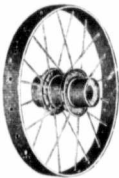


# Farming World

A Paper for Farmers and Stockmen

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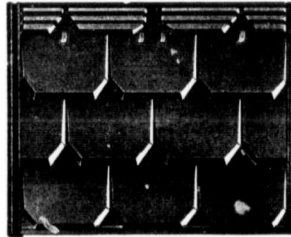
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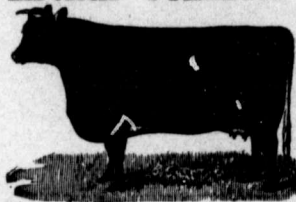
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# The Farming World

For Farmers and Stockmen

VOL. XVIII.

OCTOBER 15th, 1900.

No. 7

## Antipodean Agriculture

Some Interesting Facts for Canadian Farmers and Stockmen



TORONTO had two very interesting visitors last week in the persons of Captain A. W. Pearse, managing editor of the *Australasian Pastoralists' Review*, Sydney, N.W.S., and Mr. Grant, of New Zealand. Mr. Grant was accompanied by his wife and son. The party are on a tour around the world and left on Friday for Vancouver where they take one of the C.P.R. liners for home.

Captain Pearse since leaving Australia a few months back has visited New Zealand, South America and Great Britain. From the last-named place he came to Canada for the purpose of learning something of our methods of agriculture and of the resources and people of the Dominion. He spent a few days each at Ottawa and Toronto and visited the Agricultural College at Guelph. The work carried on by the Dominion and Provincial Departments of Agriculture interested him very much. To a representative of THE FARMING WORLD he stated that it was a surprise to him to find that so many connected with this line of work were or had been practical agriculturists. Such was not the case in his country. In the Departments of Agriculture in Australia there is not a practical farmer or one who has any practical knowledge of the business directing their work.

The Governments of that country are entirely under the control of the labor element, which ignores fitness for a position so long as party candidates are subservient to their interests. In the whole of Australia there are not two members of parliament who are farmers. Manhood suffrage prevails, which seems to give the labor or moving population of the country the balance of power.

The Australian colonies have suffered severely from drouth in recent years. Since 1895, 31,000,000 sheep have died from starvation and scarcity of water. In 1895 there were 63,000,000 sheep in the colony, and considering the natural increase this loss is simply appalling. The effects of the drouth are being modified to some extent by the sinking of artesian wells. These are all put down by Canadians and are sunk to a depth of from 200 to 6,300 feet and supply from 100 gallons to 6,000,000 gallons of water a day. These materially increase the water supply of the country but do not assist much in producing pasture.

Sheep rearing, which is the chief agricultural industry of the country, is carried on principally for wool production. A few years ago an attempt was made to introduce mutton-producing sheep, but this has practically been abandoned. Wool production is made the first consideration. Australia

does a large business in frozen meats, which has developed wonderfully of late years. There are numbers of what are known as freezing depots all over the country, and magnificent steamers fitted up with the most improved cold storage facilities ply between that country and Great Britain, South Africa and other consuming centres. Strange to say, this cold storage movement is entirely due to private enterprise. The Governments have had nothing to do with it excepting during recent years. The steamship lines and those associated with the meat trade have found it profitable to provide the necessary facilities to carry on this trade without any government assistance. For the past year two large refrigerator steamers owned by the American Government have been plying regularly between Melbourne and Sydney and Manila, carrying food products, such as canned meats, cheese, butter, etc., to supply the United States army in the Philippines. In addition to this, steamers leave these ports every fortnight for Japan, carrying frozen meats, a trade that is developing very rapidly.

Australia, New Zealand, and the Argentine have the advantage over Canada in that live stock do not require to be housed and fed during the winter. This is a big advantage, and reduces the cost of production to a very low figure. Since the drouth the price of meat has gone up very much in Sydney. A good 56 lb. wether, that could be bought formerly for 3s., would now cost 2d. per lb. by the carcase. MacLaren's Imperial cheese is the only Canadian cheese sold in that country. It sells for 2s. 6d. per lb. Capt. Pearse thinks it is delicious, and has it at every meal. A great many Canadian agricultural implements are sold in Australia, the Massey-Harris Co. doing a very large business. Their warehouses are to be found in every town, and are doing much to advertise Canada. The Australians grow enough wheat for their own use. New Zealand is also a wheat-growing country. Mr. Grant, who is a large farmer in that colony, last season had 600 acres of wheat which yielded 50 bushels per acre. Oats average 80 bushels per acre quite easily.

Captain Pearse was quite enthusiastic in regard to the outlook for trade in the Argentine. He travelled over a great deal of that country just recently. In one locality he saw 200,000 acres of wheat growing in one field. The average yield there is about 17 bushels per acre. The plague of grasshoppers has been got under control, and the output of wheat is destined to increase enormously during the next few years. Labor is cheap, and the cost of production is low. The farmers or land owners are very wealthy, having managers to look after their *estancias*, while they live in the cities or travel in other countries. The frozen mutton trade of the Argentinian

tine is assuming large proportions, and, since the outbreak of the foot and mouth disease, by which their cattle are prohibited from being landed alive in Great Britain, efforts are being made to develop the chilled meat trade. A couple of shipments recently sent forward have proven very satisfactory. The shipment of meat, noted in these columns some weeks ago as being sent to England from that country under a new process, by which the air in the compartment containing the meat was pasteurized, proved an utter failure. It may be possible to preserve meat in a small way by this plan, but on a large scale it is not feasible.

Capt. Pearce stated that there was a splendid opening in the Argentine for Canadian pure-bred stock. The breeders there are determined to have good stock at any cost. Only last summer 1,000 gs. was willingly paid in England for a Lincoln ram to go to the Argentine. All that is required to develop this trade is a direct line of steamers between Canada and South America. Other countries in that part of the world are also beginning to look for good stock. Of late years a great many New Zealanders have settled in Patagonia, which is turning out to be quite a grazing country. Farmers there are looking for good stock, so that the prospects for developing a trade in Canadian pure-bred stock with South America are bright, providing direct communication can be had, which should not be an insurmountable difficulty. We should be in that field with our good stock, and this whole matter is well worth looking into by the powers that be.

## A New Movement in Shorthorns

The Hon. Wm. Mulock Establishing a Valuable Herd in North York

A leading feature in live stock development in Canada during recent years is the interest taken in its progress by many of the leading public and wealthy men of the country. In a number of instances this interest has been more than mere good wishes towards those engaged in the business. Men of means and prominence in public affairs have of late years invested largely in the establishment of herds of pure-bred stock and in the importation of new blood into the country, a condition of affairs that speaks volumes for the future welfare of Canada and the development of our important live stock interests. With some, such investments are wholly for money-making purposes; with others they form a sort of pastime, while with many they are the outcome of a desire to help the farmers of the country by inducing them to purchase good stock and thus improve their herds and their flocks.

Among recent investors in this line is the Hon. Wm. Mulock, Postmaster-General, and from what we know of his motives in entering this new field he must be classed with those whose aims are to benefit the farmers of the country. He is establishing on his farm in North York a Shorthorn herd that has for its nucleus an importation of sixteen head from one of the best-known and oldest herds of Shorthorns in Great Britain. This importation arrived safely at Quebec over a month ago, and will be brought to Mr. Mulock's farm in North York as soon as they have passed quarantine, which requires ninety days, and fixes the time for their arrival in Ontario about the middle of November.

In selecting the animals for his herd Mr. Mulock was fortunate in securing the service of Mr. Wm. Linton, Aurora, Ont., than whom there is probably no better judge of Shorthorns in Canada. Mr. Linton visited Great Britain a few months ago for the purpose of selecting some of the best animals in the Old Land for his new enterprise. He

attended the annual sale of Shorthorns on the estate of the late Talbot Crosbie, of Ardferd Abbey, near the lakes of Killarney, Ireland, where he purchased the animals referred to above. In a letter published in THE FARMING WORLD of Sept. 11, Mr. Linton gave some particulars regarding this sale and his purchases.

The Ardferd Abbey herd of Shorthorns, from which Mr. Mulock's selections have been made, was founded in 1838, when Mr. Crosbie proceeded at once to secure the very best strains that money could buy, paying as high as 1500 gs. (\$7,670.25) for a single animal. He selected only the best and wisely and freely used a part of his great wealth by disposing of his stock at annual public sale to the farmers of the district. The herd was not kept in fancy condition for fancy prices, having only pasture in summer and hay and turnips in winter, and thus they were offered to the farming community.

We understand that it is Mr. Mulock's intention to imitate, as far as may be possible in this country, the late Talbot Crosbie's methods in managing and disposing of his surplus stock. Every spring a sale will be held of the male animals of the herd under such conditions as will require that at least a portion of them shall remain in North York. The aim will be to place the sale under such restrictions as will distribute animals from the finest strains in Great Britain among the local herds.

An aim such as this is to be highly commended and cannot but result in great benefit to the farmers who are so fortunate as to reside in the district where Mr. Mulock's herd is being established. The plans for disposing of the surplus stock are somewhat new in this country and we shall watch their effect upon the surrounding locality and the country at large with a great deal of interest. There is no reason why the auction sale method, if properly conducted, should not succeed in Canada as well as it does in Great Britain. We believe it will and wish the honorable gentleman every success in his new venture and trust that the objects in view in founding this herd may be fully realized. This is not Mr. Mulock's first effort in the interest of the farmers of York County. For a number of years he has presented to the Farmers' Institute of North York \$200 annually to be paid out to the most successful planters of orchards. The division of prizes, rules and judges are entirely under control of the local Institutes. The results so far have been most satisfactory and the orchards first planted are now bearing fruit.

## Management of Breeding Sheep

Success in sheep raising depends in no small measure upon the good judgment and care exercised during the breeding or mating season. In preparation for this, only the best specimens should be selected, and their treatment during this period should be such as to warrant only the best possible results. Farmers who raise a few sheep are, as a rule, more careless than they ought to be in selecting ewes for breeding purposes. The more usual plan is to let the ram serve the whole flock without any selection or separation of the good from the poor ewes. A good flock of sheep cannot be maintained in this way. Selection is required in all cases, and only the best used for breeding purposes.

The time for mating depends a good deal upon the object in rearing lambs. In the United States it is the practice with a good many farmers to rear lambs for the winter or early spring market, when very high prices are obtainable for lambs of good quality. In this country the winter trade is not of so much importance, except it be in so far as our farmers may be able to profit by rearing winter lambs for the trade in the American cities. Hundreds of Canadian lambs find their way to the Buffalo market in the fall of the year. If it be profitable to ship lambs and pay the duty at that season, why would it not be profitable to ship lambs earlier in the season, when the price per head is higher? But, however this may be, the farmer will have to be guided in arranging the season for mating by



the use to which he desires to put his lambs. The period of gestation is twenty-one weeks, and therefore the mating season may extend over a period ranging from September 1 to the first of the year.

In selecting ewes for breeding purposes care should be taken to secure only healthy animals of good form, and withal a good pedigree, provided they are of pure breed. With grades the same care should be taken, only mixed breeding is not so much of an objection in choosing breeding ewes. Some claim that it may be a distinct advantage where the form of the animal is fairly correct, since the more mixed the breeding of the females the less will be their power to resist change sought by mating them with a prepotent male. The introduction of such diseases as sheep scab, tape worm, and stomach worm should be guarded against, though it would perhaps be hard to tell as to whether animals had the last two or not. In any case, only the best specimens should be chosen. Caution should be exercised against making size only the chief ground upon which selection is based. Although size is of value, femininity and symmetry of form are among the more important considerations in selecting ewe lambs for breeding.

Some good authorities claim that young ewes should not be bred till they are nineteen months old. When bred as lambs it will tend so to hinder growth that where such a practice is followed it will not be possible to maintain nor-

advantageous to introduce an outcross from another breed and also to select sires from the breed chosen in making the outcross and there may be instances where crossbreeding is all right, but what is termed zig zag crossing, that is, choosing successive sires from different breeds, is never advisable.

Some weeks previous to mating rams should be confined to a grass paddock where they may have access to a shed. Grain feeding should then begin and be supplemented, if it can be, by succulent foods such as rape or second-growth clover. Rams should be in good condition of thrift and bodily vigor when used for service. Such a condition has a bearing on the vigor of the progeny, and it is believed upon the number of the same. The standard grain food, oats and bran may be fed to the rams, but it will be improved if some barley or wheat or both is added. Wheat, when fed in moderation, is said to be helpful in stimulating the generative functions. The quantity to be fed daily will depend upon the condition of the ram and the extent of the service. The necessity of feeding more than two lbs. per day will seldom occur and usually less will suffice.

When rams are confined to the paddock it is a good plan to drive the flock to the yard morning and evening during the mating season. Where the flock is small, and especially with a grade flock, the usual plan of allowing the ram to run with the flock will answer.



PRIZE-WINNING DORSET HORNED SHEEP

Comprising the first prize aged and shearing rams and aged and shearing ewes at the Toronto, London and Ottawa Fairs, 1900, and first prize shearing ewes at the Royal Show, England. These latter are to the right of the engraving, and were bred by Mr. T. C. Attrill, Cansbrook, Isle of Wight, England. This fine group is from the flock of Major John A. McGillivray, Uxbridge, Ont.

mal size in the flock. They will not sustain their lambs as well as ewes that are older, and the yield of wool will be lessened. Where young ewes with their offspring are to be sold as meat the following season, it may be advisable to breed them as lambs. As a rule, the ewe lambs selected for breeding should be separated from the lambs that are to be fattened as soon as weaned, as they do not require as stimulating food as the latter. Until they are bred, the aim should be to feed food that will produce growth rather than fatness.

After weaning, the ewes that are to be mated should be put upon a generous diet to enable them to pick up before being mated. For building up ewes at such a time no pasture is better than rape. The mating of the ewes may be hastened by putting them on a stimulating diet. If when the mating season arrives the ewes can be bred within a reasonably short period, the labor at lambing season will be lessened and the lambs will be more uniform both in age and size.

As the ram when properly bred and reared exerts a greater influence on the progeny than all the ewes he is bred to, the greatest care should be exercised in his selection. Rams should be well reared and should be selected largely for their prepotent qualities. In breeding grades the ram should, as a rule, be selected successively from one breed. There may be instances in which it would prove

## The Farmer in Politics

In a previous article, entitled "The Social Position of the Farmer," which appeared in this paper last spring, I tried to show that the best way for the farmer to improve his social standing is to insist upon agriculturists being represented in Parliament by practical farmers instead of by outsiders, who promise (sham) to look after the farming interest. And why should it not be so? Why should not the government of the country rest largely with those who support it? As I pointed out before, we could do without brewers, distillers, and, to a certain extent, without manufacturers (although home manufacture, and its support, is a most desirable thing), but without the farmer we cannot live. All our professions and trades originated in order to give the farmer a free hand and enable him to support the community. For instance, one man would say: "You look after the farm and I will fight to defend you; but you must support me." So commenced our armies. Another: "I will make your boots, or your clothes, or your tools; but you must support me." So commenced our trades.

Thus, you see, agriculture is the base upon which the whole social fabric stands, and for that reason the farmer is entitled to occupy the most honorable position. Is the foundation of a magnificent building of less account and less to be considered than the more showy and conspicuous cope-stone? Surely not. Again, why should farmers allow

brewers, distillers, lawyers, manufacturers, and even tradesmen, to elbow them out of the social and political road? Are these latter more intelligent? If so, with his present educational advantages, it is the farmer's own fault. And yet we find these men occupying the places of honor and responsibility. They push themselves to the front. They are knighted (when does a farmer ever get knighted?) and fêted and made much of, simply because they are in a position to accumulate wealth—and, consequently, influence—more easily than a farmer can do so. Why is this?

Well, without touching on party politics, I will ask any intelligent farmer if, supposing the agricultural interest to be largely represented in the legislature, as we ought to be, are there no burdens which now fall heavily on the farmer that could and would be removed; are there no combines that might be broken up? Taxation should fall less heavily upon the farmer as the first producer than upon any other class, because rich and poor alike look to him for support. The products of his toil are not articles of luxury, without which we could live easily, but of actual necessity, without which we could not exist at all.

I am writing now, as I wrote before, for young farmers. The generations of farmers that are gone were content to take a back seat socially, they were content to be "haw-backs" and "hayseeds" and to let other folks legislate for them, think for them and ride over them roughshod in all matters not actually connected with their business. And yet those men, those early settlers, made the country by their patient, indefatigable labors. But, since their day a mighty equalizing factor has arisen, education; and the youth whose life is to be spent on the farm may leave school as well equipped for his further intellectual development as he who is to enter a lawyer's office. Education never really stops. The education of the school is simply the plowing and harrowing of the intellectual soil to prepare it for the reception of the seed that shall yield the crop; and the crop itself naturally depends largely upon the quality of the seed. Public libraries, now within reach of all, and the low price of good literature enables the farmer, as well as any other man, to procure the best intellectual seed, and it is his own fault if he does not do so.

Let me conclude by repeating the advice I gave (in the article alluded to above) to those young farmers who desire to advance the social status of their class, and that is: Fit yourselves to become legislators; and, in the meantime, see that there are more farmers in Parliament. Let party politics go. Vote for the man whose interests are identical with your own.

SIGMA.

## Apples

*Pearson's Magazine* for October contains a most interesting article on the production of apples in the United States. The estimated production of apples in that country is 210,000,000 barrels annually, of which about 3,000,000 barrels are shipped to England. The writer points out that this is one of the greatest industries the country has ever witnessed and promises to take rank as the chief fruit crop of the world. The State of Iowa is claimed by him to be the finest apple country in the world. The total output of that State is close on to 3,000,000 barrels. But New York as a State raises three times as many apples as Iowa. Montana and Nebraska are mentioned as apple States, while Oregon, Washington, California and Colorado have only recently come into line. But the growing of apples is developing in these States very rapidly. Missouri is a large apple State and has several of the largest orchards in the world. The chief of these is at Westport and contains 2,300 acres. Another one is mentioned as containing 300,000 trees.

All through the Western States apple-growing is rapidly developing. Along with the development has come another industry which has revolutionized the whole fruit industry. This is a cold storage system as applied to stationary quantities of fruit. The first of these was built in Missouri in 1892. The effect of this movement on the

whole apple industry is not easily measured. Before their day the extra large orchard was a mine of disaster. There never has been a way of disposing of immense quantities of fruit rapidly, except at a sacrifice of profit. The only success has lain in holding crops for a better market. With cold storage stations at local points the grower can store his fruit and wait for better prices which winter and spring always command.

The writer points out that the growing of the American apple has only begun. For all that 210,000,000 barrels are grown annually there is not nearly enough for home consumption and the foreign trade is nothing. This small foreign trade is due partially to lack of proper facilities for shipping cheaply and at great speed. A movement is now on throughout the land looking to the solving of this question, and fast refrigerator lines are being established on every railroad in the country.

The article closes with a reference to the Canadian apple industry. It is stated that the shipment for the seasons of 1899-1900 to all foreign ports aggregated 2,000,000 bbls., while there were shipped to New York and Chicago at the same time 9,000,000 bbls.

In addition to this reference to Canada, we might add that this country contains about as much territory adapted to apple growing as does the United States. But while they produce 210,000,000 bbls., we produce only about 10,000,000 bbls. The apple belt of the United States is about 400 to 500 miles wide and extends from the Atlantic to the Pacific. Apples in this country are only used as a luxury. If they were used more as an article of food, home consumption would be greatly increased and we would be a healthier people, while the cost of living would be no greater and probably less than at the present time.

## North-West Breeders Organize

As a direct outcome of Dominion Live Stock Commissioner Hodson's trip to the West last summer the live stock breeders of the North-West have organized for definite work. At a large and representative gathering of breeders from every portion of the Territories, held recently at Calgary, three strong organizations, a horse breeders' association, a pure-bred cattle breeders' association and a sheep and swine breeders' association were formed.

There was a representative gathering of horse breeders when their organization was formed. The meeting was addressed by Mr. Bulyea and Mr. Peterson, Commissioner and Deputy Commissioner of Agriculture, respectively, and other interested parties. Each one emphasized the need of organizing and co-operation in order to secure better recognition from the railways in seeking cheaper freight rates. It was pointed out that one of the chief lines of work undertaken by the associations in the East was in the campaign in favor of lower transportation rates and better facilities for shipping live stock. Rates had been lowered 50 per cent., and in some cases more, almost wholly as the result of the energetic efforts of these associations. There was a wide sphere of usefulness for similar associations in the West. At present horses, especially light draft and saddle horses, commanded no cash value in the Territories excepting where a local customer could be secured. No time should be lost in organizing annual horse fairs and in inducing Eastern buyers to go West.

The motives for organizing the other associations were somewhat similar, all tending towards the further development of the various livestock interests of that part of Canada. Though Mr. Hodson was not present it was pointed out that his department was prepared to extend assistance to any scheme having in view the improvement of live stock in the West. At the sheep and swine breeders' gathering the attendance was not so large, owing to many exhibitors at the fair having returned home, but from the sentiments expressed in regard to organization, a flourishing association of these forces will be formed.

Mr. C. W. Peterson, Deputy Commissioner of Agriculture, Regina, is secretary and managing director of the associations and has associated with him in connection with each organization a strong board comprised of the representative breeders of the Territories. Starting as they do under such favorable auspices, these organizations should be able to render splendid services to the breeders of Western Canada.

## Fumigating Nursery Stock

We had a pleasant call last week from Mr. W. N. Hutt of the Niagara district, who is at present engaged in inspecting the equipment at nurseries for the fumigation of young trees to prevent the spread of the San Jose Scale. The nurserymen in the Niagara peninsula are already sending out their young stock and consequently the Government is desirous that all fumigation of trees before being shipped should be properly done. A fumigating house should be air-tight. If this is secured and the fumigation carried on according to instructions there is no possibility of the pest being distributed. Fumigation with cyanide of potassium and sulphuric acid properly administered means sure death to the scale and farmers need have no scruples about buying nursery stock thus treated.

Mr. Hutt reports that nurserymen are taking to this work very well. They realize that it is for their own interests as well as for the interest of the buyer that every effort should be made to stamp out and prevent the spread of the scale. It is now about stamped out in this province and with present methods for prevention there is not much danger of its getting a foothold in this country. But precautionary measures must be taken. It is reported that a new find of the scale has been located at Ithaca, New York State.

This fumigation process is now in force at all the ports of entry where American nursery stock is imported into Canada. This branch of the work is in charge of the department of Agriculture at Ottawa, and a thorough fumigation of all stock coming into the country on a plan similar to that prescribed for our home nurseries by the local Government is being carried on, so there is no danger of the scale getting into the country from the United States. Farmers then may rest assured that whether they buy nursery stock from home or foreign nurseries there is no real danger of the San Jose Scale being introduced into their orchards.

## Feathers and Eggs

One of the charges against the "fancier" in the poultry business is that he confines his attention too much to marking and plumage rather than to the bird's usefulness as an egg producer. There are, however, signs of a reaction in this particular and many of the so-called fanciers are turning their attention more to the utility side of the question. The following by a writer in one of our New England exchanges deals in a common sense manner with this question of feathers and eggs:

"The selection of fowls according to their uniform standard of plumage sometimes works harm to the ordinary poultry raiser. The fancy birds, of course, are judged by their feathers more than by anything else. If these are properly colored and of the right length and silkiness, the pedigree and worth of the birds are decided. This craze for feathers has to a certain extent invaded the barnyard and many farmers refuse to buy new breeds unless the feathers indicate aristocratic origin. It is true that in many cases the feathers are a pretty good criterion. If a breed with certain excellent characteristics has been bred for years to approximate to a certain type of plumage, it stands to reason that the purest of this class will have feather characteristics about the same. But there are variations in every breed and exceptions to all rules. If you emphasize the feathers too much you will be disappointed some day and find that you have bought feathers instead of eggs.

"To a similar extent the same applies to the general cut

and formation of the bird. If a certain breed has a record for egg laying, and most of the best birds of that breed have conformed to a standard type of size, shape of head and neck and form of body, we reason that there must be some close connection between the shape and the egg-producing capacity of the birds. There always is, but not to such an extent that one can go to work and breed them and trust that the eggs will come as a natural result. Not by any means. Yet some breeders work on that theory, and some ordinary farmers and poultry raisers lose by listening to them.

"The fact is, with due respect for the claims of fancy breeders, a bird has got to be judged a good deal by its own capacities and abilities and indirectly by what its ancestors have achieved. If the bird has a record for laying eggs, and its parents excelled in the same particular, what do we care about the feathers and shape. The birds may be as dirty and ugly in appearance as any dun-colored, barnyard mongrel type of fowl, and it may be as lacking in form as compared to the fancy-bred bird as a washerwoman is compared to a Venus of Milo. We are in the business for a living, and we emphasize feathers and shape only so far as they indicate the true capacities of the birds. The deification of feathers, form and similar external characteristics of fowls does well enough for the fancy breeders, but we poor practical mortals who must work hard for our livings must have something else to satisfy us."

## The Argentine as a Wheat-Growing Country

In 1890-91 the area sown in the Argentine was 3,000,000 acres, from which was harvested 764,000 tons, of which 351,000 were exported. In the following year about 300,000 acres more were sown, which yielded 950,000 tons, of which 497,000 tons were exported. In 1892-93 the area sown was about 4,000,000 acres, which yielded 1,693,000 tons, of which 1,162,000 tons were exported. The harvest of 1893-94 was the best that has been known except that of 1898-99. In that year 4,625,000 acres were sown, which yielded 2,187,000 tons, of which 1,667,000 tons were exported. In each of the four following years about 5,000,000 acres were sown, but the locusts commenced their ravages and destroyed the crops over a vast area, the estimates being from 250,000 to 1,250,000 acres each year; besides which hail-stones destroyed crops on from 81,000 to 455,000 acres each year, and the destruction from atmospheric causes varied from 153,700 to 631,000 acres every year. Therefore, the quantity harvested fell off very materially till 1897-98, when two-thirds of the crop was lost. But this was the turning point. The warfare against the locusts reduced their ravages the following season to 1,250,000 acres. Last season there was a further reduction, but the area sown had increased to 8,000,000 acres. The quantity harvested in 1897-98 was 1,271,000 tons, of which 695,000 tons were exported. The production of 1898-99 was 2,400,000 tons, of which 1,243,000 tons had been exported up to latest date. The area under wheat cultivation at present in the Argentine is about 8,000,000 acres as compared with about 3,000,000 in 1891-92, an increase of more than 150 per cent. in eight years.

From the foregoing it will be seen that the Argentine is a most formidable rival in supplying the world's wheat markets. Expansion along this line has been very rapid, and if it continues at the same rate that part of South America is destined to become one of the greatest wheat-producing countries in the world.

No trouble to own one of these famous Standard Barometers that sells regularly at \$1.00. Send us one new yearly subscription to **The FARMING WORLD** and the Barometer goes to you free. Or any present subscriber, who is not in arrears, who sends 25c. can have one. Remainder of this year free to all new subscribers to **The FARMING WORLD** for 1901.

## CORRESPONDENCE

## Will Help the Beginner

Editor THE FARMING WORLD:

I quite heartily approve of the suggestion to hold annual auction sales of live stock and think it is time forward steps in the direction indicated were taken. They will assist the small breeders and this is much needed. We do not want stock breeding to be cornered,—to be monopolized by a comparatively few farmers, as it is to certain extent now,—men now controlling this great industry being few, when we consider the large number who own small farms and have practical knowledge in such matters. The greatest hindrance to the success of a beginner in breeding is the difficulty in selling his surplus stock, and if anything can be done to remedy this, much good to the Dominion as a whole will result.

D. ROBERTSON, M.D.

Milton, Ont. President Halton Farmers' Institute.

## Manure and How to Apply It.

Editor THE FARMING WORLD:

Mr. Wallace in his communication on "Manure and how to apply it" is certainly right in advising farmers to "conserve and return to the soil any and all manurial material the farm affords" but when he advises us to always use phosphates with this, he is simply talking business for himself. That it might in many cases increase the yield goes without saying, but that is not the point at issue. If he wishes us to buy his phosphates he must show that the increase is secured at a profit. This he has not done, and until he does so anything he may write on the subject will be very lightly regarded by those he seeks to influence.

If he wishes to retain any reputation at all as an authority on manure he will ponder a little longer on what Mr. Anderson says on commercial fertilizers. In a few sentences Mr. Anderson has done more to show their true place in modern agriculture than Mr. Wallace has with all his columns of irrelevant matter.

Irrelevancy is not, however, the greatest of Mr. Wallace's failings. It must be a vivid imagination that gets him into trouble. Where "on earth" did he find an "authority" or an "experimenter" who tells him that "90 per cent. of the phosphoric acid is removed in the grain" while "90 per cent. of the potash is retained in the straw and roots"? Even if this were so, which it certainly is not, what difference would it make in the manure since both grain and its equivalent, straw, are used on the farm?

Who "on earth" is his authority for saying that animals retain 90 per cent. of the phosphates fed to them? What goes a working horse or a fattening steer do with the phosphates? If a work horse retained all but ten per cent. of the phosphorus he gets in his feed after reaching maturity he would be a mine of wealth to a match factory in his old age.

Where "in Canada" does Mr. Wallace find farms suffering from "clover sickness" or an excess of humus? "Clover sickness" I have never seen, and my experience is that the small per centage of marsh farms in Canada very soon lose their excess of humus when drained and cropped.

But why follow Mr. Wallace in all his statements. Sometimes they are correct, more frequently they are incorrect, but always they must seem to favor the use of phosphates.

A. McNEILL.

Walkerville, Ont.

NOTE.—The pivotal point in the above letter, though it contains a little more of the personal element than we would like for these columns, is whether fertilizers, and more especially phosphates, can be used at a profit on Canadian farms. There seems to be an impression among farmers, whether right or wrong, that the profit from a fertilizer should be got the first season it is used. If this is not the correct way to look at it then let parties interested in this matter arrange for

an experiment, or, for that matter, a series of experiments with phosphates extending over say a four-years' crop rotation. Apply the fertilizer the first year on part of a field and watch its effect upon the various crops of the rotation and make a comparison with the same rotation on the other part of the field upon which no fertilizer has been used. Such an experiment properly conducted would tend to throw considerable light upon this whole question.—EDITOR.

## Farmers' Institute Lecturers and Soil Fertility

Editor THE FARMING WORLD:

Permit me to make a few comments on some recent papers that have been published in your journal, the authors being two well-known Farmers' Institute lecturers. These gentlemen are paid by the Government to give practical and, as far as possible, correct scientific knowledge in their special line of agricultural work. On July 10 there appeared in your journal under the direction of Superintendent Creelman, an address by Mr. A. McNeill, Walkerville, on "Clover," and again on Sept. 18 an address by Duncan Anderson, Rugby, on "Manure and How to Apply It."

In Mr. McNeill's lecture I notice that he says in regard to clover, "It will not grow readily in a soil deficient in humus, and a good dressing of land plaster will always pay."

What relation is there between humus and land plaster in keeping up soil fertility? My own experience and investigation and that of others in Ontario show that humus is a food, but land plaster is a stimulant, and in many cases has proved a disastrous one. Why does Mr. McNeill furthermore condemn standard fertilizers which are foods and advocate a poisonous stimulant?

Secondly, under the sub-heading of "Improving worn-out soils," Mr. McNeill is asked, "How would you use clover to bring up a run-down farm?" He replies by advocating a three-years' rotation, corn, oats and hay. As to the hay, he advises cutting two crops in one season and the plowing down of the sod in the spring and then concludes, "In this way a profitable crop can be grown every year and the fertility of the soil will at the same time be very much increased."

Prof. Shutt, Dominion chemist, has recently told the farmers of Canada that the three crops Mr. McNeill recommends on an average remove per acre a total of 650 lbs. of mineral matter (phosphate and potash) from the soil. This would take about 50 tons of good barnyard manure to replace, if it can be got, which makes the rub sometimes. Strange to say, and this may be hard for Mr. McNeill to swallow, the clover crop of two tons is shown to be about 25 per cent. harder on the mineral matter of the soil than either corn or oats. How then, does Mr. McNeill explain an increase in soil fertility, by his rotation?

I may say for Mr. McNeill's benefit that I have been using fertilizers for twenty five years, largely mixed fertilizers, and depend largely on clover and manure to keep up my farm. But the two (fertilizer and manure) go together with me and I find them to pay. The last two or three years I have given some attention to using the simplest forms of fertilizers, largely the phosphatic. My plan was to use these in bringing up my farm with clover and I have found it profitable.

I fear, Mr. Editor, I have encroached too much on your valuable space, but I would close with a few words on Mr. Anderson's ideas. Mr. Anderson in answer to the question, "Have you used commercial fertilizers?" says "No." But strange to say, he proceeds to give a theoretical opinion with no practical experience from himself or others to back up what he states. We all appreciate clover as a good manure, but will Mr. McNeill or Mr. Anderson tell the average farmer how to raise clover when the farm has failed to grow it under average conditions for many years, as is the case with scores of farmers in this district?

Barrie, Ont.

WILLIAM TAYLOR.



# The Agricultural Gazette

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

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

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

### BENEFITS OF MEMBERSHIP.

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

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

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

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

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

The list of cattle, sheep, and swine for sale will be published in the third issue of each month. Members having stock for sale, in order that they may be included in the Gazette, are required to notify the undersigned by letter on or before the 9th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The date will be published in the most condensed form.

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

## List of Stock for Sale.

### DOMINION CATTLE BREEDERS' ASSOCIATION

#### Shorthorns.

Bonnycastle, F. & Son, Campbellford—9 bull calves; 20 cows, heifers and heifer calves.

Birdsall, F. & Son, Birdsall—Bull calf, Douglas, J., Caledonia—12 bulls, 6 to 26 months; young cows and heifers.

Golding, H. & Son, Thamesford—5 bull calves; 5 heifer calves; 2 cows; young heifer. Hind, H. E., Hagersville—4 bull calves, 7 to 10 months.

Haining Bros., Highgate—2 yearling bulls; 3 bull calves.

Hawkshaw, W. S. & Son, Glanworth—Bull, 17 months; heifers.

Milne, D., Ebel—10 bulls, 6 to 20 months 15 cows and heifers.

Rankin, S. Fairview—Bull, 12 months; 2 heifers, 2 years; 4 heifers, 1 year; 5 heifer calves.

Smith, A. W., Maple Lodge—10 young bulls; 10 heifers.

Walker, G., Eady—2 bull calves, 5½ and 6 months.

#### Ayrshires.

Drummond, D., Myrtle—5 bull calves; females all ages.

Guy, F. T., Bowmanville—2 yearling bulls; heifers; young calves, both sexes.

Reid, R. & Co., Hintonburg—4 yearling bulls; females all ages.

Smith, W. M., Fairfield Plains—Bull, 2 years; 2 bulls, 10 months; 2 bull calves 1 month; cows and heifers all ages.

Vuill, J. & Sons, Carleton Place—2 bulls, 2 years; 4 yearling bulls; bull calf; females all ages.

#### Holsteins.

Beck, S. R., South Cayuga—Bull, 3 years; bull, 1 year; 3 calves, 6 to 10 months; 2 cows; 4 heifer calves.

Smith, S. E., Dundas—Bull, 2 months; 2 heifers, 7 to 11 months; 2 heifers, 2 years; cow, 6 years.

#### Jerseys.

Birdsall, F. & Son, Birdsall—Bull calf.

#### Devons.

Rudd, W. J., Eden Mills—Stock both sexes, all ages.

### DOMINION SHEEP BREEDERS' ASSOCIATION.

#### Cotswolds.

Bonnycastle, F. & Son, Campbellford—20 shearing and ram lambs; 20 ewes and ewe lambs.

Rudd, W. J., Eden Mills—13 shearing rams; 10 ram lambs.

#### Shropshires.

Switzer, N. W., Streetsville—Ram, 2 shears; 6 ram lambs; 6 ewe lambs.

Vuill, J. & Sons, Carleton Place—2 shearing rams; 6 ram lambs; ewes and ewe lambs.

#### Leicesters.

Armstrong, G. B., Teeswater—Rams, various ages.

Currelley, T. & Son, Fullarton—25 Shearing rams and ram lambs.

Douglas, J., Caledonia—Shearing rams and ewes; ram and ewe lambs.

Smith, A. W., Maple Lodge—30 ram lambs; 10 rams, 1 and 2 shears; 20 ewe lambs; 20 ewes.

#### Southdowns.

McEwen, R., Byron—Aged and shearing ewes; ram and ewe lambs.

Smith, W. M., Fairfield Plains—2 rams; 2 ram lambs.

#### Oxfords.

Jull, J. H., Mt. Vernon—40 ram lambs.

### DOMINION SWINE BREEDERS' ASSOCIATION.

#### Berkshires.

Boyd, A., Kars—Boar and sow pigs.

Bonnycastle, F. & Son, Campbellford—Young pigs, both sexes, 6 weeks to 7 months.

Decker, C. R., Chesterfield—20 head. McCrea, A., Merrickville—Aged boar; 7 boars, 3, 6 and 12 months; 4 aged sows; 12 sows, 3 and 6 months.

Reid, R. & Co., Hintonburg—3 boars; 6 sows; fall pigs.

Rudd, W. J., Eden Mills—Boar and 10 sows, 7 months; boar, 18 months.

Reed, I., Ardrea—Aged boar; boar, 7 months; sow, 1 year; sow, 6 months; 10 pigs, 2 months, both sexes.

Snell, R. P., Snelgrove—Boars, 4 to 6 months.

Vuill, J. & Sons, Carleton Place—Boar, 1 year; 2 boars, 6 months; sows, all ages.

#### Yorkshires.

Drummond, D., Myrtle—Young pigs, both sexes.

#### Tamworths.

Boyd, A., Kars—2 sows and 1 boar, 7 months; stock, both sexes, 2 months.

Golding, H. & Son, Thamesford—Sows, all ages; young pigs, both sexes.

Hawkshaw, W. S. & Son, Glanworth—Stock boar; boars, 5 months; 20 boars and sows, 5 weeks.

Reid, R. & Co., Hintonburg—40 boars and sows, different ages.

Smith, H. D., Compton, Que.—Boar and 2 sows, 10 weeks.

Smith, W. M., Fairfield Plains—Boar and sow pigs.

#### Chester Whites.

Birdsall, F. & Son, Birdsall—Pigs, 6 weeks and 5 months.

Golding, H. & Son, Thamesford—3 young sows.

#### Duroc Jerseys.

Smith, W. M., Fairfield Plains—Sow pigs.

#### Poland Chinas.

Smith, W. M., Fairfield Plains—Boars and sows, all ages.

## Special Prizes at the Provincial Winter Fair.

The list of special prizes to be awarded at the Provincial Winter Fair, to which a general reference was made a few weeks ago, is now complete, and a very valuable list they make. We give in detail the specials offered in the cattle, sheep and swine departments.

#### CATTLE.

In the Shorthorn class there are two sweepstakes, one of \$35 for the best Shorthorn steer, and the other of \$30 for the best Shorthorn cow or heifer. Both these are given by the Dominion Shorthorn Breeders' Association. J. Bibby & Sons, Toronto, offer as a sweepstake for Shorthorn steers under one year, three premiums, in value \$35, being, 1st, five cwt. of their Cream Equivalent; 2nd, three cwt. of the same; and 3rd, two cwt. of the equivalent. In addition to the specials mentioned above, the Dominion Shorthorn Breeders' Association give \$25 for the best grade steer sired by a pure-bred Shorthorn bull.

Appended to the class for Herefords and Polled Angus is a special offered by the American Aberdeen-Angus Breeders' Association, who will increase 75 per cent. all first premiums won by Polled Angus cattle, if they are recorded in the herd book of this Association.

The Prince of Wales' prize of \$50 is offered as a grand sweepstake for the best dressed carcass of any breed.

## SHEEP.

There are a large number of specials offered in the sheep classes. The American Shropshire Record Association's contribution to the prize list amounts to \$100, divided over five sections, (1) for best registered yearling wether, (2) wether under one year old, (3) three registered ram lambs, (4) best yearling wether, sired by registered Shropshire ram out of grade ewes, and (5) best wether under one year old, similarly bred. Sheep competing must be bred on this continent, recorded in the association's record and have been the property of the exhibitor at least ten days before the date of the exhibition.

Special prizes are offered by the American Leicester Breeders' Association for pen of three Leicester lambs, the premiums being, 1st, \$12; 2nd, \$8; 3rd, \$5. All competing animals must be recorded with and bear the ear tag of the association.

The American Oxford Down Record Association give specials for the best yearling Oxford Down wether, best lamb, best yearling wether's carcase and best lamb's carcase. Under the conditions all stock competing must be bred and owned by exhibitor, must be registered in the American Oxford Down Record and bear the association's ear tag. The certificate of registry in the association's record must also be presented at the time of the exhibition.

A corn scuffler, valued at \$10, is donated by Thoms' Implement Works, Watford, as a sweepstake for the best Cotswold sheep. The sweepstake for Lincolns is a general purpose plow, value \$10, given by the Massey-Harris Co., Toronto. S. Vessot & Co., Joliette, Que., present a grain grinder, value \$40, to be competed for as a sweepstake among Leicesters. The sweepstake for Oxfords is a folding lawn swing, value \$10, presented by the Waggoner Ladder Co., London; that for Shropshires, a sheep shearing machine, donated by the Chicago Flexible Shaft Co., Chicago, of which the value is \$15; that for Southdowns a plow, donated by J. Fleury & Sons, Aurora; that for Dorset Horns and Merinos, 1 ton of rock salt, given by the Toronto Salt Works, Toronto; while for Hampshires and Suffolks, the West Chemical Co., Toronto, give five gallons of their chemical fluid. The grand sweepstake for the best sheep carcase, of any breed, is a silver medal, the donation of the Traders' Bank, Guelph.

## SWINE.

As in the sheep classes, there is a sweepstake for each class among the swine. The Wilkinson Plough Co. give a plough for the best Berkshire; the Spramotor Co., London, donate a spramotor, valued at \$10, for Yorkshires; the West Chemical Co. offer five tons of their chemical fluid, for

Chester Whites. A Waggoner extension step-ladder and eight-foot extension step-ladder are given by the Waggoner Ladder Co., London, for Poland Chinas; ten barrels of salt are offered by the Windsor Salt Co., for Essex; a cylinder root pulper, value \$15, by the Massey-Harris Co., Toronto, for Tamworths; and a Winnipeg heater, of the value of \$8, by the Winnipeg Heater Co., Toronto, for Duroc Jerseys.

In the classes for export bacon hogs, \$50 of the amount are given by the Ingersoll Packing Co., Ingersoll, and a similar amount by the Collingwood Meat Co., Collingwood. A silver medal, value \$10, is donated by the Canadian Bank of Commerce, Guelph, as a grand sweepstake for the best pair of swine carcases, of any breed.

## DAIRY CATTLE.

The Dairy Association of eastern Ontario donate \$50 towards the prize list in the dairy department, while in the very liberal prize list offered for dairy Shorthorns, \$220 of the amount is contributed by the Dominion Shorthorn Breeders' Association. The Canadian Ayrshire Breeders' Association supply \$50 towards the prize list for Ayrshires. Hon. Sydney Fisher, Dominion Minister of Agriculture, offers \$25 apiece in two classes of Guernseys for the best cow 36 months and over, and the best heifer under 36 months, taking part in the dairy test.

Twenty-five dollars for the best pure-bred dairy cow, and \$15 and \$10 for the next two best Holstein-Friesian dairy cows registered in their herd-book, are offered by the Canadian Holstein-Friesian Association. A valuable sweepstake, consisting of a National cream separator, worth \$75, is donated by the Raymond Manufacturing Company, Guelph, for the best pair of cows (36 months or over) of one breed, or both grades of one breed. For pair of heifers under 36 months, of one breed, or both grades of one breed, the Rippley Hardware Co., Grafton, Ill., give their Reliable feed cooker, value \$45.

The silver cup, value \$50, donated by the Forest City Business and Short-hand College, London, which was won last year by Rettie Bros., Norwich, with their phenomenal cow Aalje Posch 4th, and which must be won by an exhibitor twice in succession, or on three separate occasions, will again be offered for the best cow or heifer of any age or breed. The Dominion Shorthorn Breeders' Association, in addition to the other generous amounts contributed, will give \$200 additional to the championship cow, if she is a pure-bred Shorthorn.

## Contentment.

"What mo' kin I ask?" said the colored citizen. "De co'n's in de crib, de cotton is a pickin', de 'taters is all banked, en de ole mule don't know dar's a mortgage on him."—*Atlanta Constitution*.

## FARM HELP EXCHANGE.

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

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

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

## Help Wanted.

Man and wife wanted to run a farm two miles out of Austin, Minn. Farm consists of 160 acres, on which 32 cows are kept, the milk from which is sold in the city. Man must be competent to take charge of this dairy farm, either on a salary, or he can rent it for cash or on shares. Good dwelling house, new barn, water in barn, ice house, machine shed, hen house, etc., on farm. Eighty acres of farm in pasture. No. 603. a

Wanted, thoroughly practical, thrifty, energetic, unmarried man, who is a good plowman, and careful and painstaking with horses. Must be a good milker and willing to milk when occasion requires, but his chief duties will be the care of the horses and the general farm work. To the right kind of man will be paid at the start \$180 to \$200 a year, with board and lodging. A permanent place and a good home to one who does his best. Must have good recommendations. No. 595. b

Man wanted on a farm by the year or month. Must be a good stockman. Work in winter principally looking after stock. An extra hand also wanted at once for a while. No. 596. b

Wanted, a young man for a farm on the shore of Muskoka Lake. Would be required to do general farm work, look after cattle, and milk. Wages \$14 and board until April 1, and \$18 per month for the balance of the year. Wages paid monthly. Man must be sober and industrious. No. 600. b

Wanted, good man for the management of a large fruit farm in the Niagara District. Must be competent. 602. b

## Domestic Help Wanted.

Good general servant of the better class wanted in the city of Ottawa. A good home to a good girl, who must bring good references. Wages \$8 to \$10 a month, according to ability and desire to please. No. 597. b

Housekeeper needed on a farm immediately. Family consists of 4 children, and 2 or 3 cows are kept. References required. State wages when writing. No. 598. b

Wanted on a farm near Fredericton, N.B., housekeeper to do housework and cook. Work light. Good wages given to the right kind of person. Middle-aged person preferred. Give references. Mrs. C. H. Giles, Brooklands, Fredericton, N.B. b

Housekeeper required on a farm near Paris, Ont. State wages asked. No. 599. b

Wanted, a domestic, at once, on a farm near London. Good place for a suitable person. No. 601. b

#### Situations Wanted.

Young married man wanted a position as manager of a small farm, or would care for live stock. Does not drink or use tobacco. Would commence work at once. No. 449. b

Married man, with five children, wishes a situation on a farm as manager, or would work a good farm on shares. Can give the best of references. Is at present foreman on one of the stock farms of the Stone Stock Co., Guelph. Will be at liberty Nov. 1. Address, Harrison Lyon, Moreton Lodge, Guelph, Ont. b

Married man, who has worked on a farm for over 20 years and can do all kinds of farm work, wants a place at once. No. 448. b

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

#### Farmers' Institutes.

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

G. C. CREELMAN,  
Superintendent Farmers' Institutes.

#### The Report of the Superintendent.

One of the most valuable features of the Report of the Superintendent of Farmers' Institutes, now on the press, is the very interesting discussions which followed the reading of papers and addresses of the delegates to the various Institute meetings. The questions were answered by the speakers, and served to bring out points not touched on in the addresses, or which were not quite clear to some of the audience. As an illustration of this question and answer department we give the following replies by Prof. H. H. Dean to enquiries by seekers after knowledge:

#### MILK—ITS CARE AND PRODUCTS.

Q.—What are the limits of variation in the fat contents of milk?

A.—Prof. H. H. Dean: Ordinary herd milk will range from 3 to 5 per cent. fat. An individual cow's milk may go as low as 2 per cent. fat, and I have known one case where the percentage of fat in the milk from a single cow was as low as eight-tenths of one per cent. I have also known cases where the fat in one cow's milk tested as high as eight per cent. This occurred when the cow was nearly dry. One might say that it is difficult to set the limits to the variation in the fat of an individual cow's milk, while an individual herd's milk varies within comparatively narrow limits, say one to two per cent.

Q.—Would pasteurizing milk before feeding to calves prevent tuberculosis?

A.—Heating milk to a temperature of 160° to 165° will destroy the germs causing tuberculosis. Some recent investigations indicate that heating milk to between 140° and 145° will destroy the germs, but it is usually considered safer to heat or pasteurize at 160° to 170°, especially for skim-milk at creameries. In Denmark all skim-milk must be pasteurized before it is returned to the farm from the creameries. The Danish Government has adopted that precaution to prevent the spread of tuberculosis. Some authorities think there is very little danger of spreading tuberculosis through milk, as milk very seldom contains the disease germs unless the udder of the cow is affected.

Q.—Can a dairyman with ten cows profitably use the Babcock test?

A.—Yes. By means of the Babcock tester and weigh scales he can find out which are the profitable and which the unprofitable servants. The latter he will send where hay, silage and meal are not consumed, and where the sound of the milk-maid's voice is not heard. Weighing and testing the milk of each cow separately is the only way to select cows for a profitable dairy herd. The milk from each cow should be weighed and sampled for two or three days each month during the milking period, and the results for the year may be based on these weights and tests.

Q.—Will potatoes fed to milk cows injure either the milk or butter?

A.—No, provided they are fed in moderate quantities, say not over a peck a day to each cow. When fed in large quantities they are said to give butter a tallowy appearance, and to make it white in color. The white color may be overcome by using butter coloring judiciously. Any bad flavor which is the result of food may be best overcome by pasteurizing, using a good flavored starter in the cream to secure proper ripening.

Q.—Is it true that the separator cleans and purifies milk? If so, how?

A.—The centrifugal separator does cleanse and purify milk. Any person

may easily be convinced of this fact by noting the "mud" or "slime" which collects in a separator bowl after separating what is apparently clean milk. The cleansing is effected as a result of the action of centrifugal force. The "mud," "dirt," or "slime," etc., is the heaviest portion of the milk and collects on the far side of the inside of the separator bowl and remains there, as no way is provided for it to escape. The skim-milk is second in weight and forms next to the "mud," but this is being continually drawn off through pipes arranged for the purpose. The cream is the lightest and forms a wall in the centre of the bowl until it finds an outlet at a point near the top and centre. The substances in the milk arrange themselves in the revolving-bowl in the order of their weight of specific gravity—the heaviest, or the dirt, being thrown to the outside.

Q.—What is the relationship between the per cent. of fat in the milk and the number of pounds required to make one pound of butter?

A.—Butter consists of fat and other substances, chiefly water, salt and curd. Good butter contains on an average 84 pounds of fat and 16 pounds of water, curd and salt. The amount of butter made in excess of the fat is commonly known as the "overrun." The relation between fat in the milk and the overrun is not always constant. It is affected by loss of fat in skim-milk and buttermilk, losses by spilling, sticking of cream to vats, cans, pails, etc., loss of butter in churn and on worker, extra butter put in prints, boxes, tubs, etc., to make them hold out weight when they reach the consumer. Losses by evaporation and leakage also affect the overrun. The amount of curd, salt and water which is incorporated with the fat is also an important factor. Taking everything into consideration, an overrun of 10 to 15 per cent. is good work in a creamery. In a private dairy with a separator it may be higher. If there was no loss whatever the overrun should be a little over 19 per cent., i.e. 100 pounds of fat in the milk would make 119 pounds of merchantable butter.

(Continued in our next issue).

#### OUR FOUR-INCH READING-GLASS.

If you're a paid-up subscriber to THE FARMING WORLD you can have one of our famous four-inch reading glasses, sold regularly at \$2.50, for \$1.00. Carefully packed for mail. Postage paid.

#### IF NOT, WHY NOT?

If you are a paid-up subscriber to THE FARMING WORLD you may have a \$2.50 4-inch reading glass for \$1. This glass shows how clear small type appears when viewed through its lens. It is a great comfort to those whose eyesight is not strong and is valuable in examining seeds and insects.

# Farm Implement Department

"Canada Needs More Such Papers."

The Exhibition Number of The Farming World comes to us this month with eighty two pages well filled with items of interest to the farmers of Canada and with a nice line of advertising, showing the good work being done by Advertising Manager Stickle. Canada needs more such papers. And evidently advertising pays in The Farming World or Bro. Stickle would not use so much good space for his own schemes.

—Farm Machinery.

## Corn Picker and Husker.

The accompanying illustration presents a most curious and interesting piece of farm machinery. It is what is known as a corn picker and husker and is said to be the only successful machine of its kind in the world. It is warranted to husk corn from standing stocks one row at a time and de-

that is being made at the present time in improving farm machinery.

## The Evolution of the Plow.

By F. W. Taylor.

The plow has from time to time been so much improved that it may now be accepted as the most perfect that we have for preparing the soil for a crop; no other can compete with it in regard to the amount and quality of the work performed, taking into consideration the time and expenditure of power. The superiority of the present day plow over the primitive plow of centuries ago cannot be questioned—simply a glance at the two shows that there has been a wonderful revolution, both in form and utility.

In briefly summarizing the history of the plow, let it be noticed that the first plow-like implement was a straight stick sharpened at one end; after this came the pick-axe or hoe; then the forked stick with a handle

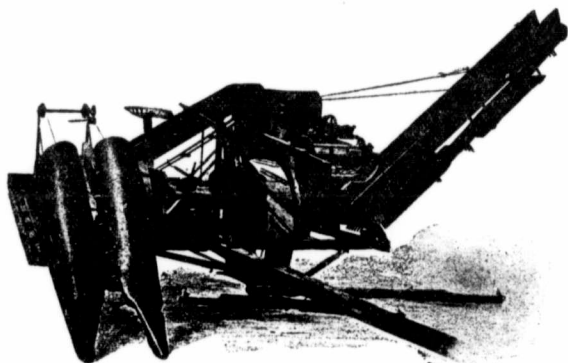
was begun at the close of the eighteenth century.

We thus find all the essential parts of the plow initiated by the year 1800, and, since that time, the most marked improvements have been to give the plow its great superiority in pulverizing power, lightness of draft, ease of holding, durability, quality of the material, uniformity of wear, regularity of turning the furrow slice and in many other respects. In short, mechanical principles have been better understood and more intelligently applied; simplicity of construction and economy of power have been combined; a better knowledge of the strength of materials has made possible a reduction in the size and clumsiness of the old-style implements. There are now over twelve hundred models of plows constructed, adapted to an almost infinite variety of work and meeting the conditions and requirements of every kind of soil. The further evolution of the plow will probably be continued along the lines of greater depth and a more perfect pulverization, thereby increasing the available fertility and moisture content of the soil.

## The Evolution and Comparison of Reaping Machines.

By M. F. Miller, Ohio.

The process of reaping is older than written history. The first implements which are supposed to have been used for this purpose are found among the works of pre-historic men, such as those of the later stone period of Great Britain. The first forms were of stone, but later bronze, and finally iron came into use for fashioning rude sickles resembling somewhat those of the present day. The ancient Egyptians did much towards developing this implement, which with little change has come down to the present time. The scythe developed along with the sickle after they were once introduced, which, however, was at a later period than the latter. The sickle, however, remained pre-eminent as a reaping implement for centuries, or until the American grain cradle came into use, which was towards the latter part of the eighteenth century. It is true, however, that an attempt had been made to construct a machine driven by animal power long before this time. Pliny, about A.D. 23, mentions a machine as in use in the fields of Gaul, which was pushed by an ox, and which consisted of a box mounted on wheels and bearing a row of sharp teeth on its forward edge, which stripped off the heads and allowed them to be raked into the box by an attendant. This seems to have been used to some extent at



Front View of Steiner Corn Picker and Husker

liver ears into a wagon as fast as horses ordinarily walk through a field. It is warranted to skip no more ears than the average man will and to pick from lodged as well as standing stalks. It will husk sufficiently clean for cribbing or shelling.

The construction is largely of steel and iron; simple, easily understood and of but few parts. It can be operated in any kind of corn and as readily as a grain harvester. One machine, one man and two to six horses (depending on condition of ground, size of corn and size of horses) will pick and husk five to eight acres of corn per day.

Such a machine will perhaps be more useful in the large corn fields of the Western States than anywhere else. It is, however, somewhat of a curiosity, and shows the great progress

attached, drawn by men; a little later the same implement drawn by oxen. Here then, we find the beam handle and share, which may be termed nature's contribution to the art of plow-making.

Thus far the plow was a double furrow implement, and the next improvement was to cut off one side of the share so that the dirt would be thrown only one way. Probably the next step was to cover the point with metal, and later on to provide the share with a metal-cutting edge.

The mould-board was introduced with the plows of Rome, but it did not accomplish the inversion of the soil. The coulter also came into use with the Romans; the bridge was first used on the Rotherham plow in 1720; and the proper construction of the mould-board and the extended use of iron



that time, but was of little consequence and was eventually forgotten.

English inventors were the first of modern men to turn their attention towards constructing a reaping machine, and many attempts were made along this line, some of which gained considerable notoriety at the time, and which were really valuable inventions.

A man by the name of Cable Sloft was the first of these to suggest a reaping machine. It was after the plan of the Gaulic reaper, but was never constructed in a practical form. Other inventors tried the principle of a revolving cutter, and several machines were constructed after this plan. None were practical, however, although the revolving principle was still tried for years after the vibrating cutter came into use. The most important of English machines, or, at least, the one which excited the most comment, was that of Patrick Bell, in the year 1828. This machine had several pairs of shears arranged side by side for cutting the grain, and a canvas roller for depositing it in a swath at the side. It was used with slight success for several years and was also introduced into America. A few years before this, however, in 1814, a machine was constructed by Henry Ogle, which, although it never became so prominent as Bell's, yet contained several principles which were vital to the modern reaper. It had a straight-edged knife vibrating over iron teeth, a reel resembling the modern one, and a platform to receive the cut grain. It never came into prominence, owing to labor disturbance at that time.

Many other inventors brought out machines, and through the aid of American inventors, who now took up the work, reaping machines of different styles became quite common in England and on the Continent.

The first attempts in America were mostly along the line of grass cutters, but in the earlier machines they were so closely related to grain cutters that they may be discussed together. Several machines of minor importance were constructed before the celebrated one by Obed Hussey, which was patented December 31, 1833. The next year, June 21, Cyrus McCormick patented his celebrated machine. These two machines were the basis upon which all successful machines were thereafter built, and the controversy between these two men for priority of invention and originality of successful principles was one of the most celebrated on record. Hussey's machine consisted of a frame mounted on two wheels, with a side-bar cutter consisting of triangular plates riveted to a bar, the whole reciprocating through slotted teeth or guards. This was used both as a grass and grain cutter, but the principle was more after the style of the modern mower than of a grain cutter. McCormick's machine had a reciprocating knife

with a sickle edge, vibrating through projecting wires to hold the grain while being cut, a platform from which the grain was raked, and a reel to hold the grain against the knife. Both men improved their machines afterwards and secured later patents, but to say that either man was the inventor of the reaping machine would be far from the truth. Both made valuable machines, and each had some original principles, but the greater part of each machine had been foreshadowed by other inventors. Both men, however, did splendid work, and to them should be given most credit in bringing about the development of the reaping machine.

The foundation now laid, other inventors began helping to improve these crude forms, and from them was developed the reaper or self-rake, the mower, and finally the modern binder. Among the inventors who brought out valuable improvements on the self-rake might be mentioned, Nelson Platt, who patented a self-acting rake sweeping over a quadrantal platform; Palmer & Williams with a rake which swept the platform at regular intervals, and Hoffheim, whose device afterward improved by Dorsey, Johnson and others became the modern self-rake. This form of machine had not long to remain king however, for the automatic binder soon came into use, thus replacing the self rake.

The first automatic binders were placed upon different forms of the self-rake, but were never successful as thus applied. In 1858, the Marsh Brothers of Illinois, patented their celebrated harvester, resembling in form the binder of to-day, but carrying men to do the binding. It was to this type of machine that the binder was successfully applied, through the efforts of Locks, Gordon, Appleby and others. By 1880 the modern binder was practically perfected, and together with the large headers and combined harvesters and threshers of the West as it stands is the modern type of reaping machine.

#### Cutter, Shredder and Husker.

We give herewith a diagram of a new corn cutter with shredding and snapping or husking attachments. The machine is a very simple contrivance and is warranted by the makers if properly set up and adjusted to husk in good shape 75 to 80 per cent. of the ears on well-cured corn and 100 per cent. of the ears will be snapped and the fodder left in the best possible condition for either cutting or shredding because all cornstalks of any size are thoroughly crushed and softened in passing through the snapping rolls.

This machine is pronounced to be a happy solution of the corn-field question in the leading corn-growing states. It is one of the Smalley make and is manufactured in Wisconsin.

#### Corn Harvesting.

The thought comes to me as each corn-cutting time approaches, what an enormous task the farmers of this country have on hands to harvest the entire corn crop of the nation! Any attempt at the introduction of machinery for the scientific harvesting of corn has been made only in the last few years, and has been brought about through efforts to save the stover, formerly, and in many localities at present so wantonly wasted.

The first implement used for cutting corn was the hand cutter either crooked or straight, with which we are all familiar to-day. The sled cutters marked the first advance, and these have proved a great labor saving, where all the conditions are favorable. However, they have not, and never can, solve the problem in hand. Within the last few years two machines have appeared which are destined to revolutionize the harvesting of corn, and result in a saving of millions of dollars to American farmers. They are the corn harvester and husker. The harvester is a modified form of the binder, so successful in the harvesting of wheat. While there are many improvements necessary before the machine is perfect, the rapid increase in its use leaves no doubt but that in a few more years the bulk of the corn crop will be cut by the harvester.

Many difficulties are to be overcome in the harvesting of corn by machinery. The large size and also the great variation in size of the plant makes strong and heavy machinery necessary. But if properly cultivated the ground will be soft, which combines with the weight of the machine to make the draft heavy and the expense of operating great. The attachment of the ears to the stalk make the plant difficult to handle without knocking off a great many of them, and at the same time very hard to make a bundle that will retain its shape while handling. However, thousands of farmers all over the country consider these difficulties sufficiently overcome to make the harvester a practical success with them and they are loud in its praise. The original cost of a harvester will probably prohibit the small grower from using it, but the question is becoming more and more one of economical farm management rather than any difference of opinion as to its merit. The harvester binds the whole plant into bundles, which are usually placed in shocks until sufficiently dry to husk. The bundles cure well when properly shocked and the work of handling is made much easier. The habit of feeding the whole fodder to cattle is growing in favor and when fed thus there is a great saving of space when stored, and much labor saved in handling. We have become so accustomed to growing this plant for the grain it yields, and using the roughage as a sort of straw to be eaten or wasted as accident determines, that we have almost

wholly overlooked the feeding qualities of the latter.

Experiments have determined that the stover of the corn crop seems to reach the highest yield and the best condition for feeding at a stage of growth indicated by a well-dented kernel and the first drying of the blades. The grain reaches the highest yield and the best condition for utility, at a stage of growth indicated by a well-ripened ear and a half-dried blade. The best time for securing the crop with reference to the highest utility of both is found at a stage of ripening between the above.

When harvested in the usual way, leaving the fodder in the field until ready to use, there is a very heavy loss amounting to nearly one-fourth of the dry matter and protein in the stover. The portions lost are the most valuable part of the forage. In comparing the yield of corn and stover, and the amount of digestible matter in each, from one acre of land, an average

for cutting corn has been slow the inventions of husking machinery have been even slower. The human hand with various appliances has been the only means of husking corn since its cultivation was first begun, until within the last few years. A little over a decade ago the first husker was put into practical use. The machine husked the corn and cut the fodder at the same time. There is yet some doubt with many whether there is any actual saving of expense over husking in the old way when the grain alone is considered, but the increased value of the stover when shredded as the husker of to-day leaves it, will make this machine within a few years as common as the thresher.

The waste of the stover in the past may be accounted for in part by the fact that there was no practical way to change the coarse stalks into a form in which it could be readily eaten by stock, and conveniently handled by the feeders. The first huskers were

stead of two, as with only two, it gave some trouble in handling by coming apart. To the question whether stover thus treated will keep, the large amount of bright shredded fodder on the market is a sufficient answer. There are certain conditions that must be followed but which must be determined for each locality. Like hay, the stover goes through a sweat, but this does not harm it if left alone. It will be several years before the average farmer learns how to manage this new material for the best results, but its excellence and cheapness when properly cured, will, in the near future, make it as much a staple article of feed as hay now is.

In the central and eastern portion of the country the stover, when shredded, is usually run into mows or sheds. In this form it takes up much less room than the whole stalks. In the West the shredded stover is stacked like hay, and when the work is properly done it keeps equally as well. When baled it must have previously gone through the sweating process to prevent moulding.

This new "corn fodder hay" has an additional value as an absorbent for bedding far superior to straw. The soft pith of the corn stalk is unquestionably the best bedding yet discovered for the absorption of liquid manure.

Corn leads all other cereals in the number of bushels produced in this country. But when the value of the stover becomes more generally understood and the machinery for harvesting the crop is placed on the same level of perfection as the implements for preparing and cultivating the soil, the production will vastly increase, and corn will indeed be king.—*Ohio Agricultural Student.*



New Cutter with Shredder and Snapper or Husker Attachment

of the results at the New Jersey, Connecticut, Wisconsin and Pennsylvania Stations give 53.6 per cent. of the total crop in the corn and 46.4 per cent. in the stover; 63 per cent. of the digestible nutriment was in the corn and 37 per cent. in the stover. Corn stover contains a large amount of digestible carbohydrates but is deficient in protein. Its chief value, therefore, is as a cheap source of carbohydrates and when supplemented by some feed rich in protein, it can hardly be surpassed in the cheap production of material for growth, beef and milk. The average of numerous feeding experiments give the total amount of digestible nutriment in corn stover, timothy hay and clover hay to be respectively 36.6, 49.4 and 43.2 per cent. of the total weight. The number and extent of these trials are too numerous to leave any doubt as to the value of corn stover, in great part wasted in the past.

While the invention of machinery

equipped with a cutting head, but in the last few years cut stover has been rapidly replaced by a shredded product.

Shredding leaves no sharp edges and the hard outer shell of the stalk is so shredded and broken that even the lower portion of the stalk is readily eaten. Professor Henry, of Wisconsin, found that here was a saving of 24 per cent. in feeding milk cows stover in the shredded form.

The shredding of the stover has developed a new industry which in a few years will be a valuable source of income to the farmers of America. Baled shredded fodder is fast becoming an article of commerce and may be seen in any feed store in the cities. When good timothy hay is selling for \$8 per ton, baled shredded fodder sells for about \$6 per ton. A feed dealer in this city said to me that this product was fast becoming the chief rough feed bought. He suggested to those bailing it that three wires be used in-

### Ellwood Steel Fences.

The name of Ellwood is one of the most familiar names of manufacturers to the agricultural communities of America by reason of the long association of that name with the leading and most popular brands of barbed wire, Mr. Isaac L. Ellwood having been one of the original inventors of barbed wire, and prominently identified with the growth of that industry and the improvement of that product.

It was always an axiom in the trade, that anything bearing the Ellwood stamp was absolutely reliable and of highest grade, and of the woven wire fences bearing the Ellwood name the same is absolutely true.

The development of the wire industry in America has been very great in the last decade, and the improvement in quality of wire used in the Ellwood woven wire fences, advertised elsewhere in this issue, is one of its best evidences. There is a wide difference between the ordinary fence wire and the wire used in making Ellwood wire fences. This wire is a hard steel,

especially made to resist the sort of wear and tear to which a fence is subjected, and it is specially galvanized with a heavy coating, in order to insure against rust and guarantee a long life.

The Ellwood Fences comprises several varieties or styles, furnished in heights from 18 to 58 inches. The Ellwood standard style is the leader of these fences, the 26-in. height of this fence being a great favorite as a hog and pig fencing. The Ellwood special fence is similar to the standard, but is somewhat lighter, by reason of the use of less wire in a wider mesh. The Ellwood Perfect, The Ellwood Lawn, The Ellwood Poultry and Rabbit and Ellwood Crib are the other styles of Ellwood fencing designed for particular uses, but each complete and efficient for general use as well.

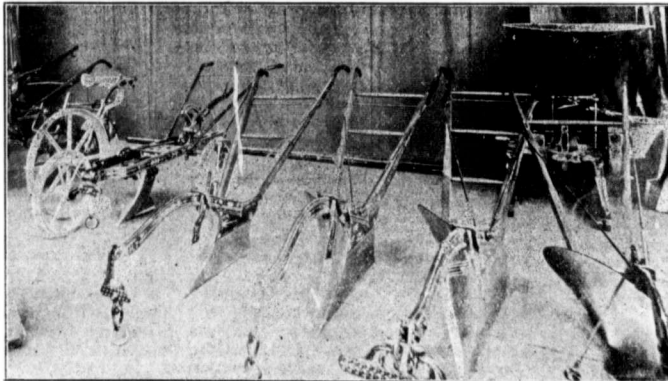
The Ellwood Lawn Fence is particularly adapted to parks and cemeteries, and enclosures in towns and cities when a particularly strong fence is required. The Ellwood Poultry and

labor-saving threshing mill, which has just been erected there by Mr. R. G. Morton, engineering works, Errol, to the order of Mr. William Walker, tenant of the farm. The mill receives its motive power from a compact little engine of the well known "Concinnity" type, and both mill and engine have been fitted up in such a manner as to accord as conveniently as possible with the construction of the steading. A self-contained 10 h.p. nominal engine, with double fly-wheels, it is steamed by a locomotive multitubular boiler of 12 h.p. nominal, with enlarged fire-box for burning cheap fuel. Working a full day, it will consume only from 4 to 5 cwt. of coal, this giving high pressure and quick revolution. The engine is attached to the mill by belting in the ordinary way. The mill itself is an admirable piece of mechanism, combining several ingenious devices for the saving of manual labor. When set in motion, it requires only about half the number of hands that are absolutely

veyed along in the opposite direction, falling into the straw store from any one of seven different hatchways, placed at intervals, and which may be easily opened or closed at will. A load of wheat was passed through the mill in about a quarter of an hour, and all present expressed themselves as highly pleased with the smooth working of the mill, and especially with its labor-saving qualities. The company were hospitably entertained at the farmhouse by Mr. and Mrs. Walker, and first among a number of toasts the health and prosperity of the host and hostess was cordially pledged, on the call of Mr. Andrew Hutcheson.—*North British Agriculturist.*

### A New Cross-cut Saw.

A trial of the thin back racer cross-cut saw, held recently by the Loan and Mercantile, was a success. About the end of last month, logs of white pine



View Showing the Exhibit of J. Fleury's Sons, Aurora, Ont., at Paris Exposition

Rabbit Fence, as its name implies, is particularly adapted to enclosures for fowls and smaller animals. The Ellwood Crib material is especially designed for stationary or portable corn cribs, being a cheap, durable and economical substitute for wood, and superior to wood because it affords no breeding places for vermin, and prevents the secretion of moisture.

It will pay all of our readers to secure the complete catalogue of Ellwood Fences, which they can have by writing to the manufacturers, the American Steel and Wire Co., Chicago or New York, or by visiting the local agents through whom the fences are sold in over 15,000 towns and cities in the United States and Canada.

### A Labor Saving Threshing Mill.

Last week a number of farmers assembled at Kingston Farm, Carse of Gowrie, to witness in operation a new

necessary to be in attendance upon a portable mill. It is capable of threshing as much straw as one man can possibly throw into the receiver in a day. From the thresher the grain passes down to the patent pneumatic awner, which is fitted with a dust and smut exhauster. This is a double winnowing and triple riddling machine, and performs its work with a smooth and vigorous whirr. The winnowed grain afterwards passes up the elevator, and is delivered into a side screen, from which it goes into an oscillating conveyer, by which it is carried away into the granary. By opening small slits in the conveyer the grain may be deposited at several points on the granary floor, and by a series of sieves it is, while passing through the conveyer, cleared of all small or broken grain, and finally falls on the granary floor in the perfect state. Meanwhile the straw is being delivered into a patent crank shaker, from which it is

passed to the straw carrier and con-  
rimu, and rata were cut through, and in each case the ease and rapidity with which the saw cut was a surprise to the onlookers. As each spectator took a hand at the saw the smile of satisfaction which came over his countenance spoke volumes for the good work the saw was doing. The saws are made in Canada, of beautifully tempered razor steel and are in various lengths from five to seven feet. The easy working of this saw is explained by its thin tapering back and the beautiful set of the teeth which is easily regulated by a patent appliance supplied with each saw. The resistance becomes confined entirely to the cutting point of the saw, and the steel is such that it will cut half as long again as any other saw, and then be sharpened with ease and uniformity. Mr. Barr, the expert, states that at the end of a day's work in the hardest of woods, the saw will cut as well as when started in the morning.—*New Zealand Dairyman.*

# The Farm Home

## The Four-Leaf Clover.

With dimpled cheeks flashing, the dear little maid

Went wandering the green meadow over,  
And down where the bobolink trilled his sweet cheer  
She gathered the four-leaf clover.

"Shy clover," she whispered, "your promise is true."

As the clover-song poet has bidden;  
I have faith, hope and love for the other three leaves,  
And good luck in the fourth must be bidden."

Then softly she added: "I'll prove you tonight!"

So eagerly homeward she hastened,  
And over the cottage door, blushing and shy,  
The luck-bringing clover she fastened.

She sat by the window; faith, hope and sweet love,

In her heart the sweet echoes a-ringing;  
But good luck was silent and joined not a note

In all of their jubilant singing.

Low down in the western sky drooped the fair day

With many a lengthening shadow,  
And the wind in the tree-tops sang sweet lullabies

All over the wayside meadows.

A step up the pathway—then watching good luck

Sang a mellow cheer over and over,  
For the laddie beloved was the one who had first

Passed under the four-leaf clover.

—Jean Wilson, in *Boston Transcript*.

## Worry.

It is not work but worry that kills. I do not propose to sermonize on the evils of worrying for we all know how utterly useless it is to worry, and I am not sure that hurrying is not equally useless. Those who are always hurrying do not make greatest speed. I have seen the hurrying house-wife spend hours ripping and re-sewing what would have been done properly in a few minutes if she had been content to make haste slowly.

Often hurry and worry go hand in hand and among other wastes caused by them is waste of strength, waste of energy, waste of flesh, waste of food. The nervous "fussy" woman is usually a hearty eater, but a sharp-featured, bony person.

It is not in this connection I wish to write on worrying but it is on the wrong we do others.

No woman lives unto herself. She may wear her own life out worrying, hurrying and fussing, but she forgets that at the same time she is injuring others.

Her children usually lack self dependence. They have become so accustomed to having mother fussing over them that they do not think for themselves. To hear the mother in-

structing her children one would suppose they did not "know enough to come in out of the wet." She is always telling them to move from draughts, to put a wrap on in the evening, to put on thick shoes, to wrap up the throat, to be careful not to eat certain foods, to not drink cold water, to not get damp feet, to change the shoes, in fact every minute of the life of the child, not the child of two years, but the child of twelve, sixteen, twenty or thirty, as the case may be, is filled with instructions. She thinks she is a wise, loving and careful mother, but why might she not as well begin in their babyhood and train them to use their own judgment? They could as easily learn to think for themselves as to have their mother do all the thinking, and what a saving it would be of her nervous force to say nothing of the more perfect men and women her children would become. What happiness to the child it would be were he or she allowed to do their own thinking. I felt sorry for the small boy who had been told not to take off his shoes when playing at a neighbor's. On his return he said, "Mamma, I would have liked to take off my shoes. The others had theirs off and they were wading in the bin of peas and I know it was just lovely. Mamma, if you knew would you have let me take off my shoes?"

The mother was sorry she had prohibited the removing of shoes. The child will not be the worse of learning more things by experience.

How great a pleasure it would be to the girls when they go out for an evening call if the mother would not say: "Be home before dark or before eight." If she just left them to enjoy themselves, even if they were a few minutes later. Though it might not be wading in a bin of peas it might be some other special treat they are compelled to deny themselves because "mother will worry if we are not home by a certain time." Do you suppose the women I describe think that they were given the judgment and the power of thought sufficient to go around the whole family.

Then what a mistake we make if things do not turn out quite as we expect when we begin asking Why? How? etc. It were better to wait for the offered explanation rather than demand one.

We think we are considerate and friendly when we are offering advice to our acquaintances, pressing them to eat certain foods when they call on us, almost forcing them to do what we think is for their good. It is simply "fussiness," if I may be allowed the word. It is very well to offer food or drink but we should allow everyone to use his own judgment.

There is another method the mother adopts that takes from the self-dependence of the child. She may not give so much instruction but she acts it instead. She is always waiting on him or her, hanging up his clothes, brushing them, carrying and fetching, and in a thousand and one ways doing her best to make him useless. She likes to do these things it may be, but she has no right to wear herself out in making a helpless creature of him.

M. E. GRAHAM.

## OUR BOY'S PREMIUM WATCH.

Where is the boy who cannot go out and take five new subscriptions to THE FARMING WORLD? It can be done easily. Send us five subscriptions, and 10c. extra to cover postage and packing, and you will receive a nickel-finished watch that will give excellent service, free. A subscriber, not in arrears, may have one for \$1.10. Remainder of this year free to all new subscribers to THE FARMING WORLD for 1901.

## Hints by May Manton.

Ladies' Three-Piece Skirt for Walking and all Out-Door Sports, No. 3624.

The skirt that falls to the instep and clears the ground by two or three inches grows in favor day by day. No longer model rivals it for walking, outdoor sports or shopping. Graceful as long skirts are in their proper place,



3624 Ladies' Short Three Piece Skirt. 22 to 30 in. waist.

they are a menace to health and a detriment to comfort when the occasion demands freedom of movement. Paris has already declared the shorter length correct, and proves daily how ready and eager well-dressed women are to make the change. Golfing cloth, che-



violet, serge and all similar materials are used. The only requirement is that of sufficient thickness and weight to take good folds and, if possible, to dispense with lining.

The model illustrated includes all the latest features. The skirt is cut with a front gore, which flares gracefully, and circular portions, which form a deep inverted plait at the back. As shown, the material is tan-colored chevrot, simply stitched down the two front seams and down the lower edge, at the top of the facing. Any quiet tone is suitable, however, and the trimming can be changed to stitched bands or braid, if preferred. As shown, the length is correct for walking and golfing, but the pattern is perforated at the proper line for cycling, which sport requires a still shorter skirt.

To cut this skirt for a lady of medium size  $3\frac{1}{2}$  yards of material, 44 inches wide, or 3 yards, 50 inches wide, will be required.

The pattern No. 3624 is cut in sizes for a 22, 24, 26, 28 and 30-inch waist measure.

**The price of above pattern post-paid is only 10 cents. Send orders to "The Farming World," Confederation Life Building, Toronto, giving size wanted.**

### Medicinal Value of Salt.

Salt is such a common article in the household that many of us do not sufficiently appreciate it as being of a high medicinal value. Many and various are the remedial uses to which it may be put, and the free use of salt goes far to preserving health in the home. As a dentrifice, common salt may be relied upon. By its judicious use the teeth are kept white, the gums hard and the breath sweet. When the gums are spongy the mouth should be washed out twice a day with salt and water. Warm salt and water, held in the mouth, will sometimes banish toothache, and at least make the affliction lighter, while it is both safe and easy to try.

Again, equal parts of alum and salt, or even salt alone, placed on a piece of cotton wool and inserted in the hollow of an aching tooth, will often give relief when other means have failed. To allay neuralgic pains in the head and face take a small bag of flannel, fill with salt, heat thoroughly and apply to the affected part. A bag of salt placed hot to the feet or any portion of the body is better for giving and keeping warmth than is the conventional brick or hot water bottle. Salt placed on the gum when the tooth has been extracted will prevent profuse bleeding at such a time. An excellent gargle for the throat is simple salt and water. Many serious cases of throat affection might be cured by the use of this alone, if only taken in time, gargling every hour or half hour, as the need warrants. A flannel cloth wrung out

of salt water is also an excellent remedy for simple sore throat. Salt in tepid water is a handy emetic; as an antidote for the poison silver nitre or lunar caustic, give salt and water freely. For poisoning by alcohol an emetic of warm salt and water should be given and repeated often.—*Philadelphia Times*.

### Servantgalism.

Servantgalism is evidently as troublesome a problem in Australia as it is in the Mother Country. In a recent issue of a Queensland journal, a girl, advertising to take charge of a laundry or a dairy—a strange combination, in all truth!—after explaining that she can cook and understands housekeeping, adds: "None but a respectable mistress who wishes to leave her servant in uninterrupted discharge of her duties need apply." This is something like outspokenness. The mistress who engages a servant like this knows what she is getting. In England it is different. The domestic is a sort of human mystery-box. You judge by the exterior, but time alone displays the defects. In fact, there is something interesting in the Sarah Ann of to-day. You open your house to her, and trust Providence to be good to you. Sometimes fortune favors you; sometimes she comes from the other place.—*The Rural World*.

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### French Loaves.

Put a pound and a half of flour into a bowl; cream an ounce of German yeast with a teaspoonful of salt and stir into the centre of the flour; add the white of an egg beaten to a froth; have an ounce of butter melted in half a pint of milk, and when just new-milk warm, add and stir all well together. Form into small loaves, set to rise for ten or fifteen minutes and bake in a hot oven.

## The Farming World

A PAPER FOR FARMERS AND STOCKMEN.

Managing Director, . . . D. T. McAINSH  
Editor, . . . J. W. WHEATON

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### Fattened Poultry for England.

The first shipment to Great Britain of chickens fattened at the illustration stations being operated this year by the Dominion Department of Agriculture will be made this week. About eight hundred chicks have been fattened at Chatham, Whitby, and Lancashire, Ont., and at Alburton, P. E. I., for this shipment. The chickens are purchased in the various districts, fattened for four weeks, and after killing, are shipped by cold storage to Great Britain.

### Good Roads in B.C.

The good roads campaign has reached British Columbia. At a largely representative meeting held recently at Kamloops, a Good Roads Association for the province was duly organized with Hon. James Dunsmuir as honorary president; Mr. F. J. Deane, president; Mr. J. R. Anderson, vice-president; and Mr. E. T. W. Pearce, Kamloops, secretary. A few of the objects of the association are:

To awaken an interest in the subject among the people at large.

To receive, publish, and discuss any well-considered plans for local, provincial or national legislation.

To aid in providing for a proper road exhibit and instruction in road making at Farmers' Institutes, dairymen, creamery, and other association meetings, and other suitable gatherings throughout the province.

Through its executive to consult with the government and the municipal and city authorities, and work together with them in furtherance of the objects of the association.

To receive and expend in the furtherance of the objects of the association any money that may come into his hands.

To use every effort to establish local associations in the different municipalities and districts throughout the province and to obtain and spread among the local associations full information regarding recent legislation for road improvement.

To obtain and publish full information regarding methods of road building as practised in various parts of Canada, the United States and other countries.

To procure and furnish to the local associations at reduced prices all valuable publications on the subject of roads and road legislation.

**Sheep Husbandry in Minnesota.**

Sheep Husbandry in Minnesota, by Prof. Thomas Shaw, though specially written for the farmers of the North Western States, the practical matter it contains cannot but be of benefit to sheep breeders and farmers in the more northerly portion of the hemisphere. The work is profusely illustrated and deals with the breeding and management of sheep in a very practical way.

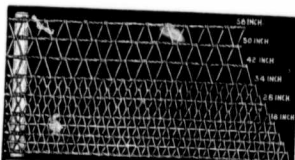
**Scour in Calves.**

As every dairyman and stock rearer knows from dearly acquired experience, there is no more fertile cause of loss of calves than "scour," which, in the number of fatalities it occasions, and the check to growth and development to which it gives rise, exceeds the mischief produced by all other infantile maladies put together.

There are several forms or varieties of scour, but the most common and in the aggregate the most costly, is that due to indigestion. It is also the most easily preventable.

When calves run with the cows, and the latter live under fairly natural conditions, scour is practically unknown. Why is this? Because the calves suck at their own sweet will and feed themselves on the little and often principle. The only calves reared at the teat at all prone to scour are those pampered for exhibition purposes, who are furnished with foster-mothers, and are apt to indulge in excess. But we cannot rear calves at a profit by allowing them to suck their mother, and with the exception of the purely beef breeds, the principal end in view in keeping cows is milk production, either for sale as such, or for conversion into cream, butter or cheese.

A very common system is to take the calf from the dam as soon as it is born and put into any place handy, often unsuitable and draughty, and feed it night and morning on milk from a bucket, that is the produce of dit-

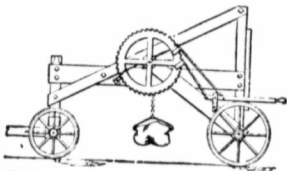


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ferent cows at different periods of calving. This is an illustration of how not to do it. The newly-born calf should for the first three days at least be fed on the milk of its mother, which milk contains a principle called colostrum, designed specially to purge the bowels of their fetal contents or meconium. If this is retained it sets up irritation and retention of the meconium, which is likely to happen where the calf receives mixed milk, or that from stall cows, is one of the most certain causes of scour in the new-born animal.

Sometimes, especially in dairies where rearing is not practised, the calf is sold as soon as it can be got rid of. Sucklers are either sent to market or sold to dealers and often have to travel long distances before they reach their new home. They have been a long time without food and as soon as they are got home they are gorged with milk. Scour is the natural result, indigestion being set up by a heavy feed after a long fast. It is not too much to say that in some districts, where calves are imported from a distance, where the mortality reaches forty per cent., it might be materially reduced if rearers would begin more cautiously or avoid the gorging after fasts by feeding on the road in small quantities.

Whether it pays better under ordinary circumstances to feed heavily twice a day, and risk the loss from scour, than to give the same quantity of food in three or four doses is a matter for the rearer to consider, but of this we are certain—feeding more frequently would materially reduce the number of fatal cases of diarrhoea.

The time intervening between the night and morning meal, and that between the morning and evening feed, is too long for so young an animal, that in a state of nature would feed itself many times.

The result of giving a large quantity of milk at one time after a long fast is that we get formed in the stomach large, heavy masses of spongy curd that cannot digest. These undigested masses are the chief cause of diarrhoea their action—as foreign bodies—giving rise to irritation, which is followed by inflammation of the stomach and intestines, or the condition that is technically described as gastro-conteritis. The purging is nature's efforts to relieve herself, but if this continues, exhaustion and death result.

Another fertile cause of digestive disorder culminating in scour is neglect of care about the temperature of the food of young calves. A thermometer should be used, for not much dependence can be placed in such a test as the sensation imparted to the fingers of the feeder can afford. Food that is either too hot or too cold is to be deprecated, and it should be given about milk-warm, *i.e.*, the temperature at which milk leaves the udder, or about 100 degrees Fahrenheit.

Cleanliness, both of utensils and surroundings, the former not less than the latter, is most essential to success-

ful calf rearing, and whether new milk be fed from a pail or separated or skimmed milk be enriched with "Cream Equivalent," the utensils should be as carefully cleaned as those used in butter-making.

Germs lurk in milk left in joints and crevices, and multiply with astounding rapidity in a favorable temperature. There are other causes of scour, of which lack of space forbids consideration, but the essentials for successfully avoiding it are to give the calf some of the milk of its own mother, to avoid long fasts and over-feeding, to make all changes—whether from new to skimmed or from skimmed milk to substitute—gradually, to attend to the temperature, and to be very careful in enforcing cleanliness.

With regard to treatment. It is much easier to prevent scour than to cure it, but a good deal can be done if taken in time.

Something depends on the stage of the malady, but the common practice, an immediate resort to astringent medicines, is far from being good treatment, indeed, is to be strongly deprecated. Bearing in mind the condition of the stomach and bowels that post mortem examination reveals, the indications are rather to assist nature in breaking up the mass of curd and to remove irritating material from the bowels than to check its expulsion.

It is preferable to first administer castor oil in combination with laudanum, and then carminatives and cordials to promote the digestive process.

Remember, diarrhoea is not in itself a disease, but only a symptom, and treating symptoms while leaving the root of the evil unattacked is generally bad surgery.

It is useful, as in the case of the scouring baby, to add lime water to milk, and, when this seems at fault, or unsuited to the animal, the substitution of gruel for half the allowance of milk is recommended.—ARARAT.

NOTE.—There ought to be no scour in any well-regulated calf house if proper care be taken in the selection of food and its preparation. J. Bibby & Sons guarantee absolute immunity from this complaint wherever their Cream Equivalent is used if ordinary care be taken in the preparation and feeding of the gruel.—EDITOR.

## Ravages of Consumption

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## PURE-BRED STOCK

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

#### Horses.

Twelve Clydesdale and Shire horses of considerable merit have recently been imported by Messrs. Bawdon & McDonald, Exeter, Ont.

Mr. Thomas Dickson, Seaforth, Ont., sells this week with three, big, weighty horses for Canada. These include a two-year old named Lord Huron, and purchased from Mr. Walter S. Park, Hutton, Bishopon. He was got by Young Gallant (10949), and bred by the Messrs. Clark, Sunderland, Islay, out of Queen of Sunderland, a good mare by Garnet (5622), granddam by Young Ivanhoe. Mr. Alexander M. Simpson, Whitesons, East Kilbride, contributes one to the lot in the three-year-old—Joe Anderson. This is a very strong, powerful horse, full of substance, and with grand fore feet and legs. He is by the noted Robert Darnley (10115), out of a mare by Glasgow Pearl, and is like proving a very suitable sire of commercial geldings. The other member of his lot is Flashwood's Last, which was bred and purchased from Mr. Macmillan, Bent, Strathaven. His sire was the well-known Flashwood, and he is a big, well-colored horse out of a Prince of Wales mare. Another horse has been purchased for exportation to Canada by Mr. Charles Mason, Brucefield, Ont., who in years gone by used to ship more extensively, and who hopes to secure some more horses before leaving the Old Country, but has considerable difficulty in finding them big. His selection is The Leading Article (10139), which was bred by Mr. Wm. Hunter, Garthland Mains, Stranraer. He was bought from Mr. Robt. Gardiner, Henthill, Forteviot, and is a half-brother to the champion horse Hiawatha, being got by Prince Robert. His dam, Earnock Queen, was a high-priced mare by Darnley, and he is a thick, blocky horse, with good feet and legs, and has been a first-class breeding horse in Strathcarran. He should prove a good breeder in Canada.—*Scottish Farmer.*

The horse breeders of the Northwest Territories have organized with Mr. C. W. Peterson, Deputy Commissioner of Agriculture, as secretary. The following comprise the board of directors: President, W. K. Stewart, Fort McLeod; 1st vice-president, S. H. Eckford, High River; 2nd vice-president, H. C. Lawson, Regina; directors, representing Hackneys, A. N. Rawlinson, Calgary; Thoroughbreds, O. S. Critchley, Calgary; Coach, R. G. Robinson, Calgary; Standard-bred, J. R. Sutherland, Calgary; Clydesdales, J. A. Turner, Millarville; Shires, J. W. McLaughlin, High River; Percheron, Geo. Lane, Nanton; and five additional directors: D. H. Andrews, Crane Lake; S. J. Macfarlane, Battleford; J. Leeds, New Oxley; Thomas Brown, Lethbridge; John Herron, Pincher Creek.

#### Cattle.

Mr. W. D. Flatt, Hamilton, Ont., recently sold 16 Shorthorn cattle to Geo. C. Cary, St. Johnsbury, Vt. They were shipped to Fort Fairfield, Maine, where they were sold to farmers in the district.

Hopkins Bros., Fort Fairfield, Me., bought three Shorthorn bulls and five Shorthorn heifers and cows at the International Exhibition, St. John, N.B.

Arthur Johnston, Greenwood, has recently sold to Jacob Belger & Brothers, Walkerton, Ont., an excellent young bull, sired by the imported Kenell bull Royal Sovereign, and out of the imported Marr cow, Princess Thule, 3rd of the famous old Princess Royal family.

They also secured the handsome cow Nonpareil 4th, by the famous Indian Chief and Duchess of Gloster D., another of his daughters, and belonging to the great Cruickshank Duchess of Gloster tribe. In addition to these they also bought Buchan Lassie's Gem, by imp. Roan Prince, and out of Buchan Lassie of Glenmure by the imported Cruickshank bull, Duke of Gildres. These are animals of the highest type and all imported.

Some important purchase of stock were made by Mr. J. B. Slater, Secretary of the St. Johns, Newfoundland, Board of Agriculture, at the larger fall fairs last month. They were typical young bulls of the different dairy herds on exhibition. The purchases were as follows: Golden Lad of Brampton, from B. H. Bull & Son, Brampton, Ont.; Jack of Springhill, from Mr. Robert Hunter, manager of W. W. Ogilvie's farm and herd at Lachine Rapids, Que.; Gilliflower's Paul de Kol from C. J. Gilroy & Son, Elm Buell, Ont. Mr. Slater showed good judgment in his selection as all these are animals of a high type.

On Saturday last, Sept. 22, Messrs. Alfred Mansel & Co., the well-known live stock exporters of Shrewsbury, shipped from Hull for Riga per s. s. "Thomas Wilson" of the Wilson Line, the following high class stock, viz. 14 Clydesdale stallions and mares, 20 red and roan Shorthorn heifers, five red Shorthorn bulls, one white bull, four Jersey heifers, 25 Shropshire rams, one Oxford ram, 10 Shropshire ewes, and 20 large White and Berkshire boars and sows. The animals had all been specially selected from high class breeders and should be the means of securing further orders.

#### Sheep.

The champion R. A. S. F. Shropshire ram of this season bred by Mr. A. E. Mansell, was shipped to Melbourne per s. s. "Afric," (White Star Line) on Saturday last, the 22nd September, by Messrs. Alfred Mansel & Co., live stock exporters, Shrewsbury. The same boat also took two high-class Shropshire rams to Adelaide selected by the same firm for Mr. A. J. Simpson. Full particulars will appear in a later issue.

On Saturday, the 15th inst., Messrs. Alfred Mansel & Co., of Shrewsbury, shipped by the Wilson Line two high-class Shropshire rams to Stettin on account of Herr Reeholtz of Germany.

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Toronto

## European Exporters' Association

AN ORGANIZATION FORMED FOR THE PROTECTION OF CANADIAN SHIPPERS.

Head Office: **McKinnon Building**, Toronto.  
EDWARD STILL, Manager in England. HON. G. W. ROSS, LL.D., M.P.P., President. ERNEST HEATON, Manager in Canada.

The Association is prepared to undertake the following services on behalf of consignors of apples, eggs, poultry and all kinds of fruit and produce—

1. To recommend a reliable Consigner at each port.
2. To arrange freight contracts and effect insurances upon shipments.
3. To give attention, through its agents at ports of shipment, to the proper stowage and prompt transportation of such consignments.
4. To have goods inspected when claims are made by consignees, either for damage in transit, or for alleged non-compliance with contract, and to report thereon.
5. To investigate any complaints and report.

Consignors making small shipments under the auspices of the Association can, by co-operation through the Association, receive all the advantages which can usually be commanded by large shippers only.

**Poultry Shippers** who desire the protection of the Association are requested to write at once to the Head Office of the Association, at Toronto, for list of apple receivers, list of sailing dates and instructions for grading and packing of fruit for export.

**Apple Shippers**



# Market Review and Forecast

Office of THE FARMING WORLD,  
Confederation Life Building,  
Toronto, Oct. 15, 1900.

Fall business in wholesale lines is reported to be progressing favorably. Prices on some lines of goods have declined considerably, especially in iron and its products, as well as in wool. Failures are not numerous, although they have increased somewhat of late. Money keeps steady at 5 per cent. on call and about 5 to 5½ per cent. on time.

## Wheat.

The wheat situation shows little change, and, if anything, there is a downward tendency with cable reports weaker. It is likely that the yield in the Northwestern States will be larger than was anticipated some months back. The efforts of speculators to bull the market has not had much effect. The total stocks in sight in the United States and Canada are 55,400,000 bushels, showing an increase of about 23,000,000 bushels since July 1 and an increase of 11,000,000 bushels as compared with this time last year.

There is reported to be quite a movement in Ontario winter wheat for export, which seems to be coming into favor in England. The quality of Ontario red winter wheat is excellent this year, which should induce a larger business being done later on. No. 1 Manitoba hard is quoted at 90 to 90½c. afloat Fort William and Ontario wheat at 74 to 75c. afloat Montreal. The deliveries here are light. Red and white is held at 66c. west, 6000 at 65c. north and west and spring at 67c. east. On Toronto farmers' market red and white bring 69 to 70c., loose 68½ to 69c. and spring wheat 69c. per bushel.

## Oats and Barley.

The English market for Canadian oats is a little steadier and there is a better export demand. Oats are quoted here at about 23½c. middle freights, and on farmers' market at 29 to 29½c. per bushel.

Export barley is also in better demand, and good malting barley scarce. The market here is steady at 37 to 45c. at outside points as to quality. On Toronto farmers' market barley brings 45 to 48c. per bushel.

## Peas and Corn.

There has been a fair export demand for new peas and more business has been done. Quotations here are 57 to 57½c. west, and on farmers' market 59c. per bushel.

The corn market is reported to be easier. Old Canadian yellow is quoted here at 41½c. and new at 35c. west. No. 3 American yellow is quoted at 49½c. Toronto.

## Bran and Shorts.

Ontario bran is quoted at Montreal at \$15 to \$15.50 in car lots in bulk, and shorts at \$16.50 to \$18. City mills here sell bran at \$13.50 and shorts at \$16 f.o.b. in car lots Toronto. At points west of here bran is quoted at \$12 and shorts at \$14 low freights.

## Eggs and Poultry.

Large quantities of eggs continue to go forward to the British market, and returns so far have been fairly satisfactory. Exports to date show an increase of 26,444 cases. Quotations at Montreal for straight fresh gathered eggs are 15 to 15½c. in a wholesale way.

The first shipment of dressed poultry is to go forward this week. There is a heavier demand here and many enquiries for Thanksgiving turkeys. The cooler weather is helping trade some. On Toronto farmers' market dressed chickens bring 40 to 60c., with ducks at 40 to 70c. per pair, and turkeys at 10 to 12c. per lb.

## Potatoes.

There is not much chance of an export trade and prices will likely be reasonable. At Montreal quotations are 45 to 47½c. per bag in a wholesale way. Car lots are quoted here at 34 to 35c. per bag. On farmers' market here potatoes bring 30 to 40c. per bag.

## Hay and Straw.

There is an active demand for baled hay. The Eastern States market keeps firm. A shipment of Canadian hay has recently been made to Antwerp as an experiment. Quotations at Montreal range from \$8.25 to \$9 per ton for No. 2 quality. Prices here are \$9 to \$9.50 per ton in car lots on track. On Toronto farmers' market hay being \$13 to \$14, sheafstraw \$12.50 to \$12, and loose straw \$4 to \$6 per ton.

## Seeds.

Prices for these at Montreal are nominal at last week's quotations. Unless the export demand improves prices are expected to take a drop of 25 to 50c. per bushel on all grades of alsike. Quotations here are \$6 to \$8 for alsike, \$5.75 to \$6.50 for red clover per bushel. In a wholesale way timothy sells for \$3.75 to \$5 per cwt.

## Fruit.

The apple market shows signs of an improvement in values. In the northern and western parts of the province apples that could have been secured two weeks ago at 40 to 50c. cannot be had for less than 60 to 75c. per bbl. (this means for fruit picked only). Some spies are reported sold at \$1.25 to \$1.35 per bbl. delivered. At Montreal quotations are \$1.25 to \$1.75 as to quality. Other sales are reported at \$1.20 to \$1.35 f.o.b. in the west.

## Cheese.

Business in cheese has been rather quiet nearly all week, though towards the close a better feeling prevailed with actual sales of finest Western colored at Montreal at 11¼. Finest Western white sold at 11½ and finest Eastern at 10¾ to 11c. Exports so far show an increase of 212,170 boxes as compared with the same period of last year. Stocks are reported light in England with finest September quoted at 56s. to 58s. at London. Prices at the local market show a little advance and there was more buying towards

end of week. Prices ruled at from 10½ to 11c. and at several points over the 11c. was reached on Friday. At Brockville on Thursday there was a brisk demand and 11c. was paid for both white and colored. At London on Saturday cheese sold at 11½c.

## Butter.

At the decline in England there is a better feeling with a much better demand. Shipments so far this season show a decline of 166,424 packages as compared with the same period last year. Many creameries find it more profitable to sell locally than to export. The situation at Montreal is summed up by the *Trade Bulletin* as follows:

"The market has been quiet all week, although not without some business, sales being reported of about 2,000 packages of choice late-made creamery at 20¼ to 20½c., a good portion of this being for the home trade. Seconds have sold at 19 to 20c. There has also been some trading in the country at 19 to 20¼c. as to quality. There seems to be a disposition on the part of makers to hold. Stocks, although not very large, are ample for all requirements, both export and local. The shipments now going forward are mostly on old orders."

Creamery is steady here at 20 to 21c. for tubs and 22 to 23c. for prints. Dairy pound roll prints are in more demand, and sell for 18 to 19c. in a wholesale way. Good dairy tubs and pails bring 17 to 18c. On Toronto farmers' market pound rolls bring 18 to 20c. each.

## Cattle.

The general tone of the cattle situation towards the end of the week at American centres was slow. Cable reports were also slow, and lower values were in order at most places, though on Friday at Buffalo cattle were reported in fair position. At Toronto cattle market on Friday the run of live stock was larger than it has been for some time, comprising 1,668 cattle, 3,280 hogs, 1,508 sheep

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and 40 calves. There were about six car loads of shipping cattle, the bulk of which was held over from Thursday. Trade in this class is very dull just now, the highest price quoted being \$4.60 per cwt. Butchers' cattle of good quality were a little more active. The demand for heavy feeders is active, and a number of farmers were present on Friday looking for choice, well-bred heavy steers, as well as sheep and lambs, for feeding purposes.

**Export Cattle.**—Choice lots sold at \$4.30 to \$4.60, and light ones at \$4 to \$4.25 per cwt. Heavy bulls sold at \$4.12½ to \$4.25, and light ones at \$3.12½ to \$3.25, and not wanted. Loads of good butchers' and exporters' mixed were sold at \$3.90 to \$4.10 per cwt.

**Butchers' Cattle.**—Choice picked lots of these, equal in quality to the best exporters, and weighing 1,000 to 1,100 lbs. each, sold at \$4.40 to \$4.60; good cattle at \$4 to \$4.25; medium \$3.50 to \$3.75; and inferior to common at \$2.50 to \$3.25 per cwt.

**Feeders.**—Heavy feeders are in demand. Well-bred steers 1,000 to 1,150 in weight sold at \$3.60 to \$3.90, while those of poorer quality but same weight sold at \$3.40 to \$3.50 per cwt. Short-keep feeders 1,100 to 1,200 each in good condition sold at \$4 to \$4.15 per cwt. Light steers 800 to 900 lbs. each sold at \$3.10 to \$3.35 per cwt. Feeding bulls 1,100 to 1,600 each are worth \$3 to \$3.25 per cwt.

**Stockers.**—Yearling steers 500 to 700 lbs. each sold at \$2.25 to \$3 and off colors of inferior quality at \$1.75 to \$2 per cwt. Yearling stock bulls 600 to 900 lbs. each sold at \$2 to \$2.25 per cwt.

**Milk Cows.**—Ten milk cows and springers sold at \$30 to \$50 each.

**Calves.**—At Buffalo on Friday calves were in active demand and higher, choice to extra being quoted at \$7.75 to \$8, and good to choice at \$7.25 to \$7.75 per cwt. At Toronto market calves sell at from \$3 to \$10 each, and good veals are scarce.

#### Sheep and Lambs.

There were six loads of Canadian lambs at Buffalo on Friday, which sold at \$5.50 per cwt. At Toronto market prices were easier at \$3.25 to \$3.50 for ewes, and \$2.50 to \$2.75 per cwt. for bucks. Spring lambs sold at from \$2.50 to \$3.50 each or from \$3.50 to \$4.25 per cwt.

#### Hogs.

Choice bacon hogs show an advance of 12c. per cwt. over last week's quotations. On Friday select bacon hogs 160 to 200 lbs. in weight sold at \$6.37½., and thick and light fats at \$5.50 per cwt. Unculled lots sold at \$6 to \$6.30 per cwt. Owing to the large increase in supplies, there may be a lowering of values this week.

Montreal market is steady at \$6 to \$6.12½ per cwt. for light bacon hogs, with some selects bringing a trifle more. The *Trade Bulletin's* London cable of Oct. 11 re Canadian bacon reads thus: "The market for Canadian bacon is decidedly firmer and higher, choice lean Montreal sides having sold at 62s. to-day."

#### Horses.

The fall season has opened up at Grand's in very good shape. Last week all kinds, especially good delivery horses, sold well. On Tuesday some good, sound, heavy horses sold readily at \$120 to \$130 each. A good, heavy delivery team sold at \$225. A light draft brown mare sold at \$130. Prices for good, light drivers range from \$75 to \$100 each. The best demand was for choice delivery horses. Nine heavy horses, 1,300 to 1,500 in weight, sold at \$112.50 each, to go to the lumber camps. Mr. Smith has established a fitting-up stable. From this stable two fine carriage teams were sold. One, a very choice team, sold at \$450, and another, not quite so fine, for \$300.

As announced last week, a big sale of ranch horses will take place at Grand's on Friday and Saturday of this week, when an assortment of 200, consisting of ponies, saddle, work and heavy horses from the Canadian West, will be sold.

## The Ontario Veterinary College.

The opening lecture of the Ontario Veterinary College, Toronto, Canada, for session 1900-1901, was delivered by Prof. Andrew Smith, F.R.C.V.S., Principal, on Oct. 10th. As usual a large attendance of students who gather here from various parts of North America, from the Southern States, from the Pacific Coast, from Newfoundland and the West Indies, as well as from the Dominion of Canada, is an evidence of the thoroughness of the teachings of the college.

## Apple Market Report.

"Bow Park," Brantford, Oct. 10, 1900.

Messrs. Simons, Shuttleworth & Co., Liverpool, cable to-day. Choice sound fruit met with an active demand. Market opened strong. Prices advanced slightly closing firm at the advance. The following quotations are for sound parcels of well-packed fruit, fancy stock bringing the top figures: Blenheim, 15s. 6d. to 18s.; Cayuga Red Streaks 14s. 6d. to 16s. 6d.; 20 oz. and Cranberry Pippins 17s. to 19s.; Baldwins, Spies 15s. to 17s.; Kings 10s. 6d. to 22s.; Greenings, Ribstons, Seeks 14s. to 16s.; Snows 17s. to 20s.; lower grades and conditions 1s. to 3s. less.

Messrs. Simons, Jacobs & Co., Glasgow, cable. Market active at the advance in prices. Sound parcels, choice to fancy, ruling as follows: Baldwins 17s. to 20s.; Greenings 16s. to 18s.; Golden Russets 14s. to 16s.; Spitz 16s. to 18s.; Kings 20s. to 24s.; Spitz Seeks, Ribstons 16s. to 18s.; Gravensteins, Snows 18s. to 20s.; Colberts 15s. to 17s.; lower grades and condition 1s. to 3s. below lowest quotations.

Messrs. Garcia, Jacobs & Co., London, cable. Our market is now ready for some of some of those good Canadians. English fruit is not of as good quality as it promised to be

earlier in the season. We look for an active demand at fair prices, so long as receipts are not too large.

While the above prices are accurate market quotations, shippers will do well not to expect a continuance of these high figures after the present exports are very materially increased. J. M. SHUTTLEWORTH.

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good as any revolver made. We will send one of these revolvers to you on receipt of only  
\$4.95, or send us 25 cents and we will send the revolver to your express office, where you can  
examine it and pay the agent balance \$4.70 and charges. Mention what calibre you want.  
Write for wholesale prices. Address the

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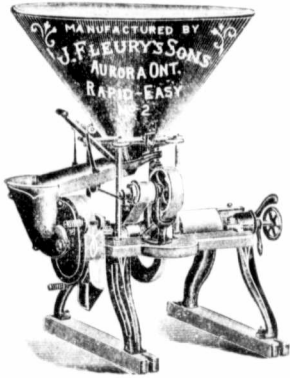
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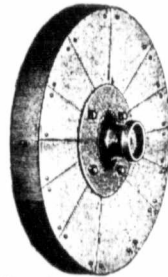
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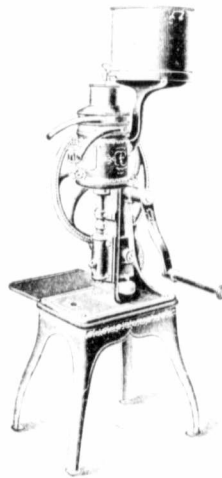
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WE take pleasure in offering to the public a Saw  
manufactured of the finest quality of steel and  
temper which toughens and refines the steel, gives a  
keener cutting edge and holds it longer than by any  
process known. A Saw to cut fast, must hold a  
keen cutting edge.

This secret process of temper is known and used  
only by ourselves.

These Saws are elliptic ground thin back, requiring  
less set than any Saws now made, perfect taper from  
tooth to back.

Now, we ask you, when you go to buy a Saw, to ask  
for the Maple Leaf, Razor Steel, Secret Temper Saw,  
and if you are told that some other Saw is good, ask  
your merchant to let you take them both home and  
try them, and keep the one you like best.

Our steel is no longer a guarantee of quality, as  
some of the poorest steel made is now branded silver  
steel. We have the sole right for the "Razor Steel"  
brand.

It does not pay to buy a Saw for one dollar less and  
lose 25 per cent in labor. Your Saw must hold a  
keen edge to do a large day's work.

Thousands of these Saws are shipped to the United  
States, and sold at a higher price than the best  
American Saws.

MANUFACTURED ONLY BY  
**SHURLY & DIETRICH**  
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buy the best machine at low-  
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100% profit. All machines are  
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\$10 Value, only \$5.00. \$20.00  
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**CANADIAN  
PACIFIC RY.**

## Thanksgiving

### Day, 1900

Will issue return tickets as follows:

**SINGLE FIRST-CLASS FARE**

Good going all trains October 17th and 18th,  
good to return up to 30 days, including October 25th, 1900.

Between all stations in Canada, Ft. William, South  
Sea, Mack, Windsor and East, and to and from De-  
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A. H. NOYMAN

Assistant General Passenger Agent,

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