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The Farming World



AND CANADIAN FARM & HOME

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STARCH

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The Farming World

And Canadian Farm and Home

Vol. XXII.

TORONTO, MAY 15, 1903

No. 8

Improving the Home Pages.

THE home readers of this journal will appreciate the changes in that department as outlined in this issue. In adopting the name of "The Home World" instead of "The Farm Home," our idea has been to broaden out a little and take in a wider range of subjects in this department. As "The Farming World" covers the whole field of agriculture, so that branch of it to be known henceforth as "The Home World" will aim to cover the whole field of home life on the farm. As will be seen several new departments appear in this issue. These will be greatly enlarged in future issues. The special decorative headings have been prepared at considerable expense. Others will appear next issue, our desire being to brighten up the home department and give it a lighter touch than heretofore. The practical side of home life will not be neglected, but more attention will be given to the children's branch and to the more entertaining side.

We trust our home readers will appreciate these changes. They have been made wholly for their benefit. However, we need their cooperation and help. Hints and suggestions that will help us to make this department better and bring it more in touch with the home life on the farm will be gratefully received. Let us hear from you.

Dr. James W. Robertson.

Queen's University paid a well deserved tribute to agriculture in conferring the honorary degree of LL.D., upon Prof. James W. Robertson, Dominion Commissioner of Agriculture and Dairying, at its recent commencement. No Canadian better merits an honor of this kind. During the past eighteen or twenty years Prof. Robertson has given his best energies and devoted his splendid executive and constructive ability to build up and advance the interests of agriculture in all parts of the Dominion, and with marked success. His more recent work in connection with manual training, the Macdonald seed grain competition and the introduction of consolidated rural schools into Canada is deserving of special recognition and Queen's University has only added glory unto itself by honoring so worthy an individual. It has often been a surprise to us, why such men as Prof. Robertson, Dr. Mills, and a few others we might mention, who have aided very materially in the advancement of Canadian agriculture, have been passed by and worn out politicians

and men of mediocre ability selected for honors at the hand of royalty on great state occasions. Though such honors mean nothing in themselves, they are supposed to be given as a recognition of merit, and if so, why confer them to one or two classes in the community.

To Dr. James W. Robertson we extend our heartiest congratulations. May he live long to wear the honors recently bestowed and to carry on the splendid work he is doing for Canada and Canadian Agriculture.

Colonists Via James Bay

Among the recent colonization proposals is one to build a railway from Peninsular Harbor, on the north east point of Lake Superior, to a point on the Albany River in connection with a line of steamers from James Bay to England. The promoters propose to bring settlers into new Ontario by the Hudson Bay route and so avoid the long journey inland from the seaboard. It is claimed that this northern passage is open from May 1 to Nov. 15 or as long as the St. Lawrence route.

The Grand Trunk Pacific.

The Grand Trunk Pacific project is now before the Railway Committee at Ottawa. Not since the proposal to build the Canadian Pacific was before it has that body had so important a measure to discuss. The project is important for several reasons. There is a serious congestion of traffic in the west and another railway is badly needed. The route proposed is largely through new and unsettled parts of Canada, and will open up large tracts of uncultivated land to the settler. The new road will be Canadian from start to finish and will have behind it the power and influence of the Grand Trunk corporation thus assuring the completion of the road without any needless loss of time.

The proposed route of some months back will be changed somewhat. Instead of starting from North Bay and running westerly to Winnipeg, it is now proposed to start from Quebec crossing the Ontario boundary near Lake Abitibi, or about midway between Lake Temiskaming and the head of James Bay. This will take the road through the great clay belt of northern Ontario opening up a well-wooded and well-watered section. It is also proposed to build the section from Quebec to Winnipeg first, which will help to relieve the congested traffic of the West, and greatly enlarge the spout.

The proposition is then of the very greatest importance to Canada and nothing should be done that will delay its construction. At the same time the interests of the public should be well guarded. Freight rates should be kept under control, and the chances to saddle another great railway monopoly upon the Dominion reduced to a minimum. This country must have more railways to the West, but they should not be had at any sacrifice of the public's rights.

Ontario Crop Report.

The May crop report just issued by the Ontario Department of Agriculture states that fall wheat, in most cases, has come through the winter well and promises fair to good. The acreage is somewhat less than the past year or two. Clover came through generally in good condition and prospects are bright in the western half of the province. Seeding operations were well advanced at the end of April. Taken altogether the position of live stock was good on May 1st. In various parts of the province distemper was prevalent, but not of a serious nature. Cattle were a trifle thin but healthy. Sheep were in fair condition but ravages from dogs prevents many from raising sheep. Lambing was later than usual and a considerable number of those dropped died. The swine industry is prosperous and litters are reported larger than last year. Rough fodder has been plentiful but bran, shorts and meals have been scarce. There is a good supply of hay on hand; but it is of poor quality. Prime heaves are scarce and there are not as many store cattle on hand as usual. Orchards have come through the winter in excellent order, no injury from severe frosts or ice-storms being reported. Field mice have done much damage to trees in many districts and appear to be working westward. Blossoming was late and no definite opinion could be given on May 1st as to the general yield.

Argentine Again Shut Out.

The British Board of Agriculture on May 11th issued an order prohibiting the importation of live stock from Argentina and Uruguay. This will no doubt help the Canadian cattle trade considerably and it is to be hoped there will be no changing around for a time. This order, however, should not lessen any effort that is being made to establish the dressed meat trade in Canada. Our farmers will never get the highest prices for their cattle until this trade is placed on a good footing.

Live Stock and Crop Prospects in the West

Seeding Operations—Outlook Most Promising— Items of Interest

(By our Western correspondent)

It is undeniable that the present month and the month of April have been ideal weather for seeding operations and that an increased crop area has been sown with less labor and in less time than any preceding season within our recollection. Since the closing days of March, when seeding operations commenced, there has been only one day when it was impossible to do field work, and in some portions of the province even that interruption was not experienced. This favorable weather, combined with the large amount of new land broken, and the further large area of summer fallowing and fall plowing of last year, is certain to result in a considerably increased area in crop this year. Just how much this increase will amount to it is at present impossible to say. Various estimates have been offered of from ten to thirty per cent., and either figure may be correct. Wheat seeding has been completed for a week past and the greater portion of the oats and barley are now sown. Another week will see the ordinary seeding operations at an end. The increase referred to will mostly occur in the eastern and northwestern portions of the province. The southern and southwestern districts are now so well settled that it is not likely that any notable increase in area will take place there.

As to the Territories, it can only be said that the advancement of the present year is bound to be phenomenal. Seeding operations there are not so far advanced as in Manitoba, but are well under way and will probably be completed by the 25th of this month.

The increasing warmth has started a healthy growth of the newly-sown grains, and the prairie grasses are also in good condition. We are now looking for rain, although there will be no unfortunate effects experienced should no rain come for two or three weeks yet. The latter part of May and the month of June is the most critical season of the year with Manitoba farmers; it is then that he expects the bulk of the season's rainfall. Should this expectation be realized this year, the rosy accounts and soul-stirring prophecies of the newspaper scribe will probably be realized.

STOCKERS FOR THE RANCHES

It is not only in grain growing that the prospects for the coming season are excellent. Dairying and cattle raising are equally promising to those engaged in these occupations. Reports from the Territories indicate that a very large number of stockers are being plac-

ed on the ranches at the present time. Manitoba stockers are scarce and high priced, but large quantities are being imported from Ontario, the United States, and even from as far south as Mexico. Messrs. Gordon & Ironside are reported to have a shipment of 10,000 head on the way from Mexico at the present time, of which they will place 4,000 on their own ranches, offering the balance for sale. There is no export trade at present as the British markets are too low to suit our dealers, who are holding for an improvement. The local cattle trade is in good condition; prices are fair as will be seen from this week's market report, and the supply is steady, showing that farmers find present prices remunerative.

In dairying it might be remarked that while growth is steady, there is not likely to be any noticeable increase while the prospects for grain growing are so brilliant. Nothing has given dairying so great an impetus in this province as the partial failure of the crop of 1900. This season has been favorable. Pasture although not abundant, is of good quality, and roads being in good condition, the factories and creameries are opening early. Another influence that is bound to give a tendency toward dairying is the steady increase in the value of farm property. Wheat will pay only when land values are not above a certain figure,—the higher the price of land, the less profit in exclusive grain farming. From now on we shall feel this influence in dairying in many parts of Manitoba where land is scarce.

WHERE LAST YEAR'S WHEAT WENT

Here are some very interesting figures showing the disposal of last year's wheat crop.

The estimated crop of Manitoba and the Territories for 1902 was	64,283,434
The amount of wheat now in store at country points estimated to be	10,644,590
Amount required for seed estimated to be	5,000,000
For feed until next crop	1,000,000
Held by country mills for flouring purposes	7,000,000
Amount still in farmers' hands about	4,089,168
Amount still to be taken out by railways about	14,733,758
Amount shipped or in terminal elevators	35,549,676

LIKE ONTARIO

A recent occurrence recalls stories of pioneer life in Eastern Canada. The little town of Edrans is situated on a new line of railway

running northwesterly from MacGregor. Though only of two years' growth it is a flourishing little village with considerable local trade and doing a large business in cordwood, which is shipped from that point in immense quantities. It is surrounded on all sides by partly cleared woods. A farmer burning brushwood in his clearing permitted the fire to get beyond control and the high wind soon spread the conflagration. It was only a few hours until the little town was almost encircled by flames, and for a day and a night the community fought for the safety of their homes, and almost for their lives. They were successful at last in saving the town, though several houses were destroyed, and in the immediate neighborhood more than one farmer lost buildings, machinery and stock, and worse than all, the cordwood which represented the results of his winter's work. It is stated that over 20,000 cords of wood were burned.

LIVE STOCK WORK

The Manitoba Live Stock Associations have begun an active campaign for the purpose of booming business. A list of stock for sale has been issued, giving prices and descriptions of the animals offered by members of the Association. The Association has the co-operation of the Territorial Government in shipping purebred stock from Manitoba to the Territories. A flat rate of \$5.00 per head on bulls and \$7.50 per head on females will be charged to purchasers by the Government. The Association is also wrestling with the Winter Fair problem, and the secretary hopes to have a definite proposition to place before the members at an early date.

WINNIPEG INDUSTRIAL

Since the last financial report of the Winnipeg Industrial Exhibition there has been a very general feeling among parties interested that the affairs of that institution are not managed on the strictest business principles. This has culminated in the appointment of an auditor by the City Council, whose report on the books of the Association is just recently published. The report contains some very severe criticisms, not only of book-keeping, but of the officials' methods of doing business. While no grave irregularities are charged, the fact is made clear that certain reforms are necessary. As the city is in future likely to guarantee the financial liabilities of the Association it seems not at all unlikely that the recommendations will be acted upon.

♦

Prof. Dean will address the annual meeting of the American Holstein-Friesian Association at Syracuse, N.Y., on June 3rd. Mr. Geo. Rice, Currier, Ont., will ask for the reduction of registration fees on bulls.



Judge and Jury, 1st prize pair under 15.2½ hands high. They are chestnut in color and well broken. Shown by H. C. Cox, Toronto.

Canadian Military Tournament and Horse Show

The title fairly describes, as was intended, the 1903 gathering in the Toronto Armouries. It was first a Military Tournament—the majority of the Committee being military men—and the best of the hours and the bulk of the time were devoted to military matters, the balance being left for the Horse Show proper. In point of attendance the public gave it ample patronage, and every evening showed an increased attendance, while the afternoons sometimes had the seats very well filled. The most popular part of the military side was the free gymnastics of the Royal Military College Cadets. Their quick marching was specially good. Next to them in popularity were the volunteers. The "Trooping the Color" by the Royal Grenadiers and the 48th Highlanders was specially popular, as was also the exhibition of "all arms" and the bridge building of the engineers.

The two last days of April and the first and second of May were the days of the Show, and while part of the time was wet and sometimes cold outside, the patrons of the Show should be pleased with the measure of good weather enjoyed.

THE HORSES

There was nothing sensational in the horses shown; perhaps the one that deserves first mention is the Hackney stallion "Saxon" bred near Calgary, out on the Western ranches. He shows wonderful action and is altogether a most promising animal, and if he goes on improving will be another continental champion. The Spring Show for heavy draught classes was held in February, and brought out over a hundred head of the best in Canada. At this Show teams and singles were the only ones shown and while a good average lot were out, the winners of a year ago were again to the front. The saddle horses were the feature of the Show. So many really good ones were out that the

classes were all filled with big fields of well-broken animals. The breeding classes of light-legged horses were not so well filled. In many cases there were just enough shown to capture the money, while in others even this number was lacking.

THOROUGHBREDS

The champion in this class was the King's Plate winner Dalmoor, foaled in 1894, Louis XIII.—Lady Dalmeny. This grandson of the famous St. Simon is a thick-bodied bay and a very lively animal to improve the breed of saddle horses and hunters. In the regular class Tragedian won first for Crow & Murray, Toronto. He is a chestnut by Egmont, and beat the bigger Derwentwater colt, Dunrobin. For young stallions out of the two shown, first was given to E. B. Clancey, Toronto, for Prince Arthur by Pillanist, a dark brown leggy fellow, very like a good racer.

CARRIAGE AND COACH

This was a fairly large class of various types. J. L. Reid, Derry

West, captured both first and second with a pair by Wiley Buckles—a thoroughbred who in his day left many a prize winner. Third went to W. N. Scott, of Milton, for a reformer, a bigger bay by Phenomenon. In the young class there were but three out. The bay Reformer, owned by A. G. H. Luxton, was first; a dark grey hackney, shown by H. N. Cressley, Rousseau, was second, and another son of Wiley Buckles was third.

STANDARD BRED

For young stallions, foaled since 1st January, 1900, only two entered, and first went to Miss K. L. Wilks, Galt, for Rex W. 37551, a yearling chestnut with three white socks—a well-made, clean-legged youngster by Dashwood. Second to a bigger, older horse, Sir Casimir 34843, rich brown in color, and a good mover. He is owned by Geo. W. Kennedy, Ilderton. There were eleven entries for the aged class. Golden Jubilee 29574, a chestnut, won for Cheyne & Armstrong, Derry West. He is by Norfolk, and is well made and fast, dam Gipsy Wilkes by Young Jim. Third went to Lord of the Manor 23216, bred by C. J. Hamlin; the well-known breeder of East Aurora, N.Y., and now owned by Geo. W. Kennedy. The class was a fairly good one, but with varied types.

HACKNEYS

Very few hackneys were shown. In the age stallion class only two were out. Saxon, a dark brown with white markings, owned by Robert Beith, M.P., Bowmanville, was first. He has quite wonderful action and won everything he could enter for in the Show. First for aged stallion—and he but four the last day of the Show—First for the best hackney stallion any age foaled in Canada; first for the best hackney stallion any age, given by the Toronto Industrial Exhibition; first and silver medal for the prize offered by the Hackney Horse Society of Great Britain for best colt out of imported dam by an imported sire. Saxon is by Robin



The Duke; 1st prize high stepper, Horse Show, 1903. Owned by P. Maher, Toronto. He and his mate, McGregor, won first prize for pairs, 1st in livery class, 2nd in four-in-hand, and 2nd in single hackney.

Adair 2nd (3907) out of Timber Pride (3798). The second prize in the aged class went to Kitchener (7143), a brown, bred by H. Fawcett, Belthorpe, Eng., imported and shown by Thos. Irving, Winchester. In the younger class R. Beith again won with Smylett Performer, a rich chestnut with white markings, bred by W. D. Fetch, Polkington, Eng. Second went to Jubilee Performer, a black by Jubilee Chief out of Miss Baker, bred by J. Sorby, Guelph, and exhibited by T. A. Cox, Brantford. Third to R. Beith for Toscar, by the imported Lord Rosebery. Only two hackney mares were in the young class, both owned by H. K. Crossley, Rosseau. Queen of the Party was the winner, a grey roan with three white stockings. She is clean-legged and a good stepper, and also won the English hackney medal, and was reservé for the championship for best hackney mare, being beaten by Canadian Queen, bred and shown by R. Beith. This mare is a fine bay, an excellent performer, and is by Squire Rickell, out of Cherry Ripe. The gold medal for the best get of a hackney sire went to A. Yeager, Simcoe, for Derby's Pride, by Hillhurst Sensation, an excellent goer and a good type of a superior harness horse.

HEAVY DRAUGHTS

For best heavy draught pair, any breed whatever, there were six entries and they all paraded. Five were Clydes or crosses and the sixth were greys after the Percheron type. First went easily to T. A. Cox, agent, Brantford, for the team shown last year by Graham Bros., Moss King, 4 yr., by Erskine Macgregor, and Moss Rose by Macquenn. They are bays with white legs to the knee and a fine team. Next to them came Geo. Moore, Waterloo, with a pair of four-year-old geldings—bays with very little white,—and third prize went to Mrs. Massey, of Dentonia Farm. In fourth place stood a pair from Wm. Hendrie & Co., Toronto, strong-looking bays with three white hind sooks, and next a Montreal team, heavy and good, but not going just well enough to please the judges. The prizes given by the Clydesdale Association went to the same teams as they were all sired by registered Clydesdale stallions. In the class for single draught, mare or gelding, Moss King was first, but two new ones came in for second and third. Second went to H. Pelton, Embro, for a very big thing four-year-old gelding, who may be an immense fellow when he is matured. Third to John Larmon, Toronto, for an-

other promising four-year-old. Strangely enough these three prizes went to the only three four-year-olds shown and the three winners all had white blazed faces, and the only ones shown in the class.

FONES

There was a capital show of ponies, and most of these classes were in the ring Saturday forenoon when the school children of the city visited the Show. The saddle class, fourteen one and under, ridden by boys under fifteen years of age, was a popular class, and the audience soon selected the winner—Margaret—exhibited by Miss Ethel Ames and well ridden by the smallest boy in the whole field. The same pony won in harness class, medium height, beating Duke of York, exhibited by H. M. Robinson, Toronto, a very perfect little horse of the Welsh type, but a half-bred hackney by Royal Stand-



Moss King, 1st prize single draught horse, shown by T. A. Cox, Brantford.

ard. This pony won first in the stallion class and second to him stood a little pinto pony owned by Joseph Harrison, Brampton. Ponies over thirteen hands were a good class. Princess Pelly, a light bay, was first. She is exhibited by Arthur Taylor, Toronto. Second went to Lady Edie, a chestnut shown by A.H. Haines, Toronto. In the smaller class, Denton Massey, Toronto, won with Ginger—a pretty chestnut. There was a large lot of Polo ponies, and the competitions in these classes were popular with the visitors. They had to be shown with mallet, and were judged for handiness, manners and conformation. They were in classes of ten or a dozen, and while some of these could not be called desirable polo ponies, being more suitable for the steady going of a country cob, but others were in capital form and did well. One winner was a handsome steel grey. He had perfect swift action, turned with the slightest movement, and appeared to be of one mind with his rider. He had a good deal of a

hackney look about him, and a casual glance would have put him down as too heavy for the best polo work, but when he moved he soon showed his excellent qualities. Altogether the polo ponies were the best lot ever seen at a Toronto Show.

HORSES IN HARNESS

There were an even 250 entries for the various harness classes in the Show and most of them were paraded before the judges. There was an even excellence in the animals shown which was absent when these Shows were begun years ago. Following the large Shows at Boston and New York, where many Canadian dealers exhibit with success, it may be that some of the best were left, in exchange for good prices, at these Shows, but enough were left to make a most creditable showing. The winner of the championship in this class was Geo. Pepper, of Toronto, who with the bay gelding Creighton won this honor. This horse is a fine mover and stands 15.2, six years old. He was first in his class, with the half-bred hackney winner Derby's Pride standing next him and Crow & Murray's Flashlight third. In the class under 15.1, Gay Boy, a four-year-old bay, shown by A. Yeager, Simcoe, was first, and he stood reservé for the harness championship. P. Maher, Toronto, won in the higher standing class with his popular bay gelding Duke. The same exhibitor got for his high standing pair, and Geo. Pepper with Creighton and mate captured the other class. This pair are from the Western States and were bought in Kansas City. Mrs. Fraser, Toronto Junction, had first for Brougham horses, and Geo. Gooderham sen., first for a pair shown to Victoria, with Mrs. Fraser second with a nice pair of browns. Geo. Pepper won for tandems and had a choice and very gay leader. A. Yeager won with four-in-hands. For horse and runabout, there was a large, good entry and a close contest. H. C. Cox, Toronto, won with Judge, a chestnut gelding, with Mrs. A. Beck, London, a close second with the bay mare Sparkle. Mr. Cox, with his chestnut pair Judge and Jury, won first for pair before a T cart, second and third for a single horse suitable for a lady to drive, being heateated by Sparkle, second for tandem pair and second for pair under 15.2½. Judge was also awarded first for single horse to Victoria. For best roadster, Miss K. L. Wilks won with the chestnut mare Lady Croesus, by the great speaker Croesus.

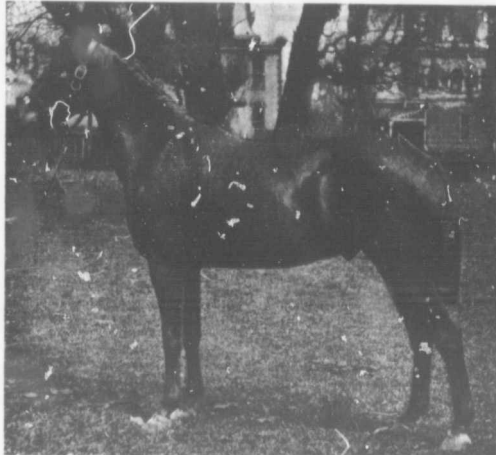
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Aylmer, winner of Governor-General's prize for best riding or cavalry horse not under 15 hands or over 15.3. Shown by A. Beck, London. After the show he sold for \$240 to Lord Minto. He is a good type of the military horse.

The same exhibitor had third for the black gelding Victor, and between this fine pair there stood the black mare Surette, owned by A. W. Hamilton, Sunderland. For roadster pairs, blacks with very long tails and very light feet were first. They are owned by W. T. Merry, Toronto. A fine pair of chestnuts with white markings took second for Dr. W. P. Caven, Toronto. They were more stately if hardly as attractive as their brisky rivals. For pacers, R. B. Moore, Waterloo, and Fred Moran, Toronto, were the winners in the two classes divided by 15.3 limit.

SADDLE HORSES

There were an even hundred saddle horses entered, and they were as good an average as any ever before seen at a Show in Toronto. For best saddle horse, fifteen hands and over, there were thirty entered and over a score faced the judges. Miss Pepper, Toronto, won with My Surprise, a chestnut, beautifully schooled. This horse was afterwards awarded the championship as the best saddle horse at the Show. The second class was for horses not over fifteen hands and a half, and again My Surprise won, as he measures half an inch under that height. Kidd Bros., Listowel, had second for Glendale, and Miss Murray's Primrose, a chestnut mare, was third. This mare afterwards won the class for lady's saddle horse with My Surprise second in the class for carrying mares. Miss Falkirk won for Mrs. A. Beck, with Mrs. Gerken, of Newmarket, second with the black Wanders, a Kentucky saddler, with all the paces. Third went to A. S. Chisholm, Oakville, for a very bonny black. There was a splendid class for

heavy weights. The chestnuts were winners again; out of five shown three won and the others were close up. Geo. Pepper's Senator was first, Mrs. A. Beck second with Westminster Belle, and A. Beck third with Connaught.

HUNTERS AND JUMPERS

The champion hunter was found in Geo. Pepper's Rupert, a black gelding 16½ hands. He was first as a qualified heavyweight and second for best six jumps. Mr. Pepper as usual had a fine string of hunters and jumpers, and was closely followed by Mrs. A. Beck and by A. Beck, of London, and also by Crow & Murray, of Toronto. The latter had a nice bay mare named Coquette. She won for best lady's hunter and was third for best six jumps, and first for lightweight hunter. They had also a winner in Intruder, a well-made dun who got first for heavyweight green hunter. Mrs. Beck had second for the qualified middleweight Falkirk, which was also second for ladies' hunter. Mrs. Beck had a second for Dunkirk in the lightweight class and the first for best six jumps.

The jumping and exhibit of hunters was much appreciated, and the attendance of the Toronto Hunt Club and the hounds was a very nice feature of the meeting, and altogether this meeting was one that was specially strong in hunters and saddle horses.

Western Seeding Operations

According to exhaustive reports received from all parts of Manitoba and the Territories by the Winnipeg Free Press, seeding operations and business conditions are progressing favorably. Spring conditions have been most favorable,

probably the best in the history of the country. There has been no broken weather to interrupt farming operations and this has afforded more time for careful cultivation of the soil. An increased acreage is reported, amounting in some districts to 20 per cent.

Ontario's Sheep

Ontario pure-bred sheep breeders have always had a good market for their surplus stock in the United States. That market still continues. Every year hundreds of the pick of our best flocks are sold to the Americans at high prices. In fact, our sheep breeders state that the United States is their very best market. It is to their interests therefore to make every effort to retain that market.

The future of this trade is of the most hopeful character. A change in the kind of husbandry carried on in many of the Western States is bound to come sooner or later. Ranching must give way to more diversified farming, and general agriculture be largely followed as the country becomes more thickly settled. At present the large flockmasters on the ranches seek new blood from such sources as will maintain the necessary characteristics in the flocks in their present environment. When the change to more intensive farming comes, there will be a greater demand for more productive animals than those now used on the ranges. When the flock does not have to "rustle" for a living, the flockmaster will turn his attention to a larger production of wool and mutton per head to meet the added cost of feeding and housing.

Some claim that when this change comes the breeding ground for supplying the new blood under these new conditions will move farther westward, and that breeders in the Eastern States and in Ontario will be practically forced out of this market. As to whether this will result or not it is hard to say. Our breeders have a good hold on that market at present and should make every effort to retain it. And should the breeding ground move farther West, new blood will be required to replenish these breeding herds, which no country will be in a better position to supply than Ontario.

A Good Mutton Sheep

"The sheep industry is at the present time in a dormant condition, but there will be a good awakening in the course of two or three years, and now is the time for the farmers to lay in a good flock of sheep at low prices. The sheep industry is a cheap one, and one that can be run in connection with all farms. It is very important that buyers should get the right stock in order to produce the right article. The male should show lots of strength and muscu-

lar development, yet he should not be coarse. He must have a good head, with a raise above the nostrils, good breadth and bone development. It is very important that the bone in the sheep should be coarse. He must have a good neck and lots of strength there. A thin weak neck is very undesirable. The junction of the neck to the shoulder should be smooth and well joined. It is very essential that a good male should have good feet. They must not be too long. All animals that are flesh producers must be low down. Back of all these the animal must have a good strong constitution. Wool on the head is a sign of good breeding. The ear is another sign of strength and vitality. The loin should be strong and there should be good development on the leg of mutton in order to be a desirable carcass. A well finished flank is a sign of a good feeder and a good feeder is essential to a good mutton sheep. Wool at the present time is a minor consideration, but the good sheep must carry wool of superior quality."—J. H. Grisdale, Central Experimental Farm, Ottawa.

Pig Feeding Experiment

An experiment in pig feeding has recently been started at the Experimental Farm, under the supervision of Mr. J. H. Grisdale. Thirty-two pigs have been divided into eight groups of four pigs each. This experiment will be continued for some time, to determine, if possible, the most profitable amount or proportion of roots or green feed that may be fed along with meal.

The following are the rations each lot will be fed:

Group 1.—This lot will get what may be termed a standard ration, which consists of a meal mixture, oats, peas, and barley, equal parts by weight, as much as they will eat up clean in a day, and four pounds of skim milk per pig per day.

Group 2.—Half pound of sugar beets to each pound of shorts.

Group 3.—Three-quarters of a pound of sugar beets to each pound of shorts.

Group 4.—One pound of sugar beets to each pound of shorts.

Group 5.—One and one-half pounds of sugar beets to each pound of shorts.

Group 6.—Two pounds of sugar beets to each pound of shorts.

Group 7.—Three pounds of sugar beets to each pound of shorts.

Group 8.—Four pounds of sugar beets to each pound of shorts.

On the 3rd of June, the sugar beets will be replaced by rape and the shorts by oats and barley.

Stubb—There goes a man who is full of mystery.

Pen—You don't say!

Stubb—Yes, he just ate some hash.

Country Roads— City Pavements

We know of no more useful thing on the farm than a good reliable bicycle. Such a wheel is the—



"Massey-Harris"

It is built of good material by experts of acknowledged ability. It has all the big improvements, and one man is responsible entirely for the regearing of wheeling—the

Hygienic Cushion Frame

that makes all roads smooth, that is to wheeling what the "Pullman" is to railroading.

In the country it turns the ordinary road into a city pavement, and saves the tires because it does away with a lot of friction.

A Bicycle so equipped puts your neighbor and the post-office at the turn of a pleasant spin.

Write for our pretty new booklet, "In Bicycledom."

Canada Cycle & Motor Company Limited

Head Office and Works
Toronto Junction

Building Up the Dairy Herd!

The improvement of the dairy herd is the very first step towards success. First of all, the milk record should receive our attention. By this I mean we should employ some system to record the daily, weekly, monthly and yearly yield of each cow in the herd. Reader, if you will try this you will be surprised at the results.

To illustrate how important this is: In a herd of cows which I was privileged to control last year, one cow gave 13,420 pounds of milk and she was the best cow in the herd. The poorest cow gave us a return of but 2,260 pounds.

Without the milk record we could have never known which cow was paying us and which one was not. As soon as we obtained this record we sold the unprofitable one and filled her place in the herd by another. How easy it is where a record is kept to find out what cows are profitable and what ones are not.

The owner can in this way discard the poor ones and keep the good ones, and in a few years have a valuable herd—all profitable animals.

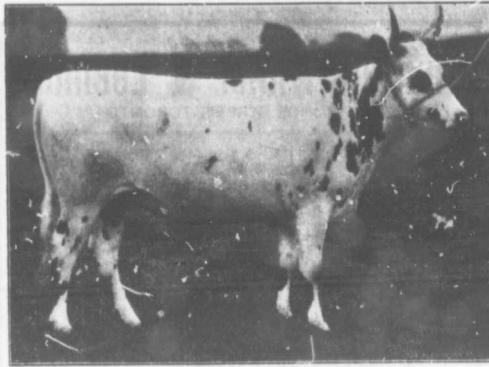
A small pair of scales costs but little and the milk from each cow can be weighed easily and quickly. If you think it is positively too much trouble to weigh each milking, do it once a week anyway; you can then estimate the relative standing of your cows. Then when you know the relative value of your cows and a buyer comes along, don't sell the best one because he will pay \$10 or \$20 more for her.

You have two cows: one will give you 6,000 pounds of milk and is a good cow; the second gives but 2,000 pounds. For the first you are offered \$60, for the second \$40. Twenty dollars looks like a big difference between two cows. And on the surface perhaps it is. But we must look down deep for the facts. The 6,000 pound cow at prevailing prices in many parts of the South would realize in sale of milk \$180 per year; the 2,000 pound cow but \$60. Where is the \$20 difference now? Solved to \$120. No, reader, you cannot afford to sell your best stock, if you mean to build up your herd. It is business wisdom to do so.

No farmer who produces milk and butter can afford to sell the best. Make use of the milk record, then, so as to know positively what cows are profitable and what are not. Sell off the poor ones and feed the remaining cows better with that which would have gone to the unprofitable ones.

I believe if one half the cows of any dairy breed were killed for beef or struck by lightning this coming week, and the remaining half were to receive the attention and food that would have gone to the whole herd they would return more profit to their owner.

J. H. C.



Ayrshire Cow, Aileen Aroon, at 2 years of age. A noted Scotch prize winner, exported to Japan in 1902.

Some Comments on Grants to Agriculture

Last issue we referred in a brief paragraph to the appropriations for agriculture in this province. There are some phases of these appropriations and the objects for which they are expended that may be profitably considered at this juncture. The following table has been prepared from the printed estimates of the Ontario Legislature for the years 1893, 1898 and 1903 and shows the increases to the various societies during these years:

	1893	1898	1903
AGRICULTURAL SOCIETIES			
Grants.....	\$75 000	\$76 650	\$78 650
Agriculture and Arts.....	5 000	.....	.....
Judges.....	.....	.....	3 000
DAIRY			
Associations.....	7 500	6 500	8 000
Institutions.....	.....	.....	6 000
E. and W. Schools.....	7 500	.....	700
FRUIT			
Associations.....	1 800	1 800	1 800
Expt. Stations.....	.....	3 800	3 100
Fruit Institutes.....	.....	.....	300
LIVE STOCK			
Associations.....	1 400	6 200	9 500
Poultry Associations.....	1 300	1 400	2 500
Experimental Union.....	600	1 200	1 200
Farmers' Institutes.....	6 000	9 900	13 5 0
Entomological Society.....	1 000	1 000	1 000
The Keepers' Ass'n.....	1 100	1 100	1 100
Bureau of Industries.....	6 500	6 500	5 500
Reports, Bulletins, etc.....	3 000	13 100	18 000
Colleges and Fairs.....	26 000	22 150	115 000
Miscellaneous.....	3 000	12 800	9 800
Total Agr. Grant	\$180 075	\$279 790	\$482,930

The above table gives a sort of birdseye view of the expansion of agricultural work as carried out in Ontario by the Minister of Agriculture and his Department. The Hon. John Dryden has been Minister for these ten years and it represents, as perhaps no other table or brief statement could, the growth of the work under his guidance and supervision. Agriculture has been making steady but rapid progress during these ten years and the advance is in no small measure due to the wise use of the increasing appropriations. It will doubtless be quite a surprise to many of our readers to know that the appropriations have increased by over one hundred thousand dollars in the past ten years. A careful examination of this table will show some interesting features

and suggest many questions. For instance, why have certain appropriations stood still, and why have others moved ahead so rapidly?

The most noteworthy increase is in connection with the Agricultural College and Experimental Farm. The appropriations for college and farm have just doubled in ten years. Why is this? Simply because this institution has been, all things considered, the most successful educational institution in Canada during these ten years. The report of the president just issued tells us that in 1902 no less than 768 students attended the various courses. In 1892 the number in attendance was 159. The work has widened. During the past ten years there have been added special short courses in dairying, poultry work, domestic science, and grain and live stock judging. It was no doubt because of the increasing usefulness and the pronounced success of the institution that the Massey executors and Sir Wm. C. Macdonald decided to place their liberal grants at the disposal of the college. Nothing succeeds like success, and the increasing appropriations will doubtless still further enlarge the scope and usefulness of this fine institution.

The increase of the Experimental Union grant may be referred to under this head and it is inseparably connected with the college work. The Central Dairy School appropriations are included in the college appropriations and explain in part the increase.

The grants to the Live Stock Associations are next to be noted. The Spring Horse Show at Toronto, but more especially the Winter Fair at Guelph, stand out as the annual proofs of the wisdom of their grants. To the same source is to be attributed, in large measure, the very important trade in pure bred stock taking place between Ontario and the other provinces.

The dairy work is of late rapidly expanding and developing along new lines inaugurated by the department, and ere long this industry will be served by a most thorough system of instruction, second to none in the world.

The increased grants to fruit growing are due to new lines of work emanating from and supervised by the department. The little addition of \$300 in the third column for fruit institutes represents the beginning of practical instruction in the orchard that is becoming very popular.

For years the poultry associations moved along in a groove and the grant maintained the monotony of the rut. But a couple of years ago the associations wakened up, stepped out of the groove, got into touch with the other departmental live stock associations, and note the change—the appropriations are doubled!

Farmers' Institutes' grants have been doubled within ten years. And why? They have gone ahead; they have widened out; new lines have been taken up; progressive methods adopted. The departmental management has been popular.

The work undertaken by nearly all the societies has broadened. The grants to fairs remain the same, but there is a \$3,000 vote for expert judges which seems to indicate that departmental direction may mean some increase there, and this will be followed by improvement.

The Entomological Society shows the same vote for the entire period but among the miscellaneous items are included the San Jose Scale votes, so that the work in fighting insects has been extended by the direct work of the department.

The Beekeepers' Association appropriation is about the only other line that calls for any comment and perhaps some may ask why it stands still. Is there anything wrong with its work? Is it not progressive? Is it out of touch with the other lines of departmental work? The beekeepers should ask themselves some questions and find out whether there is anything in the methods of work of the other associations that could be imitated. It will not do for our beekeepers to fall behind in the rapid forward movement that seems characteristic of so many other lines of agricultural work.

International Institute Workers

The annual convention of the Farmers' Institute workers of the United States and Canada will be held in the Parliament Buildings, Toronto, the last week in June. This convention will be attended by the superintendents of Farmers' Institutes in the different States of the Union, and other prominent agriculturists. Supt. Creelman is Secretary of the convention and has invited the Institute workers of Ontario to be present. One day will be devoted to Women's Institutes, when Misses Rose, Maddocks and Agnes Smith will be the chief speakers.

Packing Apples in Boxes

The Executive Committee of the Ontario Fruit Growers' Association have been conducting a series of experiments at St. Catharines in the packing of apples in boxes. The British market calls for an apple box containing 40 pounds of fruit, and experiments were carried out with a view to finding the most convenient form of box for the different sizes of apples, and it was decided that no one box would suit the different grades of fruit. Experiments will be continued at some future date in time for next fall's crop.

New San Jose Scale Remedy

A new San Jose Scale remedy is being tested with considerable success in the Niaga a fruit belt. It is known as McBains' Soluble Carbolic Insecticide. No boiling is required. It mixes instantly with cold water. It is claimed to destroy all kinds of scale, fungus and parasites and can be used for spraying in winter and summer. To one gallon of mixture add 25 of water in winter and 50 in summer. Use as a winter spray when the leaves begin to fall and as a summer spray after the buds are nicely formed.

Solving the Threshing Problem

Some three years ago, I purchased a two horse tread power threshing machine. I placed the separator on one side of the barn floor, elevated it seven feet, so that the threshed grain would run into the granary, drove in the loads of grain from the fields and instead of putting into the mow in the usual way I run them through the threshers thereby saving the extra expense of threshing. This I have found to be very convenient and profitable, three hands being quite sufficient to do the harvesting and, threshing for a one hundred acre farm. Hoping this may assist some of the Farming World readers to solve the threshing problem.

Joseph Watt,
Northumberland Co., Ont.

Note.—With the present scarcity of help the threshing problem becomes serious. The above adaptation of the tread power threshing, if it does not take too much time during harvest should help to simplify matters. We would be glad to have the experience of others on this and other topics of interest on the farm. Pen, ink, paper and ten minutes' time will do it. Editor.

Richmond Show

There was only a small display at the stallion show at Richmond, Ont., held early this month. The attendance of farmers was good, but stallion owners did not bring out their horses in as large numbers as was expected. There were only two exhibitors each in the imported and Canadian bred classes. There were a couple of fine Percherons shown.

Gourlay, Winter & Leeming

188 YONGE STREET, TORONTO

WE WANT

\$25,000 Cash

AND FOR IT OFFER NEARLY TWO DOLLARS FOR ONE IN PIANO VALUES. We are equipping our new piano factory, and to meet the large additional expenditure, wish to realize this sum within the next few weeks.

To accomplish this, we offer

A Piano Opportunity

such as we believe has never before been presented to the Canadian public; the chance to obtain a really good piano—one of the best—at about half the usual cost.

We have on our floors a number of pianos that have had some slight concert or home use. We append description and prices of a few. They are selected values. Also several unusually good Square Pianos, which have been thoroughly reconstructed and are fully guaranteed the same as if new.

TERMS OF SALE

1. Every instrument is fully guaranteed.
2. We will pay return freight if not satisfactory.
3. A handsome new stool and drape or cover accompanies each instrument.
4. Every instrument safely packed without extra charge.

TERMS OF PAYMENT

Ten per cent. of the amount with order, balance within sixty days. Remember, that if the piano should not prove satisfactory upon receipt you have the right to return it, and we will pay the return freight and refund your deposit.

These prices being for cash, old instruments will not be accepted in part payment of any of the pianos advertised.

- 8400 DUNHAM** for \$108
7 octave rosewood square piano, by Dunham & Sons, New York. Has carved legs and lyre, plinth mouldings, full iron frame and overstrung scale; length 6 feet 2 inches, width 3 feet.
- 8450 HEINTZMAN** for \$115
7½ octave square piano, by Heintzman & Co. Rosewood case, with carved legs and lyre, plinth mouldings, full iron frame and overstrung scale, in perfect order; length 8 feet 9 inches, width 3 feet 4 inches.
- 8500 SCHOMACKER** for \$124
7½ octave square piano, by Schomacker & Co., Philadelphia. Handsome rosewood case, with carved legs and lyre, serpentine and double plinth mouldings, full iron frame, patent gold string overstrung scale; length 6 feet 10 inches, width 3 feet 6 inches.
- 8380 WHALEY-ROYCE** for \$138
7½ octave upright piano by Whaley-Royce. Case in handsome burr walnut, double veneered has full length carved panel and music desk, Boston fall board, iron frame, tri-chord overstrung scale, ivory and ebony keys, three pedals etc., could not be told from new; height 4 feet 6 inches.
- 8425 KARN** for \$210
7½ octave cabinet grand upright piano, by D. W. Karn & Co. Case in dark rosewood, with plain polished panels and light hand carving in relief; has iron frame, tri-chord overstrung scale, West, Nickel & Gross action, ivory and ebony keys, etc.; height 4 feet 8 inches.
- 8375 HEINDELSSOHN** for \$247
7½ octave cabinet grand piano, by the Medelsbuh Piano Co. Handsome double veneered walnut case, with full length carved and polished panel, automatic swinging music desk and Boston fall board, iron frame, large overstrung tri-chord scale, ivory and ebony keys, three pedals; height 4 feet 8 inches.
- 8376 GERHARD HEINTZMAN** for \$260
7½ octave upright piano, by Gerhard Heintzman. Rich mahogany case, full length music desk and carved panels, iron frame, double repeating action with brass hinges and regulating screws, three pedals, ivory and ebony keys, etc.; height 4 feet 8 inches.
- 8460 GERHARD HEINTZMAN** for \$305
7½ octave cabinet grand piano, by Gerhard Heintzman. Case in handsome San Domingo mahogany, with full length polished panel and music desk, hand carving in relief, best West, Nickel & Gross action with lost motion patent, iron frame, new patent tone painting bridge, full acoustic rims on sounding board, etc., used less than six months; height 4 feet 7 inches.
- 8500 GERHARD HEINTZMAN** for \$328
7½ octave cabinet grand piano, by Gerhard Heintzman. Handsome burr walnut case of Colonia design with Boston double fall board, and carved panels, has iron frame, best West, Nickel and Gross action, with lost motion patent, brass hinges, etc., ivory and ebony keys, three pedals, etc.; height 4 feet 9 inches.

Gourlay, Winter & Leeming

188 YONGE STREET, TORONTO

Orchard Tillage and Management

H. P. Gould, assistant pomologist in the United States Department of Agriculture, in Farmers' Bulletin 161, "Practical Suggestions for Fruit Growers," treats on tillage as follows:

As a fundamental factor in progressive orchard management, systematic tillage is a practice of comparatively recent introduction. While the practice has become quite general during the past few years, and is growing more so, the principles underlying the operation are not so fully understood as they should be. A better understanding of these principles will make the operation more effective, because it will be more thorough.

The offices of tillage are several. Among the more important ones are:

1. The setting free of plant food by increasing the chemical activities in the soil.
2. The soil is made finer and hence presents greater surfaces to the roots, thus increasing the area from which the roots can absorb nutriment.
3. The surface of the soil is kept in such condition that it immediately absorbs all the rain that falls during the summer, when it is apt to be dry. Little is lost by surface drainage.
4. Moisture is conserved thereby. Where the surface remains undisturbed for weeks the soil becomes packed, so that the moisture from below really passes to the surface and is evaporated, thus being lost to the growing crop. If the surface is kept light and loose by tillage, so that the capillarity is broken, but little of the soil moisture comes to the surface and evaporation is not so great. In this way nearly all the moisture remains in the soil, where it can be used by the plants.

5. Thorough tillage has a tendency to cause deeper rooting of the plants. The surface of the soil is made drier by tillage during the early part of the season than it would otherwise be; hence the roots go where the soil is moist. The advantage of deep rooting during drought is obvious.

The relation of plant food and moisture to the welfare of crops and the influence of tillage thereon should perhaps receive some further attention. Doubtless all farm crops—not excepting the tree fruits—suffer more from lack of moisture than they do from lack of plant food in the soil. All of the nourishment which the plant gets from the soil is taken in solution, and unless there is an abundance of soil moisture to dissolve the mineral plant foods it is evident that their presence in the soil, even in limitless quantities, could avail nothing for the good of the crop. The ideal tillage, then, is that which begins as early in the season as the soil can be worked, while there is still an abundance of moisture in it, and continues until mid season—that is, through the

growing season of the plant. The aim should be to keep the surface, to the depth of 2 or 3 inches, as light and as loose as possible. This will be equivalent, so far as conserving the moisture is concerned, to spreading a mulch of straw or sawdust over the soil. The constantly moist condition of the soil under such a mulch is a matter of frequent observation.

But tillage, to be of value in fruit growing, must be practiced judiciously. If the soil is tilled when it is too wet, more damage may be done by a single cultivation than a whole season's effort in corrective methods can overcome.

There are cases where conditions will suggest that tillage of any kind is unwise. Such fruits as the strawberry, which produces its crop close to the ground and early in the season, obviously should receive little, if any, cultivation before the fruit is harvested. The practice of tillage, however, is correct in principle. The wisdom of the grower must suggest the proper application of it.

A Business Education

This is an intense age when men in all walks of life realize the importance of having a good business education. In the ranks of com-

merce 97 out of every 100 men fail. It sometimes happens that circumstances are against them, but as a rule this record of disaster and



Walter James Brown, B.S.A., LL.B., Principal Canadian Correspondence College, Toronto, Ontario.

ruin is due to a lack of a proper business education. Professional men of all kinds are usually poor business men. Farmers are the worst of the lot. How many farmers can tell how much it costs to raise a pound of pork or a bushel of grain? Every man should take a business course. The Canadian Correspondence College of Toronto, offers excellent courses in these important subjects by mail.

In the Maritime Provinces

Prince Edward Island

Our farmers are busy working on the land and some seed was sown the 1st of May. Cool, backward weather, very little growth. Jack Frost paid us a visit on the night of May 1st. The roads are pretty good, and business is rushing. The market was well attended on May 1st. Pork sold from 7½c. to 8c. per lb.; oats 38c. to 40c. per bus.; potatoes 50c. per bus. with few offerings. Hay 38c. to 60c. per cwt. Eggs, 11c. to 12c. per doz. Creamery butter 26c. Very little dairy butter offered. No tub butter in market. Fresh lettuce and radishes on sale. Fresh herring 8c. per doz., fresh codfish, 10c. to 15c. each. Turnips 14c.

On April 24, the steamer Elliott sailed for St. John's, Nfld., with 2,352 bags oats, 1,030 bags potatoes, 50 bags turnips, 30 boxes cheese shipped by Carvell Bros.; 47 head cattle, 52 bags turnips, 8 sundries shipped by Sellars & Henderson. Shipping is brisk.

J. W. Calbeck, Augustine Cove, is the owner of two fillies one year and eleven months old, and one colt eleven months old, that make a total of 3,327 lbs. These colts are all by the noted Knight of Ardgowan. Mr. Calbeck was offered \$130 for one of these fillies.

A meeting was held in Montague Hall for the purpose of considering the Dominion Government's offer to establish a chicken fattening station in Montague. Immediate

action was the result. Some excellent addresses were delivered.

The lobster fishing season opened on April 20. Lobsters are plentiful and prices high.

Twelve boxes of young hogs were offered on April 26, at from \$4 to \$7 per pair. On May 2nd, Mr. David Keele took over 25 head of cattle to St. John's, and Mr. McKie 4 horses.

On April 30th, Mr. Wm. Irwin, a resident of Charlottetown, drank an ounce of carbolic acid and died almost instantly. A. R.

Nova Scotia Travelling Dairy

The Nova Scotia Government will have two travelling dairy outfits on the road this summer. One of these will be in charge of Miss Laura Rose, of Guelph, who so successfully operated the travelling dairy in that province during the past two years. The other will be in charge of Miss Annie Rose, sister of the above. The Misses Rose are expert dairymen and will do good work in the province down by the sea. Though the routes have not been definitely laid out yet, they will probably be in the counties of Hants, Kings and Lunenburg.

Teacher—Correct the sentence, "The liquor what the man bought was soon drank."

Bright Pupil—The man who bought the liquor was soon drunk.

Farm Conveniences

A Shade for Horses' Eyes

The most frequent cause of weak eyes in horses is a badly arranged stable. Foul gases irritate and inflame the tender membranes of the eye and head, and horses brought from dark stables into bright sunlight, or on to glittering snow, are dazzled and blinded. The existing weakness or irritation is intensified, and the poor animal suffers unsuspected torments. The remedy is to purify the stable and give sufficient light, shaded by blinds from before



and behind the horse, or from both sides, avoiding a light from only the front, rear, or one side light. A shade for weak or inflamed eyes may be constructed by fastening wires to the bridle and covering it with oiled cloth in the manner represented. Thus a soft, subdued light reaches the eyes, while the horse can still see the ground immediately before him. It will be a timely job to prepare such a shade for use before the snow of winter comes.—"Farm Conveniences."

Handy Foot Vice

This is a rough sketch of a thoroughly good foot vice, which is easy to make, and is strong and serviceable when it is made. As shown in the illustration, the main



piece is made with different sizes of grooves for swaging calks, and two legs are bolted on to this main piece about 12 in. from the top. A treadle is then made and joined to the other jaw, as shown in the illustration.

Jug Float for Water Tank

The illustration shows a simple device for regulating the flow of

water in tanks which are fed from cisterns, reservoirs or from any other source. I have been buying galvanized iron floats until I am tired. They rust out in a short time, seldom lasting more than two years and costing five times



Float in Position.

as much as the one illustrated. I simply buy a stone jug, preferably a one gallon jug, and plug it carefully, so that it is airtight. I fasten this by means of a wire chain to the valve at the bottom of the tank. This will last indefinitely and will neither rust nor waterlog as is the case with iron or wood.

J. H.

A Portable Granary

Mr. J. T. Mitchell, Waterdown, and Geo. Russell, Hamilton, Ont., have patented a portable granary. It is constructed of matched lumber after the fashion of a cistern, about ten feet in diameter and eight feet, or thereabouts in height with pitched roof of sheet iron, put together in sections (the last one being moveable, to permit of being opened to admit of the threshed

grain being poured into the granary. It is specially adapted for the western prairie, being built upon runners like a stone boat it can be hauled any place where the threshing is at work. It will hold about 1,000 bushels of grain.

A Calf-Feeder

The illustration given herewith is a very useful arrangement for feeding calves. The nipples are made so that there are no seams



to crack. They work by straight suction and do not have to be bent in use. It was invented a couple of years ago by Messrs. Kincannon Cole of Birmingham, England.

"This isn't a very good picture of your little baby brother, is it?" said the visitor.

"No, ma'am," replied five-year-old Elsie. "But then he ain't a very good baby."—Boston Journal.

THE TWENTIETH CENTURY DISC HEATER MANUFACTURING CO. CHICAGO, ILL.

IT'S ALL IN THE DISCS.

The Twentieth Century Disc Heater

has never failed to give satisfaction. Note what a Wisconsin user says:



ALL METAL

WEST DE PERE, WIS.

Creamery Package Mfg. Co.,
Chicago, Ill.

GENTLEMEN—

The Twentieth Century Milk Heater we got from you on 30 days trial some time ago is giving the best of satisfaction. Will remit for same on our next pay day.

Respectfully yours,

WEST DE PERE CRY. CO.

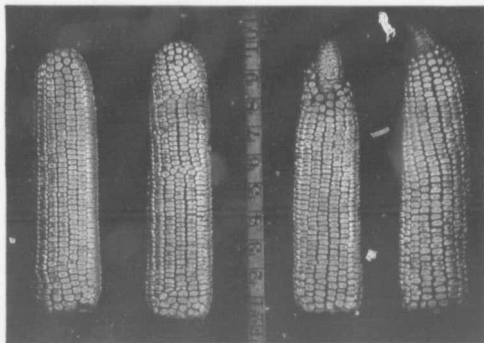
We will guarantee to save that extra .02 of 1 per cent of butterfat lost in skim milk which all other heaters are unable to save.

Write for prices. — Sent on 30 days' trial.

CREAMERY PACKAGE MANUFACTURING CO.

COWANSVILLE, QUE. Limited

THE TWENTIETH CENTURY DISC HEATER MANUFACTURING CO. CHICAGO, ILL.



Showing Improvement of Corn by Selection. Boone Co. White Corn on left, and the type from which it was developed by selection on the right.

Growing the Corn Crop

The corn crop is an important one in Canada and is becoming more so every year, especially in Eastern Canada. Like all other crops some special attention must be given to seed selection and to preparing the land for the crop.

WHERE TO PLANT

Two systems of cultivation are commonly practised in the corn belt. One is to plow very late in the fall, manure in the winter and spring, then gang plow or disc in May, making a shallow seed bed. This plan has two advantages; the cut worms are killed by late plowing and the moisture accumulated by the winter snow and rain is conserved and held for the growth of the crop during the summer. The other system practised is to avoid plowing in the fall. Let the grass and clover get a good start and leave the plowing as late as possible say till after the middle of May. Then plow as quickly as possible about $4\frac{1}{2}$ inches deep and roll down, then thoroughly work to get a good seed bed and plant as soon as possible. This plan is very often followed on very heavy soils and the advantages claimed are that the soil is rendered more pliable and mellow by the fermentation of the green stuff and the roots turned under and that it does not become heavy and sodden as it sometimes does when plowed in the fall. However, whatever system is followed, corn requires a fine well prepared seed bed which should be had at any cost.

HOW TO PLANT

As to planting there are two general methods followed, in hills and in drills. Planting in hills has several important advantages over in drills. The crop of grain is larger, there is a better exposure to the sun and more circulation of air, thus hastening maturity

and giving better quality. The corn can be cut easier and most important of all the crop can get more thorough cultivation and less hand cleaning is required.

The planting should be done in hills from $3\frac{1}{2}$ to 4 feet each way, according to variety. As a rule May 20th or 24th is soon enough to begin planting, even in Southern Ontario. Wait till the soil is warm. As soon as planted, if the land is in suitable shape, harrow the field and give a stroke of the harrow every two or three days until the corn is up, then start the weeder and keep it going till the corn is 1 $\frac{1}{2}$ feet high. After this cultivate deeply at first but shallow later, as long as it can be done without too much damage to the crop. After the corn is 3 feet high do not cultivate more than 2 inches deep as there is a danger of destroying the feeding roots. A writer has said: "When you have nothing else to do cultivate corn."

If the corn crop is properly cultivated it is about as good as a summer fallow for cleaning a field of weeds. Corn is, however, a heavy feeder and manure should be made use of pretty liberally. Any of our ordinary soils will grow corn successfully except very hard clays, that are deficient in humus.

WHAT TO PLANT

But the preparation of the land is not everything in growing corn. The selection of the seed for planting is most important. The best way to get seed corn is to go through the field in the fall when the corn is ripening and select the largest and best filled ears with the plumpest grain, and which ripen earliest. The accompanying illustration shows what may be accomplished in proper seed selection. But if you neglected to select your seed last fall go to some reliable dealer and buy some good plump,

well matured seed of the variety you intend to plant.

The question of variety is important. A good variety is the one that will give the largest total yield of stalks and grain per acre, and that will mature safely any average year. Special emphasis should be put upon the yield of grain whether for silo or other purposes. The nutritive value of a pound of the grain is many times that of a pound of stalks. Some varieties that have done well in Southern Ontario are: Mastodon Dent, Improved Leaming, Cloud's Early and Wisconsin White Dent; in Central Ontario, Wisconsin White Dent, White Cap, Yellow Dent and Salzers, North Dakota and Northern Ontario, Blue Blaud, White Flint and King Philip. There are no doubt other good varieties, but these are the only ones we recall at the moment that have done well in the districts named. In the other provinces growers will have to be guided in their selection according as their climatic and soil conditions are similar to those in Ontario.

Build Silos, Because:

Less waste of fodder than drying. Three times as much storage capacity as if stored in mows.

Juicy winter feed keeps up the milk flow.

Ensilage is estimated, on good experiment station authority, as two or three times as cheap as roots.

Keep cows in a healthy condition; better than dry food and gives good appetite.

It helps save late crops in bad weather.

It helps out old pasturage.

Twice as many cattle can be kept on the average farm.

No sudden change from green to dry food, and the reverse.—N.Y. Farmer.

Handling the Dairy Cow

"It requires tact as well as gentle perseverance to satisfactorily manage a herd of cows coming into their places with tender and distended udders, fairly groaning to be relieved of the milk pressure, yet fearful of a rough coarseness of manipulation; and a pounding with the milk stool, so common in some dairies, does not help matters, but only keeps the poor, frightened creatures in constant apprehension of what may be in store for them. Cows of a nervous temperament irritated and excited by such treatment are seldom in what can be termed a normal condition, consequently, there is a loss, as no cow can do her best unless in a normal condition, which calls for a judicious diet, warm, well ventilated apartments, and gentle handling, the latter being of more importance than we sometimes take into consideration."

R. H. Field, Stonemont Co.

Macaroni Wheats

The growing of macaroni wheats is becoming quite an industry in the United States. The Agricultural Experiment Station of South Dakota has been investigating the growing of these kinds of wheats in that state. Some of the conclusions are: Macaroni wheats will yield from 25 to 100 per cent. more than the best blue stem and file wheats, under ordinary conditions. The difference in yields in favor of macaroni wheats increases as the conditions for bread wheat raising become less favorable. Macaroni wheat can be ground into flour by any good flouring mill without any extensive modification of the methods used for milling ordinary bread wheats. The flour from macaroni wheat can be made into bread of excellent quality, more nutritious and by many preferred to that made from ordinary bread wheat.


There is a steadily increasing demand for this wheat for making macaroni and like products both in America and Europe. The home demand in the United States, which is a growing one, is for the manufacture of macaroni and kindred products. There are now several million dollars worth of these products imported into the United States, which could be produced at home provided the farmers grew enough macaroni wheat for the purpose.

Macaroni wheats require the same culture as the ordinary bread wheat except that the seeding should be heavier. There are a number of different varieties that have yielded well in Dakota such as the Tagaurog, Argentine, Velvet Don and Black Don. The wild goose or goose wheat is a macaroni wheat, but as most of the wheat of this variety has been grown for years without any effort to keep it pure or to maintain its quality, it is usually decidedly inferior to the recently imported varieties, but may be greatly improved by careful selection.

Should the Canadian farmer grow macaroni wheats is the question some will ask? To this question no definite answer can be given. A great deal of goose wheat is grown in Ontario and some of it is sold for macaroni purposes. The bulk is not, however, and as in Dakota it has not been kept pure and its original quality maintained. Goose wheat is usually quoted at from 5c. to 6c. a bushel below the bread wheats.

The Tide Turned

The Chicago Inter Ocean is authority for the statement that 17,897 Americans came into Canada in 1901 and 26,388 in 1902, while only 636 Canadians became citizens of the United States last year. This is quite a change from a few years ago.



Page Metal Gates

Double or single.
Lightest and strongest gates made.
No wood to rot or sag.
Made of solid round iron frame and "Page" ornamental wire.
Strong hinges and self-acting latches.
Handsome in appearance, light in weight, low in cost, indestructible in wear, easily handled in snow, always in place in summer.

Write for full information to
The Page Wire Fence Co., Limited
Walkerville, Ont.,
Montreal, P.Q. St. John, N.B. 101

Bug Death Fruit Tree Spray

Bug Death is a fungicide, as well as an insecticide. It will kill all the worms, while at the same time keep the foliage in fine condition.

WOLFVILLE, N.S., Oct. 10, 1902.


MESSES. BUG DEATH CHEMICAL CO.

DEAR SIR:—I was induced this season to use **BUG DEATH** on my apple trees to test it beside Paris Green. I find that it does not hurt the foliage and kills the canker worm as well as Paris Green, and that it leaves the tree in a better condition. I think it will be the coming spray for orchards when it is a little better known. It is non-poisonous and that it will kill the worms and that it will help the foliage is a great thing in its favor. Yours truly,

J. W. BAZZLOW,
Pres. Fruit Growers' Association.

Send for free booklet, which gives full information.
BUG DEATH CHEMICAL CO. Ltd.
St. Stephen, N.B.

**Kills the Bugs.
Feeds the Plant.**



As Hard as A Rock

IS CHURCH'S COLD WATER

ALABASTINE

When mixed according to directions and applied to any surface. Any of the tints will make home attractive, and when combined into decorations that are so easily done a room finished with ALABASTINE is really beautiful.

Made in 90 beautiful tints and white.
For sale by hardware and paint dealers everywhere.
Never sold in bulk.

If you don't know how to decorate walls for Painters—Every lady can have free the "Housekeeper's Reminder," and will find it very convenient.

ADDRESS
THE ALABASTINE CO., Limited, Paris, Ont.



Views of Bars and Stables on "Kelvin Grove" Farm, Scarborough Township, York County, Ont.

Modern Barn Building

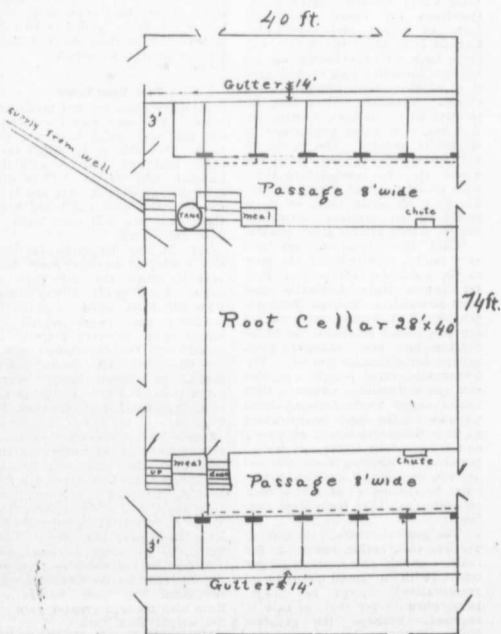
In March 16th issue we published a description and plans of Mr. Simpson Rennie's barn and stables on lot 29, 2nd concession of Scarborough Township. In this issue we illustrate Mr. Rennie's home farm lot 30, 5th concession of Scarborough, popularly known as "Kelvin Grove." This farm has the distinction of being one of the premier farms in Ontario, it having in 1883 won the government gold medal for the district for the best kept and best arranged farm, including buildings, etc., and in 1886 the sweepstakes for the best farm in the province.

Though there have been many improvements since then, both in farm management and in barn building a great many valuable suggestions may be gathered from the buildings at "Kelvin Grove" as the accompanying plans show. The plan of having the root cellar below the barn floor and a couple of feet below the surface of the ground should make it convenient for feeding from the barn floor. Mr. Rennie's plan provides for a passage between the cellar and the stable on either side. We have seen this idea worked out in smaller sized barns without the passage, the feed being conveyed directly to the feed box or manger from the barn floor through the space existing between the bottom of the mow and the barn floor. Another advantage of this plan is that the lowering of the barn floor makes the driveway to the barn less steep. There is this drawback, however, that the distance from the floor to the roof is increased, thus making it more difficult in unloading hay or grain. But with the hay fork in use this is not a serious objection.

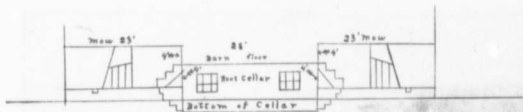
The water system in this stable is supplied with the Woodward drinking basin. The flooring of the stables is of plank and raised two feet from the ground. If the stable

were on the ground it would reduce the height of mows above the barn floor by two feet and not injure the stables in the least. It would also lessen the number of steps from the root house to the stable.

"Kelvin Grove Farm" is now occupied by Mr. Rennie's son, Mr. James A. Rennie, the former having retired from active farming operations a few years ago. He at present lives in Toronto.



Plan of Rennie's Stables, "Kelvin Grove" Farm



Vertical section elevation of stables above barn floor

"Kevin Grove" Barns

Is Canadian Butter in Disfavor?

Mr. A. A. Ayer, one of Montreal's leading cheese and butter exporters, who has been in England this spring, writes regarding the standing of Canadian butter in Great Britain as follows:

"I regret to say that Canadian butter has not a very pleasant aroma in the nostrils of the British merchant at the present time. Such parcels as have been kept over are now offering at from 10s to 12s under New Zealand, and 15 to 20s under Danish.

"Our Canadian butter has not the style and appearance of butter from other countries. The parchment is put on in a slovenly way, and the butter is not properly boxed. There are too many small creameries, and there is a lack of uniformity in the make.

"All the papers contain something about Canada almost daily. Questions are asked about all sorts of things and conditions. Canada is to the fore; never was there such an opportunity to introduce Canadian butter and give it a foremost place alongside our cheese. Canadian butter has no identity of its own at present, or, if it has, it is either unpleasant or splendidly isolated. The public do not know of it, and don't talk about it. We must tempt them with quality and at a very moderate price for some time, as it is necessary to displace continental butter, which arrives fresh weekly.

"Cool transportation has been very faulty, especially on the part of the steamship companies. Butter comes from Australia and New Zealand, as well as from Argentine at a temperature of 15 degrees, whilst heretofore 30 to 40 degrees has been thought good enough for Canadian butter. Unfortunately, most people on this side are under the impression that butter ought to be brought from Canada at the same temperature as from Denmark; this is all wrong and I have been trying, as far as possible, to impress upon the importers here that Canadian butter must be carried at as low a temperature as that from New Zealand.

"The general tendency here is to use less salt, rather under 2 per cent., I should say nearly 1 per cent. (with a small quantity of preservative), except in 70-lb. tubs, when 3½ per cent. of salt is required. Perhaps the greatest fault with the quality of our Canadian butter is in the washing of it

in the churns. It should always be washed in a brine and made as dry as possible before being salted otherwise too much moisture is left in the butter, and too much salt washed out, the result being that the butter comes irregularly salted and unsatisfactory.

"For this reason, our butter has not the waxiness and dryness (viz. freedom from moisture) that the Australian, New Zealand and Argentine has, and, therefore, does not keep and suit as well."


The trend of Mr. Ayer's remarks put the position of Canadian butter in England in a much more unfavorable light than reports from other sources have shown it to be in. Who is right? If what Mr. Ayer says be true, there is much to be done before Canadian butter has attained to the position it should occupy in the British markets. Everything considered, our butter should be landed in Britain in better shape than the New Zealand or Australian article.

Test Your Cows

All dairy cows are not profitable cows. The only way the farmer can find out which cows are the most profitable is to weigh each one's milk and test it with the Babcock milk tester. Then discard the unprofitable ones and keep the profitable ones and breed from them and you will soon have a good dairy herd.

The Illinois Experimental Station conducted an experiment last year to show the difference in cows. Two grade cows, named Rose and Nora, aged respectively 9 and 6 years, were treated as nearly alike in every respect as possible. The experiment lasted one year and the feeding stuffs used were, clover hay, various green feeds, and a mixed grain ration. The total food consumed by Rose was 20,196.4 lbs., by Nora, 19,598.9 lbs., a difference of 596.5 lbs. in favor of the former. The product of the two cows for the year showed that for every 100 lbs. of milk produced by Nora, Rose gave 139.5 lbs., and for every 100 lbs. of butter-fat produced by Nora, Rose gave 180.7 lbs. With butter at 16 cents a pound, the difference in the value of the butter produced by the two cows on the same feed basis was \$47.09. Rose also made a greater gain in live weight than Nora.

Moral:—Keep only the most profitable cows.



The Dairy S.
When the three alphabets in water, the letter S will stand for three things—Sharples, Satisfaction, Sharples. They all mean the same thing.

Sharples Tubular Dairy Separator.

The simple separation—free from complicated machinery to test and easy to clean. The satisfactory preservation and long life of cream of better quality—yielding a 5% greater profit in your investment than any other separator. Our Business Dairymen Book No. 190 explains how and why, but our experience tells its own story better than words can.

You may try it and then decide whether you want it or not.

Sharples Co., P. O. Sharpley, West Chester, Pa., Chicago, Ill.

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BABY'S OWN SOAP

keeps the most tender skin, soft, smooth, and free from chaps.
No Other is just as Good.

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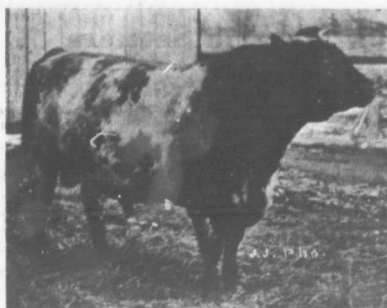
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GUELPH - - - - - ONT.

Send for Catalogue No. 41.



The Shorthorn Bull Scotsman—40420—(imp.) at the head of the Ontario Agricultural College herd. Bred by John Taylor, Stonehaven, Scotland, and imported by Thos. Russel & Sons, Exeter, Ont. His dam was Strawberry Blossom and, a noted show cow in Scotland. His sire, Lord Hampton, is a Marr bred bull from one of his Missie families.

Selling Argentine Cattle for Best Home-Killed Beef in England

Spring Cold and Backward—The Meat and Bacon Trade—Canadian Butter in Favor—Fruit Position

By our Regular Correspondent

London, Eng., April 28, 1903. The spring promised a month ago to be an exceptionally early one, but the past two or three weeks have been cold with night frosts, and so vegetation has received a severe check. The cold has not been exceptional in any way, but it has been continuous, and it is to this fact that we must attribute the great amount of damage done to our crops. Grass has been cut somewhat badly, but store cattle still are in demand for feeding purposes, and many British graziers are of the opinion that the price of beef will go higher than at present during the coming autumn. Personally, however, I think that such an anticipation is over sanguine and I do not expect to see the price of meat increase just yet, and think that the present level will be maintained for some little time to come.

CANADA IN THE PUBLIC EYE

Business on this side is fair, there is plenty doing, but no fresh ground seems to be opening up. The provision trade has brightened up with the colder weather, and there is not much to grumble about. It is very noticeable what a large number of people are leaving here for the Dominion every week. As to whether many of them are unsuited and will prove failures, time alone will prove. It cannot be questioned, however, that just at present Canada fills the public eye to the exclusion of all the other colonies.

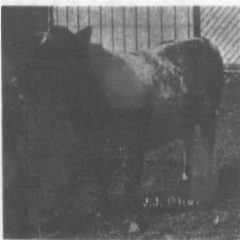
IRISH LIVE STOCK

I was over in Ireland last week, where the country seems to be more backward than it is in England. From what I heard, Irish

farming prospects are fairly good, and a new era of prosperity is anticipated when the new Irish Land Purchase Bill gets into thorough working order. The Irish live stock have greatly improved in quality during the past few years owing to the free use of pedigree bulls, and Irish store cattle are in keen request by English graziers.

"BEST HOME KILLED" MEAT

One of the most important points that is agitating the provision world at present is the sale of foreign meat as English. Last October a large and influential deputation of butchers waited on Mr. Hanbury, the Minister of Agriculture (since this was written the death of Mr. Hanbury is reported), to press for the re-opening of the ports to Argentine stock. On that occasion Mr. Hanbury subjected them to a sharp cross examination as to the motives which underlay their anxiety to have the



Dalmeny Fanny 6h, Shorthorn Heifer, O.A.C., Guelph. Bred by Lord Rosebery and imported by W. D. Flatt, Hamilton, Ont.

surplus stock from Argentine imported "on the hoof" instead of coming in carcass form as had been the case for the past two years. In reply to the Minister's pointed questions, the butchers were driven to confess that they wanted Argentine fat stock—which they admitted to be only second-class stock at the best—to come to our ports on the hoof, because when these stocks were slaughtered at the British port of landing they could then be put upon the market as "best home killed" meat, which the consumer would generally take to mean, "best home fed meat." When the Argentine stock were thus slaughtered at the port of debarkation they could be fraudulently palmed off on the unsuspecting consumer as best home fed meat, which would have the effect of not only pulling down the price of home fed meat, but of all fresh beef, whereas when the Argentine stuff was sent to this country in carcass form it had to be sold at a cheaper rate as foreign frozen meat. Mr. Hanbury deserves credit for the way in which he succeeded in exacting these admissions, and now that the Argentine ports are again open he has felt called upon to issue a warning upon the subject, which says that the common plan of describing foreign meat as "home killed" appears likely to mislead purchasers and he promises to do his utmost to put a stop to this fraud. There can be no doubt that the large imports of Argentine cattle that have reached these shores just lately have had a depressing effect upon the meat trade, and only Canadian cattle and sheep of the best quality sell with any amount of freedom. Trade rules slow and prices lower all round. There is a fair demand for light weights, but heavy and rough sorts are difficult to sell owing to the Argentine competition in the lower qualities. Sheep only sell slowly, but prices remain high.

BACON

Bacon still continues to sell remarkably well. As soon as the holidays were over it was at once evident that, thanks to the large consumptive demand, dealers were left almost entirely without stocks to go on with, and consequently prices were quickly advanced. Canadian selections fully participated in this movement, supplies having again proved short, so that with prices for "live" pigs equal to \$14.40 to \$14.90 for the cured meats laid down here and arrivals of all cuts into Liverpool much less than in previous years, a material rise has ensued, and prime brands have fetched \$13.45 to \$13.90 per cwt. with less reputable brands in proportion.

BUTTER PRICES

Butter prices continue to maintain a somewhat high level, and do not fall to the extent expected. The reason for so much firmness

in the market is due to the fact that the spring this year although early, has been attended with a considerable amount of frost which has put a check to the growth of grass. New season's makes of Canadian creameries, which should now begin to show, are coming to hand very slowly, and, therefore, fail to exercise any influence in bringing about lower rates. The nominal values have declined several shillings, but no reliable prices have been fixed for quantities worthy of notice. Prices are expected to go lower than at present, but not to such an extent as to leave no profit for the producer. A feature of the situation is the rapid development of the trade in Canadian butter, of which, during 1902, 285,760 cwt. reached these shores, as against 215,380 cwt. in 1901, and 138,310 cwt. in 1900. The way in which this produce has been received by buyers is very satisfactory and there is every opportunity of the trade growing considerably during the present year.

Canadian cheese retains a firm tone, but prices for new folders makes rule so high that purchasers on this side hesitate to operate freely, and consequently business is restricted. In fact there is nothing worth recording just at present.

CANADIAN FRUIT SCARCER

Good samples of Canadian fruit are getting scarce, and they meet keen competition from the Australian sorts, which meets all the needs of the English market at this season. It is said that American shippers have large quantities still on hand of second-rate fruit, and if this is so they would be well advised to convert it into pulp or apple jelly, and as they are likely to send it over here at a loss to themselves as well as damaging the reputation of Canadian fruit in general.

Ten Dollar Beef

A bit of the after-history of the noted steer, "Shamrock," the champion prize steer at the International for 1902, will not be without interest to Canadians. This steer was produced by the Iowa Agricultural College. He was a Polled Angus and sold at the show for 56 cents a pound, or \$1.080 in all. He was shipped to New York and there killed for the fancy trade of the metropolis. Trimmed porterhouse steaks from "Shamrock" sold for \$10 a pound, and the much-despised cheek for a good round figure. "Shamrock," though without water for twenty-four hours, held to his Chicago weight.

"Charles, not a single vegetable that we planted has come up."

"Don't worry about that, Clara; if we haven't got any garden, we won't have to break our backs keeping the weeds out of it."—Ex.

New Ontario Settlers

THE VETERANS' LOCATING AND COLONIZATION ASSOCIATION

COLONEL L. BUCHAN, C.M.G., President. MAJOR WILLIAM HENRIK, JR., Vice-President.
MAJOR DONALD M. ROBERTSON, Secretary-Treasurer.

Having explored and examined the lands in New Ontario in the settlement of Veterans, we are now selecting farms for intending settlers who procure lands from the Government either by free grant or by purchase.

The Association has examined all the lands opened for settlement in Temiscamingue and Rainy River. Apply for particulars to

DONALD M. ROBERTSON, Canada Life Building, Toronto.



All lateral wires high carbon spring steel, a better grade of wire than hard steel wire.

Stays No. 11 in size, of half steel wire and fourteen inches apart.

Can be erected with ease, and from five to six times as many rods can be stretched per day, as of hand made fence.

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U. S. CREAM SEPARATOR



The U. S. Gets More Cream,
which means **more Money** to the user ;
With the U. S. the calves and pigs do better,
which means **still more money** to the user ;

The U. S. Wears Better and Longer,
which means **more money** still to the user.

These and other points of superiority
described in our catalogues make

THE U. S. SEPARATOR THE MOST PROFITABLE TO BUY.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

There is no duty on U. S. Separators shipped into Canada.

It is Worth While

investigating the advantages offered to settlers on the **CROWN LANDS IN NEW ONTARIO**. The climate is all right; the land is rich and well watered; railways serve each district opened for settlement, and the local market for timber, in most cases, enables the cost of clearing to be more than met by the crop of trees now on the land.

If You have any Curiosity

as to Ontario's advantages in this regard, and desire to better your position, write for information to

HON. E. J. DAVIS

Commissioner of Crown Lands, TORONTO, ONT.



The Song Sparrow

Nature About the Farm

Edited by C. W. Nash

BIRD NOTES

The past two weeks have given us a great increase in the number of birds which habitually frequent our farm lands and gardens among them being several representatives of the sparrow tribe, yellow bellied woodpeckers, all the swallows and the first contingent of the great Warbler family consisting of myrtle warblers and our familiar yellow warbler.

The swallow are a most interesting and useful tribe of birds, they touch no products of our industry but devote themselves to clearing the atmosphere of mosquitoes and other troublesome insects. All of them except the bank swallow delight in attaching themselves to the vicinity of our homes, where they entertain us with their songs, migrations and marvellous agility of the wing.

Judging from my correspondence there seems to be some difficulty in distinguishing between some of the species of our native sparrows, they are generally grouped together under the name of grey birds, in fact with many people this term covers about half the small birds of the province. The most abundant of the sparrows are the song sparrow, savanna sparrow, vesper sparrow, chipping sparrow and field sparrow; all these are here now and are summer residents throughout the southern part of Ontario. In the spring and fall we are visited by several others in more or less abundance, some of them, notably the tree, the white throated, and white crowned sparrows and the slate colored Irenon, visit the barn-

yard the garden and the weed patches round the fields making themselves quite familiar during their stay. While the fox sparrow, the most beautiful songster of them all and Lincoln's sparrow, a rare species, usually confine themselves to the bush and scrub.

It is between the white throated and white crowned sparrows that most confusion exists, they are both large sparrows, both of them have three white stripes and two black ones on the top of their heads, the central white stripe of the white crowned being much the clearer. The most distinctive markings are the bright yellow stripes from the nostrils over the eye and the white throat patch of the white throated sparrow, both of which are lacking in the white crowned. The song of the white throated sparrow is very distinct and cannot well be mistaken for that of any other bird; it is one of the characteristic sounds of spring and well known to every dweller in the country. The notes are thought to resemble the words "Poor Tom peabody peabody peabody" and in consequence, the white throat is commonly known as the peabody bird. The song of the white crowned is very different and cannot be expressed in words. Some few pairs of white throated sparrows and Irenons always remain and breed in the southern part of the province, but all the tree, fox and white crowned sparrows go on further north to nest, returning to us on their way south about the middle of September, when they visit almost every weed patch and brush heap, feasting on the seeds of weeds and such insects as they find sheltered there.

INSECT LIFE (APHIDS OR PLANT LICE).


In our last issue I stated that wasps when they have young were very useful insects. As soon as the eggs are hatched the queen mother is kept busy hunting food for her ravenous larvae and this food consists of flies and caterpillars, these the queen chews up and feeds to her young much as a bird feeds her nestlings. In about fourteen days the larva attains full size, ceases to require food and closing up the mouth of its cell enters the pupae state, in which it remains for about ten days and then cutting its way out of its cell emerges as a worker. As workers are produced the queen ceases her labours and devotes herself entirely to egg laying, the workers building the nest and feeding the young. The wasps now do great service in keeping flies and caterpillars in check catching them in vast numbers and carrying them to the nest, of this I shall write further.

Last week I examined the trees in an apple orchard near me and found the buds covered with newly hatched aphids. Of these aphids commonly known as "plant lice" or "green flies" we have a large number of injurious species. They are found upon almost all parts of plants; the roots, stems, buds and leaves and many of our cultivated plants harbor one or two kinds which are peculiar to themselves. In some cases aphids have alternative food plants as for instance the hop plant louse, which winters on the plum, starts breeding there and migrates to the hops after the vines have started growing. In the autumn they fly back to the plums again and there deposit their eggs to provide for the ensuing season. The various species differ somewhat in appearance but the following general characteristics are sufficiently distinctive to identify them. In the wingless stage the bodies are soft and oval furnished near their hinder extremity with two little tubes. Their heads are small with long antennae, the mouth parts furnished with a tube with which the insects pierce the plant tissues and through which they suck its juices. As a rule they live clustered together in large colonies. Usually there are two forms in the colony, one wingless the other winged, the greater number being wingless. These in the early part of the season are all females, which give birth to living young, in about a week these young aphids reproduce in the same way. So rapidly do they increase that they soon endanger the life of the plants upon which they feed. The death of the plant would mean the destruction of the wingless aphids by starvation, to avoid this when overcrowding is imminent the winged forms are chiefly produced these at maturity fly away to other plants and form fresh colonies, quite often in late summer the air is full of these flying aphids. At the approach of cold weather a

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new generation consisting of normally developed sexual forms is produced, the males usually winged, the females always wingless. Late in the autumn these females deposit their eggs upon the leaf buds of their food plant, the eggs are hatched early in the following spring young sometimes appearing during the first week in April they at once feed by drawing sap from the tender buds and soon reach maturity. The plant lice produced from eggs are all wingless females which upon attaining maturity continue to propagate by giving birth to living young.

Most of the smooth bodied aphids have the habit of ejecting from their bodies a sticky fluid which sometimes covers the foliage of trees infested by them, this fluid is commonly known as honey-dew, in drying it becomes dark colored and injures the leaves rendering them susceptible to attacks of fungus disease. It is for the sake of this fluid that ants pay so much attention to the aphids.

There is another class of plant lice known as the woolly aphids, these may be distinguished by the white fluffy covering which they excrete from their bodies. A common species affects the alder, another is found on the beech and a very injurious form attacks the apple.

The aphids which are most important from an economic point of view are generally named after the plant to which they commonly attach themselves, among the best known are the rose aphid, pea aphid, cherry aphid, apple aphid, and the cabbage or turnip aphid, all these, as well as others which are less generally abundant are exceedingly injurious pests where they occur. Fortunately for us their natural enemies are sufficiently numerous to prevent their entirely over running us, so that by the judicious use of our known remedies as an assistance to nature, when the aphids are seriously troublesome we may hope to keep them in check.

REMEDIES

As all plant lice feed upon the juices of plants which they obtain by suction, stomach poisons which require to be eaten are of no avail against them; they can however, be readily destroyed by the use of contact insecticides, of these the best is whale oil soap solution, made in the proportion of one pound of whale oil soap to eight gallons of water; this should be applied as early as possible after the first appearance of the insects in the spring, so as to destroy the first brood of females as they emerge from the egg before the leaves begin to curl over them. The spray should be applied with all the force possible.

In greenhouses and for garden plants dry pyrethrum used pure or slightly diluted with flour and sifted will be found quite effectual.

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THE HOME WORLD

"Economy is the first mortgage on wealth."

O UR desire is to bring this department in as close touch with the home life of the farm as possible. We can do this better with the cooperation of those living in the farm home. Any suggestions or hints along the line of improving this department will be gratefully received. Tell us how to make it better.

Mr. Dooley on Generosity

When a man begins makin' money in his youth at anything but games iv chance, he never can become gin'rous late in loife. He may make a bluff at it. Some men are gin'rous with a crutch. Some men git th' use of their gin'rosity 'ack suddenly when they are in danger. When Clancy th' miser was caught in a foire in th' Halstead Shtreet Palace Hotel he howled fr'm a windy: "I'll give twenty dollars to anny wan that'll take me down." Cap'n Minnehan put up a laddher, an' climbed to him, an' carried him to the sthreet. Half way down th' laddher th' brave rayscoer was seen to be chokin' his helpless burden. We discovered afterwards that Clancy had tried to begin negotiatiuns to rayjoice th' reward to foive dollars. His gin'rosity had become parlyzed ag'in.

So if ye'd shtay gin'rous to th' end, niver lave ye'er gin'rosity idle too long. Don't run it ivry hour at th' top iv its speed, but fr'm day to day give it a little gentle exercise 'to kape' it supple an' hearty, an' in due time ye may injive it.—From Observations by Mr. Dooley.

First "New Woman"

If the translation of the Babylonian tablets are to be believed, the "new woman" is about as old as the human race. Five thousand years ago she asserted her equality with man, carried on business on her own account, inherited property and made her will like man. There is a possibility that she anticipated the bankruptcy laws by having her husband's property "deeded over."

If her husband married a second wife in her lifetime—was he entitled to do without fear of prosecution for bigamy—he had to re-

turn the first wife's fortune, and she was free to go where she chose and do what she liked, without troubling the divorce court. She went into the church and she practised medicine and law.—Boston Post.

Homesickness

O big old square white house! O moaning pines!
O rough stone wall! O ampelopsis vines!
O maple trees! O whispering sycamores!
O painted paling-fence! O hospitable door!
O horses, pigs! O chickens, turkeys, ducks!
O sheep! O cats! O dogs! O cows!
O—shucks!

O dear old-fashioned yard! O gentle breeze!
O lilac-hedge! O pear and apple trees!
O vine-clad porch! O hammock swinging!
O steps of stone! O robins sweetly singing!
O sisters kind! O brothers-in-law!
O pa and ma! O uncles, aunts!
O—pshaw!

O soft June sun! O evenings sweet!
O buzzing bees! O shady village street!
O brothers, nieces, nephews, cousins!
O dear old loving friends in dozens!
O pure fresh milk and cream! O cake! O pie!
O hot light rolls, and waffles, too!
O—my!

—Miriam Sheffey in the May Woman's Home Companion.

Queer Things About Frogs

The frog's skin is so important as a breathing apparatus that the creature would die at once of suffocation if the pores were closed by a coat of sticky varnish, by dust, or in any other way. While we are speaking of his breathing, you will notice that his sides do not heave as ours do at each breath we take. A frog has no ribs, and cannot inhale and exhale as we do, but is obliged to swallow his air in gulps, and if you will watch this little fellow's throat you will see it continually moving in and out as one gulp follows another. In order to swallow, his mouth must be closed; just try to swallow with your mouth wide open, and you

will see what I mean. A frog, then, always breathes through his nose, and if you held his mouth open he would suffocate as surely as though you gave his skin a coat of varnish. "Mr. Frog" has an enormous mouth for his size, and if we were to put a finger inside it, we would find that he has a row of teeth in the upper jaw, and his soft white tongue, unlike our own, is attached in front and is free behind. When he wishes to catch any insect, he throws out the free end of the tongue, then draws it in so rapidly that it is difficult to see whether he has been successful or not. As the tongue is coated with a gummy fluid, the insect sticks to it and is carried back into the mouth, which closes upon it like the door of a tomb. Frogs, however, are not limited to one mode of feeding; they often leap open-mouthed upon larger prey, which includes, besides insects, small fish, mice, small duckslings, polliwogs and tiny frogs.—Ernest Harold Baynes in the May Woman's Home Companion.

Last Resort

We learn things sometimes even from people who do not know them, but there is not much hope for the pupils of a possible teacher who, perhaps, never existed outside the columns of the Atlanta Constitution, which tells the story.

Chad, an old negro farmer, has a son who lately tried the civil service examination.

"Well, Chad," said a friendly gentleman after the trial, "did your boy pass the examination?"

"No, suh," replied Chad; "dey turned him down."

"What was the trouble?"

"Short on 'rithmetic, suh."

"Anything else?"

"An' g'ography."

"Yes?"

"An' spellin'."

"Nothing more?"

"Nothin mo', suh, 'ceptin' grammar an' hist'ry an' some other things."

"Well, Chad, what will he do now?"

"Well, suh, he des 'bout decided ter teach school."

"Got a talking machine at home?"

"Yep."

"What'd you pay for it?"

"Nothing. Married it."—Cincinnati Commercial.



For the Cook

The left over of cold ham may be utilized in breakfast balls. Crush three boiled potatoes through a sieve. Moisten with sweet cream, add a quarter of a cupful of grated or finely minced ham, a little chopped parsley and pepper and salt. Beat the yolk of two eggs. Form into small balls, fry until light brown in color, and serve plain or with brown gravy.

Cheese balls may appear with toasted crackers after the dessert or as the piece de resistance of the informal supper. To one cupful of dry grated cheese add three whites of two eggs well beaten, and a pinch of salt. Mould into soft balls, roll in bread-crumbs, lay in a wire basket and dip them into hot lard and fry until golden brown.

Nothing is better to keep two-year-old children in health than stewed fresh fruit every day. Peaches, apricots and apples are the best fresh fruits for stewing, and prunes among the dried fruits. There is such an abundance of cereals in the market that the two-year-old can have a different one every morning, with cream. Soft-boiled eggs and mutton and chicken broth are standard diets for young people of this age.

One of the best sauces for fish is made by chopping a tablespoonful of capers very fine and then rubbing them through a sieve with a wooden spoon. Mix this with an ounce of cold butter and season with salt and pepper.

To Clean Tinware

If new tinware is rubbed over with fresh lard, then thoroughly heated in the oven before it is used it will never rust afterward, no matter how much it is put into water. If the teapot or coffee-pot is discolored on the inside, boil it for a short time in a strong solution of borax, and all its brightness will return.—May Woman's Home Companion.

Wrapping Paper Uses

Don't throw away the paper that comes around your parcels, but smooth it out and lay it away; you will find many uses for it. Lining the cake pan, or covering the bottom of the bird cage, are two of the uses. Or if you have a gift to send, do not just twist it up anyhow in a bit of newspaper, but wrap it neatly in one of those dainty colored papers that

came around a drug store bundle. Shelves look neater with wrapping paper on than with newspaper.—May Myrtle.

Washing Lamp Chimneys

If the chimney is badly smoked, don't wash it with a cloth that must be scrubbed half an hour to be made clean again, but take a bit of old paper, dampen it slightly and clean off all the black before you touch it with the cloth. This method saves bother in washing the pan in which you clean your lamps, also.—M. M. F.

Fried Apples

Pare and quarter ripe apples and slice each quarter in two lengthwise. Fry slices of pork or bacon, pour out almost all of the fat and put in the apples. Fry till tender, and serve on the platter

with the pork or bacon. They will resemble sections of orange, and will not break up so easily as if cut across the apple.—H. M. B.

Pot Roast

Take a piece of lean beef weighing 4 or 5 lbs. place in a vessel with enough cold water to half cover the meat; add to the water 1 tablespoon lemon juice or 2 tablespoons good vinegar. Bring to a boil, then skim. Now add 1 minced onion, 4 whole cloves, 1 teaspoon ground celery seed, pepper and salt to taste. Place the vessel on back of range, and boil gently till tender, keeping it covered closely all the time. If the flavor of sage is liked, add 2 teaspoons powdered leaves half an hour before the meat is wanted. The broth may be thickened or served plain (by adding water) as a soup with toast or crackers.—Anna Galihier.

Pumpkin Pie Without Eggs

Cook the pumpkin until very soft then pass through a colander, and to every pint of pumpkin add 1 heaping tablespoon flour, stir thoroughly until smooth and free from lumps. Then proceed in the usual way. Made in this way they are as nice and light as when made with eggs.—A. Knoll.

How to Keep Well

This department, which will be greatly enlarged in an early issue will deal with matters affecting the health of the farmers' household. We want to make it of practical value and interest to our readers and would be glad to have suggestions and hints as to the best way of doing so.

was in this way nourished besides gaining flesh.

Tub baths should be used sparingly for frail children or very thin persons. Sponge baths and oil rubs are needed for them.—Carrie May Ashton.

A Milk Pack

A physician in the Transvaal region of South Africa, knowing that milk absorbs poisonous germs that are exposed to it, conceived the idea of applying milk externally to people afflicted with fever and skin diseases. The patient is wrapped in a sheet that has been saturated with milk, and then a hot blanket is put around the person, and kept on for an hour. Then the clothing is removed, and the patient is sponged with warm water, in a room, as hot as can be borne. A case of smallpox thus treated had most of the poison taken out of the skin, and the patient was placed on the road to recovery within twenty-four hours. This remedy acts so quickly that successful operation in fevers will recommend its use in cases of sudden attack. Milk is well adapted to repair the damaged system.—Exchange.

Conceited people are like egg-too full of themselves to hold anything else.

Hints to Mothers

The mother and grandmother of a large family remarked the other day: "There is no better remedy for earache than rabbit oil. When rabbits are dressed for cooking, try out the fat and always save it for emergencies. Warm it and put one or two drops in the ear, and rub back of the ear and below it." It is always best to be cautious in regard to applications within the ear, however.

The value of oil rubs and massage for frail children or adults cannot be estimated.

A young woman who had always been thin and who was very much run down from nervous prostration gained fifteen pounds in a few months by oil rubs twice a week, and later on once a week. Olive, coconut, and almond oil are used for this purpose.

One patient who was in such a reduced condition from not being able to assimilate her food was given an oil rub every day, and

In the Sewing Room

MISSES' BLOUSE JACKET WITH STOLE CAPE, 4382

Blouse jackets with little capes of various sorts are among the features of advanced styles and are exceedingly becoming to young girls. The very stylish example illustrated is suited alike to the general wrap and the costume, but, as shown, is of Rhose blue chevrot and makes part of a suit. The trimming is bands of the same material stitched on with corticelli silk and held at the points with handsome buttons.



4377 Shirt Waist,
32 to 40 bust.



4382 Misses' Blouse
Jacket, 12 to 15 yrs.



4379 Child's Blouse
Saque, 1, 2 and 4 yrs.

The very pretty little jacket illustrated suits, that purpose to a nicety and can be made of flannel, wash silk albatross, cashmere or any of the suitable cotton stuffs. As shown, however, it is of pale pink cashmere leather stitched with corticelli silk.

The jacket consists of the loose fronts and back and is shaped by means of shoulder and under-arm seams. At the neck is a bishop collar made with the new stole ends. The sleeves are full with pointed cuffs.

The quantity of material requir-

The blouse is made with fronts and back. The cape is separate and is circular over the shoulders and extended at the front to form stoles, at the back to give a V effect and to make the postillion. It can be omitted and the blouse made plain when preferred. To the lower edge are attached the basque portions. The sleeves are full but tucked above the elbows and allowed to form puffs below. At the wrists are plain straight cuffs simply stitched.

The quantity of material required for the medium size (14 years) is $2\frac{1}{2}$ yards 44 inches wide or 2 yards 52 inches wide.

The pattern 4382 is cut in sizes for girls of 12, 14 and 16 years of age.

WOMAN'S SKIRT WAIST, 4377

To be made with or without the Fitted Lining.

The waist consists of the fitted lining made with fronts and back, the tucked fronts and the back which is drawn down in gathers at the waist line. The front is bloused slightly over the belt and closes invisibly at the left of the centre. The sleeves are the new ones that form full puffs over the straight cuffs, and the neck is finished with a pointed stock.

The quantity of material required for the medium size is $4\frac{1}{2}$ yards 21 inches wide, 4 yards 27 inches wide, $2\frac{3}{4}$ yards 32 inches wide or 2 yards 44 inches wide.

The pattern 4377 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

CHILD'S HOUSE JACKET, 4379

Little children stand in perpetual need of simple wraps that can be slipped on at a moment's notice.

32 inches wide, or 1 yard 44 inches wide.

The pattern 4379 is cut in sizes for children of 1, 2, and 4 years of age.

The price of each of the above patterns post-paid is only 10 cts. Send orders to The Farming World, Morning Building, Toronto, giving size wanted.

Fruit in Fashion

Fruit plays an important part in the fashions this summer. There are many fruit-trimmed hats which vie in loveliness with the flower-laden creations. Stock collars, belts and veils are frequently embroidered in a fruit design. Among the newest of the chiffon veils used as a hat-drapery are those in dark blue or black chiffon, with a hem-stitched border having the long ends embroidered in white silk in a design of cherries. Then there are fruit hat-pins and fruit belt-pins, to say nothing of the belt-buckles which simulate fruit in their design and are most realistic as to their coloring. — May Woman's Home Companion.

Sunday At Home

I Wouldn't Be Cross

I wouldn't be cross dear, it's never worth while;
Disarm the vexation by wearing a smile;
Let hap a disaster, a trouble, a loss,
Just meet the thing boldly, and never be cross.

I wouldn't be cross, dear, with people at home,
They love you so fondly; whatever may come,
You may count on the kinsfolk around you to stand,
Oh, loyally true in a brotherly band!
So, since the fine gold far exceedeth the dross,
I wouldn't be cross, dear, I wouldn't be cross.

I wouldn't be cross with a stranger, ah, no!
To the pilgrims we meet on the life path, we owe
This kindness, to give them good cheer as they pass,
To clear out the flint stones and plant the soft grass;
No, dear, with a stranger in trial or loss,
I perchance might be, silent, I wouldn't be cross.

No bitterness sweetens, no sharpness may heal
The wound which the soul is too proud to reveal.
No envy hath peace; by a fret and a jar

The beautiful work of our hands we may mar.

Let happen what may, dear, of trouble and loss,

I wouldn't be cross, dear, I wouldn't be cross.

—Margaret E. Sangster.

For the Sunday School Teacher

A finger's breath is an inch.
A shekel of silver is equal to about sixty-four cents.

A shekel of gold was about nine dollars and sixty cents.

A piece of silver, or a penny, was about sixteen cents.

A farthing was about four cents.

A mite was less than a quarter of a cent.

A gerah was one cent.

An ephah, or bath, contained about eight gallons.

A hin was about one and one third gallons.

An omer was about six pints.

A day's journey was about twenty-three and one fifth miles.

A Sabbath day's journey was about an English mile.

A cubit was nearly twenty-two inches.

A hand's breadth is about three inches.

"What would you say," began the voluble prophet of woe, "if I were to tell you that in a very short space of time all the rivers of this country would dry up?"

"I would say," replied the patient man, "Go thou and do likewise."



THE BOYS AND GIRLS



Entries Close June 1st

We have already received a number of entries for our weed collection contest. Every boy and girl on the farm should make an effort to secure one of the valuable prizes given for the best collection of Canadian weeds. Send in your entries at once. They close June 1st and if you don't see the life your name in you will miss the opportunity of your life.

Puzzle Gems

(Correspondence relating to this department should be kept separate from other matter, and addressed, "Puzzle Gems, Farming World, Toronto, Ont.")

1.—A WISE SON.

One cold 9 8 10 2 1 in 11 8 9 1 3 6, as farmer Jones was 11 5 6 7 8 9 10 himself by his cheerful 4 8 6 3, his little son of 1 2 6 3 3 upon his knee, he asked the 14 5 15 what he would be when a man. "A 4 5 6 7 3 6, sir," promptly replied the boy. "Very good," said the father, "but to be one of 11 12 3 1 2 you must always read 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15."

Edith Estes.

2.—CHARADE.

A campaign orator was he,
And WHOLE his theme was reckoned;
But when he lost the FIRST of it,
Of interest it was SECOND.

His garments likewise they were
WHOLE,
And eke of buttons SECOND;
But to the rescue came his spouse,
Who skilled with FIRST was reckoned.

W. W.

3.—DECAPITATIONS.

1. Behead a bird, and leave a great noise and commotion.
2. Behead without company, and leave without company.
3. Behead something used by the fisherman, and leave a fish.
4. Behead a place of amusement, and leave a liquid.
5. Behead a dweller on an island and leave gossip.
6. Behead an occurrence, and leave a place of exit.
7. Behead one who hurries about, and leave an escort or guide.
8. Behead a bird, and leave a sweetheart.

9. Behead a hotel, and leave two alike.

10. Behead to hold firmly, and leave to sever.

11. Behead to rub out, and leave to destroy.

12. Behead a fruit, and leave a chain of mountains.

13. Behead not any, and leave a small number.

The removed heads form a very useful bird.

4.—TRANSPPOSITION.

The pupil said his punishment
Was — than he deserved;
He said he from the teacher's rules
Had only slightly swerved.

He thought the teacher ought to —

The judgment on him passed,
For he (the boy) before the school
A culprit had been classed.

The teacher answered: "I will hold
In — a good big switch,
And when you next shall break a rule,
You'll sing falsetto pitch."
Ethyl.

5.—AMONG THE BIRDS.—A DIAMOND.

1. A part of every bird.
2. A domestic animal. Combined with 1, an obnoxious bird.
3. A bird we all admire.
4. An artificial covering. The oriole would prize it for building her nest. Combined with 5, it is part of a bird.
5. Found in the nest of every bird.

Farmer Boy.

PRIZE FOR ANSWERS.

An attractive and interesting book is offered for the best list of answers to the above puzzles. In case of two equal lists the more neatly arranged will receive the preference.

Why Not

Little Mary was discussing the great hereafter with her mama when the following ensued:
"Mama, will you go to heaven when you die?"
"Yes; I hope so, child."
"Well, I hope I'll go, too, because you'll be so lonesome."
"Oh, yes, and I hope your papa will go, too."
"Oh, no; papa can't go—he can't leave the store."—Current Literature.

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Blood will tell



When an animal is all run down, has a rough coat and a tight hide, anyone knows that his blood is out of order. To keep an animal economically he must be in good health.

DICK'S BLOOD PURIFIER

is a necessity where the best results from feeding would be obtained. It tones up the system, rids the stomach of bots, worms and other parasites that suck the life power away.

Nothing like Dick's powder for a run down horse.

60 cents a package.

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OF CANADA

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and MUSIC CO., LIMITED
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The Best Spent Holiday

There has been a most liberal response to our offer in April 1st issue of prizes for a short account of the best spent holiday, and it has been no light task to decide who the lucky ones are. After a careful reading of the essays sent in, we have decided that the following are entitled to the prize money. They are bright and somewhat original in style and matter, especially the first and second prize ones. Several good essays were ruled out because they were too long. All contributors deserve credit for their efforts, and we would advise them to try again when the opportunity occurs later on:

FIRST PRIZE.

My best holiday was spent last September on the beach of the Georgian Bay at the mouth of the Nottawasaga River. My uncle took a load of seven of us for a picnic at the beach. The morning was fine and a merry crowd was gathered. We reached the picnic ground about noon. Here we rested, fed the horses and had a fine dinner, for which the fourteen-mile drive had well prepared us. Then we played games and gathered shells. Mother, thinking the water too cool for me to go in bathing, I waded along the beach until a big wave tripped me, and I went down, wetting all my clothes through. I then had to take off everything, and mother hung my wet things on a bush to dry while I went in bathing. My clothes were not dry when uncle called us to go home. I was wrapped up in some old dry things and mother hung my wet shirt on the back of the seat to dry as we rode along. We had not gone many miles when we missed the shirt; so my best spent holiday cost me a shirt, but I had had a jolly day.

George Dickout, aged 8 years.
Assa East, N.W.T.

SECOND PRIZE.

It is the custom at our place to take at least one holiday a year, and the most enjoyable one of all was our trip to Long Point last summer.

We started early in the morning and drove swiftly along the smooth country road which, however, we soon left to continue our journey on the beach. It was very pleasant riding so close to the water.

We crossed the cut, which divides Long Point from the mainland, about ten o'clock, and were now at our destination.

After a trip up the lighthouse tower, lunch was served under a large shade tree, and one of my cousins remarked that eating lunch was the best part of a picnic.

Bathing and fishing came next, but the fishing was ended by one of the small boys dumping the bait into the lake.

At one old gentleman was strolling along the bank a deer bounded up a few feet ahead of him and dashed into the wood, but he was not more astonished than was a portly aunt of mine when she sat down upon a large black snake the same afternoon. A very pleasant drive home ended this happy day.

Wallace C. Loucks,
Norfolk Co., Ont.

THIRD PRIZE.

The most enjoyable holiday I ever spent was at the fall fair. It was a lovely September day. I did my chores in a hurry, and ate my break-

fast; but I did not feel hungry then. Our school was trying for two prizes, for best decorated wagon, and the largest and best-looking load. We were to meet at the village where the wagon with arches on it, was trimmed with red, white and blue, and evergreens and abundance of flowers. It was drawn by a team of handsome black horses and a lovely white team also, with their harness and manes trimmed with ribbons and rosettes of red, white and blue.

We arrived on the fair ground at one o'clock, with over eighty in our crowded load.

The best is we got the two first prizes which was \$25. We had a lovely time there. Our teacher treated us to lots of things to eat. We left in time to have a very enjoyable moonlight drive home.

Oh! that was a day of all days! After weeks of waiting and planning. The most of us came home a happy, tired lot of boys and girls. Anyway I was one.

Alva Smith,

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VALUABLE PRIZES FOR THE BEST COLLECTION OF WEEDS AND ESSAYS ON HOW TO DESTROY THEM.

We wish to obtain specimens of injurious weeds in Canada and information as to the best methods of destroying them. We want the girls and boys who read the *Farming World* to help us in securing these.

To the girl or boy sending us the best collection of injurious weeds we will give \$40 for the second best collection, \$15; for the third best collection, \$10; and for the fourth best collection, \$5. The prizes will be awarded subject to the following conditions:

(1) A single specimen of each variety of weed shall be mounted on white paper (about foolscap size) in such a way as to show the leaves, the branching, and, if possible, the flower. Where blotting paper is not available, newspapers or a large book will do for drying and pressing the specimens in. Spread the plants out carefully between newspapers and place a couple of large books on them. The better pressed the plants are the better they will keep.

(2) Each specimen must be carefully labelled with the popular and botanical name, the habitat (a swamp, wood, field), and the date of collection. The dry specimens can be mounted on the white paper readily with strips of gummed paper.

(3) No collection shall be enlarged by the addition of duplicates. Select only the best specimen of each variety.

(4) Each competitor must write an essay, containing not more than 500 words, describing some of the most injurious plants in his or her locality and the methods used to destroy them. In awarding the prizes 25 points will be given for a perfect essay.

(5) All competitors must be subscribers to the *Farming World*, or the paper must be a regular visitor in the home in which they live.

(6) All who intend competing for a prize must fill in the attached blank form and send to us not later than June 1st, 1903.

(7) All collections must reach this office not later than August 1st, 1903.

The above conditions can be easily complied with by every boy or girl on the farm, and we look for a ready response to this splendid offer. Now is the time to begin. Fill in the coupon below. Mail to us to-day and commence your collection at once.

Dr. James Fletcher, Dominion Entomologist and Botanist, has kindly consented to examine the collections and make the awards. He has also kindly offered, where no other means are available, to send the botanical name of any weed to a competitor if a specimen is sent him. Such specimens and letters will go free by mail if addressed to the Entomologist and Botanist, Central Experimental Farm, Ottawa. We would prefer, however, that competitors make every effort, by consulting books on botany, etc., to find out the names for themselves. When this can't be done, Dr. Fletcher will be pleased to help you out.

The *FARMING WORLD*, Toronto.

(Cut this off and mail to us)

THE *FARMING WORLD*, 90 Wellington St. West, Toronto.

I intend entering the competition for the best collection of weeds. I will comply with the conditions governing the contest and will have my collection sent in before August 1st, 1903.

Name

P.O. Province

In the Flower Garden

Attend to Now

Re-pot fuchsias which are to be called on for summer flowering. See that they are never allowed to get dry at the roots. Show them two or three times a week. Pinch back the ends of the growing branches in order to encourage the production of side branches and make the plants compact.

Go over the geraniums and mark those which you do not care to make use of another season in the house. When the weather becomes warm these can be transferred to the garden, where they will be quite likely to flower well the greater part of the season if cut back when put out.

If any old plants seem to have outlived their usefulness make cuttings from which to perpetuate the stock. It is not too early to start plants for next winter's use. The sooner it is done the better. I would advise throwing out all inferior varieties.

Shrubs may have to be reset. Perennial plants may need removal or division. This can be done before growth begins better than later. Do not neglect it until the plants have made such a start that removal of them will result in a check from which they will not recover in time to do good work this season. If care is taken to lift the plants with considerable earth about their roots they will not suffer much by removal. Of course, they should be cut back somewhat. Remove the weak branches and the old ones. Make the soil rich in which you plant them, and water well if the season is a dry one, in order to assist them in getting a good start.—Home and Flowers.

For Cut Flowers

You will want a bed of flowers to cut from. Sow in some out-of-the-way corner all the left-over seed you happen to have, and depend upon the plants grown from them for flowers for cutting. This will make it unnecessary to rob the show beds of the blossoms that make them attractive. The best varieties of annuals for cut-flower use are nasturtiums, nemophilas, scabiosa, poppies, sweet peas, ageratum, and sweet alyssum.

You should have a good sized bed of gladioli. You are not living up to the privileges of the gardener if you do not have. Now-a-days good strong flowering-size roots are sold very cheaply. No plant is easier to grow. Give it a soil of rich, mellow loam. Set the roots about five inches under the surface. Do this as soon as the weather becomes warm and settled. The best results are secured by planting at least a dozen roots in a group. This gives a solid mass of color at flowering time, instead of the rather thin effect which comes from planting

singly. Of all our garden flowers there is none so varied in rich and gorgeous coloring as the gladioli. It is to the garden what the orchid is to the conservatory.—Home and Flowers.

Lawns

Preparation of the soil is most important. Before seeding, work into the soil:

Ground bone 5 parts.
Muriate of Potash 1 part.

At the rate of 5 lbs. per square rod.

Top dress with muriate of potash at the rate of ½ lb. per square rod 2 or 3 times during the season.

How to Make a Flower Bed

(From Country Life in America.)

Make the soil rich and fine and soft and deep, just as you would for radishes or onions. There are some plants for which the soil can be made too rich of course, but most persons do not err in this direction. For sweet peas there is this danger: for these are nitrogen-gatherers and the addition of nitrogenous manures makes them run too much to vine. The finer and more broken down the manure the better. Spade it in. Mix it thoroughly with the soil. If the soil is clay-like, see that fine manure is thoroughly mixed with the surface layers to prevent "baking."

How to Water Plants

Watering is an exacting labor, and yet half of it is usually unnecessary. The reasons why it is unnecessary are two: the soil is so shallowly prepared that the roots do not strike deep enough; they waste the moisture by allowing the soil to become hard, thereby setting up capillary connection with the atmosphere and letting the water escape. See how moist the soil is in spring. Mulch it so that the moisture will not evaporate. Mulch it with a garden rake, by keeping the soil loose and dry on top. This loose, dry soil is the mulch. There will be the moisture underneath. Save water rather than add it. Then when you do have to water the plants, go at it as if you meant it. Do not dribble and piddle. Wet the soil clear through. Wet it at dusk or in cloudy weather. Before the hot sun strikes it renew your mulch, or supply a mulch of fine litter. More plants are spoiled by sprinkling than by drouth. Bear in mind that watering is only a special practice: the general practice is to so fit and maintain the ground that the plants will not need watering.



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In the Vegetable Garden

Two Crops a Year

Where land is valuable, as it usually is in the vicinity of towns and cities, the system of double-cropping I have practised with excellent results for several years past, may be of great advantage. The object is to get two or more crops from the same piece of land in one season, and above all never to let the land from which an early crop has been secured lie idle the remainder of the season. For instance, I plant peas and lettuce, and they are out in plenty of time to set out cabbage or tomato plants or sow the seeds of beets or turnips that in most cases give as good a crop as those sown a month earlier. Hills of squash and pumpkins can be made among the rows of early corn, and potatoes, and after the first crop is gathered, the second crop keeps on growing. Celery and late cabbage are the most satisfactory crops to follow early potatoes and peas in my opinion, after trying many other systems of double cropping. With regard to the sub-division of double cropping, known as companion cropping, I have had good success with the following combinations: Radishes with beets, the radishes being fit to pull long before the beets take up the room. Early onions, especially the multipliers, with cabbage; lettuce with early cabbage and several others, which space will not permit of my describing in detail. The soil must be in the best condition and well fertilized with stable manure and concentrated quick-acting fertilizers to give the best results, as double cropping is very exhausting on the soil unless well treated.

E. MacKinlay,
Halifax Co., N. S.

Potato Culture

Potato growing is an important industry in many parts of Canada, hence the following from a bulletin recently issued by Cornell Experiment Station on potato culture, will not come amiss:

1. Extensive tillage alone is not sufficient to produce a large yield of potatoes. The soil upon which the potatoes are grown should be properly supplied with humus if moisture is to be conserved through a drowth.

2. On a soil well supplied with humus the moisture may be conserved even through a severe drowth, and a fair crop of potatoes are produced.

3. Spraying with Bordeaux mixture in nearly every case has increased the yield of potatoes, even when blight has been prevalent. The practice should become more general.

4. Harrowing potato land after potatoes are planted and before the plants are above ground is a wise practice.

5. Intensive tillage may be overdone. During a drowth only so much tillage is necessary as shall keep the surface mulch loose and thoroughly dry. The dryer the surface layer of soil the more slowly will moisture be absorbed by it from the layers of sub-surface soil.

6. Spraying with Bordeaux mixture should be done thoroughly.

7. Pruning potato vines to one main stem will not be beneficial.

8. Potato machinery, while not yet perfected, has reached such a degree of perfection that where potatoes are grown upon any considerable area special potato machinery should be provided. Implements should be purchased which are found adapted to the local conditions.

9. There is no royal road to success with potatoes. Methods of procedure which are applicable during one season must be modified to meet the requirements of another season; treatment of one soil might be radically wrong when applied to another soil. Success will only be attained by thorough familiarity with the plant and its habits of growth, and then conditions must be made to meet as completely as possible the requirements of the plant.

The Best Cabbage

Of the eight varieties of cabbage tested side by side in my garden, the past season, I find the standard Jersey wakefield the best early pointed sort, and Allhead Early the most satisfactory flat-headed early variety for home use or market. Some of the most cracked-up new varieties are simply select strains of these well-known standards. Footlers Brunswick, I find, to be excellent mid-season cabbage, forming a solid head quite early. The best variety for late fall and winter use was the Danish Ballhead, or Danish Emperor, and Hollander as different strains are called by some seedsmen. It is a wonderful keeper and although not of large size, will weigh more to the barrel than any other sort, being a compact and solid header. The stump is longer than the ordinary sorts, but this is advantageous in that close cultivation can be given it up to harvesting time. The Savoy cabbages, although of excellent quality and handsome in appearance! do not head very compactly, and are poor keepers; the best variety of Savoy is the Perfection. I think I am safe in calling the Danish Ballhead the most valuable variety introduced for years, and I feel sure my statements will be corroborated by those who have grown it.

E. M., Wolfville, N. S.

She—Papa says our minister's salary is only half as much as that of the baseball pitcher.

Well, perhaps the pitcher's delivery is better.—Chicago News.

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Our money winning books, written by men who know, tell you all about

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The Sugar Beet World

Devoted to Sugar Beet Culture in Canada

Beet Sugar in Michigan

The report of the Michigan Commissioner of Labor is out and it contains considerable interesting matter relative to the beet sugar industry, which is summarized in the following:

In the campaign of 1902-03, the report says, there were 16 factories in operation with an aggregate capacity of slicing 9,525 tons of beets a day. Factories are in course of construction at Owosso, East Tawas, Menominee and Charlevoix. The average cost of the plants is \$533,357.

Last year 93,933 acres were planted to sugar beets but on account of the unfavorable weather, the tonnage was only 539,990 and the per cent. of sugar was 13.6, or nearly one per cent. less than the previous year. The estimated output of sugar was 95,800,000 pounds.

The 16 factories employed 1,037 skilled laborers at a daily average wage of \$2.63, and 2,504 common laborers, at a daily average of \$1.81. This would show that \$762,632.85 was paid in wages for the employees in the factories alone, to say nothing of the enormous amount paid to the employees who worked in the fields.

"It requires sublime faith for men to incorporate capital and invest one-half million dollars in a sugar plant, where unfavorable weather or some pest might destroy at once a season's prospects, and yet these men have this faith in the future of the industry. Michigan is now the leading state in the manufacture of sugar. Every citizen should lend his aid to promote its success."

The commissioners in making the following comparisons canvassed 10 counties and interviewed 88 growers finding that they increased their acreage from 1,435 in 1901 to 2,475 in 1902. The average number of tons yielded in 1902 was 9%; average price received, \$5.17 per ton; average cost of raising and delivering to the factory, \$29.32 per acre.—Mich. Sugar Beet.

Hints to Growers

A successful grower who was asked regarding the fitting of a particular piece of ground, took clover sod, heavy clay loam, fall plowed, and replied: As soon as the ground is dry enough to be worked, it should be harrowed with the disk harrow across furrows. Always allow the disk harrow to lap to the centre. This will prevent the ridging of the land. Let the land remain in this condition until you are ready to sow the seed. Harrow with the disk harrow, twice diagonal, or once lengthwise of the furrows and then diagonal.

Follow once or twice with the leveling harrow, then with roller or float across the furrows and then with the drill in the same direction. If the ground is a little dry, follow the drill with the roller. Four or five days after planting go across the rows or diagonal with the leveling harrow, or the weeder.

If the ground is so lumpy that the leveling harrow does not leave a fine seed bed suitable for any garden seed, roll after once harrowing, and then disk again before the last harrowing, floating and drilling.

A sandy loam soil will yield a fine seed bed with considerable less work. Use the float before drilling instead of the roller, as the hoof prints are filled leaving a seed bed perfectly level thus allowing the seed to be covered more uniformly.

Spring plowed land should be rolled immediately after plowing, unless it is a very heavy piece of ground, when the harrow should precede the roller. Land plowed in the spring should be rolled two or three times to insure a good firm seed bed.

A float can be made by every farmer. Bolt or spike three or four plank together so that they lap about three inches. Use about eight or ten foot plank, 10 or 12 inches wide. Hitch the team by use of a chain, drawing the float a little on the diagonal. The float can be weighted down with stone as desired.

In preparing corn ground for beets too much stress cannot be laid upon the importance of removing all the corn roots or stalks not completely ploughed under. The stocks will hinder a great deal during seeding and cultivating if allowed to remain.

Sow plenty of seed, and sow in the freshly prepared seed bed. Where possible, the last harrowing, floating and drilling should be done the same day. Watch the drill closely, raise the shoes before starting to turn around or you will have trouble with the shoe packing the dirt. In drilling, make a complete round across each end so that you will be sure to have the field entirely planted.

Immediately after drilling, clean out all the furrows, and leave the field in best possible shape for a wet time.

Purchased a Stock Farm

Prof. H. W. Mumford of Illinois Agricultural Experiment Station, and well known to many readers of The Farming World, has purchased the Spring Brook farm near Ann Arbor, Mich. This farm has long been famous for Shorthorn cattle and Merino sheep and is known as one of the best stock farms of that state.

The Best and

Newest

Rural Books

Books on leading topics connected with agricultural and rural life are here mentioned. Each book is the work of a specialist, under the editorial supervision of Prof. L. H. Bailey, of Cornell University, or by Professor Bailey himself, and is readable, clear-cut and practical.

The Rural Science Series

The Soil. By F. H. KING, of the University of Wisconsin. 75 cents.

The Fertility of the Land. By I. P. ROBERTS, of Cornell University. \$1.25

The Spraying of Plants. By E. G. LODEMAN, late of Cornell University. \$1.00.

Milk and its Products. By H. H. WING, of Cornell University. \$1.00.

The Principles of Fruit-Growing. By L. H. BAILEY. \$1.25.

Bush Fruits. By F. W. CARD, of Rhode Island College of Agriculture and Mechanic Arts. \$1.50.

Fertilizers. By E. B. VOORHEES, of New Jersey Experiment Station. \$1.00.

The Principles of Agriculture. By L. H. BAILEY. \$1.25.

Irrigation and Drainage. By F. H. KING, University of Wisconsin. \$1.50.

The Farmstead. By I. P. ROBERTS, of Cornell University. \$1.25.

Rural Wealth and Welfare. By GEO. T. FAIRCHILD, Ex-President of the Agricultural College of Kansas. \$1.25.

The Principles of Vegetable Gardening. By L. H. BAILEY. \$1.25.

The Feeding of Animals. By W. H. JORDAN, of New York State Experiment Station. \$1.25 net.

Farm Poultry. By GEORGE C. WATSON, of Pennsylvania State College. \$1.25 net.

The Garden Craft Series

The Horticulturist's Rule Book. By L. H. BAILEY. 75 cents.

The Nursery-Book. By L. H. BAILEY. \$1.00.

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The Forcing-Book. By L. H. BAILEY. \$1.00.

The Pruning-Book. By L. H. BAILEY. \$1.50.

The Practical Garden Book. By C. E. HUNN and L. H. BAILEY. \$1.00.

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In the Poultry Yard

Raising Chickens by the Hundred

The eggs must be gathered soon after being laid to prevent chilling; see that you have at least six nest boxes for each dozen hens or pullets or you will have your eggs broken by the birds fighting for possession, place the nests in a secluded position, a hen dislikes to lay where she can be seen, this will also minimise the danger of egg-eating.

Always keep a little oats or small wheat scattered in the scratching material in the shed, and have a couple of small boxes, one filled with small gravel or grit of some kind, and the other with broken charcoal; these should be placed where the birds can help themselves, and it will be found very beneficial in promoting health and thrift.

ANIMAL FOOD NECESSARY

Make arrangements for a regular supply of animal food of some sort, it does not make much difference what it is but it is very important that the birds get it, they are ravenous for it and only the best results are obtained by the use of it. Fresh beef bones direct from the butcher may be cut in fine form for feeding with one of the numerous bone cutters now on the market and if you have not used one you would scarcely believe that bones could be cut up in such excellent form for feeding; it looks like sausage meat and is the best of all available animal foods. Another good food is boiled livers cut up small; feed half a pound per day to each dozen hens, it will redden their combs, put a gloss on their plumage and greatly increase the number of eggs laid, it will also greatly increase the fertility of the eggs. To obtain the best results in hatching the eggs must not be kept over two weeks before being set, they should be laid on their sides in an ordinary market basket and loosely covered with a piece of flannel or old blanket and should be kept

in a cool place in a temperature of 45 degrees or 50 degrees Fahrenheit—but on no account allow the temperature to fall below 40 degrees or the germs will be so seriously injured by chilling that they will be of little value for hatching.

ARRANGING FOR HATCHING

As your eggs accumulate you will realise the necessity of making arrangements for hatching them and it will usually be found that while you are obtaining eggs quite freely the hens persistently refuse to set. This will be deplored by the man who has no means of hatching artificially, but he who has provided himself with a good incubator will consider it an advantage. The poultry raiser who depends on sitting hens will never accomplish much. Let us consider for a minute the probabilities and possibilities of the two methods.

We will suppose that you have one hundred hens, not by any means a large flock but large enough to make a very respectable sum of money if properly managed, when they are laying freely you should get fifty eggs per day but we will be generous and not ask them to work on Sunday so we will call it three hundred eggs per week. To use these eggs to the best advantage an incubator of about 200 eggs capacity should be filled every week and at the same time another small incubator of about 75 eggs capacity should also be filled, this has taken 275 eggs or one week's production less 25. There will be fully this number of badly shaped eggs, rough shells, etc., which should be rejected. At the end of seven days the eggs in our two incubators must be tested and the infertile ones removed. Early in the season it will be found that 25 per cent. are infertile, this will necessitate the removal of about fifty eggs from our large machine, but the gaps can be filled with fertile eggs. The small incubator which we will now empty and by this arrangement

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

WHITE AND SILVER WYANDOTTES; best for quality and vigor. W. D. MONKMAN, Road Head, Ont.

SHORTHORNS AND LEICESTERS. Young Stock of both sexes for sale, also my stock Bull Imp. Christopher 2882. Satisfactory reasons for selling. JAMES DOUGLAS, California, Ont.

SHORTHORNS—The best and better combination. Scotch Collies, from imported stock. Write for particulars. H. C. GRAHAM, Alisa Craig, Ont.

WHITE PLYMOUTH ROCKS.—Eggs from high scoring stock, imported from Fusal \$2 per 15. Rose Comb Black Minorcas (Workshop strain) eggs \$1.50 per 15. A. E. BELL, Port Dover, Ont.

BEES AND QUEEN.—Wanted purchasers for either full colonies (price on application), or queens. Imported queens direct from Carolina or Italy for these orders must be booked at once. **Imported delivery.** Either kind \$4.00. **Unmated Italians** before July 1st, each \$1.25, per six \$6.50; after July 1st \$1.00, per six \$5.75. **Tested before July 1st, \$1.50, after June 1st \$1.25. Best breeders \$2.00. Carolina** untested before July 1st, each \$1.25, per six \$7.50; after July 1st \$1.00, per six \$6.50. **Tested before July 1st \$1.75, after June 1st \$1.50. Best breeders \$1.50.** Am running \$20 to 500 colonies. **Good sales in line, try it.** Full directions sent for changing the queen money by P.O. order. Express orders or Registered letter, address R. F. HOLTERRMANN, Brantford, Ont., Canada.

WANTED—Energetic, responsible man 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 never before offered for sale in Canada. For best terms apply NOW. PELHAM NURSERY COMPANY, Toronto, Ont.

TORONTO INCUBATORS and brooders. Canada's best hatching machines, used by largest breeders and the Dominion Government. Write for catalogue. T. A. WILLIAMS, 614 Dundas St., Toronto, Ont.

LARGE IMPORTED WHITE LEGHORNS—sent to Lehigh, New York for my stock. Eggs 15 for \$2.00. MRS. J. E. PARKS, Box 715, Belleville, Ont.

IMPORTED BUFF ORPINGTONS—Another importation just arrived. Cooke direct costing, \$65.00 a pair. Orange and Lemon Buffs, imported stock, \$3.00 per 15; Canadian bred solid Buff \$2.00 per 15. Eggs reduced after May 20th to \$2.00 and \$1.00. Also breeder of registered Shropshire sheep and Yorkshire pigs, best quality. J. W. CLARK, Importer and Breeder, Ortonville, Ont. Write for catalogue giving standard.

HIGH PRICES FOR POULTRY—We are paying 25c. per lb. for broilers or spring chickens live or dressed, weighing between 2 1/2 and 3 1/2 lbs. each. Don't hold your chickens until the fall at extra expense and then sell for less per pair than we will give you for them now. Write us at once as these prices will soon drop. CANADIAN PRODUCE CO., Toronto.

BUFF ORPINGTONS—As good as there is to be had. Reduced price on eggs \$1.00 per 15. Stock for sale at bargain prices. L. B. FORSYTH, 70 Queen St. West, Toronto.



Goslings Mothered by a Hen.

our large machine is completely filled with fertile eggs, the small machine should be refilled without an hour's delay and also another large incubator of 200 eggs capacity, both of these must be tested at the end of seven days and the gaps in the large machine filled with fertile eggs from the small incubator; this operation is repeated each week. It will be readily seen that to do this three large incubators will be required and one small one, by the aid of the small machine which is used as a tender we are enabled to keep our large incubators running to their full capacity with fertile eggs which is a great advantage. Now counting on chickens before they are hatched, and we can do so in this case with tolerable certainty, we should get not less than one hundred and sixty chicks each week even assuming that we only hatch 80 p.c. of the fertile eggs—and we ought to do much better than this, in fact the writer knows people who do better, but of course they are experts and know every wrinkle in the business.

640 CHICKS PER MONTH

In the estimate made above in which we assume that 25 per cent. of the eggs are infertile and 80 per cent. of the fertile eggs hatch we are well within the bounds of reason; so we are turning out 640 chickens per month and if we have good brooders and have cut our back teeth we should raise nearly all of them. We certainly should not lose 10 per cent. of them, we may call our flock six hundred, which we have distributed in a dozen brooders to obtain the best results, as fifty chicks will do better, together than a larger number.

The hatching can be continued for at least three months, by which time according to our estimate we shall have set 3,300 eggs, and hatched 1,920 chickens, 1,800 of which we will assume reach the market in good order, and if your fowls are Plymouth Rocks, Wyandottes, or crosses of these varieties your chicks will be ready for market at the age of ten weeks when they will bring in Toronto markets all the way from 75 cents to \$1.50 per pair; the latter figure is being paid at the present time retail and \$1 to \$1.25 wholesale, and it will be quite a while before they get as low as 75 cents. For the sake of being conservative in our estimate we will assume that one dollar per pair for the first half of the season and 75 cents for the latter half is all that the dealer can be induced to pay, in spite of our good looks and charming manner, even at these figures we are making considerably more than the proverbial Dutchman's one per cent. It will not cost more than 25 cents per pair to raise these chicks to the age of ten weeks and I am by no means sure that it cannot be done for 20 cents, thus in three months we turn over to the market man 900 pairs of chicks which at the higher figure have cost us \$225, to

which must be added \$24 cost of feed for the hens that laid the eggs making a total cost of \$249. For which we receive at the above prices the snug sum of \$787.50 leaving a profit over the cost of feed of \$538.50. From the time the first lot of eggs were placed in the incubator until the last lot of chicks go to market only five and a half months have elapsed and this has been accomplished with a small outfit easily within the reach of any farmer in Ontario.

T. A. Willits.

An Up-to-date Henery

Mr. Andrew Newlands, Waterloo Co., has gone into poultry raising on a large and up-to-date plan. The hen houses placed side by side, make a length of 450 feet. The plant is lighted by electricity and gas and heated by hot water. His incubators have a capacity to hatch 1,200 chickens at once.

Turkey Fattening on a New Plan

Col. Sam Holmes, of Harwich Township, Ont., is going into tur-

key raising on a large scale and expects to raise 500 for next Christmas market, which he proposes to sell at from \$1.50 to \$2 each.

According to the Chatham Planet Mr. Holmes has been breeding and raising grass-hoppers for the purpose of getting a supply to fatten his turkeys on. The young poult will develop strength of limb and muscle, hopping around after the "hoppers."

London Bee-Keepers

A meeting of the Middlesex Beekeepers' Association was held at London on May 2nd. There was a fair attendance of the bee men in the district. The discussions took a practical turn, reports on wintering bees coming in for much attention. These were on the whole fair, though the spring weather had been cold and unfavorable. The clipping of queens was declared to be a decided advantage in swarming. The members decided to affiliate with the Beekeepers' Exchange and also with the Ontario Beekeepers' Association.

Peas and the Pea Weevil

The Ontario Department of Agriculture has just issued a bulletin on peas and the pea weevil prepared by Professors Lochhead and Zavitz, of the Ontario Agricultural College. The loss last year through decreased acreage and decreased yield is estimated at \$2,000,000, caused by the ravages of the pea weevil. The bulletin recommends the following:

"(1) That the acreage of both field and garden peas of the very best varieties be greatly increased in those sections of the Province where there are no pea weevils:

"(2) That the growing of both field and garden peas (to be ripened) in the weevil-infested districts of Ontario be discontinued for the next two years, and such crops as Early Yellow Soy beans, Grass peas, Emmer (improperly called Spelt), mixed grains, etc., be substituted;

"(3) That if any persons continue to grow and ripen peas in the infested districts, they make the best possible use of the fumigation method;

"(4) That seedsmen, farmers and others send no infested peas into those districts of Ontario where the pea weevil does not exist; and

"(5) That farmers, gardeners, seedsmen, millers, exporters, importers, and all others who have anything to do with the growing or handling of peas in Ontario, cooperate heartily in the effort to eradicate the pea weevil from Ontario within the next two years."

Remedy for Pea Weevil

Dr. James Fletcher, Dominion Entomologist, gives the following method for cleansing pea seed of the weevil:

"If farmers find their seed peas contain weevils they should treat

them in the following manner: Drunch them with coal oil, using about one quart to five gallons of seed. Sprinkle the oil over them and turn them frequently with a shovel so that every seed gets a coating. This will penetrate the pod and destroy the weevil without injury to the seed.

"Those who grow peas in gardens for green peas should pull up the vines as soon as the crop is gathered. It is a very slovenly method to leave the old useless vines on the ground, which should be covered with a late garden crop such as cabbages, beets or carrots, and besides this it gives the pea weevil a chance to propagate in the few pods which are always left on the dead vines. People sometimes think when they have let their peas get too old that they will save them and use them for seed next year. This should not be done."

Turpentine for Sick Pigs

A writer to an English exchange says: "I have only one remedy for a sick pig, and it is a very simple one. Rheumatism, paralysis, blind staggers, thumps, scours, etc., I treat all alike, though in varying proportions. My cure-all is nothing more than fresh new milk and turpentine. For a young pig, say, six weeks old, I administer a teaspoonful of turpentine in, say, a half pint of milk. Unless the pig is very sick it will readily drink this. If too far gone to drink, it must be administered with a spoon. An older pig, however, will seldom refuse new milk, even when a tablespoonful is given in a quart or more. Grade the dose from a teaspoonful to six weeks old, to a tablespoonful or more for a mature hog.

Finance on the Farm

Business Side of Farming

Business methods and business principles are necessary in the carrying on of successful farming of the present day. No farmer can hope to make the greatest success in his calling unless he gives his attention to the business end of the concern. Strictly speaking, the business end of the farm deals with buying and selling, the same as in any other calling. But there are other phases of farm practice in which the highest quality of business ability will find ample scope for its powers.

But to return to the strictly business end of farming. In what calling is greater business ability or a study of business methods required more than in finding a profitable market for the varied products of the farm. Generally speaking, market conditions relating to farm products vary more than for any other commodity. With the dry-goods merchant the price at which he buys or sells varies comparatively little so long as he is up-to-date in his methods of doing business. The same with the hardware merchant and other businesses we might mention. Not so with the farmer's product. The price is not governed by purely local conditions, but by conditions in the produce markets of nearly every country in the world, hence the necessity for close attention to the buying and selling side of agriculture.

But business on the farm has a much broader meaning for the farmer than the mere buying and selling. Of late years the average farmer has become more prosperous and has more or less of a surplus for which he is seeking good investment. To invest money to advantage in financial or other institutions one must give some attention to the study of finance. For the purpose of supplying information on this and kindred topics this department has been started. To make it as useful as possible we require the help and co-operation of the farmer himself. He can help us very much by sending his experience in investments or in connection with any other topic discussed on this page.

There are several important topics closely associated with finance on the farm which will be discussed shortly, such as private banks, rate of interest on farm loans, how to invest, local mutual fire insurance companies as compared with the larger organizations. To begin with we would like to have a few brief notes from our readers as to the benefits that may be derived from farmers mutual fire insurance companies. We shall be glad also to answer on this page questions bearing upon any of the topics discussed or upon any matter bearing upon the business side of the farm.

Farmers' Mutual Insurance Companies

There has been a rapid development in recent years of farmers local mutual fire insurance companies. When well managed they afford a cheap, reliable and convenient method of insurance. The management is in direct touch with the person insured, and has every facility for finding out the kind and quality of the risk to be taken. Not so with the larger company of the city or town, who have to depend upon the report of their

inspectors who may be complete strangers to the conditions in the district and in ignorance of the kind of man who is seeking insurance. With the farmers' company conditions are different, and there is no excuse whatever for taking poor risks. On the other hand no great risk is run in insuring the reliable farmer, who is as much concerned as the company is in preserving his crops and his buildings from fire. Then statistics show that the local company can be run at comparatively little cost and unless there are more than the average run of fires the rate is not high. The local company is not a money-making concern in any sense, but a convenient way of affording ample protection to the farmer by the farmer at comparatively little cost.

A Prosperous Business

It is a matter for congratulation among stockholders in E. W. Gillet Company, Limited, that they have already received three dividends on their stock. The last dividend was paid on 15th ult., and total amount in less than a year paid to stockholders is \$18,000. This plan of interesting the trade in an industrial company of this kind has proved to be a very fine one.

Books and Bulletins

THE NEW ONION CULTURE.—By T. Greiner. Rewritten, greatly enlarged and brought up to the present day. A new method of growing onions of largest size and yield, on less land than can be raised by the old plan. Liberally illustrated, 57 inches, about 150 pages, cloth. Price, postpaid, 50 cents. Orange Judd Company, New York; Toronto: Morang & Co.

ONTARIO AGRICULTURAL COLLEGE Report for 1902 gives reports of the work of the various departments with numerous illustrations. Published by the Ontario Department of Agriculture, Toronto.

THE FARMER'S BUSINESS HANDBOOK—A manual of simple farm accounts and of brief advice on rural law, by Isaac Phillips Roberts, is the latest volume in The Rural Science Series published by the Macmillan Company, Toronto and Morang & Co. This should prove a most valuable book to all farmers. It is the only complete book of its kind issued, and the name of Mr. Roberts, author of *Fertility of the Land and The Farmstead*, on the title pages assures us of its authenticity. The book treats of Farm accounts. Why accounts should be kept. The kinds of accounts. Accounts with particular fields and crops. Accounts with animals. Accounts with the farm household. Farm Law. Property, deed and conveyances. Trespass and water rights. Highways and roadides. Legal fences. Contracts. Mutual liabilities of employer and employee, shareholders, buyer and seller. Notes, due bills and chattel mortgages. Gifts, wills, taxes. Powers of attorney, affidavits, legal tenders. Inventories from the Census.

DOMINION EXPERIMENTAL FARM'S report for 1902. A full report of the year's work at the Central and Branch Farms, with more or less detailed data as to the experimental work carried on. Copies may be had free by writing, Director Experimental Farms, Ottawa.

THE TORONTO GENERAL TRUSTS CORPORATION

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Paid-up Capital, \$1,000,000
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Executes Trusts of every description.

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Trust funds to loan on Mortgages at lowest current rates of interest.

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The Loan & Savings Co., Limited

Capital \$250,000.00.
Authorized bond issue, \$2,000,000.00.
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Local Managers Wanted.
(2)

ELECTRIC BATTERY 99c.



WORTH \$5.00

A Doctor in your home — Always ready in case of emergency — Never wears out. Can turn the crank and generate an electric current which can be

regulated at will. Weak enough for a baby or powerful enough to overcome a strong man. Nothing like it for Apoplexy, Meningitis, Paralysis, Neuralgia and all other nervous affections, Dyspepsia, Rheumatism, etc., etc. Last fall we brought a large number of these batteries, and now have only a few dozen left. Not wishing to carry them in stock through the summer, we are clearing them out at 99c. Regular dealers charge from \$2.50 to \$5.00 for these batteries. At 99c, they will sell in a few days, and they will be no more at this price after these are gone. Secure one by sending 99c. to-day. JOHNSTON & CO., Box 360, Toronto.

WANTED—RELIABLE MEN in every locality throughout Canada to introduce our goods, tackling up show cards on trees, fences, along roads and all conspicuous places, also distributing small advertising matter. Commission or salary \$50 per month and expenses, not to exceed \$2.50 per day. Steady employment to good, honest, reliable men. No experience needed. Write for full particulars.

THE EMPIRE MEDICINE CO., London, Ont

The Farming World

—and—
CANADIAN FARM AND HOME.

J. W. WHEATON, B. A. Editor

The Farming World is a paper for farmers and stockmen published on the 1st and 15th of each month, with illustrations. The subscription price is one dollar a year, payable in advance.

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PUBLISHER'S DESK

A REMEDY THAT SHOULD BE IN EVERY HOUSEHOLD

Whitney's Point, N.Y.

Jan. 20, 1903.

The Lawrence-Williams Co., Cleveland, O.:

I used your GOMBAULT'S CAUSTIC BALSAM on a yearling colt that had an enlargement of the ankle. It was quite a bunch. Your Balsam cured it without a scar. It should be in every household.—JOHN H. KNAPP.

The demand for wrought iron wheels for low-down wagons has grown so large that the Dominion Wheel Company have had to build new factories in order to handle the orders satisfactorily. Their new catalogue just received should be in the hands of every farmer. Send for it.

Settlement of New Ontario

The Veterans' Locating and Colonization Association has done much to facilitate the selection of lands given by the Ontario Government to the citizens who turned out in defence of their country at the time of the Fenian Raid as well as the recent war in South Africa. The work is done in a systematic manner by sending out exploring parties who examine every lot in the newly opened townships as well as those that are partially settled, and by this means acquire a complete knowledge of all the territory. After a close examination is made the best lots are selected. The affairs of the Association are managed by Major D. M. Robertson, Canada Life Building, Toronto, who is always prepared to give information to veterans as well as settlers.

Moved to Orillia

The extension of a manufacturing business of so much interest to farmers as the Dominion Wrought Iron Wheel Co., will ever be of interest to our readers. From a space 1830 and two storeys high in the rear of 954 Queen St. West, the busi-

ness moved to larger quarters on Brock Ave., thence to factory 498 200, situated in Orillia, equipped with modern machinery, a switch branching off the main line, and all possible facilities. The company was incorporated on Feb. 28, 1901, with James B. Tudhope, of the Tudhope Carriage Co., Ltd., Orillia, as President, with a capital of \$20,000, but in December, 1902, the amount was raised to \$100,000. The business has increased to such an extent that there can be no doubt of the quality and superiority of the goods manufactured. The accompanying cut gives an idea of the appearance of the Orillia factory.

QUESTIONS AND ANSWERS

Sick Pigs

Please tell me what is the matter with my pigs. They fall from one side to the other and walk but a little while.

J. K. G., Quebec.

Your pigs probably have a very bad case of indigestion. Physic with epsom salts and change food, giving a little slop of middlings, bran and milk. Give in food three times half a dram of hypophosphite of soda and allow plenty of charcoal. Lime water may also be used freely in water or food three times a week.

Feeding Calves

(1) Is there any remedy for pot-bellied calves, caused by over-feeding?

(2) Is it a good plan that feed a number of calves together from a trough?

W. D. K., Olds, Alta.

Pot-bellied calves are caused by indigestion feeding, and the only remedy is to begin feeding properly. Infrequent and irregular feeding and giving too large a supply of skim-milk or whey at one time will tend to make pot-bellied calves. Young calves should be fed not less than three times a day until four or five weeks old and then care should be taken not to give too much. Feeding little and often is a good rule to follow in rearing calves. The best results are usually obtained by allowing the calf to have whole milk for two or three weeks. The calf should always get the colostrum or first milk of the cow, as this will help to clear the bowels and start the digestive functions. After a day or two the calf should be taught to drink warm whole milk for this purpose, and feed not less than three times a day until the calf is two or three weeks old, after which gradually substitute skim milk. From one to two weeks should pass in changing from whole to skim milk. Oil meal converted into a jelly by adding boiling water is relished by young calves. A teaspoonful would be sufficient at first. This may be increased gradually as the calf grows to half a pound daily. The supply of whole milk that a calf should get should not be over 10 pounds at first and end with 15 pounds daily. The skim milk should not exceed 15 pounds daily until the calf is five weeks old, and only in rare cases should an amount beyond 24 pounds daily be given. Heat the milk to blood temperature. We would advise correspondent to begin feeding little and often with his pot-bellied calves. If they are old enough to eat grain or

meal don't give any more at a time than they will eat up clean.

(2) As to feeding a number of calves together from a trough it will depend upon the calves. If they annoy one another they should certainly be fed separately. In any case the best results will be obtained by feeding separately, as the greedy ones are apt to get more than their share if all are fed together.

Boils on Horse's Neck

I have a horse with boils on neck, which come on about every two weeks. I have used condition powders, but they are of no use. A few will break out under the collar and after they are healed some more will come. I use a soft sweat pad and a good collar.—C. M., Carleton Co.

The horse is out of condition, and is not digesting his food properly. Give a small quantity of aloes and laxative food. If the horse can be turned out on or given fresh grass do so. A laxative and change of diet will do good.

ABOUT RURAL LAW

In this column will be answered for subscribers, 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, and communications to "Legal Column," The Farming World, Toronto.

REMEDY WHEN CATTLE DO DAMAGE

Q.—A seized B's oxen, which were in his (A's) field of wheat doing damage, but, being unable to find a pound-keeper, turned them loose near B's gate. On the evening of the same day A again seized them for doing damage to his meadow and impounded them, giving a statement of his claim for damage to the wheat, but making no claim for damage to the meadow. The oxen were sold by order of A, though B forbade the sale. A, telling the pound-keeper to go on and sell and he would be responsible. 1. Can B sue A for damages? 2. Can he sue the pound-keeper? 3. Can he sue both?—A. G. D.

A.—1. Yes; A, by his action in releasing the oxen had abandoned his claim for damage to the wheat, and so the impounding and sale of the oxen for the damage so claimed was illegal. His showing caused no damage to his meadow, not to his wheat. 2. The pound-keeper is also liable in damages to B, since he unlawfully dealt with his property. Probably, however, A. would have to reimburse him. 3. Yes.

MUST SUPPLY GOODS PURCHASED

Q.—I agreed to purchase from B a certain kind of sugar, known as "C" sugar. B was to deliver it as I required it. B., without any order from me, shipped to me nearly the whole quantity agreed for of another brand of sugar manufactured by another company which was not the same quality. 1. Can I refuse to accept it? 2. Can B. recover the value of the sugar shipped me?—D. B. E.

A.—1. Yes; the sugar you got was a different article from that contracted for. 2. No; for the same reason.

GRANT OF A RIGHT OF WAY

Q.—C. conveyed land to S., who owned land adjoining other lands of

With the Jokers

The Doubtful Age

Little Richard, who is five and who has arrived at the dignity of first trousers, was disgusted when he saw a little neighbor, aged three, arrayed also for the first time in the garments of distinction.

"Now just look what they've done to Wilson's baby!" he exclaimed. "They've gone and put it in pants before they know whether it's going to be a boy or a girl!"—February Woman's Home Companion.

Farmer Honk—Say Lem!
Farmer Stackrider—Har?

Farmer Honk—Is that 'ere solemn, spectacled young nephew of yours'n that's bein' called "Doctor," and goes around lookin' as wise as a trefoil of owls, a dentist, a hoss physician, a corn curer, a layer-on-of-hands, a presidin' elder, or just a common doctor that saws bones and kills folks?—Puck.

Bobby—Mamma, am I a lad?
Mamma—Yes, Bobby.

Bobby—And is my new papa my stepfather?

Mamma—Yes.

Bobby—Then am I his step-ladder?—Washington Star.

Between Themselves

He—"You know you married me for my money."

She—"Well, I'm glad you give me credit for not being an utter fool."—Life.

The Old Saying

Rollingstone Nomoss—"Wot's de old sayin' 'bout a dog in de manger?"

Tatterdan Tern—"A dog in de manger is worth two in de front yard."—Philadelphia Record.

Cliptomania

Old Gentleman—So you think my daughter loves you, sir; and you wish to marry her?

Dudleigh—That's what I called to see you about. Is there any insanity in your family?

Old Gentleman—No, sir! and there's not going to be any.—Medical Record.

Safer Perhaps

"Bellingham's religion is like his property," said Trivet to Dicer.

"How's that?"

"It's all in his wife's name."—Judge.

Elsie—I spent nearly two hours yesterday at the photographer's.

Jack—What doing?

Elsie—Awaiting developments.—Yale Record.

According to Their Light

It makes all the difference in the world where the language is used. According to President Harris of Amherst, for instance, a word that is looked upon as profanity in Boston may express the deepest sentiment out West, in proof of which he tells the following story: "A rough miner died out West, and was laid away by his fellow-laborers, with a common slab of stone to mark his resting-place. On the stone was this inscription: "Bill Jenkins. Died June 13, 1901. He done his damndest. Angels could do no more.'"—New York Tribune.

Si's Plunge

Si Barker, who lived in a hill town in Vermont, became fired with an ambition to emulate the men who make money in Wall Street. He read the financial news of his paper with care and regularity, but it was some weeks before he made up his mind what his first move should be, says the New York Tribune.

One morning he came in from milking and sat down at the breakfast-table with a manner as mysterious as that of an Oriental diplomatist.

"For the land's sake, Si," said his wife, after looking at his complacent expression for a while in silence, "what be you a-grinning at?"

"Maria, if I told ye," began Si, coolly, "you'd know as much 'bout it as I do. But," he added, "I'll let ye in on the ground floor when the right time comes."

After breakfast Si "hitched up" and drove to a neighbor's, three miles away, and dickered for a rooster, which he finally bought. Then he carried the rooster four miles to the next town, and sold it within an hour. As he drove home another farmer met him and pulled up.

"Hello, Si!" he called. "Where you been?"

"Oh, spec'lating a little," Si answered.

"What you been a-spec'lating of, Si?"

"Wal," returned Si, with the careless ease of a financier, "I bought me a rooster of Ben Jones for forty-eight cents, and took it to Rochester and sold it for fifty-eight cents. Just a little filly, that's all."

An Amusing Catch

FitzSmart—"Would you say a yoke of oxen is plowing or are plowing?"

FitzNoodle—"Is, of course."

FitzSmart—"Would you say the yolk of an egg is white or are white?"

FitzNoodle—"Is, of course. What next?"

FitzSmart—"Well, I should say the yolk of an egg is yellow."—May Woman's Home Companion.

Pete's Puzzle

Five or six men were recently chatting in a village inn, when one of them said to the others, "I say, I bet ye dinners all round that none o' ye can tell me the answer to a puzzle that I know of."

"Done," they said; "I bet we can. What is it?"

"Well," said Pete, "why is a journalist the funniest creature in the world?"

After vainly trying for about two hours they sadly said they would have to give it up.

"Why," said the delighted Pete, "because his tale comes out of his head, don't it?"—London Spare Moments.

The Society of Christian Endeavor, Denver, 1903

The Passenger Department of the Chicago & North-Western Railway has issued a very interesting folder on the subject of the Christian Endeavor meeting to be held at Denver, July 9th to 13th, together with information as to reduced rates and sleeping car service, as well as a short description of the various points of interest in Colorado usually visited by tourists. Send 2-cent stamp to W. B. Kniskern, Passenger Traffic Manager, Chicago, for copy.

READ THIS OFFER!

\$2.50 value for \$1.50

Canadian Good Housekeeping, a \$1.50 magazine, and The Farming World, \$1.00 a year, both for \$1.50. We are now prepared, for a short time only, to make this wonderful offer. The Farming World is without doubt the best agricultural paper in Canada, and Canadian Good Housekeeping the best household magazine. Certainly both should be in every home. Together they fill every want, and with these two magazines other reading matter is unnecessary.

Remember, for \$1.50 we will send both magazines for one year to any address.

DOMINION PHELPS, Limited,

Morang Building, 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 as our desire is to make this the medium for conveying information as to the transfer of pure-bred animals and the condition of live stock throughout the country. The co-operation of all breeders is earnestly solicited in making this department as useful and as interesting as possible. The editor reserves the right to eliminate any matter that he may consider better suited to our advertising columns.

At the combination sale of Short-horns to be held at Hamilton, Ont. on June 9th the Hon. John Dryden & Son, Brooklin, Ont., will contribute two cows with calves at foot, five young heifers, all sale in calf, to the Cruickshank bull "Prince Gloster." These heifers are all deep red in color and contain very rich Cruickshank blood. They are of the thick, meaty sort, similar to those sold by Mr. Dryden at Chicago last summer, and will make splendid foundation stock for building up a young herd.

To this sale W. C. Edwards & Co., Rockland, Ont., will contribute from 25 to 30 head of first-class stock from their best strains. Other contributors are: James Gibb, Brookdale, Ont.; W. D. Campbell, Campbellcroft, Ont.; and I. Mitchell & Sons, Nelson, Ont. Fuller particulars as to sale will appear later.

The following seven-day butter tests have recently been accepted by the American Jersey Cattle Club: Biltmore Rose, 150717, butter 17 lbs. 5 ozs. milk, 281 lbs. 12 ozs. Estate of Biltmore 121074, butter 16 lbs. 6 1-2 ozs. milk, 178 lbs. Harrowgate of Biltmore, butter 18 lbs. 13 3-4 ozs. milk, 330 lbs. 12 ozs. Very Much More 149733, butter, 24 lbs. 2 ozs. milk, 260 lbs. 7 ozs. Friars Duke's Bethel 136852, butter, 19 lbs. 14 ozs. milk, 269 lbs. 12 ozs. Merry Maid of Millbrook 159369, butter 15 lbs. 7 1-2 ozs. milk, 229 lbs. 14 ozs.

The sale of Short-horn herd at Woodstock, N.B., on March 17th last, was so successful that it has been decided to hold another at Fredericton the last week of May. Mr. W. V. Hubbard, C.P.R. agricultural agent, has wired Mr. John Bright, Myrtle, Ont., to select for this sale fifteen Short-horn bulls and ten females. He will also select five Clydesdale stallions for the same sale. The sale will be conducted on the same plan as at freight rates, etc., as the one held at Woodstock. The demand for improved stock in the maritime provinces is growing, and Ontario breeders would do well to cultivate that field as much as possible.

Among the important sales made at the Canadian Horse Show was that of the Champion Hackney stallion, Saxon-97, sold by Robt. Beth, M.P., to Graham Bros., Claremont, Ont., for a handsome figure. Saxon was bred by Rawlinson Bros., Calgary, Alta., sire Robin Adair 2d (Imp.); dam Fimber Pride (Imp.). He was purchased by Mr. Beth in 1901, who made a special trip to the West to secure him.

Mr. F. D. Coburn, chief of the Live Stock Department of the St. Louis Exposition, has asked for an allotment of over thirty acres for the live stock exhibits. On this site will be erected forty-seven buildings, thirty-nine of which will be stock barns with 2,400 open stalls 5 x 10 feet and 400 box stalls 10x10 feet. Four octagonal dairy barns will provide 140 open stalls and 28 box stalls. The dates to be fixed for the live stock displays will probably extend from

August 22nd to November 5th, 1904. Exhibitions will be shown from August 22nd to Sept. 3rd; cattle Sept. 12th to 24th; sheep and swine, Oct. 3rd to 15th, and poultry, pet stock, etc., from Oct. 24th to November 5th. Cows in the dairy test will likely occupy their barns on December 1st, 1903, continuing their use till Nov. 1st, 1904. There will be three classes for the cows in the test, Class A consisting of twenty-five cows Class B and fifteen cows, and Class C ten cows.

On Saturday Mr. Wm. Taylor, Park Mains, Renfrew, will ship from Glasgow for Montreal, per Donaldson steamer Alcides, five Clydesdale stallions and colts and two fillies, which he had sold to Mr. F. H. Hassard, veterinary surgeon, Millbrook, Ont. The stallions and colts were as follows: The Prince, 12124; Lambton Knight, 11779; Sir Ernest, 10916; Sir Gilbert, 11535; and Sir Gordon, 11939. The Prince is a thick massive four-year-old, sired by Prince of Kyle. He won first prize as a yearling at the Elgin Show. Lambton Knight is a five-year-old, sired by Lord Durham, and sired by the champion Rose Knight of Cowal. He is a fine dark-colored horse with the best of action, and should suit the Canadian taste to a nicety. Sir Ernest is a five-year-old horse got by the St. James Harbour stud horse Lord Steuart out of a champion mare. He is a finely moulded horse, with beautiful bone and capital action. Sir Gilbert is a three-year-old, sired by Admiral of Rosehaugh. He is a very massive heavy horse, and is out of the same mare as Royal Exchange, which won the Glasgow premium and numerous other prizes. Sir Gordon is a two-year-old, sired by the good breeding horse Royal Favourite. This is a colt of exceptional promise, with the best of legs and feet. He won a good few prizes as a yearling last year, and with ordinary good luck he will win a good many more in Canada. The couple of fillies which Mr. Hassard has bought are two-year-olds, sired by Royal Carrick, which won the Glasgow premium, and was sold to Mr. Dunlop for £1,000. These fillies have both been prize-winners at local shows, and from their breeding and merit are sure to become valuable brood mares.—North British Agriculturist.

Mr. Jas. Picken, Torrs, Kirkcubright, has sold to Mr. Neil Smith, Brampton, Ont., the big weighty Clydesdale stallion, The Mint, 11273, by King of the Roses out of a mare by another well-known Highland Sobrogie Stamp. The Mint stands nearly 18 hands, is well ribbed and quartered, and is like a g horse that should city prize horse of past days. Cairnwood well in Canada. He was bred by Mr. Gourlay, Arbrack.—North British Agriculturist.

Wm. H. Caldwell, Secretary of the American Guernsey Cattle Club, reports that the Guernsey heifer, Dolly Bloom, No. 12779, A.G.C., was just completed a most wonderful year's milk and butter fat record. She

Horse Owners Should Use

GOMBAULT'S CAUSTIC BALSAM

The Great French Veterinary Remedy. A SURE, SPEEDY & POSITIVE CURE.



SUPERSEDES ALL CAUTERY OR FIRING.

Impossible to produce any scar or slough. The safest but most effective remedy. Takes the place of all liniments for mild or severe action. Removes all blisters or blennorrhoeas from the eye or leg.

HUMAN REMEDY for Rheumatism, Sprains, Stomach, etc. It is the only medicine that can relieve all rheumatic pains, and is equally effective in chronic or acute cases. It is warranted to give satisfaction. Price \$1.00 per bottle. Sold by druggists, or sent by post, charges paid, with full directions for its use. For descriptive circulars, testimonials, etc., address THE LAWRENCE-WILLIAMS CHEMIST, 18 Front St. West, Toronto.

The Books are Free Spavin Lump Jaw

You can cure Bone Spavin, Bog or Blood Spavin, Kingbone, Light Hobbler or any lameness hard or soft, Foul Foot, Full Blood, Sweny or Knee-Flange, also Lump Jaw, and all other ailments of the horse. Get your two books free! You have and prove to you that you can cure all ailments of the horse and stock, and you do so in 14 days. If you have a case to cure write us and we will send you the books free. FLEMING BROS., Chemists, 32 Front St. West, Toronto, Ont.

A GOOD LINIMENT

For 50 cents a gallon can be made as follows: Absorbine, 4 ounces; Yinegar, 1 quart; Water, 3 quarts; Saltpetre (powdered), 1 ounce. This combination will prove satisfactory and successful for curing Bruises & Cuts, Hemorrhoids, A.C.P., Dollar Galls, to toughen the shoulder, for wounds, etc. It will reduce Swollen Ankles, Bad Tendons and all kinds of troubles where a liniment would be generally used. Buy the

ABSORBINE at the store, or send to the manufacturer, W. F. YOUNG, P. O. F., Springfield, Mass. LYMAN BROS. & Co., Montreal, A.C.P., who will send it prepaid upon receipt of \$2.00 for a bottle. One bottle ABSORBINE will make three gallons of liniment or wash as above giving. Write for a bottle and the free booklet forming formulae of Veterinary Remedies.

MEN WANTED

Salary or commission, \$200 a year and expenses, payable weekly, to good reliable men, representing us in the district mentioned. Our goods, distributed largely and small advertising matter, so experience, only honesty required. Write at once for instructions. Sales and Cash Appliances Co., London, Ontario.

Farmers' Sons Wanted with knowledge of farm work in an office, and a month with arrangements made for their education. For more particulars write to the Branch Office of the Association are being established in the following cities: Toronto, Montreal, London, Ont., and Vancouver, B.C.

calved March 22nd and started her record on March 27th, 1902, when 23 months old, and completed it March 25th, 1903. During that period she gave 8,841.58 lbs. of milk, averaging 5.13 per cent of butter fat and yielding a total of 453.86 lbs. of butter fat. The requirement for the advanced registry was 6,000 lbs. of milk and 250.5 lbs. of butter-fat. Her production greatly exceeded this and the record made is said to be the largest for one year's production of butter-fat by any two-year-old heifer in the world, that can be found recorded by representatives of any public institution or organization.

In the Argentine Estancia, published at Buenos Ayres, Argentina, this appears: "The Shorthorn occupies in this country an enormously preponderant extent of land—all that has a temperate climate, all that is fertile, all that is normal and best provided with the elements of nutrition and shelter. The whole of the province of Buenos Ayres, which alone will possess 30,000,000 of cattle at no very distant date, is devoted to the Shorthorn; the whole of Entre Rios and Cordoba, all the south and centre of Santa Fe, which are the more valuable and more thickly populated districts, nearly the whole of the Pampa, the more easterly region of Mendoza, which is bound to become a live stock district, part of San Luis, and even the southern department of Corrientes, which are the best grazing grounds of the Argentine Mesopotamia—all and every one are stocked with Shorthorns."

"There is land enough on which to breed the most enormous agglomeration of cattle that any breed whatever has ever attained to in any part of our planet." It is added that the live stock country of Argentina is much more than this: the whole of the south—that is, from the Rio Negro to Tierra del Fuego, more than 40,000 square miles of Patagonian land—is unfitted for the Shorthorn. The Andine valleys offer in all their extent an immense area for live stock, having the Chilean market close at hand, only the mountain range between. From the Neuquen to Salta and Jujuy, from the vicinity of the Antarctic circle to the tropic of Capricorn—all this, it is said, is for the Hereford and Aberdeen Angus "and others of Nature's fragal brood."

A Great Live Stock Centre

The total value of live stock received at Chicago during 1902 was \$312,984,386, or \$24,029,147 more than in 1901. The cattle receipts less than 1901, while the value of totalled 2,941,559 head, or 89,837 the cattle totalled \$3,844,186, or \$83,337,178 more than last year. The top price for cattle was \$9 per cwt. and the average price \$6.25. The receipts of hogs were 7,895,238, or 395,256 less than last year, while their valuation was \$10,650,000 more. The top price was \$8.25, and the average \$6.85 per cwt. The average weight was 220 lbs., or 6 lbs. lighter than in 1901.

The sheep receipts were the largest on record, or 4,515,716. The total value of the sheep and lambs received during 1902 was \$19,191,793, an increase of \$3,824,232 over last year. The top price for mutons was \$6.50, and the average price \$4.

The total receipts of horses were 102,100, averaging \$166 per head.



Scotch Shorthorns

Imported and Canadian Bred Shorthorns. Imported bulls, cows and heifers of the best families, bred by Messrs. Chas. and Geo. Ross, and Vicecro, bred by Lord Lovat.

Large White Yorkshires

A choice lot of boars ready for service, direct from stock of the best herds in England. Also young pigs and sows bred or old enough to breed.

Address H. J. DAVIS, WOODSTOCK, Ont.

Importer and Breeder of Scotch Shorthorns and Large White Yorkshires.

Maple Lodge Stock Farm

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

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

TWIN CITY HERB FOOD

has no equal as a Horse, Cattle or Poultry food. It is made in Canada and costs less than one-half the price of any reliable food. Farmers write for particulars to

HALLMAN & CO., Sole Manufacturers Berlin, Ont.



ROCK SALT for horses and cattle, in one and one-half ton bags, Toronto



W. T. BUCHANAN & CO., Ingersoll, Ont.

YOUNG MEN, Become Independent

Our School now give you a Veterinary Course in simple English language, at home during five months of your spare time, and place you in a position to secure a business of from \$1,000 upwards yearly. Diploma granted and gold medals obtained for successful students. Cost within reach of all. THE ONTARIO VETERINARY CORRESPONDENCE SCHOOL, London, Ontario, Canada.

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How to speculate with one dollar. An entirely new plan. Full information sent on request.

The Weltner & Dunn Corporation, 85 Broadway, New York City.

Target Pocket Pistol, 69c



We bought 6 dozen of these pistols at a very low price, and are selling them at 69c, simply as an advertisement. They are light, neat and well finished, hard wood stock, and blued barrel, accurate load. Our price is one quarter what a regular dealer would ask. Remember, we have only 6 dozen, so please order at once. JOHNSTON & CO., Box 318, Toronto.

For Sale

IMPORTED SHIRE STALLION, name C.A., No. 230 Canadian Stud Book. 17 hands, about 1900 lbs., quiet, good action, sure getter. His colts fetch highest prices. Inspection will fully confirm description.

JOHN SEMPLE, Tottenham.

FOR SALE

Large English Yorkshires. Boars fit for service; sows ready to breed; boars and sows 8 weeks to 3 months old, from imported and Canadian bred sows. Write

JAMES A. RUSSELL, Precious Corners, Ont.

DAVID MCGRAE, Innesfield, Guelph, Canada. Importer and Breeder of Galleyway Cattle, Chippendale Horses and Cotswold Sheep. Choice animals for sale.



Live Stock Labels

Send for prices and order early before the rush. R.W. JAMES, Dorranville, Ont.



NO HUMBAG, Three

in One. Send for prices and order early before the rush. R.W. JAMES, Dorranville, Ont.

PURE BRED STOCK

I have for sale 4 Ayrshire Bulls, 2 Pure Bred Shorthorn Heifers, coming one year old; 1 Shorthorn Bull, two years old; one Choice Yorkshire Boar, one year old; Yorkshire Sows and Boars, from four weeks to six months old; these animals are of choicest breeding. Will be sold cheap to quick buyers.

JOHN H. DOUGLAS,

Warkworth, Ont.

Champion Berkshire Herd of Canada (Headed by the 1000-lb.)

SILVER MEDAL CHAMPION BOAR OF CANADA (and other noted Prize Boars)

I was awarded the above honors, besides 10 other prizes, at the late Toronto Exhibition. The great growth and size of my hogs, at the different ages, was freely complimented on by the best judges, many of whom secured my such due had never been seen before, and I think I had the HEAVIEST HOGS on the grounds of ANY BREED in almost every class, and at every age. I have a grand lot of young boars, ready for service, young sows bred to prize boars, and young pigs from my best prize sows and boars, all for sale very reasonable. Come and see them, or send for pictures of my winners. I am one of the group that won at Toronto. W. H. DURHAM, York Lodge, East Toronto P.O., Canada.

Our Fortnightly Market Review

The Trend of Markets—Supply and Demand—The Outlook

Toronto, May 14th, 1903.
Aside from the demoralization of the carrying trade, due to the recent strikes at Montreal, general business has been good. Farmers are now well through with seeding and will be able to market some of their hold-over products. The opening of the cheese season will help to distribute more money in the country. Money rules steady at about 6 per cent. on call.

Wheat

The wheat situation is, if anything, a little stronger. The recent cold weather checked growth somewhat, but has not permanently injured the crop, unless a good warm rain is a long time coming. The Ontario crop report for May shows the crop to be in a fair condition. Armour is still the prominent factor in the speculative market, and seems to have control, or at least other speculators are afraid to act till they know what his intentions are. The world's supply in sight is not increasing, and, in fact, has decreased considerably. But as we are so near the new crop, this fact, though strengthening prices somewhat, has no very great effect on the market. The British market remains firm. Locally prices have advanced a trifle since our last issue, and 71 to 72c. are quoted for red and white, goose 50 to 62c., and spring 69 to 70c. per bushel. No. 1 hard Manitoba is quoted at 77c. Fort William.

Corn & Grains

There is no important change in oats. About 28,000 bushels of Canadian oats were shipped to South Africa last week from New York. The British market for Canadian oats is lower owing to large arrivals of Russian oats. Corn rules steady.

Feed Stuffs

Bran and shorts continue to sell at good prices, and are still reported scarce. Prices, however, rule steady at table quotations.

Hay

Receipts of hay have fallen off somewhat during seeding. But it is expected that more will be coming out as farmers will have time to get out their surplus stock. There is considerable hay in the country, but a great deal of it is of inferior quality. Consequently good quality hay will sell well. No. 1 baled timothy is quoted at Montreal at \$10 per ton. At Quebec points No. 2 quality has been selling at \$6.50 to \$8.00, f.o.b.

Eggs and Poultry

Receipts of eggs have been falling off somewhat, and consequently prices are firmer. The Montreal strike has interfered greatly with trade at that point. At country points East, buyers are paying from 11-14 to 11-12c., f.o.b., for case lots. Dealers here claim prices are too high and will have to come down. Picklers are said to be busy in many parts of the country which will help to keep up values. The English market is quiet. Nothing is doing in dressed poultry.

Dairy Products

The strike at Montreal has probably affected the cheese trade more than any other, except Eggs. But now that it is over things will improve. Though receipts have been large, prices still remain at a high level.

At Montreal finest Westerns are quoted at 12-14 to 12-3-8c. and Easterns at 12 to 12-1-8c. Factories have been selling well. Prices range from 10 3-4 to 11-1-4c. at the factories.

The butter market is rather unsettled. The English market is weak. Receipts are expected to increase rapidly from this on, though the improvement in quality when the full grass butter comes may improve matters. Creamery packages are quoted at from 18 to 19c., at the factories, and prints higher.

Wool

Though we hear of higher prices elsewhere, the Canadian wool trade does not seem to be opening up any better than last year. Holders of last year's clip are anxious to get rid of it, which is having an easier feeling. Piece is quoted as at 14 to 15c. for washed and, 8 to 9c. for unwashed.

Live Stock

There is a more buoyant feeling in live stock, especially in cattle, owing perhaps to the recent prohibition of Argentine cattle from the British market. The export cattle offering are not well finished, and should be held longer. The best loads of exporters sold on Tuesday at \$5.00 to \$5.20 per cwt. Choice butchers' cattle are higher, and sell at from \$4.65, to \$4.80, fair to good at \$4.35 to \$4.65, and common to medium at \$3.65 to \$4.45 per cwt. There is a fair demand for stockers and feeders. Short-keeper feeders sell at \$4.50 to \$4.95, other quality at \$3.75 to \$4.00 per cwt. Stockers range in price from \$3.25 to \$4.00 per cwt. as to quality. Milch cows bring from \$35 to \$55 each.

The run of sheep and lambs has been light and prices are firm for the best grain-fed yearlings, which sell at \$5.00 to \$5.50 per cwt.

Hogs are lower than two weeks ago. On Tuesday last they sold at \$6.10 per cwt. for selects, and \$5.85 for lights and fats.

Horses

Trade in horses continues active for this season, when farmers are busy with seeding operations. Good horses are not plentiful and command good prices when properly fitted for market. On Tuesday at Grand's Repository about 45 horses sold at prices ranging from \$75 to \$135. They were a mixed lot, chiefly workers and delivery horses. One good delivery horse sold for \$165.

Maritime Markets

Halifax, May 10th, 1903.
There is every indication of a heavy make of both butter and cheese during the coming season. Throughout the Maritime Provinces the patrons of the butter and cheese factories have all most everywhere increased their herds so that the present supply of milk is much ahead of last year. The market in Halifax for the last week, has been heavily oversupplied with print butter, as the factories at this season prefer to put up in this form. It will now be compelled to pack solid.

A number of factories are making cheese, and, although the price is somewhat lower, all the make of the local factories will be used up at remunerative prices. Most of the factories are now asking 12-1-2 cents, i.o.b. This of course is for hay goods. Maritime Province markets are very lightly supplied with eggs, and the price is high for the time of the year.

Hay is in better supply, but the temporary scarcity enabled dealers to move out all their old stocks at slightly advanced prices. Oats have advanced about two cents per bushel. Arrangements have been made for the arrival of a refrigerator car of Ontario meats on this market weekly during the summer months which will assure an even supply and will prevent prices from advancing as they did last season on account of local scarcity. Fowls are in better supply and are lower at from 75c. to a dollar. The chief feature in the grocery markets is the advance in molasses which is now quoted at 38c. in single puncheons. Very little Barbados molasses comes here, the local preference being for Porto Rico.

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. Poorer stuff lower.

Date	Toronto	Montreal	St. John	Halifax	Winnipeg	Victoria
	13	12	10	10	10	24
Wheat, per bushel.....	\$ 0 72	\$0 73	\$...	\$...	\$ 0 77	\$27 00*
Oats, per bushel.....	32	34	43	43	31	25 00*
Barley, per bushel.....	44	48	48	50	31	29 00*
Fesa, per bushel.....	64	70	65	68	...	35 00*
Corn, per bushel.....	40	51	50	50	...	23 00*
Flour, per barrel.....	4 00	4 10	4 80	5 11	...	...
Bran, per ton.....	17 00	17 50	21 50	22 00	15 50	19 00
Shorts, per ton.....	18 00	19 00	24 00	24 50	17 50	21 00
Potatoes, per bag.....	1 05	1 10	80	2 00	1 90	75
Beans, per bushel.....	2 00	1 85	1 95	2 00	...	...
Hay, per ton.....	9 00	10 10	10 00	10 50	7 50	9 50
Straw, per ton.....	5 00	6 50	8 00	8 00	...	12 00
Eggs, per dozen.....	13	13	13	14	12	30
Sheep, per pair, d.w.....	1 95	...	0 95	1 00	4	85
Ducks, per pair, d.w.....	...	...	...	...	...	75*
Turkeys, per pound, d.w.....	16	...	16	16	...	...
Geese, per pound, d.w.....	...	...	...	...	17	...
Apples, per barrel.....	3 00	3 00	3 75	3 75	5 50	1 75 box
Cherries, per pound.....	12	11 1/2	13	14	14	3 00
Butter, creamery, per pound.....	19 1/2	19	24	24	23	30
Butter, dairy, per pound.....	16 1/2	16	19	20	16	28
Cattle, per cwt.....	5 20	5 50	4 75	5 00	4 50	6 00
Sheep, per cwt.....	7 75	6 00	6 00	6 00	85	7 00
Hogs, per cwt.....	6 10	6 75	6 75	6 75	6 25	9 00
Veal Calves, per cwt.....	5 00	8 00	6 00	6 00	6 75	7 00

* Per ton + per lb.; † each.

Live Stock Exports

Statement of live stock shipments from Port of Montreal for week ending May 10th, 1903. Robt. Bickerdike & Co., Ltd.:—

May 1st, S.S. "Iberian," London, 536 cattle; May 3rd, S.S. "Lake Champlain," Liverpool, 530 cattle; May 8th, S.S. "Corinthian," Liverpool, 738 cattle; May 10th, S.S. "Manhattan," London, 770 cattle; May 10th, S.S. "Salacia," Liverpool, 691 cattle. Total, 3,257 cattle.

Mange in Hogs

Zenoleum was used quite extensively by the writer during the last year of his connection with the Montana Experiment Station. It was used most largely in the swine department. Among the uses to which it was put are the following:

1. Mange. We have applications of Zenoleum to give a perfect cure in case of hog mange with one or two applications.
2. In the case of a skin disease, causing a scuminess, the exact cause of which was not well understood, and which resulted in the loss of hair over almost the entire body, applications of Zenoleum completely removed the cause of the trouble.
3. In the case of an outbreak of hog cholera, the indications were that the mortality was reduced among the mature animals. Small quantities were given daily in the food fed.
4. We found it very useful in maintaining the best sanitary conditions among the pens.

Robt. Shaw,

Prof. of Agriculture University Agricultural College.

A Novel Way to Select Judges

At the annual meeting of the Ayrshire Agricultural Association recently held, the board of directors recommended that slips containing nominations by exhibitors should be put in a hat, and the judges drawn by lot.

How would such a plan suit in Canada? What a conglomeration of judges would result if this plan were in operation, say, for the Toronto Fair? It would, however, be worth getting the slips from exhibitors just to see how many would agree on the same judge, or how many different ones would be selected.

However, the good sense of the meeting prevailed and the selecting by lot method will not be used by our Scottish compatriots. The plan decided upon finally is as follows:

That slips be sent out annually, as formerly, to all exhibitors in these sections for the previous three years inviting them to send in names of the judges they wish nominated; that a list be drawn up of all the gentlemen nominated as judges in each section in the order of their votes; that from these lists twice the number of names required as judges be taken in their order of votes, as above ascertained; and that the judges be appointed by the April Show Committee from these names.

It isn't often...



that any machine receives the success and endorsement that "MAGNET" SEPARATORS have, as being the Hand Cream Separator for the farmer.

THE PATENT MFG. CO., LYS.,
Guelph, Ont.

Ottawa, April 6th, 1903.

Gentlemen:—I am pleased to inform you that the Magnet Cream Separator which I bought from you several months ago, has been in continuous use every day of forty cows. It has been very carefully and severely tested, and I am glad to inform you that it has given perfect satisfaction.

It runs very lightly, skims well, and separates beyond the capacity guaranteed by you.

I have no hesitation in saying that Canadian farmers would find it to their interests to buy machines made in Canada, rather than those imported from foreign countries and assembled in Canada. The reasons are obvious and need no explanation.

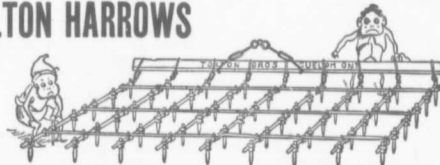
Yours very truly,
F. W. HODSON (Live Stock Commissioner).

Don't do yourself the injustice of ordering a Cream Separator without first having thoroughly investigated how strong and well made Magnet Separators are. No worm gearing, but all cut gears. They turn easy, skim clean, and are easily cleaned.

A Catalogue for the asking

PETRIE MFG. CO. GUELPH, ONT.

TOLTON HARROWS



Section and Flexible all Steel Harrows with an unequalled record.

A large variety suitable for the requirements of any country, made in different widths to suit purchasers, presumably the most efficient, strongest, and longest-wearing Harrows ever manufactured in our unqualified country. Parties wishing a first-class Harrow will do well to write us direct or apply to the local agent.

OUR MOTTO "Not too Cheap, but too Good."

TOLTON BROS. - GUELPH, ONT.

The Hardie Potato Sprayer



is a strong, simple and practical attachment which can be quickly and easily connected to any spray pump. Fits on the back of an ordinary wagon or cart. Sprays 4 rows at a time, covers the entire vine with a fine foliage spray, and one man can spray 50 acres in a day. Does exactly the same work as a \$150.00 machine, and ONLY COSTS \$7.00.

Write for our free illustrated catalogue containing the latest and best information about our complete line of Spraying Machines.

HARDIE SPRAY MFG. CO., WINDSOR, ONT.

A FULL SIZE GENUINE COLUMBIA GRAPHOPHONE TALKING MACHINE ALMOST FREE



A regular \$30.00 Machine that will cost you only \$7.00 and are absolutely guaranteed to give you the best of the world. Please understand clearly, we are not taking the price on the records to make up for any loss on the machine, as the price of the wax itself is not covered by the makers themselves. We have every machine in the catalogue for the next 30 days in order to get them introduced throughout the country as quickly as possible. OUR \$7.00 OFFER. You can send us \$7.00 and we will send you this Graphophone, Talking Machine, and 6 Records (your choice) and the understanding is you are not perfectly satisfied with the outfit, then you can not return it, you can still keep the records and we will refund your money. But, if you prefer to see and examine the outfit before paying for it, we will, with the machine, for \$1.00 if you live in Ont., N. Y., or N. W. I., and the Talking Machine and six Records by Express, C.I.A., subject to examination. You can then examine them at the Express Office, and, if found perfectly satisfactory, you can pay the Express Agent the balance, \$5.00, and the Express charges. Understand, this offer holds good for 30 days only. If you wish to take advantage of this offer immediately, the best arrangement will appear in all the newspapers in Canada, and we have only a limited number of outfits to be disposed of in this way. Address J. GARDNER, 200, Bloor, 255, Toronto.

No Racing at the Industrial

At a meeting of the Industrial Exhibition Association held on Wednesday last this resolution was passed: "That horseracing in front of the grandstand be discontinued, and that \$2,500 be appropriated for the prizes for special harness, saddle, hunter, jumping, polo and speed classes to be exhibited in front of the grandstand, making an entirely new and attractive feature."

A number of additions to the live stock prize lists has been made. The Dominion Shorthorn Association will add \$1,500 to the Shorthorn list instead of \$1,000 as heretofore. The greatest care will be exercised in the selection of judges. No director or member of the association will be allowed to handle or lead his stock in the ring when being judged. A programme has been agreed upon before the grand stand in accordance with the above resolution. It was decided that the prizes should be \$100, \$50 and \$25 in each section and that there should be a high jumping competition and two hunt club events. In the trotting and pacing classes speed will be accorded 70 per cent., conformation 20 per cent., and neatness of driver's outfit 10 per cent.

Keep Out Poor Horses

The live stock men of the Territories are meeting at Calgary this week, which will close with a fat stock show. The number of horses imported into the Calgary district for 1902 was 4,756, valued at \$106,880 or an average of \$22.47. The average value of horses imported into Manitoba and the Territories was \$16.57. It is urged that a minimum valuation should be placed on horses imported into Canada. The west is being flooded with an inferior class of horses, bought at slaughter prices in Montana and other western States and sold in Canada at low prices and at a minimum duty. This works a great injury to Western breeders and is of no benefit to any class in the community.

Want to Lower Egg Prices

The Canadian Egg Packers' Association met on Wednesday last to discuss the season's business. Packers complain that they find it hard to do business in England at present prices. The Canadian supply is but a fraction of what the British demand, the bulk of which is satisfied from Russia.

The proposition was made that the members agree not to pay dealers more than 10 1/2 cents a dozen for picking eggs at the present time, with an expectation of a reaction to nine or ten cents within a short period. No definite arrangement, however, could be reached, notwithstanding the fact that few of the members have been

able to make their business profitable within the past year, when prices have risen even to fifteen cents.

Flour, Pulp and Lumber

The Hon. Mr. Fisher, Minister of Agriculture, returned this week from his visit to Japan in the interest of Canadian trade. He says there are three commodities for which an exceptional market is now open in the East, namely, flour, pulp and lumber. The market for paper is excellent. The supply is now secured from Europe and there is no reason why Canada should not capture this trade. The Canadian exhibit at the Osaka exhibition has been awarded the prize for the best assorted display of the entire exhibition.

How the West Grows

The immigration into the Canadian West for March is the highest on record, numbering 12,267 settlers. The record for March, 1902, was 7,248. The record for March, 1903, was 70 per cent. larger than a year ago. Since July 1st, 1902, 25,396 more people have located in Manitoba and the Territories than during the corresponding nine months of the previous fiscal year.

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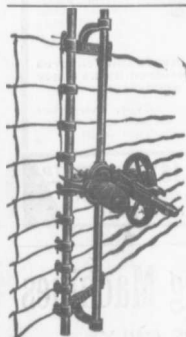
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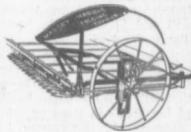
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