOME

How Much Food to Eat

How shall one determine how much food to eat? Too much mystery has been thrown about this subject. Let your sensations decide. It must be kept in mind that the entire function of digestion and assimilation is carried on without conscious supervision or concurrence. Satisfaction is had. It imparts a sensation of fullness in the region of the stomach, and that means that too much food has been taken. The exact correspondence in a healthy animal between the appetite and the amount of food required is extraordinary. As a rule, the meal, unless eaten very slowly, should cease before the appetite is entirely satisfied, because a little time is required for the outlying organs and tissues to feel the effects of the food that has been ingested. If too little has been taken, it is easy enough to make it up at the next meal, and the appetite will be only the better and the food more grateful.

No one was ever sorry for having voluntarily eaten too little, while millions every day repent having eaten too much. It has been said that the great lesson homeopathy taught the world was this: That, whereas physicians had been in the habit of giving the patient the largest dose he could stand, they have been led to see that their purpose was better subserved by giving him the smallest dose that would produce the desired effect. The lesson is the same. Instead of eating, as most people unfortunately do, as much as they can, they should eat the smallest amount that will keep them in good health.

Care of the Hands

To treat grimy hands begin with rubbing them well with cold cream, or even with a little pure melted tallow. When the grease has loosened the soil, then wipe it off with an old rag or piece of soft paper, and wash the hands in warm water. Use a good soap and a nail brush, rinse in cold water and dry thoroughly. Very few women take time to dry their hands properly, and then they wonder at them becoming coarse and chapped. The housewife who has much to do in the way of dusting and cleaning should save her hands by wearing housemaid's tan gloves as much as possible, and on going to bed, after washing her hands with warm water, she should apply to them a little glycerine and rose water.

How Much Sleep is Necessary

A proper amount of sleep is, of course, absolutely essential to continued good health, but, if dietic habits are correct, it is a matter which will regulate itself. If a rule is needed, one will follow naturally from the fact that almost everyone feels languid on waking, and is disposed to take another nap, no matter how long he has been sleeping. This is a morbid sensation which it would take too long to explain here. It is enough to say that lack of sleep should be made up, if possible, at the beginning and not at the end. The best general rule is to rise at a given hour every morning, whether tired or not, and go to bed when sleepy.



Nothing Succeeds Like Success

The popularity of the New Century Ball-Bearing Washing Machine is the best evidence of its success.

The universal praise of it, who see it in our best advertising, and read the kind things said about it in letters from our friends who believe the New Century is entitled to a place in the Hall of Fame. We will mail you a booklet describing it on application. Sold by local dealers everywhere at 95¢.

THE BIRDSEWELL MFG. CO. LTD., HAMILTON

SUNDAY AFTERNOON

Constant Prayer

Tell Him the Lord.
Tell Him about the heartache,
And tell Him the longings, too;
Tell Him the baffling purpose,
When we scarce know what to do;
Then, leaving all our weakness
With the One divinely strong,
Forget that we bore the burden,
And carry away the song.
—Margaret E. Sangster.

God's Plans and Ours

God's plans are so much larger than our own that the two naturally come into collision. Our plans may include the ease and comfort of doing what we like best. God's plans value our ease and comfort but little, and our growth in goodness and usefulness a great deal. So He wrecks the nest nests we have made for ourselves, drives us out to new fights, constrains us to finer efforts. Meanwhile we mourn over the wreck of our lives, forgetting that life is not the gathering of pleasant surroundings, but the outgoing of effort and affection for others.

What is Dying?

I am standing upon the seashore. A ship at my side spreads her white sails to the morning breeze, and starts for the blue ocean. She is an object of beauty and strength, and I stand and watch her until she hangs like a speck of white cloud just where the sea and sky come down to meet and mingle with each other. Then someone at my side says: "There! She's gone!" Gone where? Gone from my sight that is all. She is just as large in mast and hull and spar as she was when she left my side, and just as able to bear her load of living freight to the place of her destination. Her diminished size is in me, and not in her.

And just at that moment when someone at my side says: "There! She's gone!" there are other eyes that are watching for her coming; and other voices ready to take up the glad shout: "There she comes!"

And that is—"dying."

Religion and Work

Give me the man who loves his work, However hard it be,
Who only thinks it mean to shirk,
And hates the hired man's plea,
Though hands and face be hard and brown,
That is a trivial thing,
Who wears his duty like a crown
Is every inch a king.

Friends With God

God would have us know how perfectly natural our relationship to him may be. If you walked by your friend's side and did not say a word to him, it would become more and more difficult for you to speak to him. On the other hand, the more you speak the easier it becomes. So with the dear Lord. Speak to Him about everything that comes to you. Say, "Good-morning, dear Master," when you awake. Ask His help constantly, even in little things. Say to Him, quietly, again and again, as you work or walk, "Dear Lord!" Speak to Him all the time, and see how near He will seem.

Add to the Home Comfort
by Purchasing a

BELL PIANO or ORGAN

Nearly 125 000 in use
Give Great Satisfaction

BUILT TO LAST A LIFETIME

BY THE
BELL PIANO & ORGAN CO.,
LIMITED

GUELPH, ONTARIO

Catalogue No. 41 free. Send for it.

MAGIC

TRADE MARK

SODA

OR
SALERATUS
IS THE BEST.

E.W. GILLET COMPANY LIMITED
TORONTO, ONT.



Dress for the Housewife

I do not know that the dress of the farm housewife should differ materially from that of any other housewife. The most essential thing is neatness; that is why the real one of everyone. All can be clean and have the appearance of being in the best condition possible, no matter how worn the apparel is. It is very easy to draw two pictures from life. Let us see to which we would give the preference. There are two ladies living side by side, families the same size, they are equally good cooks and all other conditions about the same. Mrs. A has been doing up the morning's work and is now preparing dinner, the same as Mrs. B. Mrs. A is dressed in a print dress that shows evidence of having been recently laundered, her hair is neatly combed and everything in the kitchen gives one a general idea that pains are taken with all pertaining to the work and people. The dining table is covered with a clean blue and white tablecloth and the dishes are neatly arranged.

On going over to Mrs. B's, things were in a very different state. Her dinner seemed to be in the same stage of progress, but what a change—the floor was littered all over, a fine linen tablecloth, covered with spots and rings where soiled dishes had been set, was carelessly spread, while the dishes looked as though they had been thrown at the table. The appearance of the lady was most repulsive, and fairly turned one against the meal. Her hair did not look like the winter comb had been near it that morning, her dress was a very rich material and at one time had been a very beautiful garment, but as it had been worn every morning all through the winter and was not washable, it was a foul affair. All of the odor of the cooking and kitchen clung to it, the trailing skirt swept up the litter as the wearer moved around about her work and sweeping days had filled it with dust.

After making a careful study for some years of the work-dress question, many ladies have decided that something in wash goods is the most satisfactory. While a doubt as to the warmth may be made an argument against them, it is a very easy matter to use extra underclothing for warmth, and as the dresses are so much easier laundered without lining, it is advisable to make them without. So far as possible the weight of the clothing should be given to the shoulders instead of the hips, consequently the wrappers are chosen. While these in the fashion plates may look stylish and neat left loose, they look far from it in the kitchen, so by all means keep them in place either with belts fastened to the side seams or with a neat kitchen apron. It is not economy to buy either the cheap gingham or prints for aprons and dresses, as they lose their color and do not begin to wear with those at about a shilling per yard. And above all things else have the work dress clear the floor, so that it does not drabble in everything or have to be held up at every turn.

It is neither a waste of time or energy to put on a dress that has been kept on purpose for the washing and scrubbing, as this is very hard on the color of the dresses.

Hemming Table Linen

Some one has made a very clever little discovery anent that troublesome work of hemming table linen!

Hand-hemmed it must be, of course; but, thanks to this bright idea, the machine can still be made to do the greater part of the work, says the Philadelphia North American.

Here is the suggestion: Have your tablecloth ready, as if to sew by machine, and turn the hem all along with the hemmer, but without threading the needle. This turning in of the hem is, every one knows, the most laborious part of the task.

With this accomplished, it is a comparatively easy matter to complete the sewing by hand.

How to Have Fresh Ribbons

It is the small things that contribute most to a girl's neat appearance, and nothing detracts more from the look of a girl than soiled or wrinkled ribbons, if she wears them on her hair or for her neck and it is necessary to take care of them if she would like to keep them fresh and dainty looking. The ribbons will keep clean longer and look far dantier if they are smoothed out after each wearing and wound carefully over a roller. A small toy rolling-pin is nice for this purpose, and can be bought for a trifle. When the ribbons have become wrinkled they can be freshened by damping slightly, on the wrong side, then lay them on a clean board and leave them to dry. In cleaning ribbons, great care must be taken to keep them from becoming creased, as the creases are very hard to remove, and the best way to clean them is to lay them on a smooth, clean table and scrub with a small brush, or a piece of the ribbon dipped in the cleaning fluid. Black ribbons can be freshened by sponging with well strained cold coffee or with equal parts of alcohol and water, and if any stiffness is desired, rub the ribbon with dissolved gum arabic and water and leave it to dry. Short lengths of ribbon can be dried by drawing them smoothly over a marble-top table or a large window-pane, when they will require no ironing but will have a fresh, new appearance. Many use gasoline for cleaning ribbons, and it cleans readily, but is liable to leave a yellow tinge, and the most satisfactory method of cleaning ribbons is to sponge them with a warm pearline suds and if they are carefully cleaned and pressed they come through the process looking as good as new. After rinsing the ribbons, smooth with the hands and hang on the line to drip, and when partly dry, iron on the wrong side with a piece of thin muslin between the iron and the ribbon, but for black ribbons a piece of thin black goods should be used.

Little Weather-Wise

Rosy little Dimplecheeks
Came panting in from play,
Tired out and sleepy, too,
'Twas such a scorching day.

On my knee she dozed awhile,
Then said, as up she looked,
"Folks called winter weather raw;
I think *this* must be cooked."

PRESSED
ZINC
ORNAMENTS
WRITE FOR PRICES
METALLIC ROOFING CO
LTD.
TORONTO, CANADA.

Farming Pays

In NEW ONTARIO

Write for descriptive pamphlet and maps

Algoma,

Thunder Bay,

Rainy River,

Nipissing,

Temiskaming

—TO—

Hon. E. J. Davis,

Commissioner of Crown Lands, Toronto.

Not long ago in a large town in the south of England, an Irishman gave a dinner party. One of the dishes mentioned on the menu was "roast fowl." He asked the lady on the right what part of the fowl she preferred. "Oh," said she, "I'll take a leg, please." The asked another lady on his left which part she preferred. "Oh, I'll take a leg, too, please," said she. After asking two other guests and receiving requests for a leg, Mike dropped the carving knife and fork and exclaimed, "Faith, and what do you think I'm carving at all, at all—a centipede?"

Fruit-a-tives
or Fruit Liver Tablets

are fruit juices in tablet form. They contain all the tonic and laxative properties of fresh fruits—and are a certain cure for Stomach, Liver and Kidney Diseases. At Drug-gists. 50 cents a box.

FITS

Leibig's Fit Cure for Epilepsy and kindred ailments is the only successful remedy, and is now used by the best physicians and hospitals in Europe and America. It is confidently recommended to the afflicted. If you suffer from

EPILEPSY, FITS, ST. VITUS' DANCE or have children or relatives that do, or know a friend that is afflicted, send for a free trial bottle and test it. It will be sent by mail prepaid.

Leibig's Fit Cure brings permanent relief when all else fails. When writing mention this paper, and give full name and address to THE LEIBIG CO., 179 King St. W., Toronto, Can.

CURED

Some one has solved the problem and offers the following explanation why a locomotive is called "she":

"It wears a jacket, an apron, has hose, and drags a train behind it. It has a lap, needs guides, rides wheels, and will not turn for pedestrians; sometimes foams and refuses to work. It attracts the men sometimes, is contrary, and always takes a man to manage it."

—Detroit Evening News.

Some Live Farm Topics

Some Advantages of Soiling Crops

Among the advantages of soiling, if put into practice on the average Ontario farm, is that of saving land. Those who have given it a full and fair trial state that one acre of soiling crops will produce as much food as three acres, and some good authorities place it at four acres, in pasture. The saving will just be in proportion to the number of acres sown. If this be correct, it then follows that for every acre used for growing soiling crops, it leaves two acres more available for growing the other crops of the farm, or, in other words, a farmer, owning a good tillable farm of 100 acres, can, by keeping the same quantity of stock, have at least twenty acres more under grain crop. And the land under the plow would be kept in as high a state of fertility, owing to the large amount of summer made manure of the richest quality, which under the pasturing system, would be in a great measure lost.

Farmers' Bulletin, No. 16, of the United States Department of Agriculture, in discussing soiling, or feeding animals largely or wholly on green forage crops in the barn instead of pasturing them, says: Less land is required to maintain a given number of animals. The food supply can be better regulated. The animals do not waste their energy in searching for food, and the manure can all be saved and applied to the soil. The arguments for partial soiling are that the amount of feed furnished by pastures is very irregular, being usually abundant and of good quality early in the season, but falling off later from droughts or early frosts. In the case of milk cows, unless some supplementary food is given at such times, the milk flow diminishes, and the cows fall off in flesh.

Concerning the relative amounts of food furnished by pasturing and by soiling, the Pennsylvania Experiment Station found that in round numbers they could produce from three to five times as much digestible food per acre, by means of soiling crops, as is produced by pasturage, such as is represented by their small plot. The plot in question was believed to fairly represent the average pasturage. From feeding trials with soiling crops (rye and corn, clover and corn) and pasture grass, the average yield of milk per acre was calculated as follows:

Yields of Milk per acre.

1888.	1889.
Soiling produced.....	3,416 5,674 lbs.
Pasturing produced.....	928 1,504 lbs.

Though the above is partly an estimate, it points very strongly in favor of soiling.

Trials at the Experiment Station of Wisconsin showed that by soiling in summer a certain area of land will yield double the amount of milk and butter that it will when pasturized.

The Connecticut (Storrs) Experiment Station maintained four cows from June the first to November the first on a little less than two and one-half acres of soiling crops, with the addition of a very light grain and straw feed.

At the Ontario Agricultural College about three-fourths of an acre of soiling crops (green clover, green peas, tares, oats and corn fodder) was sufficient with the addition of 240 pounds wheat bran for two cows for sixty-three days. We might expect, therefore, to grow on about an acre sufficient green food to feed a cow to hundred days, under ordinary conditions.

One of the arguments used in favor of a general system of soiling is that

it does away in a large measure with the necessity of having so many fences on the farm. This saves a considerable annual expenditure for repairs and maintenance, and does away with the propagating ground for foul weeds of all sorts. Besides it adds to the available acreage for crop growing to the extent of large land occupied by fences under the ordinary system.

The experience of some of the successful breeders and feeders, leads them to believe that they get better results by a part soiling and pasture system, than by full soiling. It is claimed that stock is the better for being turned to pasture at night, especially during the hot months. And certainly there are many things to be said in favor of this plan. Still, if cattle are fed in the stable with soiling crops and turned out into a small paddock or yard for the night, they will get sufficient exercise and be free from flies and heat during the day, thereby obtaining better results.

One of the greatest benefits to be derived from soiling is the large increase in the manure supply. By the soiling system all that is made is saved, and can be applied to the land in the best form. When soiling is practiced to any large extent, it is safe to say that the extra value of the manure, quantity and quality considered, is more than enough to meet all the extra expense of labor in cutting, hauling and feeding soiling crops.

Another important consideration is that soiling will, if properly managed, clear the foulest land of all noxious weeds. This may be set down as a very strong point in favor of the system. Tens of thousands of acres of the most fertile lands in Ontario are comparatively worthless from no other reason than that the white daisy, mustard, wild oat, thistles and other noxious weeds occupy the soil to such an extent that there is hardly room left to raise a crop sufficiently remunerative to pay for the labor. When the system of soiling is gone about intelligently, weeds are not allowed to mature. Annuals cannot withstand a second cutting. Perennials are cut before the seeds form and as every successive crop is cut green they must give way. Soiling certainly seems to be the surest and cheapest way of cleaning land when it has become excessively dirty.—A. P. MacVannel, Perth Co., Ont.

Building Farm Houses

Suppose those of us who contemplate the building of a home, as well as the house, should spend a little time in planning it first, and be very sure we are right before we go ahead. I think there is hardly any one, even those who have just completed new houses, who would not build just a little differently if they were to do it over again.

Now let us try to avoid, as far as possible, this unpleasant conclusion.

In the first place, there are few to whom the expense is not of major importance, and I am sure these will find themselves well repaid by careful planning beforehand.

We are about to commence building a home that has been erected, finished, and altered over at least a dozen times in our brains, and we think we have got it down pretty fine at last, for it is at least six months since we have changed it. Builders used to tell us to dig the cellar, and fill it solidly full of lumber and pile as much more on top; to buy all the nails we could possibly need, and then add as many more, in order to be sure we had enough. But we are going to get out of that difficulty by building concrete instead

of timber, and that for several reasons.

Concrete, well built, is the warmest dwelling that can be erected; for, if window and door frames are well fitted, and the composition worked closely around them, the whole is practically airtight; no wind can penetrate.

Secondly, it lends itself more readily to different forms of construction. For instance, we propose to put our dining room out separate from the main building, being connected only at one end, and the opposite end we want to build oval in form. Now this would be somewhat difficult of accomplishment if built of timber, and probably we should have to employ more skilled labor than the men on the farm afford.

But I have made a pretty thorough study of the subject, and am sure that that particular shape will be as easily built as any other, after the molds are once constructed.

We want to build our hall door *zwecken*, I suppose, and I can assure you, for that is the appearance they present as if they had moved inward a couple of feet before they decided to stop there; but there is no form of door within our acquaintance which gives such a dignified appearance to the house it beautifies as this does.

Take such a door as this, in a solid stone house—or one that looks like solid stone—and it is very hard to improve upon.

Another thing; such a house when once thoroughly dried and hardened, is practically one solid stone, from foundation stone to eaves, and the years only make it a little dryer and more solid.

One, in building, should consider not only the needs of today, but as far as they can be comprehended, those of tomorrow also. For instance, have you children growing up who will want to gather their mates about them by-and-by? Is your property increasing, and are you hiring more help constantly? Well, then, why not make allowance for the "slap over" now, as well as when it is worse needed.

Many houses are built too small, but few are too large, if within the means of their owners. But I would rather live in two rooms that were my own, than in a palace some capitalist held a mortgage on. Cut the pattern according to the cloth every time, but be sure you use all the cloth.

And, if possible, if you are not of the "rolling stone" variety of people, but are building for the rest of your life, build in the cupboards, bookcases, sideboards, etc., and don't make the mistake of thinking any of these things are needless. Trust your wife to find plenty of things for the sideboard and the few books you have will look so lonesome you will soon get some more to put beside them. Remember, we none of us, ought to live entirely for the sake of putting money in our pockets, but for our families, our fellow men and the credit of the country; and this depends very largely upon the appearance of the farmsteads.—F. Holmes.

Canadians are the Men to Do It.

The *North British Agriculturalist*, referring to the new Canadian Seed Growers' Association recently formed at Ottawa, says:

"There is no doubt that great good can be done in this way, and the Canadians are the men to do it. In our own country the seed of our farmers has not left so much for our farmers to do in this line, but the enterprise of their Canadian competitors may well stir them up to leave nothing undone in the way of doing the seed of the very best and most productive kind. The extra cost of such seed will be repaid a hundred-fold in the greater yield and superior quality of the crop grown therefrom."

A Page About Live Stock

Judging Ages in Stock

At the Smithfield and Birmingham shows the following rules govern the judgment of the age of animals:

Cattle having their central permanent incisors cut will be considered as exceeding one year and any of the first three permanent incisors fully up will be considered as exceeding two years and three months.

Cattle having their third pair of permanent incisors cut will be considered as exceeding two years and eight months.

Cattle having their fourth pair (corner) permanent incisors fully up and their anterior molars showing signs of wear will be considered as exceeding three years.

Sheep having their central permanent incisors cut will be considered as exceeding ten months.

Sheep having their central permanent incisors fully up will be considered as exceeding twelve months.

Sheep having their third pair of permanent incisors cut will be considered as exceeding fifteen months.

Sheep having their third pair of permanent incisors fully up and the temporary molars shed will be considered as exceeding twenty-four months.

Sheep having their corner permanent incisors well up and showing marks of wear will be considered as exceeding three years.

Pigs having their corner permanent incisors cut will be considered as exceeding six months.

Pigs having their permanent tusks more than half up will be considered as exceeding nine months.

Pigs having their central permanent incisors up and any of the first three permanent molars cut will be considered as exceeding twelve months.

Pigs having their lateral temporary incisors shed and the permanents appearing will be considered as exceeding fifteen months.

Pigs having their lateral permanent incisors fully up will be considered as exceeding eighteen months.

Compensation for Stock Slaughtered

Hon. Mr. Fisher has given notice of an amendment to the animal contagious diseases act by adding "maladie due coli" to the list of contagious diseases, and providing that in case of animals being slaughtered the compensation, if any, shall be two-thirds the value of the animal before infection; except where the animal was not slaughtered justifiably, the full value of the animal shall be paid. The limit of value to be placed upon any of the slaughtered is fixed as follows: Grade animals—Horses, \$150; cattle, \$60; sheep or pig, \$15; and for pure-bred animals, horses, \$300; cattle, \$150; sheep or pig, \$50.

Colic in Horses

A prevention of the principle and most frequent exciting causes of colic will be effected if the horse is always regularly fed; if the food is sound, wholesome and digestible; if feeding a heavy meal immediately before and after severe exercise is avoided; if no food which has a tendency to ferment or that is rich in alkalies is given; if no ice-cold water is given to drink or, when it can not be avoided, only in small quantities, and never when the horse is perspiring or has an empty stomach, and if meal or bran is given as food, that it be thoroughly moistened. Absolute and relative overfeeding undoubtedly constitutes a frequent cause

of colic, especially in animals in which the necessary predisposing causes are already existing. Too large a quantity of food in the stomach and intestines not only requires an increased activity of the digestive apparatus and consequently an increased supply of the digestive canal with blood, but also retards and impedes the peristaltic motions, and by expanding the abnormal cavity and pressing upon the diaphragm, decreases the space in the chest and thus interferes more or less with the functions of the heart and of the lungs, and in consequence, with the decarbonization of the blood and the regularity of its circulation.

Why Sows Eat Their Pigs

That veteran swine breeder, Theodore Louis, has this to say as to the reasons why sows eat their young:

"The first cause of pig eating is constipation of the sow before farrowing, which is produced by improper feeding, and hence is easily avoided. In this condition, probably long continued, the sow farrows, a fever results, caked udder follows, it becomes inflamed, sore to the touch, and terribly painful when attacked by hungry pigs eager for their natural sustenance. A passion amounting to insanity follows, a falling that human beings are not always exempt from, and the sow chooses the shortest route to what she thinks is relief. That condition of the udder should have been known, if not prevented, and it should have been bathed with hot water and then rubbed with an ointment made of one part turpentine to two parts lard, applied while warm. Relieve costiveness and give a dry, warm bed, and in a few hours the soreness will be so allayed that the pigs may nurse with safety. A good physic in such cases is a piece of salt pork cut in the centre down to the middle; put in the slit a tablespoonful of calomel for a large sow, proportionately less for a smaller one. Feed a few small slices of pork without calomel first. This seems to modify the appetite for young pig. But the best way is to prevent constipation in the first place.

Another cause of pig eating is the tusks of young pigs, which often inflict painful wounds that the sow madly resents by scattering her pigs in all directions. With a pair of pinchers remove the tusks, and if the sow is in good condition there will be no trouble. The sow does not eat her pigs because she loves them so, but for reasons that proper feeding and care will always prevent.

Condiments for Live Stock

Is condimental food necessary for the use of our live stock? The question may be answered by asking another—Are condiments necessary to the human race? If we derive any benefit either to our palate or our digestion by the use of such things as salt, mustard, pepper, pickles, sauces, etc., it is manifest that the corresponding articles must have a like use to the lower animals. The value of such is due to various results; they stimulate the flow of saliva in the mouth, they stimulate the flow of gastric juice in the stomach, they act as a tonic or a medicine, while if the food is not very palatable, they improve it in this respect. Salt itself is absolutely necessary not only as a matter of taste or palatability but as an ingredient of the blood—only one-half of the total solids of the same being ordinary salt, and giving a brackish taste to it. In ad-

dition to this, however, there cannot be the least doubt, that the absorption of some other bodies into the system has a beneficial effect, such as sulphur, black antimony (sulphide) iron sulphate, saltpetre, etc., among mineral bodies with fenugreek, gentian, aniseed and ginger amongst herbs. The basis of most condimental foods is maize meal, with which the other ingredients are mixed and ground into an exceedingly fine condition. A mixture of 10 to 12 pounds of these various ingredients along with 100 lbs. of meal makes a very good home-made spice, and at very much less than the usual price for the ready-made article. One thing about condimental food must be kept in mind; "blunt" the stomach, and its efficacy will cease after a time. Its value lies in making musty food more palatable, in stimulating the stomach when an animal is "off its feed," in forcing the body to the ready animal for a certain period, and so on—its continuous use not being desirable.—The Dairy.

Prevention of White Scours in Calves

The board of Agriculture and Fisheries of Great Britain recommends the following procedure in treating calves for white scours:

DISINFECTING OF PREMISES

The floors of cow-houses and calf-houses should be thoroughly cleaned and disinfected at least once each week with a solution of blue-stone (2 lbs. of blue stone to every 3 gallons of water). The floor of the calf-house should be of concrete, and must be swept daily and disinfected with a solution of blue-stone of the above strength.

NAVEL TREATMENT

(a) When the cow is about to calve place a good layer of clean fresh hay or straw behind her to keep the calf clean.

(b) When she shows signs of calving her "bearings" should be washed with a warm 2 per cent. solution of lysol in rainwater. The same solution of lysol should be injected into the passage through which the calf is to be born.

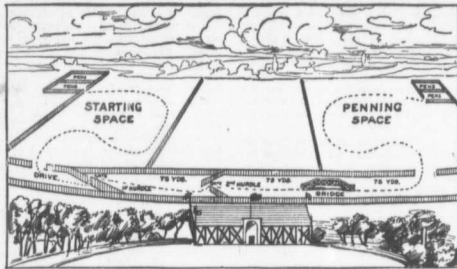
(c) The navel cord should be tied immediately at the birth of the calf with twine which must be kept ready in a solution of lysol. The person who is to tie the cord should first rub and wash his hands in a solution of lysol.

(d) Immediately the cord is tied the portion adhering to the calf and the surrounding area must be well painted with a solution of iodine in methylated spirits (50 grains of iodine to two pints of methylated spirits).

(e) After a few minutes the navel cord must be painted with a layer of collodion containing 1 per cent. of iodine, or Stockholm tar may be used for this purpose instead of collodion and iodine.

Separated milk should not be given until the calf is four weeks old. The change from new to separated milk should be gradual. The calf should have a substitute for the cream removed by the separator. One or two oz. per day of the best cod liver oil, or a mucilage prepared by steeping flax seed or good linseed cake in hot water, will be found useful for this purpose, if the quantity is carefully regulated in accordance with the state of the bowels.

No Use.—"Don't you think it would be a good idea to send our beloved pastor abroad?"
"But he wouldn't stay."—Life.



The class for the sheep dog trials at Toronto Fair seems to have filled a long-felt want, judging from the number of enquirers for the special circular regarding these trials, and many owners of dogs in the United States and Canada have already signified their intention of competing. The above diagram represents one of the trials the dogs will have to undergo.

Correspondence

Killing Weeds and Thistles

Editor THE FARMING WORLD:

I notice an article in THE FARMING WORLD entitled "Weeds and Thistles." I will give you my plan of getting rid of these pests. I may say that I have very little trouble with either. In the first place, I keep all weeds and thistles out on the highway. I only plow a plot of ground twice or three seasons, and re-seed again, using plenty of the best seed I can get, mostly clover—on high land red clover, on low land alsike. I had good results getting rid of daisies by turning down sod in the fall, sowing oats the following spring, and seeding heavily to timothy directly after the crop is taken off; then top-dressing with manure the following winter. It is a mistake for farmers to have a larger hoe crop than can be kept clean. If more clover were sown and more attention paid to weeds in fence corners and on highways, there would be less trouble in keeping weeds down. D. F. ARMSTRONG,
Leeds Co., Ont.

Winter Manuring

Editor THE FARMING WORLD:

This is a subject that has been discussed a great deal lately, and perhaps my experience on the subject might be of some use.

In the first place I will give my reasons for being in favor of winter manuring.

Firstly, I think manure can be applied cheaper in the winter, as most farmers are not very busy at this time of the year, consequently the time is not as valuable as it is in the spring when they ought to be rushing in the crop. Secondly, I think when the manure is applied in the winter, it gives the spring rains a chance to soak the decomposed manure into the soil instead of washing it away as some writers think, and also helps rot the coarse manure that is left, so that by the time the land is ready to work it does not gather under the plow-beam or clog the cultivator teeth as it does when applied in the spring. Lastly, I think, and a large number of the best farmers I believe are of the same opinion, that the fresher manure is applied the more valuable it is. When it is piled in a large heap to rot, part of it will be almost useless by the time all of the heap is rotted. The reason why some of it is spoiled is this: the large heap generates so much heat that the bottom and middle of the heap is burnt until there is but very little fertilizing matter left in it.

Manure properly applied, we all know, is very beneficial to the soil, inasmuch as it supplies much of its lost fertility, but manure can be so applied as to be an injury instead of a benefit.

Always try to apply your coarse manure to clay soils; as they need something to keep them porous as well as to fertilize. Do not apply coarse manure to loamy soil, as it keeps it too open and it will consequently dry out. Never apply manure to such growing crops as roots or potatoes, as it injures instead of benefits them.

For two years we have applied as soon as possible after the ground froze up a top-dressing of manure to our winter wheat. It keeps the snow from being all blown off, leaving it exposed. It also protects it in the early spring as well as fertilizing it.

Where a manure spreader is used the manure will have to be applied after it freezes up in the fall and before the snow comes.

"LARK"

Weeds

Editor FARMING WORLD:

Now is the time of year when nearly every variety of injurious weeds are fully developed that deplete our fair province; now is the time of the year for the farmer to practice some of the methods adopted to destroy injurious weeds. The Canada thistle, that creeping perennial with underground stems and spreads by the roots, is with us now in flowering bloom, and is a terror to an up-to-date farmer. The methods adopted to destroy are so simple we wonder one is allowed to thrive. There are several methods used by the practical farmer; one method is this and it requires a little hard work: Dig out every root, or mow off when in full bloom, and then use the plow two weeks later to keep the surface well cultivated and leaves from forming. If you are blessed with a small patch, they can be smothered out by putting a manure pile or straw stack over it.

Weed-destroying methods are of the utmost importance to the farmer. Weeds are the source of a great loss to farmers. They rob the soil of moisture and plant food that useful plants should have. The harm that weeds do is legion and too numerous to mention. Like all other plants, weeds are classified perennial, biennials, winter and summer annuals. If we want to get rid of them study their habits and the methods of eradicating them.

P. E. Buchner, Norfolk Co., Ont.

Distributing Grants to Agricultural Societies

In a recent letter to H. B. Cowan, Superintendent of Fairs for Ontario, regarding the distribution of grants to agricultural societies, C. W. Peterson, Secretary of the Territorial Live Stock Association, says:

"There cannot, in my opinion, be any question whatever that the most equitable and satisfactory manner of distributing grants to agricultural societies is on a basis of the actual amount of money paid out in prize money for legitimate live stock and agricultural exhibits. This basis of payment has been adopted in nearly all the Australian states and has been found very satisfactory there. Payment on a basis of membership seems to me to be a most antiquated and senseless arrangement. If the main object of the society is to hold a useful exhibition, it stands to reason that the measure of its success may be more correctly estimated by the volume of its agricultural exhibits than by the number of store keepers, professional men and others that happen to have joined the society by way of contributing a dollar to its funds. I do not think that the wisdom of the Territorial legislative provision in that respect admits of any argument. As far as I am aware all agricultural societies with the exception of a few that were in the habit of receiving a grant on a minimum membership basis without giving any adequate return therefor, are very much in favor of the distribution of the annual grant on a basis of actual performance."

The great unfairness of the present basis of distributing grants in Ontario is shown by the following:

It has been found that a township society near Toronto paid out in 1902 over \$2,800 for agricultural prizes, being the largest sum paid out by any society, either district or township, in the province for that year. Of the four societies which paid out the most for agricultural purposes, two are township organizations. One township society receiving a grant of \$80 paid out over \$1,000 in agricultural prizes, while a district society receiving a grant of \$800, paid out only \$1,128. One district society receiving a government grant of \$520, whose total receipts were \$4,420, paid out less than \$900 for agricultural purposes. Another district society receiving a grant of \$360, with total receipts of \$5,100 paid out about \$800 in agricultural prizes. Another society receiving a grant of \$350, with total receipts of over \$1,300 paid less than \$260 for agricultural work.

Among the township societies, one which received a grant of \$121, paid out only \$72 for agricultural prizes; another one receiving \$90 for a government grant, with total receipts of \$1,300, paid out but \$131 for agriculture. A third society receiving a grant of \$140 paid \$85 for agricultural work.

A Thrifty Scotchman

"Well, James, how are you feeling to-day?" said the minister, to one of his parishioners, an old man suffering from chronic rheumatism. "You are not looking as brisk as usual." "Na, sir," replied the old fellow sadly, "I've been very unfortunit the day." "How, James?" "Well, sir, I got a letter fra' Glasg lawyer body this mornin', tellin' me that ma cousin Jock was dead, an' that he had left me two hunner poum." "Two hundred pounds?" repeated the minister. "And you got it all in luck? Why, it is quite a fortune for you, James." "Aye," said the old man sorrowfully, "but the stiped lawyer body didna pit enough stamps on his letter, an' I had a hale saxeption to pay for extra postage."

QUESTIONS AND ANSWERS

Horse With Cough

Could you give me some satisfactory cure for a cough? I have a horse that has a hard, dry cough. He seems to be dull and hungry all the time. I feed three gallons of oats a day with hay. Also, I would like a satisfactory cure for itch on horses. They kick and stamp all the time.—Subscriber, Russell Co., Ont.

To give a satisfactory cure, one should know definitely the cause of the cough. A horse with lung trouble will usually have a dry, hard cough, which can easily be told on examination. Your horse probably has some stomach trouble. You had better diet it and give a laxative. Also change the feed and give something more succulent. A bran mash or something of that kind will help. A horse with bots or worms in the stomach will sometimes have a cough. There is no very effective remedy for bots. A mixture of two ounces of turpentine to one and one-half pints of milk, given three mornings in succession on an empty stomach will probably do as much good as anything else.

The itch may be caused by some skin disease or by lice on the body. If the former, give the horse some sulphur in the food. If due to lice and there are only two or three animals affected, wash the body well with English soft soap, which may be had at any drug store. If there are a number of horses affected, spray the animals with Pyrethrum powder.

ABOUT RURAL LAW

In this column will be answered for any paid-up subscriber, free of charge, questions of law. Make your questions brief and to the point. This column is in charge of a competent lawyer, who will, from time to time, publish herein notes on current legal matters of interest to farmers. Address your communications to "Legal Column," The Farming World, Toronto.

Draining on a Road

Q.—A's horse stands on the northeast corner of sideroad and concession. Two years ago A ran a tile drain from his cellar into an open drain which crosses the sideroad. The water runs over the sideroad and keeps it very wet. It would not do to put in a culvert here, and the only remedy is to run a tile drain from where A has left off draining, and continue about thirty yards down the road. 1. Can the township council compel A to put in tile on the road?—G. B. W., Ontario.

A.—1. No. But probably he should be entitled to cut off A's drain by a wall, or other means, so as to prevent the water from A's drain flowing into the ditch on the highway. Then if A could get no other outlet he would have to take the proceedings set out in R.S.O., Cap. 226. We assume that the water from the ditch would not flow over the highway unless the water from A's drain flowed into it.

Purchase of Machine

Q.—I bought a machine from the local general agent of the manufacturer. The agreement was that they should give me a machine with sickle and sheaf carrier for an old machine, and also repair the old machine. They did send me the new machine, but did not send the sickle

or sheaf carrier or repair old machine until winter. These goods were to have been delivered in June, 1902. 1. Can I sue manufacturer for damages for his failing to fulfil his contract in the Division Court here, or will I be compelled to manufacture a court (court of the division in which the manufacturer resides)? 2. Could they raise the question of jurisdiction?—J. S.

A.—1. The action must be tried in the division in which the defendant resides, or in which the cause of action arose. The cause of action would be the contract and the breach of the contract was made in your division, and the performance, i.e., the delivery of the goods and the repairs, was to take place there; you could sue it in your division. 2. The defendant could of course raise the question of jurisdiction, but whether or not he would succeed would depend on the above principles.

Cattle Trespassing

Q.—In the township in which I live cattle are allowed to run at large. My neighbor's cattle run on my land all the time, and of course, do considerable damage to it. 1. Can I force him to keep his cattle off my land if they come on by the public road?—A. A. C., Ont.

A.—If your land is properly fenced, and his cattle broke through the fence and came on your land, or even if they came through the gate while it was open for a lawful purpose, you could seize his cattle and hold them until he paid you for the damage done, or you could drive them out and sue him for the damage. But if your land is not properly fenced, you would have no remedy against him under the circumstances. You could merely drive the cattle off your land.

Horses Killed

Q.—P occupied about an acre of lot 30, adjoining the railway. His horses pasturing on another part of the lot, which he did not occupy, but to which he had no title, passed on to the track and were killed by a passing train. 1. Is P entitled to damages from the railway company?—G. L. V.

A.—1. No. P would not be entitled to call upon the railway company to fence across the part of the lot from which the horses escaped; and, therefore, the company would not be liable to make good the loss to P.

In and Around Quebec

Haying is half finished, and the crop is a good one. The weather has been variable since the first hay went down about July 1st, and not more than an average of three days a week have been hay days. This season has been a growing time, rain and sunshine have alternated sufficiently to keep things fresh and moving without a check. Potatoes, grain and roots all look splendid, but corn is not advanced as it generally is at this time. In places, the farmer claim that the seed has been bad, but that much of it failed to germinate, and what came up had little or no life in it. Occasionally a fine piece of corn is seen, but more frequently the reverse.

For many years, so great an abundance of fruit has not been seen. No late frost marred the promise of immense fruit crops which the spring blossoming indicated. Apples, plums, raspberries, strawberries, currants, gooseberries and blackberries weigh down the trees and bushes, while tomatoes and melons are very forward, and the market gardener should be in the happiest of moods.

Dairy produce is not as high as last year, and some disappointment among the farmers was manifested in April and May at the cheese and butter factory returns. Things mended somewhat in

June, for in addition to an increase in the value of butter, the pastures have been so good that the increased flow of milk has largely helped to diminish the difference which the low prices of dairy produce this season have caused in the factory returns.

On the Covansville Board on July 23rd, butter realized as high as 15¢ a lb. while cheese brought 7 7/8¢. 28 creameries offered for sale 1,780 boxes of butter, and 29 cheese factories boarded 2,004 packages of cheese.

During the meeting of the Board, in accordance with Mr. H. S. Foster's idea, subscription blank lists were given to many salesmen for circulation among those who desire to testify, by a monument, their appreciation of the work done by the late Hon. John McIntosh, M.P., for the farmer and dairyman.
H. W. P.

Prince Edward Island

Warm weather. Some of our farmers finished hay making on Aug. 2. As the weather was favorable most of the hay was saved in good condition. Good crops in some sections of the country, while in others hardly worth cutting. One North River farmer has a 4-acre field which yielded about 13 tons of excellent hay. Oats will be short on account of the dry weather. Our farmers find it necessary to give the potato bugs frequent doses of Paris green. Vegetables are well. Cherries and black currants are scarce, but blueberries, raspberries and gooseberries are very plentiful. There is promise of an abundant crop of apples and plums.

CHARLOTTETOWN MARKETS.

Beef, qr, per lb. 6 to 9c.; small 8 to 14c.; pork 5 1/2 to 5 3/4; bacon, small, 14c. per lb.; hams 14c. per lb.; cattle, dressed, 6 to 8c.; butter, tub, 17 to 18c.; fresh, 18 to 20c. per lb.; new potatoes, 50c. to \$1.00 per bus.; flour, per cwt., \$2.50; qr. bbl., \$3.50; straw, per cwt., 25c.; h. hay, 14c. per ton; eggs, per bus., 28 to 40c.; chickens, per pair, 50c.; gooseberries, 6c. per qt.; cherries, 20c. per qt.; blueberries, 6 to 8c.; bush beans, 4c. per qt.; peas, 10c. per qt.; codfish, 50c. per dozen; little pigs, \$3.50 to \$4.00 per pair.

SUMMERSIDE MARKET.

Hay, loose, \$11.00 per ton; oats, black, 25c.; white, 34c. per bus.; eggs, 13c. per doz.; butter, 16c. per lb.; beef, 5 1/2c., by carcass, 8 to 12c. retail; pork, dressed, 5 1/2 to 6c.; hides, 5 1/2c.; wool, 20c. per lb.; flour, \$1.50 to \$1.60 per cwt.; raspberries, 6c. per qt.; blueberries, 4c.; wheat, per bus., 75 to 80c.

An enterprising farmer living about five miles from the city, keeps 11 milk cows. He sends about 300 lbs. of milk to the Condensed Dairy factory, for which he receives 80 cents per cwt. Robert W. Phipps, 200, Leveson Road Farm, New Haven, has a large English Berkshire sow which has given birth to 34 pigs in ten months—11 the 15th of Sept., 11 in February and 19 July 20th. The sow is five years old and has given birth to 112 pigs.

There was a fair attendance at the Cheese Board on July 21st. The buyers present were H. Aitken of Carleton Place, E. T. Higgs of H. Hayward, R. E. Spillet, A. J. Biffin and John Wheatley. The cheese boarded was Red Pot 50, Lakeview 130, St. Peters 100, East River 84, Stanley Bridge 200, Red House 83, New Perth 140, Haylebrook 94, Hillsboro 130, Kensington 550, Union 120, Dundas 110, Cornwall 122, Gowen Brae 85, Winslow 70, Kinkora 150. The highest bid offered was \$7.15, Aitken of 7 1/2c., but at this price none of the factory representatives would dispose of their lots. The bid was increased by E. T. Higgs to 7 3/8c. This price was accepted by Union, Dundas and Cornwall.

Webster Vaniderstine of Midgell Mills recently purchased for a handsome sum J. F. Hayden, Vernon River. This animal was sired by the famous Kinlwick, Jr., and the mare a hackney. Mr. Vaniderstine intends keeping him for breeding purposes, and will place him on exhibition this fall. A. R.

Exhibition of Seeds

The Seed Division, Ottawa, has arranged an exhibition of seeds to be held in connection with the Provincial Winter Fair at Guelph. It will be open to operating members of the Canadian Seed Growers' Association, who are urgently requested to make exhibits. The following are the rules and regulations under which exhibits will be made:

1. All seeds exhibited in this department must have been grown and selected by the exhibitor as provided for in the Constitution, By-laws and Regulations of the Canadian Seed Growers' Association, and be the product of seed plots of 1904. A statutory declaration that this rule has been complied with may be required from any or each exhibitor of seeds.

The committee for the seed department reserves the right to reject any entry, shall control the arrangement of all exhibits, and may cause each exhibit to be labelled with the name of the variety, the name and address of the exhibitor, the amount of general crop seed for sale, and record notes showing its history.

3. Exhibits of wheat, oats, barley, peas, beans, flax or millet shall be as follows:

(a) Exhibits of hand-selected seed, not less than 500 stalks of wheat, oats or barley, or 500 stalks of peas, beans, flax or millet, showing the full length of straw and heads or pods of grain.

(b) Group exhibits of registered seed shall include exhibits of "hand-selected registered seed," constituted as provided in clause 2, 1 bushel of "improved registered seed," and 2 bushels of "general crop registered seed," which must be truly representative of the total quality of "general crop registered seed," held for sale by the member of the association who makes the exhibit.

4. All exhibits of seed corn must be shown in the ear.

5. Members of the Seed Growers' Association will be provided with space for exhibits of seed of which records are kept by the association, but which may not be eligible to compete for prizes; as, hand-selected improved, and general crop seed of the first year.

6. All entries must be made on a regular form, which may be supplied free by the secretary on application. Entry fees not required.

PRIZE LIST.

Prizes will be awarded for fall wheat, spring wheat, white oats, black oats, and s.w.-rowed barley, as follows:

Hand-selected seed of the
second or subsequent years \$5 \$3 \$2 \$1 C.
Group exhibits of registered
seed 7 4 2 1 C.

Hand-Selected Seed Corn.

Best 50 ears of seed corn of
varieties suited to production
for malting along the
northern limit of the corn
belt in Canada..... \$5 \$3 \$2 \$1 C.
Best 50 ears of seed corn of
varieties suited to production
for malting south of
latitude 44..... 5 3 2 1 C.
Best 50 ears of sweet corn..... 5 3 2 1 C.

Cheerful Idiot

"I should like to know why," said the Intellectual Grubber, "money is called 'dough'?"

"Because," simpered the Cheerful Idiot, "everybody kneads it."

YOU ALWAYS
DRAW OUT MORE
THAN YOU PUT IN

If you keep
your Savings
in

The Bank of Toronto

No need to worry about your money when you invest in a Bank of Toronto Savings Passbook. Your money deposited there is absolutely safe, and interest is added every six months. The following figures represent

Your Security:

Paid-Up Capital - - \$3,000,000
Reserve Fund - - 3,200,000
Total Assets - - 26,000,000

Head Office and 4 Branches, Toronto,
Ontario.
5 Branches in Montreal, Que.
30 Branches in Ontario

Just a Word, Please.

To tell you of our **Fall Opening, September 1st.** We've been preparing for it for two months. We've elbowed our way into larger premises, and given the whole place a fresh coat of paint and paper.

There's no argument about it—we have the finest business school premises in Canada. It's really worth your while to look through them.

Put the two things together—large, airy, fresh premises and our business-like system of conducting things, and you have an ideal atmosphere for work.

If you cannot come let us send you a catalogue. It's a fitting representation of the school, and is yours for the asking.

**Central
Business College**

OF TORONTO

W. H. SHAW, . . . Principal.

THE WESTERN FAIR LONDON

Sept. 9th to 17th, 1904
37th Annual Exhibition

Its continued growth and importance demands greater accommodation. A new Brick and Cement Dairy Building, costing \$10,000 has been added, giving a floor space of 8,500 feet, with complete demonstrating department and refrigerating system.

More rooms provided for Agricultural and Horticultural Products. Live Stock Buildings the best on the Continent. Ample accommodation for all. Entertainment features the best.

Stabling and space allotted as entries are received.

Special Railway Service.

Entries Close Sept. 25th.

Prize Lists Now Ready.

LT.-COL. W. M. GARTMORE,

President.

J. A. NELLE, Secretary.

Farmers' Institute Tent

Superintendent Putnam has arranged to have a tent on the grounds of the Canadian National Exhibition, in the vicinity of the Women's Building, during the two weeks of the Fair. All farmers, especially members of Institutes, will be made welcome at this tent at all times. Members of Women's Institutes are also requested to make this tent their headquarters during their visit to the Fair. Either the superintendent or his representative will be in attendance to give information regarding Women's Institutes. A convention of Farmers' Institute delegates has been arranged for September 6 and 7, and a large majority of the Institutes throughout the province have expressed their intention to send one or more delegates. The first session will be held in the tent at 2 p.m. on the afternoon of the 6th, and will be opened by addresses from persons who have been connected with the work for a number of years. The meeting will then be thrown open for a general discussion on matters of vital importance to the success of the Institutes. There will also be a session on September 7th from 2 to 5 p.m. and the delegates will decide at this session whether an evening session will be held on that day or not. Those who expect to be present are requested to send their names and addresses to A. Putnam, Superintendent of Farmers' Institutes, Parliament Buildings, Toronto.

Mr. A. P. Westvelt, Secretary of Live Stock and Poultry Associations; Mr. H. W. Wade, Registrar of Live Stock; Mr. H. B. Cowan, Superintendent of Fairs Associations, and Mr. P. W. Hodgett, Secretary of the Fruit Growers' Associations, will each be present or have a representative in this tent during the time of the Exhibition.

Enlarged Grounds

The directors of the Central Canada Exhibition, which is undoubtedly a grand fair, are leaving nothing undone to make their show this year a greater success than ever before. The sum of \$1,500 will be paid to Mr. J. A. Smart, Deputy Minister of the Interior, and \$5,000 to Mrs. J. Maclean, for land needed by the Central Fair men, and which will give the directors grounds of over sixty acres in extent, with a handsome building, Mr. Smart's present residence, for a reception home. Moreover, the entrance to the grounds is being enlarged and very much improved. The directors are to be congratulated upon their progressiveness. The dates of the fair are Sept. 16th to 24th.

The Western Fair

There is not a farmer who is not interested in the speeding events, and to still further increase the interest the management has made a wise move by striking the running races from the programme and doubling the purses for the other events. This will insure a better class of trotters and pacers, and at the same time bring about the disappearance of the runners, in which fair visitors were never specially concerned. Regarding the other ring attractions, it might be said that the acts will be the best that money can secure, the one aim being to give visitors something better than in the past. The Western Fair needs no special care to make it draw. As in the past it will have every department full, and will win the favor of the public on its merits.

Both Had Cause

Crusteigh—How did you dare, sir, to kiss my daughter last night on the balcony?

Gayboy—Well, now that I've seen her by daylight, I wonder myself.—*Philadelphia Inquirer.*

In the Poultry Yard

Shelter Controls Eggs

The West Virginia experiment station gives a timely and interesting report showing the difference in egg production where the same food and same care were given two groups of pullets. One group was warmly housed, while the other was sheltered in a cold house. There were five periods of time accorded the fowls of thirty days each. The record was as follows for eggs produced:

First Period.	
Warm house	725
Cold house	434
Second Period.	
Warm house	1,083
Cold house	866
Third Period.	
Warm house	1,150
Cold house	858
Fourth Period.	
Warm house	1,000
Cold house	1,033
Fifth Period.	
Warm house	1,281
Cold house	954

It will be seen that the hens in the warm house laid 1,103 more eggs than those in the cold house during the time allotted to this test, which should be conclusive evidence of the advantage of warmth in the production of winter eggs. It is a profitable investment as well as more humane to provide warmth for the birds.

With windows properly prepared and a drop curtain of some kind to exclude cold on midwinter nights to cover them there will be a saving of food and a saving of suffering with farm fowls.

Poultry Diseases—Remedy and Prevention

Exercise is the best tonic. Never feed sour or tainted food. Cleanliness is next to godliness. High perches cause huddle feet. Keep the drinking water clean. Clean up the droppings every morning.

Kerosene the roosts once a week for lice.

Feather-pulling is a vice caused by overcrowding and idleness. Burn a pound of sulphur in each pen once a month to disinfect.

The moment sickness is noticed separate the victim from the well ones. Before giving liquid medicine to a fowl see that the nostrils are clear.

The majority of cases of "cholera" are nothing more than indigestion and lice.

Quinine dissolved in water is an excellent wash for swelled head in roup.

Keep a piece of asafoetida in the drinking fountain as a preventive of gapes. An ointment made of equal parts of kerosene and melted lard will cure scaly legs.

For lice rub the heads of the chicks with a sponge that has been moistened with kerosene.

A tablespoonful of kerosene in a quart of drinking water is a good remedy for cold in the head.

Put four drops of tincture of aconite in half a pint of drinking water if there are signs of colds by sneezing.

Gapes is a disease that shows itself in chicks between six and eight weeks of age and not generally after four months old.

When pullets are too fat too much animal heat is apt to be created, which is likely to throw them in moult out of season.

To disinfect, clean the coops and then wash thoroughly with water containing five ounces of sulphuric acid to one gallon. Spade up the runs and scatter carbolate of lime freely about the house.

A small piece of camphor about the size of a grain of wheat daily and 10 drops of camphor or turpentine added to a pint of drinking water is a good remedy for the gapes.—*A Few Hens.*

About Turkeys

The following points on this subject should be kept in view:

The time for incubation is twenty-six to twenty-eight days.

The chicks do not require food for twenty-four hours after hatching.

Before putting them in the coop see that it is perfectly clean and free from insects, and dust the chicks twice a week with insect powder, and dust the hen the same time. Remember that nine-tenths of the young turkeys die from lice when they die at all.

Never let young turkeys get wet. Filth will soon make short work of them. Feed on clean surfaces. Give water or milk fresh three times daily, and in a manner so that they can only wet their beaks.

For the first fortnight feed on hard boiled egg, onions, dandelions, lettuce, and stinging nettles with equal proportion of bread, all mixed and chopped very fine; feed every two hours, early and late.

After the first week a little wheat can be offered in addition to the above, also maize meal, wheatmeal, and ground oats, and they will gradually get off the eggs and green food.

Remove the coop to fresh ground daily.

Ground bone, fine gravel, ground shell, and dust bath must be provided.

Give the hen and chicks full liberty on dry, warm days after they are a fortnight old; but they must be carefully attended to until well feathered.

A roost in an open shed with a south aspect, protected from north and east winds, is much better than a closed house for grown turkeys.

A single union of a male and female fertilises all the eggs the hen will lay for the season; hence one gobbler will suffice for many hens.

It is not advisable to mate a very large gobbler with small hens, as the result will be injury to the latter. If you have a heavy gobbler you must also have large hens.

Gobblers and hens of the same age may be mated, but over-year hens and a young cock is good mating.

Laying turkeys must not be kept in confinement, as they do so much better if allowed to roam at their own sweet will, and find their own nests.

Fattening: Some breeders shut up their birds for a month in large sheds, but is preferable, others think to let them have full liberty, and feed on barley, maize, and oatmeal, mixed with milk and boiled potatoes in mornings, and whole maize, wheat, and oats at nights.

A Rooster's Wisdom

A duck which faithfully stuck to business during the summer and laid several dozens of large fawn colored eggs, complained that she "wasn't appreciated."

"See that hen over there," said the duck, "she hasn't laid as many eggs as I have, nor as big, but she has a book written about her and verses composed in her honor, while nobody is saying a word about me." "The trouble with you is," said a wise rooster that was standing near, "that you don't tell the public what you have done. You lay an egg and waddle off without saying a word, but that sister of mine never lays one without letting everybody in the neighborhood know it. If you want to cut any ice in this community, you must learn to advertise."



Myers' Royal Spice

Good for little pigs and big hogs—for lambs and sturdy sheep. Nothing like it to keep them fat and well. Used all over the continent by successful farmers. Write for free literature and testimonials.

MYERS ROYAL SPICE CO.
SAGINAW FALLS, ONT. & N.Y.



Woodstock Wind Mills

Write for particulars of our

Marvel Wind Motor

Our Marvel Pumping Wind Motor has twice the power of any other wind motor of the same size built, and will run in a lighter wind.

Get our prices before purchasing elsewhere.

WOODSTOCK WIND MOTOR COMPANY
Limited
WOODSTOCK, ONT.



Windmills!

The CANADIAN AIRMOTOR

is a tested Mill.

Simple, but with Strength like a Giant.

HAS NO FRILLS (put on to sell you)

But is a Terror for Hard Work.

No up-to-date farmer should be without one.

Ontario Wind Engine and Pump Co., Limited
TORONTO - - ONT.

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 the medium for conveying information as to the breeder 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.

Farming World Man on the Wing

The country lying to the west of St. Thomas comprises some of the best farming land of Ontario, and for improved farms and general fine appearance is second to none. It is the great bean growing belt in Ontario, and the pasture lands yielding a fine verdure should simplify the question of the grazer or the dairyman of this favored section. Quite a number of the farms have a field or two of alfalfa, and though the severe winter, which proved rather too much for the wheat, has also worked some havoc with this prolific crop, yet it would take more than one failure to shake the faith of those who have grown this crop successfully for years. A great deal of attention has been given to the improved breeds of live stock in this section, and among its leading farmers are to be mentioned a number of Canada's breeders, together with a large number of others who, if not so well known at the present time, will be better known some day. Near the town of Delaware is the Belyov Farm, the home of many a prize-winning Shropshire, and its genial and enterprising owner, Mr. Richard Gibson. Around the settlement it is to be found quite a number who were wise enough not to follow the general tendency of the past few years in dropping the sheep. Mr. D. Decow, of Middlemiss, has for years been an extensive breeder of pure-bred Shropshires, as well as light horses. Mr. R. J. Hine, of Dutton, is a well known breeder of Oxford Down sheep, who can show a flock of sheep, imported and home-bred, of quality equal to the best, and has a fine farm with over 15 acres of orchard. There are three imported rams at the head of his flock of Oxfords, carefully selected in England, and he has for three years imported the ewes that were winners at the Royal, and his exhibits have vindicated their prowess at the best shows in Canada, proving the hardest kind of a nut for all opponents, and have for two years had it pretty much their own way. Mr. J. McFarlane, of Dutton, is also a breeder of Oxford Downs, and has some 30 head of fine ewes. He has at the present time to offer for sale a number of yearlings and ram lambs imported from a number of his lambs were winners at the Guelph Fat Stock Show. He is also an enthusiastic breeder of Shorthorns. His herd comprises 18 head of females, 5 of them imported, a number of them being Lustras, Orange Blossom and Alexandria. The cows are fine animals, and bred to his imported bull, Royal Prince, have produced young stock such as should satisfy exacting breeders. In Berkshire swine he has also to show a fine stock of pure-breds, a number of them being from the pens of W. H. Durham, Malton, Ont.

Mr. J. E. McCallum, Iona Station, has recently purchased to head his herd of fine females the fine imported bull calf, Spectator, a sappy, growthy red fellow of good size and quality. He has been in the business for 12 years, and bids fair to keep a prominent place among Ontario breeders. Mr. Alex. Galbraith, Dutton, Ont., is a breeder who is shrewd enough to begin the right way, commencing with

the best that can be got. He has purchased one imported heifer, and the rest of his stuff is bred closely to natives of the old land. He is a partner with Mr. McFarlane in the ownership of the imported bull Royal Prince.

O'Neil Bros., of Southgate, Ont., are the only breeders of Hereford cattle in the neighborhood to which they belong, but their sixteen years of business has been nothing if not successful. Commencing with a good foundation for their herd in some of the best blood in the country, they have kept to the front ever since, and their herd today will compare favorably with any in the country. Quite a number of the females are imported, both from the leading stables in England and the United States, and their present herd bull, "Onward," by the famous "March On," is a fine, heavy, deep bodied and thick-fleshed individual. Quite a choice selection of young stock are now offered for sale at the Sunnyside Farm.

* * * * *

A. W. Smith, Maple Lodge, Ont., has long been equally well known as the leading champion of the dairy Shorthorn and a strong advocate of the Leicester sheep. That he excels in both these lines requires only a visit to the farm for assurance. One does not meet there the raky, thin-fleshed, sort of dairy Shorthorns which a number have thought to be the only kind that can excel in milking qualities, but breeders of the approved Scotch type—cows that look like beeves all over and that can at the same time nurse a calf to look like one, too. The selection of a herd whose members are of perfect beef type and at the same time good milkers and from good milking ancestors, is a rather hard thing to accomplish, and such a herd is a very select one indeed. The improvement of any breed of live stock, and of them all, the Shorthorn cattle, is no trifling undertaking, but nothing less has been the serious and earnest purpose of Mr. Smith for years, and the combination in the one individual, in a high degree of qualities that have been regarded as opposed to each other, presents obvious difficulties, and in its realization only can be found the true farmer's cow. Yet the unbeliever who will go to the trouble to visit Maple Lodge, will not only be convinced but surprised at the success attained, and find in the one animal all that he desires of Shorthorn beef type, early maturity and feeding quality combined with ability to produce 50 lbs. of milk a day. An example of this which came beneath the writer's personal observation will suffice as an illustration of this. When in the Chilliwack Valley, B.C., the writer there met Mr. John Sampson, proprietor of the Branchflower Farm and a large herd of Shorthorns and grades kept for dairy purposes. At the head of this herd was a bull imported from the Maple Lodge Farm. He was of splendid beef conformation and Shorthorn type, and his calves were very much of his own style. When the first crop of calves were 2 years old the service of another bull was

Horse Owners

Look to your interests and use the safest, speediest and most positive cure for ailments of your horses, for which an external remedy can be used, viz:

GOMBAULT'S CAUSTIC BALSAM

Prepared exclusively by G. Gombault, Veterinary Surgeon to the French Government Stud.



SUPERSEDES ALL CAUTERY OR FIRING.

Impossible to produce any scar or lesion. The safest and best liniment ever used. Takes the place of all instruments for mild or severe action. Removes all blemishes—wounds from horses or cattle.

Every bottle of Caustic Balsam 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, for descriptive circulars, testimonials, etc. Address THE LAWRENCE WILLIAMS COMPANY, Cleveland, Ohio

21 FRONT ST. WEST, TORONTO

\$50.00 to California and Return

Via the Chicago, Union Pacific and North Western Line, from Chicago, Aug. 15th to Sept. 10th. Choice of routes going and returning. Correspondingly low rates from all points in Canada. Two trains a day from Chicago through without change. Daily and personally conducted tourist car excursions. Write for itinerary and full particulars regarding special train leaving Chicago Aug. 18th and 25th. B. H. BENNETT, 2 East King Street, Toronto, Ont.

WINDMILLS



Brantford Steel Windmills are in a class by themselves. There is only one Best—their's. Write for Catalogue.

WE also manufacture

IDEAL GAS AND GASOLINE ENGINES.

GOULD, SHAPLEY & MUIR CO., Limited, BRANTFORD, CANADA



IMPORTED

Clydesdales and Shorthorns

Messrs. Smith & Richardson, Columbus Ont., Importers of Clydesdale Horses and Shorthorn Cattle, STRATHOY—Oshawa and Brooklin, G.T.R., Myrtle, C.P.R. Forty miles east of Toronto. Long-distance telephone at residence, near Columbus, Telegraph, Brooklin.

**GRAHAM BROS.,
CLAREMONT, ONT.**

Canada's leading Horse Importers

**Clydesdales and Hackneys
Stallions and Mares.**

Farm one mile from station on C.P.R.

Write for Catalogue.

T. H. HASSARD, V.S.

Dealer in CLYDESDALES, COACH and STANDARD-BRED STALLIONS

My last importations were taken directly from the boat to the Toronto Spring Stallion Show, where they won highest honors.



MILLBROOK, - - ONT.

Glenview Stock Farm

Only two first-class Hackneys remain unsoiled.

Another consignment of imported Clydes expected about September 1st.

W. Colquhoun, Mitchell, P.O.
and Station, G.T.R.**Waverley Stock Farm****HACKNEY
Stallions
and Fillies**Choice young stock,
imported and home-
bred.

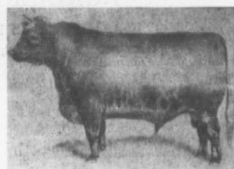
SAXON ST.

R. BEITH, Proprietor,
Bowmanville, G.T.R., Ont.**RIDGEWOOD PARK STOCK FARM**Pure Scotch Shorthorns
Clydesdale, Shire,
and Hackney HorsesE. C. ATTRILL, Mgr.,
Goderich, - - Ont.

necessary, and Mr. Sampson sold the Maple Lodge bull. But after another year when his heifers came in as milkers, they were such an improvement on their dams in this respect that Mr. Sampson went and bought the old bull back again, and said that he would keep him as long as he had a cow on his farm that was not akin. Young stock thus bred will necessarily cost more than animals bred from stock less conservatively selected, but they are the kind to convince one that the bull is half the herd. At the present time there are to be seen at Maple Lodge a large number of representatives of the dual purpose animals whose beef type could scarcely be improved upon. They are the get of the Scotch-bred bulls Knuckle Duster and Sir Wilfrid, and for the most part, from Scotch-bred cows. Knuckle Duster, winner of the first honors at London some years ago, is by Waverly, well known as the sire of a number of champions, while his dam is one of Bruce's Augustas, a strain very prolific in scions of the approved Smithfield type. Sir Wilfrid, the other bull in service on the farm, is of the Strawberry family, which produced the champion "Choice Goods," and he is similarly bred. His sire is Scottish Victor, a son of the great Scottish Archer. Among the cows selected years ago by Mr. Smith as suitable to his purposes, was Princess Jane, sire Javelyn, and of Victoria-Jilt breeding on her dam's side. This cow is now ten years old, and the dam of 8 calves, among them being Purveyor, mentioned as sold to Mr. Sampson, and also among these is the white steer that won the championship for pure-bred Shorthorns at the Guelph Fat Stock Show last winter. It will thus be seen what Mr. Smith aims at in his breeding, the development of both qualities in the one animal, and in the highest degree. In Leicester the same enterprise and management is to be observed.

Mr. Smith has headed his herd with one of the best rams he could get, the winner when a lamb of the Border Leicester Club's show, for Mr. Hume, of Fortfarrishire. The winnings of his gets for Maple Lodge have been current history for the past three years here. Mr. Smith is a critic, to be satisfied with nothing short of perfection, not only in mutton and in type, but particularly in fleece, its color, density, lustre, curl, fibre, all that is claimed of superiority by Leicester breeders is to be found highly developed in his flock, attained by careful selection, and maintained by skilful breeding and attention that ensures thrift, vitality and robustness of constitution.

T. Douglas & Sons, Strathroy, are the complacent owners of a herd of over 80 head of Shorthorns, headed by the fine young herd bull, Diamond, purchased at Mr. Flatt's sale last winter. There are a large number of really fine individuals in the herd, with good breeding as well. For them, their late herd bull, Double Gold, has done a successful siring, and his young stock show a quality that their recent purchaser should intensify.

**JOHN H. DOUGLAS,**

BREEDER OF

**SHORTHORN and
AYRSHIRE CATTLE
YORKSHIRE SWINE**Young stock of all ages and both
sexes for sale.

Warkworth, P.O.

CAMPELLEFORD STA., G.T.R.

Pleasant Valley Shorthorns

Herd of leading Scotch families, such as Jilt, Orange Blossoms, Myrtle, Killbuck Beauties (Campbell's), Nonpareils, Clematines, Rowland, Golden Drops. Headed by (imp.) Old Lancaster. Write your wants or visit personally.

**GEORGE AMOS & SON,
MOFFAT STATION P.O., C.P.R.**

NEIL DOW

VALLEY HOME STOCK FARM

Breeder of Scotch-topped Shorthorns. Herd contains the fashionable strains such as Minna, Ulys, Clippers, of straight Scotch breeding and the best kind. Both sexes for sale. Correspondence invited. Visitors welcome.

Tara Sta., G.T.R., P.O. and Tel.

Trout Creek Shorthorns

SPECIAL OFFERING!

Two imported bulls with superior breeding and individual merit.

Also a few imported Scotch heifers and home-bred bulls and heifers.

Send for catalogue.

JAMES SMITH, W. D. FLATT,
Manager, Hamilton, Ont.**MAPLE LODGE STOCK FARM**

Scotch Shorthorns, Choice Milking Strains, Prize Winning Leicesters, Young Stock for sale—imported and home bred.

A. W. SMITH, Maple Lodge, P.O., Ont.

FOR SALE**ONE SHORTHORN BULL CALF and ONE
TWO-YEAR-OLD HEIFER**

At the Glenavon Stock Farm

They are from good milking strain. Write or call.

W. B. ROBERTS, Prop., Sparta, Ont.
Station St. Thomas, C. P. R., G. T. R., M. C. R.**H. CARGILL & SON,**

Importers and Breeders of SCOTCH SHORTHORNS

Present offering SEVEN GRANDLY BRED BULLS. Also a large number of grandly bred young heifers, imported, imported in dam and home bred. Call on or write to

JOHN CLANCY, Mgr.

**H. CARGILL & SON,
Cargill P.O. and Sta. G.T.R.**

CLOVER LEAF LODGE HERD OF SHORTHORNS

Choose young stock from grandly-bred Scotch topped cows. A number from choice milking strains. This herd headed by Scotland's Challenge (imp.) Well-bred Lincoln sheep. Also Shorthorn and White Faced Country and Bronze Turkeys.

R. CORLEY,

Belgrave P.O. and Wingham, Ont.
Sta. G.T.H. C.P.R.

SHORTHORN CATTLE and LINCOLN SHEEP For sale at Maple Avenue Stock Farm

If you want either, write us today.

F. H. NEIL & SONS,

Box 35, Lucan, Ont.

Telegraph Post Office R.R. Station.

Clayfield Stock Farm

Clydesdale Horses

Shorthorn Cattle, Cotswold Sheep

Prize-winning pure bred stock. Young animals of both sexes for sale. Write or call on

J. C. ROSS, Prop., Jarvis P.O. and Sta., Ont.

KILMARNOCK STOCK FARM

Clydesdale Horses, and a fine lot of pure Scotch and Scotch topped Shorthorns for sale. A number of the individuals of Fines, Broadland, Lorry, East Bone, and other choice breeding. Six to eight head of fine Macdonald, Bonyton, The, and other well bred sires of choice Scotch breeding. Young animals of both sexes for sale. Write or call on "R. HAY, Vich P. O. and Station G. T. H."

GREEN-OAK STOCK FARM

Shorthorns, Oxford, Berkshire

Head bull, imp. Royal Prince (45229). Young stock of both sexes for sale; Oxford Down ewes; sows to farrow in October, and young pigs.

JOHN McFARLANE,

Box 11, Dutton P.O., South Co. Ont., and Stations M.C.R. and L.E. & D.R.

ANGUS

ABERDEEN-ANGUS GRADES

have topped the highest markets for beef in North America for 12 years in succession, through good times and the dull times. Now is the time to secure real good ones by using pure-bred sires. We have a grand lot of young bulls coming on, sired by Canada's Champion Aberdeen-Angus Bull, Prince of Burton. Come and make your selection early.

JAMES BOWMAN, Elm Park, GUELPH

DAVID McCRAE, Janfield, Guelph, Canada, Importer and Breeder of Galloway Cattle, Clydesdale Horses and Cotswold Sheep. Choose animals for sale.

RED POLLS

FRONTIER FARM, Lewiston, N.Y.

BREEDERS OF REGISTERED

Polled Jersey Cattle, Red Polled Cattle

...Cheviot Sheep...

Now for sale, one Polled Jersey Bull, 12rs old, Red Polled Bulls, one 12rs and 11 mos. 2 mos. old, also few females. Cheviot Sheep to exchange for registered Jersey Cows and Heifers.

A. MORE, Lewiston, N.Y.

JERSEYS

Dentonia Park Farm,

COLEMAN, P.O., - ONT.

FOR SALE—During the next six weeks—young stock of both sexes

JERSEYS, GUERNSEYS

and AYRSHIRES

Our prices won't at Toronto and Ottawa, this year give only a fair idea of the quality of the stock. Our prices are consistent with such quality. Correspondence solicited. Photographs and full particulars will be sent on request.

Cattle Sales at St. Louis

Auction sales of pure-bred cattle will be held at the St. Louis Fair in September, as follows: Aberdeen-Angus, Sept. 14th; Galloways, Sept. 16th; Herefords, Sept. 21st; Holstein-Friesians, Sept. 23rd; Jerseys, Sept. 20th; Red Polled, Sept. 15th, Shorthorns, Sept. 23rd.

Gossip

Mr. G. W. Clemons, Secretary Canadian Holstein-Friesian Association, writes:

"In a recent test of the class in dairy farming at the Massachusetts Agricultural College, a question was asked to bring out the preference of each member in the matter of a dairy breed. The following interesting result was obtained:

Per cent. of class preferring various breeds; 8; per cent. of class preferring Jerseys, 25; per cent. of class preferring Guernseys, 25; per cent. of class preferring Holstein-Friesians, 42.

I find that this is one of the straws indicating the direction of the wind. Beyond a doubt, Holstein-Friesian cattle are rapidly gaining favor in New England. Under most conditions the Holstein-Friesian is the most profitable milk producer, and the profit is the real consideration.

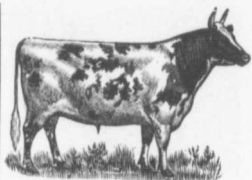
Breeders should be careful for this reason to produce bull stock that will reflect credit upon this magnificent breed. Perhaps the former policy of the association to encourage the destruction of inferior males would be of advantage to all parties interested. At all events, the interests of the breeders of registered stock in securing superior herd headers is commendable.

I have observed that frequently the true type animal is more satisfactory for the production of breeding stock than any one with the big record but asymmetrical. My criticism of prevailing practices is that breeders are apt to overlook type in the antecedents of their herd bulls in their endeavors for big records.—(F. S. Coolidge, Professor of Animal Husbandry and Dairying, Massachusetts Agricultural College.)"

The Shorthorn Boom in the Argentine

At the sale of Shorthorns belonging to Senor Tomas Bell, Rincon, Argentina, last month, splendid prices were realized. The Newton-bred bull, Newton Stone, got by the champion bull Corner Stone out of the Star of Morning cow Roan Nelly, was secured by Senor Lopez at 30,000 dols. (Argentine money)—£2,718. The four-year-old bull, Baron Gainsford, bred by Mr. Geo. Harrison, sired by Misty Morning, realized £1,650, and the five-year-old Bowman, bred by the Duke of Richmond and Gordon, and sired by Village Archer, realized £655. The Newton-bred six-year-old bull Bright Star, sired by Star of Morning, and out of the Prince of Fashion cow Besie, fetched £600. The twenty young bulls, sired by Newton Stone, realized an average of £200, and the forty calves by the same sire averaged £120. Sixteen cows averaged £108, and the fifty-eight heifers averaged £130, the average for the 125 head of cattle sold reaching the splendid figure of £152. That was a fairly satisfactory sale, even for the Argentine.—North British Agriculturist.

"Now, my little boys and girls," said a teacher, "I want you to be very still—so still that you can hear a pin drop." For a minute all was still, and a little boy shouted out: "Let her drop."



AYRSHIRES

FOR SALE

7 Ayrshire Bulls from 1 to 16 months old. Good individuals from high class stock. Prices right.

C. S. AYLWIN,
Freeman P.O., Ont.

Ayrshires and Yorkshires.

CALVES carefully bred for Milk and Show Ring. Other ages. A November Bred. Several April Fags. All prices reasonable.

Write, or come and see.
ALEX. HUME & CO.,
Menie P.O.

FOR SALE

Ayrshires, all ages. Eggs for hatching, from Lehigh, Hamburg, Dorkings, Chickens, Ducks and Turkeys. Also five pure Collie pups. For further particulars write to

W. STEWART & SON, Menie, Ont.

"NETHER LEA" AYRSHIRES

Offering this month 4 bulls, 15 mos.; 3 choice bull calves, 5 mos.; bull and heifer calves just dropped. Napoleon of Ansoncham (imp); at head of herd, whose sire has a record of 72 lbs. per day. Prices low. T. D. McCALLUM,
Barville, Que.

MAPLE CLIFF DAIRY AND STOCK FARM

Breeders of Clydesdales, Ayrshires, Tamworths and Berkshires.

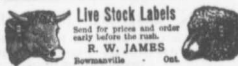
For Sale.—One Clydesdale Stallion, 3 years old; one Tamworth Sow, in pig to imported boar; two sows and two boars, 1 month old, head of herd; two Berkshire Sows, fit for service. Address: R. REID & CO., Sta. and P.O. near Ottawa. Kingston, Ont.

Woodroffe Dairy Stock Farm..

His grade young bulls still on hand will be sold cheap, if taken before water.

SEND FOR CATALOGUE OF STOCK.

Superior Yorkshire ready for shipment.
J. B. CLARK, Proprietor, OTTAWA, ONT.



R. W. JAMES
Barnswell, Ont.

ONTARIO VETERINARY COLLEGE, Ltd.

Most successful Vet. Institution in America.

Prof. A. Smith, F.R.C.V.S., Principal,

Temperance St., Toronto, Can.

Live Stock Auctioneers.

T. E. ROBSON,

Live Stock Auctioneer,

ILDERTON, ONT.

GEO. JACKSON,

Auctioneer, PORT PERRY, ONT.

Live Stock a Specialty.



Sauble River Stock Farm

Offers for sale a number of pure-bred Shropshires.

G. HINDMARSH,
Alisa Craig P.O. and Sta., Middlesex Co., Ont.



BRANT STOCK FARM

OXFORD DOWNS
Yearling rams, and ram lambs, ewes and ewe lambs from imported and prize-winning stock.

Choice lot for sale. Come and see them.

J. H. JULL & SON,
Breeders and Importers.

Burford, Ont., P.O. Telephone and Telegraph.

LINDEN FARM OXFORDS

Choice lot of 3-year Yearlings and Lambs, imported and home-bred Rams fit to head any pure bred flock. Also a few good Shropshires.

R. J. HINE, Dutton P.O.,
Elgin Co., Ont.

HILLHURST FARM.

Hampshire Down Sheep, the coming breed, direct importations. Scotch topped shorthorns from imported sires and dams of deep milking strains. **J. A. COCHRANE,** Hillhurst Station, Campton Co., P. Q.

Choice Yorkshires

Young Stock from Fine Imported and Home Bred Boars and Sows

Young Boars fit for service and Sows ready to breed or already bred. Boars and sows noy skin. Prices right. Write or call on

J. A. RUSSELL
Precious Corners P.O. Cobourg Stn., G.T.R.

Champion Berkshire Herd OF CANADA

For several years back the York Lodge herd of Berkshires has won the championship at Toronto Exhibition, beside a number of other prizes. All hogs show great growth and size. Young pigs from the best prize sows and boars for sale at reasonable prices.

W. H. DURHAM PAPERMASTER, MALTON P. O., ONT.

Yorkshire Swine Clydesdale Horses
Shorthorn Cattle

A large number of fine Trotters to choose from. A few good registered Yorkshire sows. Shorthorn Bulls and Cows from quality bred sires and dams. Good to crack hays.
A. E. HOSKIN, OSBORNE STN. AND P.B., ONT.

OAK LODGE YORKSHIRES

Years of careful breeding have made the Oak Lodge Yorkshires the Standard of Quality for IDEAL BACON HOGS.

The Championship against all breeds has been won by this herd for 5 years at the Provincial Winter Fair, on foot and in dressed orca competition. Prices are reasonable.

J. E. BRETHOUR, BURFORD, ONT.

Ontario Live Stock Co., Ltd.

UNIONVILLE Sta. and P.O., ONT.

Offer for sale 30 young Berkshire Pigs from imported stock, and 30 young Yorkshire Pigs, also from imported stock.

Price \$5.00 Each, F.O.B. Unionville.

Order at Once.

H. POWERS, Mgr.

Ottawa Winter Fair

The directors of the Eastern Ontario Live Stock and Poultry Show met in Ottawa recently and decided to hold the next show at Ottawa, March 6-10, 1905. There will be exhibits of horses, cattle, sheep, swine and poultry. The new building which will be in readiness for the show. It has been built with a view to meet the needs of both exhibitors and visitors.

Animal and Plant Breeding

The Association of Agricultural Colleges and Experiment Stations is to have a school of demonstrations in feeding and in animal and plant breeding, in the College Pavilion in the Live Stock Congress Hall at the World's Fair, further illustrating the fact that the science and pedagogics of breeding are coming forward. The organization of the American Breeders' Association is both timely and important.

High-Class Stock for the O.A.C.

Messrs. Alfred Mansell & Co. have just despatched for the Guelph College, Ontario, Canada, some typical specimens of cattle and sheep for the education of the College students, including two beautiful Hereford heifers from Mr. John Tudge's world renowned Hereford herd, and three first-class Aberdeen-Angus cattle, consisting of a bull and a cow and calf from the celebrated herd at Pictouhill belonging to Mr. W. S. Ferguson, who also supplied five high-class Border Leicester. Shorthorns were represented by an extra good heifer from Mr. Deane Willis' herd, and Mr. Minton of Montford had the honor of supplying the requirements in Shropshire sheep—North British Agriculturist.

Shropshire Sheep for Canada

The Hon. John Dryden, M.P., Minister of Agriculture for Ontario, has recently visited several Shropshire flocks, and, with the assistance of Mr. Alfred Mansell, made a selection of forty-nine Shropshire sheep from the following well-known flocks, viz.: Messrs. E. Nock, J. Harding, M. Williams, T. S. Minton, Sir Walter Corbet and T. A. Buttar. The shipment (a very choice one) comprised show animals of all sexes and ages, and a nice lot of young ewes to add to the Minister's old-established flock. Messrs. Alfred Mansell & Co. also despatched on Saturday a valuable collection of sheep to Quebec on behalf of Mr. J. L. Telfer. They comprised Shropshires, Southdowns, Oxfords and Cotswolds, and were purchased from the following gentlemen: Messrs. Adeane, H. Penfold, E. Henty, D. D.

Crawford, A. Tanner, E. Nock, C. Blatherwick, W. A. Treweeke and T. Goodworth.—North British Agriculturist.

Clydesdales for Canada

Mr. Thomas Graham, of Graham Bros., Claremont, Ont., sailed via the Donaldson S.S. Parthena on July 30th from Glasgow with ten head of Clydesdale horses. This shipment is reported to be the best lot that has ever left Scotland. Fuller particulars will appear next issue.

In the Advanced Registry

Favorit 6th, 2789, at 5y. 9m. 30d. of age; 13,538 lbs. butter fat; milk, 457 lbs. Owned by R. F. Hicks, Newton Brook, Ont.

Favorit 7th, 2790, at 4y. 10m. 25d. of age; 17,262 lbs. butter fat; milk, 513.5 lbs. Owned by R. F. Hicks, Newton Brook, Ont.

Bessie's Annie Rooney, 3563, at 2y. 22d. of age; 8,208 lbs. butter fat; milk, 239.25 lbs. Owned by R. F. Hicks, Newton Brook, Ont.

Aagie of Riverside, 2477, at 3y. 11m. 8d. of age; 13,008 lbs. butter fat; milk, 440.5 lbs. Owned by Matt. Richardson, Caledonia, Ont.

Hulda Wayne of Riverside, 2668, at 3y. 5m. 27d. of age; 14,345 lbs. butter fat; milk, 433.75 lbs. Owned by Matt. Richardson, Caledonia, Ont.

Axie DeKoi of Riverside, 3400, at 2y. 11m. 10d. of age; 8,663 lbs. butter fat; milk, 301.125 lbs. Owned by Matt. Richardson, Caledonia, Ont.

Daisy Mechthilde's DeKoi, 3464, at 1y. 11m. 24d. of age; 8,906 lbs. butter fat; milk, 272.875 lbs. Owned by Matt. Richardson, Caledonia, Ont.

Princess Calamity Clay, 3557, at 2y. 1m. 8d. of age; 9,913 lbs. butter fat; milk, 319.562 lbs. Owned by Walburn Rivers, Folsom's Corners, Ont.

Buckeye Maid 3rd, 3030, at 2y. 10m. 10d. of age; 8,642 lbs. butter fat; milk, 326.625 lbs. Owned by Robert Crak, Montreal, Que.

Belle DeKoi 2nd, 3188, at 2y. 10m. 21d. of age; 9,750 lbs. butter fat; milk, 295.187 lbs. Owned by H. Bollert, Cassel, Ont.

Lady Princess DeKoi, 3521, at 2y. 10d. of age; 8,492 lbs. butter fat; milk, 300.812 lbs. Owned by H. Bollert, Cassel, Ont.

Panarista Pauline, 2214, at 6y. 2m. 27d. of age; 13,063 lbs. butter fat; milk, 439.017 lbs. Owned by James A. Caskey, Madoc, Ont.

Inka Darkness 3rd's Jessie, 2219, at 7y. 25d. of age; 12,839 lbs. butter fat; milk, 535 lbs. Owned by James A. Caskey, Madoc, Ont.

Queen Hengerveld DeKoi, 3318, at 5y. 4d. of age; 12,333 lbs. butter fat; milk, 543 lbs. Owned by A. C. Hallman, Breslau, Ont.

Mavourney Wilhemina Tenson, 1192, at 9y. 7d. of age; 14,455 lbs. butter fat; milk, 487.625 lbs. Owned by A. Kennedy, Ayr, Ont.

Mavourney's Pieterje Netherland, 1505, at 7y. 11m. 14d. of age; 14,100 lbs. butter fat; milk, 526.187 lbs. Owned by A. Kennedy, Ayr, Ont.

Rosa May, 2235, at 8y. 10m. 24d. of age; 13,325 lbs. butter fat; milk, 384.5 lbs. Owned by B. Mallory, Frankford, Ont.

Countess Elaine's DeKoi, 2571, at 4y. 6m. 25d. of age; 12,148 lbs. butter fat; milk, 452.25 lbs. Owned by B. Mallory, Frankford, Ont.

Disone 2nd's Lulu, 2082, at 3y. 4m. 2d. of age; 10,820 lbs. butter fat; milk, 326.5 lbs. Owned by B. Mallory, Frankford, Ont.

May Echo, 3172, at 3y. 3m. 28d. of age; 11,333 lbs. butter fat; milk, 382.75 lbs. Owned by B. Mallory, Frankford, Ont.

Market Review and Forecast

The Trend of Markets—Supply and Demand—The Outlook

Toronto, Aug. 12th, 1904.

General trade is on the quiet side. Some wholesale houses report fall orders below what they were last year at this time, while others report them ahead. Country business is reported fair and the outlook good. The money situation continues about the same. Call loans are steady at 5 per cent, and discounts on commercial paper at 6 to 7 per cent.

WHEAT

Wheat in Ontario has reached the \$1.00 mark again. How long it will remain at this point is hard to say. Some are of the opinion that it will remain near this figure for some time, while others think it may go higher. It will depend largely upon the yield of the present crop. There has been no reported advance on this side from the export trade, but this may come, should the smaller yields which present crop reports for the United States be realized. The monthly report from Washington for August 1st shows that the average condition of spring wheat on Aug. 1st was 87.5, as compared with 93.7 last month, 77.1 on August 1st, 1903, and a ten-year August average of 81.2. Rust is reported in some sections. Preliminary returns indicate a winter wheat crop for the United States of 333,400,000 bushels, or an average of 12.3 bushels per acre, as compared with 12.3 bushels per acre for 1903, as finally estimated. From the Canadian wheat crop reports are favorable, and if good weather is maintained there will be the biggest yield on record for that country. But everything depends upon how things pan out from now to the end of the year. Local dealers here quote red and white at 95c. to \$1.00; at outside points goose at 81c. and spring at 91c. On Toronto farmers' market red and white are quoted at \$1.01 per bushel.

COARSE GRAINS

Both the United States and Canada are likely to have a big oat crop this year. The U.S. report shows the condition of the crop on August 1st to be 86.6, as compared with 79.5 a year ago. Both here and at Montreal the market for oats is firm owing to a strong local demand. Car lots have sold at Montreal at 39 to 40c. Here prices rule at 34½ to 35c., as to quality. There has been some demand for barley for export, but generally speaking the market is dull; as is also that for peas. The U.S. corn crop seems to be piling up well. The market is a little firmer, with prices steady at quotations.

BRAN AND SHORTS

An extra demand for mill feeds has set in and prices advanced \$1.00 per ton at Montreal a week ago. Prices rule steady here at quotations.

HAY AND STRAW

Generally speaking a good hay crop has been harvested in Canada in fair condition. In Quebec it is reported that the percentage of No. 1 quality will be greater than in 1903. England has a hay crop well saved, but not heavy, and will likely require considerable Canadian. What the United States will want is hard to say. The present demand for baled hay is fairly good at quotations.

POTATOES AND BEANS

An easier feeling in potatoes is reported owing to increased receipts, and the prospects of a good yield. At Montreal new potatoes are quoted at \$1.75 per bbl. of 180 lbs., or 90c. per bag of 80 lbs. Here prices rule at 80c. to 90c. per bushel wholesale.

The bean market is easy. Montreal quotations are \$1.30 to \$1.35 per bushel in a jobbing way, and \$1.15 in car lots.

EGGS AND POULTRY

The undertone of the egg market is not as strong as it was a week ago, owing to supplies coming near to meeting the demand. There is very little doing for export as English dealers are not willing to meet the advance on this side. Selected eggs are quoted in Montreal at 18½ to 19c. wholesale. Here quotations are 16 to 16½c. for new laid and 12 to 13c. for seconds.

The movement of poultry is still light on this market, spring chickens are quoted at 15c. and old hens at 9 to 10c. per lb. in a jobbing way.

FRUIT

The raspberry supply keeps up well and the demand continues good. Other lines of small fruits are offering fairly well. Many of the apples coming forward are very poor. Some shippers seem to think any old quality will do. But if price drops below the cost of packing and shipping they will think differently. Apples are quoted at 20 to 30c. per bushel, huckleberries \$1.00 to \$1.15, black currants \$1.00 to \$1.15, and peaches 25 to 30c.

DAIRY PRODUCTS

Exports of cheese so far this season have fallen off considerably as compared with a year ago. But there was a large surplus stock from 1903 which has been the chief factor in depressing prices. Then the bad times in England and interment all along the line has helped to lessen consumption and keep prices down to a low level. There are signs this week of a reaction, though how far it will reach is hard to say. There seems to be even yet too many large stocks on hand to permit any marked advance. At the local markets this week all offers have been above 8c., the ruling figure being 8½c., with some lots going higher.

The butter market shows considerable improvement. There has been more export buying of the best grades of creamery which is a healthy sign, though

prices do not show any marked advance as yet. Montreal quotations are 18½ to 19c. for finest, and 17½ to 18c. for ordinary fines. Exports so far show a large increase over last year for the same period. Creamery is steady here at 17½ to 18½c., while dairy owing to the increased supply is easy at 12 to 13c. for the best tubs.

WOOL

The wool market continues firm. At Montreal Canadian wool is reported scarce and firm 12c. for unwashed, 20c. for washed and 25c. for pulled. A few small lots have been exported to England. The demand keeps up well here and the market is very firm at 19 to 20c. for washed, 14 to 15c. for rejected and 11½ to 13c. for unwashed. Some outside dealers are asking 21 to 22c. for washed.

LIVE STOCK

Trade in live stock is fairly active, though values, especially for choice export cattle, are not as high as they were a fortnight ago. This week's run at the city market has been large, a great many rough and inferior cattle being offered. Good cattle are wanted and more would sell readily enough if they were here. Prices rule steady. Only a few export cattle of choice quality are offering. The demand is active. Extra choice sell at \$4.70 to \$4.90, and cows at \$4.00 to \$4.50 per cwt. Too many rough butchers' cattle are offering and for those trade is slow. The best butchers' sell at \$4.50 to \$4.65; good to choice at \$4.30 to \$4.50; fair to good at \$4.00 to \$4.25, and common to medium at \$2.50 to \$3.75 per cwt. There is a fairly active demand for stockers and feeders and trade is brisk. Short-keep in good condition sell at \$3.50 to \$4.00; other quality at \$3.25 to \$3.75. Good stockers bring \$3.25 to \$3.75 and common \$2.00 to \$2.75 per cwt. Milch cows are of rather slow demand just now and sell at \$20 to \$30 each. Calves are firm at \$2 to \$10 each and \$3.50 to \$3.25 per cwt.

Though the run of sheep has been large, trade is fair. Export sheep sell at \$2.75 to \$3.85 per cwt., and culls at \$2 to \$3. Lambs are firm at \$2.50 to \$3.75 each, and \$1.75 to \$4.50 per cwt.

Hogs have advanced in price and quotations this week are \$3.50 per cwt. for select and \$3.35 for lights and fats.

The Canadian Produce Markets at a Glance

The highest quotations of prevailing prices for standard grades of farm produce in the leading markets on the dates named. Foorer stuff lower.

Date	Toronto	Montreal	St. John	Halifax	Winnipeg
	12	11	8	8	8
Wheat, per bushel.....	\$ 1 00	\$ 0 98	\$	\$	\$ 0 8½
Oats, per bushel.....	35½	40	45	45	36
Barley, per bushel.....	41	49½	53	53	44
Peas, per bushel.....	71	75	75	75
Corn, per bushel.....	50	60	55	57
Flour, per barrel.....	4 10	4 70	4 20	4 60	4 15
Bran, per ton.....	16 50	16 50	21 50	22 00	16 00
Shorts, per ton.....	19 00	18 00	22 50	23 00	17 00
Potatoes, per bag.....	90	60	60	60	70
Beans, per bushel.....	1 20	1 15	1 90	2 00
Hay, per ton.....	9 00	10 00	12 50	13 00	10 00
Straw, per ton.....	5 75	6 00	8 00	8 00
Eggs, per dozen.....	16½	19	15	15	18
Chickens, per pound, d.w.....	15	16	16	16	18
Ducks, per pound, d.w.....	14	16	16	16	17
Turkeys, per pound, d.w.....	15	16	16	16	18
Geese, per pound, d.w.....	10	11	14	14
Apples, per barrel.....	5 00	4 70	4 00	4 00	5 75
Cheese, per pound.....	9	8½	9	9	8½
Butter, creamery, per pound.....	18½	19½	19	20	16½
Butter, dairy, per pound.....	13	14½	15	16	12
Cattle, per cwt.....	5 25	5 00	5 25	5 00	3 75
Sheep, per cwt.....	5 85	5 50	5 25	5 30	4 50
Hogs, per cwt.....	5 60	5 50	5 50	5 30	4 75
Veal Calves, per cwt.....	5 00	3 50	4 50	4 50

TORONTO JUNCTION

The receipts of stock at the new Union Stock Yards, Toronto Junction, continue to grow. On Monday last the total receipts were 86 carloads, made up mostly of cattle. The quality of cattle offered was fair to good. The bulk of the export cattle sold at \$4.75 to \$5.00 per cwt., although some sold as high as \$5.25. Bulls went for \$3.50 to \$4.00 per cwt. Butcher's cattle sold as high as \$4.50 and down to \$3.25 per cwt.

Carnefac Stock Food Competition at Winnipeg

The general interest which was taken all over the country in the Carnefac Stock Food Competition for pure-bred or grade calves, born on or after January 1st, 1904, culminated in a most exciting contest. The entries were of such a strong character in every way that not only the winners, but all those who took part deserve the utmost credit. Wm. R. Stewart, Limerick, Ont., won the first prize of \$100, by a magnificent animal, born on January 10th, and weighing 770 lbs. James Herriot & Sons, of Souris, Man., were second with an entry born January 7th, and weighing the team at 730 lbs. They received \$50. The third prize of \$35 fell to Sir Wm. Van Horne, East Selkirk, whose calf weighed 628 lbs., and was born January 10th. G. S. Bennet, Roman, Man., and J. G. Barron, Carberry, Man., were awarded fourth and fifth places, their animals weighing 597 and 585 lbs. respectively, being born January 13rd and January 13th. This contest proved conclusively the marvelous feeding and health-sustaining qualities of Carnefac Stock Food, which is sold from coast to coast and is backed by the largest company of its kind in Canada. Such well-known breeders of thoroughbred stock as Sir Wm. Van Horne, East Selkirk; Senator Edwards, Rockland, Ont.; Wm. R. Stewart, Lucasville, and J. G. Barron, Carberry, Man., as well as many others, are constant users of Carnefac, and find it unexcelled. Stock-raisers cannot do better than to give this strongly recommended preparation a first place in the feeding of their animals. It has a general excellence that is borne out by the experiences of breeders all over the Dominion, and may be depended upon in every respect.

Fruit-a-tives

For years it has been known that some fruits possess unusual medicinal qualities. Fresh apple juice has a marked effect on the kidneys and excites a greater excretion of urine. Ranges are probably the most appetizing of all fruits, as well as the most grateful to the stomach. Figs and prunes have been termed "nature's laxative" because of their power to strengthen and invigorate the intestines and make the bowels move easily and naturally.

"Fruit-a-tives" is the concentrated extract of fresh, ripe fruit, compressed into tablets for convenience. As a safe and speedy cure for Disorders of the Stomach, Constipation, Biliousness, Liver and Kidney Troubles, "Fruit-a-tives" are unequalled. All the drug stores now have them on sale at 50c. a box.

The Use of Bands

Does it ever occur to the advocates of spraying for the protection of fruit trees that there is a limit to the amount of preventiveness accomplished by this means—that trees cannot be properly sprayed, even by experts, only at certain periods of the year, and a large proportion of the insects, both flying and climbing, wing and wingless, are continually coming to the ground for mois-

ture, etc.; that if an effective band were placed around the trunk of trees, that same would prevent the pest, once down, from again climbing the tree, that such a band properly applied would not only stop them but would form such a means of protection for them that their cocoons would be laid underneath the band, where they can be readily found and easily destroyed, thus making it a comparatively simple operation to destroy thousands of the eggs of all kinds of insects.—F. V. Parsons, in *Canadian Horticulturist*.

BOOKS AND BULLETINS

THE BROWN TAIL MOTH.—Bulletin 107. Agricultural Experiment Station, Durham, N.H.

THE SAN JOSE SCALE.—Bulletin 109. New Hampshire Experiment Station.

ORCHARD MANAGEMENT.—Bulletin 110. New Hampshire Experiment Station.

POTATOES AND POTATO CULTURE.—Bulletin 111. N. H. Experiment Station.

LEED AND SOIL TREATMENT.—Bulletin 102. Experiment Station, Wooster, Ohio.

HARDY CATALPA AS A FARM CROP.—Bulletin 149. Ohio Experiment Station.

THE CODLING MOTH.—Bulletin 89. Experiment Station, Logan, Utah.

POULTRY MANAGEMENT.—Bulletin 100. Experiment Station, Orono, Maine.

BINDING CORN.—Bulletin 15. Experiment Station, St. Anthony Park, Minn.

SWINE FEEDING.—Bulletin 80. Experiment Station, Corvallis, Oregon.

STRAWBERRIES AND VEGETABLES.—Bulletin 77. Oregon Experiment Station.

CANNING CHEESE.—Bulletin 78. Oregon Experiment Station.

PLANT FOOD AND USE OF FERTILIZERS.—Bulletin 79. Oregon Experiment Station.

REPORT ON AGRICULTURE for the Province of New Brunswick for 1903. L. P. Farris, Commissioner of Agriculture, Fredericton, N.B.

FEEDING VALUE OF SOFT CORN FOR BEEF PRODUCTION.—Bulletin 75. Experiment Station, Ames, Iowa.

THE MOISTURE CONTENT OF BUTTER AND METHODS OF CONTROLLING IT.—Bulletin 76. Experiment Station, Ames, Iowa.

DEHORNING, MILKING RECORDS, SKIM-MILK FOR CALVES.—Bulletin 28. Experiment Station, Storrs, Conn.

SAN JOSE SCALE, MELTON BLIGHT.—Bulletin 30. Experiment Station, Storrs, Conn.

RECORDS OF DAIRY HERD FOR FIVE YEARS.—Bulletin 29. Experiment Station, Storrs, Conn.

CORN TESTS IN 1902 AND 1903.—Volume XVI, article IV. Experiment Station, Lincoln, Nebraska.

RIGHT WAY TO IRRIGATE.—Bulletin 86. Agricultural College, Logan, Utah.

THE GRAIN SMUTS.—Bulletin 84. Agricultural College, Logan, Utah.

PEAR BLIGHT.—Bulletin 85. Agricultural College, Logan, Utah.

FORAGE AND SOILING EXPERIMENTS.—Bulletin No. 65. Experiment Station, State College, Centre County, Penn.

ONTARIO AGRICULTURAL AND EXPERIMENTAL UNION.—Report for 1903. Department of Agriculture, Toronto.

New Zealand Department of Agriculture, Report for 1903.

MACARONI WHEAT.—Bulletin 82. Experiment Station, Brookings, South Dakota.

DEPARTMENT OF AGRICULTURE FOR BRITISH COLUMBIA.—Report for 1902. J. R. Anderson, Deputy Minister of Agriculture.

AMERICAN BREEDERS' ASSOCIATION. Minutes of first annual meeting. Prof. W. M. Hays, Secretary, St. Anthony Park, Minn.

PLANT DISEASES IN VERMONT.—Bulletin 106. Experiment Station, Burlington, Vt.

Report of Vermont Agricultural Experiment Station for 1902-03.

REPORT Agricultural Experiment Station for 1903.

INCREASING THE YIELD OF CORN.—Bulletin Vol. XVII, No. 2. Experiment Station, Knoxville, Tenn.

CROPS FOR THE SILO.—Bulletin Vol. XVII, No. 1. Tennessee Experiment Station.

BINDING CORN.—Class Bulletin No. 15. Experiment Station, St. Anthony Park, Minn.

Fungicides, Insecticides and Spraying Calendars.—Bulletin 96. Hatch Experiment Station, Amherst, Mass.

ANNUAL REPORT.—Board of Agriculture, Columbia, Missouri.

THE FARMERS' EXCHANGE

One Cent a Word

CASH WITH ORDER

All advertisements under this head one cent a word. Cash must accompany all orders. No clipping type or cuts allowed. (Send initials and number orders as one word.)

SALESMEN wanted for our hardy Nursery Stock. Choice Specialties. Liberal Terms. Elegant catalog free. Pay weekly. CASH REQUIRED. Galt, Ont.

FARM FOR SALE.—Splendid 120-acre farm, 2 miles from thriving village of Burford, in Great County, Ont. Good barn, stable, and out-buildings; all out-buildings recently shingled and repaired. Price, \$7,000; reasonable payment down, balance \$2. Write for big farm catalogue just published. S. G. READ & SON, Brantford, Ont.

SHORT-TORS.—The best and butter countess. Scotch sallows from imported stock. Write for particulars. H. C. ORHAM, Alton Craig, Ont.

WANTED.—Energetic, responsible men to sell fruit trees, ornamental trees, etc. Canvassing outfit free. Liberal pay weekly. Arrangements made for whole or part time. We also have a special line of seed potatoes now before offered for sale in Canada. For terms apply NOW. **FELHAM NURSERY COMPANY**, Toronto, Ont.

GINSENG.—Fortunes in little gardens. Easily grown; hardy everywhere. Roots and seeds for sale. Plant in spring or fall. Complete booklet and magazine etc. **OSARK GINSENG CO.**, Joplin, Mo., U.S.A.

SALESMEN WANTED for "Auto-Spray," best compound for all nursery insects. Splendid sale. Liberal terms. Write for particulars. Complete machine. **CARRISBROOK, Galt, Ont.**

BUFF ORPINGTON EGGS FOR SALE.—Pen No. 1 consists of 12 eggs, bred in Chicago pullet 1903, 1st industrial pullet, also 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th; eggs \$2.00 per 12. Pen No. 2—Utility even color, lots of females, headed by 1st Ontario Utility sold here, grand shape, eggs \$1.00 per 12, \$5.00 per 100. J. W. CLARK, Importer and Breeder, Cairnsville, Ont.

BARRON CURE CURE makes any animal cure the most effective. Write for particulars. Particulars from L. F. BELLECK, Druggist, Morrisburg, Ont.

EGGS, from choicest "utility" and "fancy" strains. Brown Leghorns, Black Minorcas, Barred Rocks, White Wyandottes. Circular giving particulars free. JOHN B. PETTIT, Prichard, Ont.

FOR SALE.—Several young, pure bred Holstein Bulls from the very best strains. S. E. SMITH, Dundas.

Always mention The Farming World when answering advertisements. It will usually be an advantage to do so.

DOMINION FAIR

(Continued from page 585.)

was shown in the agricultural hall, and some fine lots of last year's grains. In fact the wheat exhibit was the best we have seen at a similar exhibition, the display of Dr. Thompson, of St. James, being specially fine.

In this department were exhibits from New Ontario and British Columbia. The latter was chiefly a fruit display, in charge of R. M. Palmer. It was tastily arranged and the various kinds of fruits shown indicate that the Pacific province is par excellence a great fruit country. The Ontario grower will have to look to his laurels or his brethren beyond the Rockies will replace him in the markets of the west. Just here we might ask, why was not the Ontario fruit grower represented at the Dominion Fair? It would no doubt be difficult to get up a creditable exhibit so early in the season, but something might have been done to show the westerner that we in Ontario are in the fruit business.

POULTRY.

The west puts up a good poultry show and it was not made up of the fancy kinds either. A good representative exhibit of the utility breeds was shown that might do credit to our larger eastern shows. A. G. Gilbert, Poultry Manager, Central Experimental Farm, Ottawa, gave a series of practical talks and demonstrations on poultry culture.

MANUFACTURES.

The Ontario manufacturers, better, those from eastern Canada, did themselves proud. "Made in Canada," was much in evidence, and the display of Canadian wares should result in a largely increased trade for home manufacturers in the fast growing west.

J. W. W.

The Value of Alfalfa Pasture

The Kansas Experiment Station has been conducting an experiment during the last year for the purpose of determining the value of an acre of land as pasture for swine that are fed a grain ration consisting of half shorts, one-fourth corn meal, and one-fourth Kafir meal. Thirty shoats, averaging fifty-two pounds in weight, were divided as nearly equally as possible into three lots of ten each. All the lots were fed the same grain ration but one lot received rape pasture, one lot alfalfa pasture, and the third was fed in a dry lot.

The grains eaten were very nearly equal. Where no pasture, however, was used, it required 271 pounds of grain to make 100 pounds of gain; with rape pasture, 301 pounds; and with alfalfa pasture, 300 pounds.

The station, based on this experiment, credits the grain with 877 pounds of pork and the rape with 190 pounds. At six cents per pound, the price at which hogs were selling at the close of the experiment, this makes the value of an acre of rape \$11.90. In a similar manner the alfalfa is credited with 201 pounds of pork, equal to \$12.05, and as there was only a half acre of alfalfa used, the value of the alfalfa was \$24.10 per acre.

The cost of preparing the seed bed and seeding the rape was \$1.80 per acre. The station says that \$2.05, and as the experiment emphasizes the superior value of alfalfa pasture. Where alfalfa is not available, or where variety is wanted or it is desired to utilize otherwise waste land, Dwarf Essex rape, seeded at the rate of six to eight pounds per acre any time from early spring to late summer, will furnish an excellent diet that is greatly relished by the hog. Succulence and variety will make healthier hogs that will return increased profits.

U S U S U S U

THE IMPROVED U. S. SEPARATORS

HAVE LOW SUPPLY CAN
AND MAKE MORE MONEY
by getting more cream—
Hold World's Record
for clean skimming

SAVE MORE MONEY
by wearing longer and costing less for
repairs than others, therefore are the

MOST PROFITABLE TO BUY
Handsome illustrated catalogue free for the asking.

We have transfer houses at many different Canadian points thus insuring prompt delivery to any section.

Vermont Farm Machine Co., Bellows Falls, Vt.

S U S U S U S

The Wheel You Want.

For Farm and General Work.

ALL IRON.

Any size. Any width of tire. Made to fit any axle. Strong and durable. Costs nothing for repairs.

Our **QUEEN CITY HANDY WAGON** with iron wheels, strong and of light draft, low and convenient to load and unload, a perfect wagon for the farm, carries Five thousand pounds. Write for catalogue of both wheels and wagons.



Dominion Wrought Iron Wheel Co. Limited, Orillia, Ontario

J. L. JONES
ENGRAVING & CO.
Wood & Photo Engraving
and Electrotyping.
168 Bay Street
Toronto

DELOACH PAT.



TRIPLEX HAY BALER, SELF-FEEDER, LOW IN PRICE.
For Hand, Horse or Bolt Power. Leverage 40 to 1. Bales quicker, outer and more solid than any other. Also Striking Mills, Water Wheels, Saw Mills, etc. Cat. Free.

De Loach Mill Mfg. Co. Box 907
180 Liberty St., New York. ATLANTA, GA.

10 Years Old
or
50 Years Young

BOYS

3 Feet Tall
or
7 Feet Short

HERE is a good watch for a small boy, and not a bad watch for a big one. It is a good reliable time-keeper and made to wear and stand hard usage. The case is open face, and made from solid nickel that looks just like silver, and won't change color. It is stem wind and stem set, you don't need a key. You may pay \$25.00 or \$30.00 for a watch and not get one that will keep better time or give better general satisfaction. Only you, yourself, need know how little it cost. Get one, and you will be surprised how good it is, and how well it looks.

How to Get It

We will mail this watch, carefully packed, postage prepaid, and guaranteed in good condition when it reaches you, if you will get only eight yearly subscriptions to **THE FARMING WORLD**. The subscription price is 60 cents a year, or two years for one dollar. The paper to one address for two years counts as two subscriptions. Thus, if you can get four of your neighbors to give you one dollar each, you secure the watch for nothing. Each subscriber will get the paper for two years; or, three at \$1.60 each and two at 60 cents wins the watch. Any way in which you can make up the eight years' subscriptions, but they must all be names of new readers of the paper. Any boy can earn a watch in a few hours.

Address:

The Farming World, Toronto

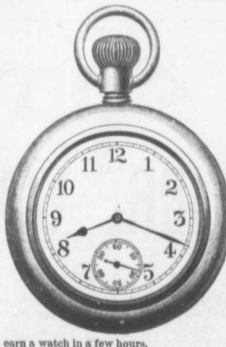


Table AND— Pocket CUTLERY

OF THE BEST ENGLISH MAKERS.

CARVERS, SPOONS, FORKS, TABLE and DESSERT KNIVES, STERLING SILVER FORKS and SPOONS, NUT CRACKS, DESSERT SETS, BREAD FORKS, Etc.

WRITE FOR PRICES.

RICE LEWIS & SON LIMITED

Cor. King and Victoria Sts., - - TORONTO

THE WONDER OF THE AGE

ALL EYES ARE ON THIS INVENTION

Patented 1895-96 and 1913.



The Genuine Tolton Pea Harvester with New Patent Buncher at Work.

1. Harvesting in the most complete manner from eight to ten acres per day.
2. Harvesters to suit all kinds of mowers.

Every Machine Warranted. Our Motto: "Not too Cheap, but too Good." No drilling holes in Mower Bar or Treadle Shoe. A wrench is all that is required to attach it to any mower. Give your orders to any four local agents, or send direct to

TOLTON BROS., Limited - GUELPH, ONT.

EDDY FIBRE WARE

is used in thousands of homes in Canada. Besides being **hand-some in appearance**, it **surpasses all others for durability** and in **all points essential to a first-class article**.

Insist on your grocer supplying you with **E. B. EDDY'S** make, which can be had in **Tubs, Pails, Wash Basins, Spittoons, Etc.**

BUCHANAN'S UNLOADING OUTFIT

Works well both on stacks and in barns unloads all kinds of hay and grain either loose or in sheaves. Send for catalogue to **M. T. BUCHANAN & CO., Ingersoll, Ont.**

The Powers Well Boring and Drilling Machine

is guaranteed to bore 1 1/2 in. in 10 hours, to be the lightest draft, most convenient mounted and operate of any machine made. It is a horse power, portable machine, requires no setting up or making chews, back-holes and drills through every motion automatic, repairs its own drill and requires but one man to operate. Write for free catalog H. **THE POWERS MFG. CO., Box 23, Clarinda, Ia.**

CANADIAN PACIFIC

Farm Laborers Wanted FARM LABORERS' EXCURSIONS

Will be run to stations on **Can. Pac.**, in Manitoba and Assiniboia, West, South-west and North-west of Winnipeg as far as

MOOSE JAW ESTEVAN and YORKTON \$12

From all stations on line of C. P. R. Hamilton, London and Windsor Sections West of Toronto, also Guelph Branch, excepting Guelph City, and all stations south of line G.T.H., Toronto to Sarina, **AUGUST 20th.**

From all stations on C. P. R. Toronto City, Eglarowale, Guelph City and north, and all stations on lines of G. T. H., Toronto to Sarina and north, excepting north of Cardwell Junction, and north of Toronto on North Bay section on **AUGUST 23rd.**

From all stations on C. P. R. east of Toronto to Shabton Lake, Inclusive, and north thereof, and all stations on Grand Trunk east of Toronto to Kingston, Inclusive, and north thereof, also north of Toronto and Cardwell Junction, on **AUGUST 25th.**

One way tickets to Winnipeg only will be sold, but each person put on has to be furnished with a coupon on which, after such person has been hired at Winnipeg to work as farm laborer, but not later than August 31st, 1914, free transportation will be given the holder from Winnipeg to any Canadian Pacific station in Manitoba or Assiniboia, West or Southwest or Northwest of Winnipeg, but not beyond Moose Jaw, Estevan or Yorkton.

For pamphlet and all particulars and tickets apply to any Canadian Pacific Agent.

A. H. Notman, Asst. Gen. Pass. Agent, Toronto.

Spavin and Ring-bone

Once hard to cure—easy now. A 45-minute treatment does it. No other method so easy, quick and painless. No other method sure.

Fleming's Spavin and Ringbone Paste cures even the very worst cases—none too old or bad. Money back if it ever fails. Lots of information if you write. Book about Spavin, Ringbone, Curb, Splint, Ring Spavin and other horse troubles sent free.

FLEMING BROS., Chemists, 88 Front Street, West, Toronto, Ont.

ROCK SALT for horses and cattle, in ton and car lots. **Toronto Salt Works, Toronto**