

The Farming World

A PAPER FOR
Farmers and Stockmen

NEW ONTARIO

LAND SEEKERS' EXCURSION

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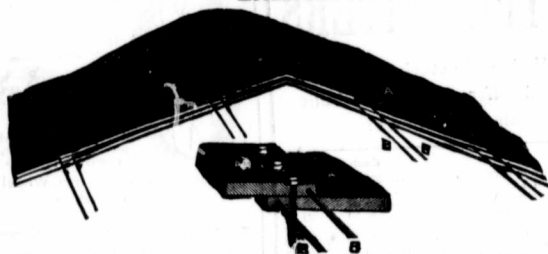
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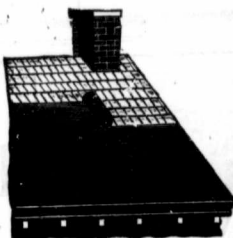
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The Farming World

For Farmers and Stockmen

VOL. XVIII

MAY 14th, 1901

No. 38

At the Experimental Farm



N institution of usefulness and value to the country is the Central Experimental Farm, Ottawa. While on a hurried visit to the capital last week we spent a few hours at the Farm.

The surroundings and roadways leading to the Farm have been very much improved of late years, and as one approaches it from the city a most attractive and delightful view is presented. The season is about one week earlier than usual this year, and consequently everything is in a more advanced stage than it otherwise would be. Seeding operations, with the exception of roots, corn, etc., are all completed, and with the one slight drawback that the soil is getting somewhat dry for the want of rain, everything points to a bountiful harvest.

The members of the Farm staff at this season are almost overwhelmed with work. The correspondence from farmers asking information on all kinds of questions is assuming very large proportions and takes up no small share of the time of the staff. Nevertheless, any information of this kind that can be bestowed is given willingly and freely, not merely because it is their business to do so, but that each member of the staff takes a personal delight in aiding the Canadian farmer in any way he can.

Dr. Saunders, the Director of the Experimental Farm System, left on Monday last for Sable Island, where he will begin an experiment in planting 81,000 trees imported from France. The island is about 100 miles from Halifax, and the Dr., accompanied by the Deputy Minister of Marine and Fisheries, will leave for that port May 15. The objects of this experiment are, if possible, to secure the island from further waste, and, by producing foliage, give it a green appearance, so that it can be seen from a greater distance. This island has been a great menace to the safety of vessels passing in that locality. It is a sandy waste, and during the past century has been reduced from 40 to 20 miles in length, and the hills from 200 feet to 100 feet in height.

Dr. Saunders will make his annual inspection of the branch Farms in August. He has outlined some special work at the Central Farm in the growing of spelt from seed procured from Germany and France. A number of new varieties of grain secured from the Paris Exposition will

be experimented with, and also some new cross-bred wheats developed at Ottawa.

Dr. Fletcher is enjoying a very large correspondence from farmers just now in regard to insect pests, etc. He has a large variety of grasses under cultivation, and seeds of many new varieties from different parts of the world have lately been received. Mr. Arthur Gibson, under Dr. Fletcher's direction, is carrying on a most important work in inflating caterpillars so as to show them as they occur in nature. In these reference collections the different stages of the insect's life history are shown, so that a farmer seeing them can recognize at a glance pests that may be infesting his crops. In some cases we noticed many of the cut worms, so troublesome in the spring on the farm and in the garden, showing the caterpillars of all sizes, and, with these, specimens of the chrysalis, the perfect moth and the various beneficial insects which are known to prey upon the species. During the past five years Dr. Fletcher has spent two or three weeks each summer in Manitoba and the Northwest, addressing institute meetings and other gatherings, particularly on methods for the eradication of weeds. He will leave in July this season to take up similar work. Last year the outbreak of the variegated cutworm in British Columbia was probably one of the most remarkable occurrences of the kind ever noted in Canada.

The Chief Chemist, Mr. Frank T. Shutt, was busy completing his work on investigations in feeding pigs, with a view to ascertaining the causes of soft bacon. An exceedingly large amount of data has been compiled and a digest of it will be issued in bulletin form shortly. A person not familiar with analyses, and work of this kind, can have no adequate idea of the immense amount of labor involved by reading the bulletin. Very shortly we hope to give some details from this work as it would be premature to draw conclusions just now. Prof. Shutt is outlining a series of experiments dealing with the conservation of soil moisture, more particularly in orchards. It may be that we are overdoing the cover crop idea. Some experiments conducted at Brandon last year showed that the best method for conserving the moisture in the soil is the summer fallow. Prof. Shutt will take a well-deserved holiday this summer in Europe. He has received a three months leave of absence, which he will spend in recuperating his health.

No department of the Farm has shown greater improvement in recent years than that of live stock. Under Mr. J. H. Grisdale's supervision some valuable experimental work is being conducted. In addition to the experiments in swine feeding, to which we have already alluded, Mr. Grisdale is conducting a feeding test with steers of different ages, that will supply a large amount of useful data of value to feeders. This work began a year ago, when he began feeding a number of calves, yearlings, two year olds and three year old steers. The different lots will be sold this month, when the results of the test will be known. So far as known now, the calves sold as yearlings will show a clear profit of \$15 per head, the yearlings sold as two year olds will average about \$17 per head, the two year olds sold as three year olds about \$15, and three year olds sold as four year olds \$8 to \$9 per head. Other experiments are being conducted in feeding steers loose and tied, and in feeding calves in two ways. In dairy lines Mr. Grisdale is developing Shorthorns and Shorthorn grades, Ayrshires and Ayrshire grades, and Guernseys and Guernsey grades, with a view to demonstrating whether pure breeds or grades are the most profitable for the farmer. Mr. Grisdale leaves this week for Great Britain, where he will select some of the best dairy Shorthorns, Ayrshires and Guernseys available for use at the Farm.

Another busy member of the staff is Mr. W. T. Macoun, Horticulturist. He has about ready for distribution an important bulletin on apple culture, which cannot but be of very great value to apple growers, especially in Ontario and Quebec. A new seedling orchard is being set out with seedlings of the best fruits ripened on the Farm, mostly winter varieties. The object of this work is to originate some hardy, late-keeping apples of good quality, adapted to Eastern Ontario and Quebec. The department over which Mr. Macoun has charge covers 150 acres, including the forest belts, arboretum and ornamental grounds, as well as fruits, vegetables, etc. This means that he has no idle time on his hands.

Mr. A. G. Gilbert, Poultry Manager, was absent on the day of our visit, but we learned sufficient to know that the work is progressing favorably under his care. He will, no doubt, have some useful data to report at the end of the season.

Leave for Great Britain

Canadian agriculture will be well represented in Great Britain this season. This week the Hon. Sydney Fisher, Minister of Agriculture, Prof. Robertson, Commissioner of Agriculture and Dairying, and F. W. Hodson, Dominion Live Stock Commissioner, sail for the Old Land in the interests of the important departments they represent. Mr. Fisher and Prof. Robertson will devote considerable attention to the markets for Canadian products, and in this connection the former will address several of the leading Boards of Trade on Canada and her agricultural resources. Strong efforts will also be made by the Minister to have the scheduling of Canadian cattle abolished. Mr. Hodson's special mission is to make a study of live stock conditions in Great Britain with special reference to dairy cattle, such as dairy Shorthorns, Ayrshires, Jerseys and Guernseys. The bacon

trade, the bacon hog, and the poultry trade will also be given some attention, with a view to obtaining information that will be helpful to those industries in Canada.

Improved Dairy Methods Needed

The dairy season of 1901 is well under way, and those connected with the business should make every effort to improve the quality of the cheese made at many of our factories. As was noted in these columns a few weeks ago, some of the States of the Union are looking forward to a time when their cheese products will surpass in quality the best made in Canada. We have every confidence in the dairymen of this country and believe that they will not allow the laurels already won in dairy lines to be wrested from them by any competitor to the south of the line. But to maintain and improve upon their present position, persistent and definite work is necessary. There must be no resting on oars, but decided action along the lines that will bring effective and constant improvement.

A first requisite in the making of a fine quality of cheese is good milk. Though addresses and articles galore have been spoken and written on the care of milk, and distributed among dairymen in all parts of the country, there is still a great lack of attention and care shown in connection with the milk delivered at many of our cheese factories. There has been no very constant or growing improvement in this direction for several years. Many patrons who sent bad flavored milk five years ago are doing so to-day. No doubt there has been improvement in the quality of milk supplied at not a few factories, especially those where the makers have given the matter special attention, but in the majority of them there is still the old complaint of bad flavored and gassy milk, at least during the summer months. This means work for somebody, and the necessity of bringing some strong influence to bear upon patrons who neglect their cows and the milk, and then expect the maker to turn out a first-class article.

To properly care for milk is not a difficult task if gone about in the right way. There are certain rules on the subject prescribed by dairy teachers, which every patron of a cheese factory should be familiar with, and it is hardly necessary to enumerate them here. What is important, however, is that every man who supplies milk to a cheese factory or creamery during 1901 should see that these regulations are lived up to, and the milk delivered in the best condition. The keynote to the proper care of milk is to be found in the word "cleanliness." If this principle is strictly applied in the feeding and housing of cows and in the milking and handling of the milk and utensils, it is pretty safe to conclude that little, if any, fault will be found with the milk. Next to cleanliness, aeration and cooling, are perhaps the most important. There are authorities who claim that the aeration of milk does little, if any, good. But we would advise dairymen to follow the practice till something better is put in its place. As to cooling, there is some difference of opinion as to the extent to which this should be practised. To be on the safe side, it would be well to cool milk during hot weather to at least 60 degrees. We saw a good rig at the Guelph Dairy School the other day for cooling milk. It consisted of a galvanized iron box

large enough to hold two or three cans, and so fitted with inlet and outlet taps that a supply of cold water could run through the box all night if necessary. Any farmer with a wind-mill could use it in a similar way. If no wind-mill were available the box could be refilled with cold water three or four times during a hot evening.

Another line along which considerable improvement should be made is in the curing of the cheese. It is poor business to receive good milk in at the weigh stand and have it made into first-class cheese, only to see it injured in the process of curing. Our factories must have better curing-rooms, properly insulated, and in which the temperature and moisture can be controlled if the cheese is to be cured as it should be. We have a striking object lesson of the value of proper curing in the experiments conducted at the Carp factory last year under the Dairy Commissioner's direction. The curing-room there was divided into three compartments—one room being insulated and connected with a sub-air duct, provision being made for using ice to control the temperature. Room No. 2 was constructed in a manner similar to a first-class ordinary curing-room, with no special means of regulating the temperature. No. 3 room was quite like many of the curing-rooms of poor construction throughout the country. The cheese made during June, July and August were distributed in these three compartments, so that there was a cheese from the same batch in each one. The report of the Montreal experts who examined them went to show that there was a most marked difference in quality in the three lots, equal to a half a cent a pound between those in rooms No. 1 and No. 2, and the same between Nos. 2 and 3. Thus the cheese ripened under the conditions which exist in nine out of ten Ontario factories was worth fully a cent less than it ought to be. This is a direct loss, which in the aggregate amounts to a very large sum.

Particulars of these experiments have recently been published in bulletin form by the Dairy Commissioner at Ottawa. Every dairyman should have a copy.

Two More Sugar Beet Companies

We learn from a reliable source that two new companies are being formed for the manufacturing of beet sugar in Canada. One will be capitalized at \$600,000 and the other at \$700,000. No announcements have yet been made, but we understand that within a few days all arrangements for at least one of these companies will be completed, and that the other will follow shortly afterwards. The sites at which factories will be built have practically been agreed upon and they will be located at two Western Ontario points well adapted for the growing of sugar beets. Nothing, however, will be done for this fall's campaign, but every preparation will be made for beginning the manufacturing of beet sugar in the fall of 1902.

These two companies increase the total formed in this province for making beet sugar to five, and several others are talked of. It will be noticed that these new concerns are to be capitalized at amounts somewhat in advance of what is required to build and equip a factory. This is wise. It requires fully \$500,000 to build and equip a factory with the most up-to-date

machinery, and to attempt anything short of that is only to court failure. Many of the failures in the past have been due to the lack of sufficient capital to put the business on a sound footing. There are factories talked of for this province at a capitalization far below these figures, and from what we know of the business it is very doubtful if they can be made a permanent success. Of course if the capital stock can be bonded for a sufficient amount to enable the company to put in the very best equipment all well and good, but unless this can be done it would be much better to have sufficient capital stock at the beginning to put the business on a permanent footing.

Evidently the making of beet sugar in Canada is to become one of our important industries. Once established and a market provided for beets, the Canadian farmer will have an additional source of income that should swell his annual receipts very materially. But to grow beets profitably and of the right quality the farmer must keep himself posted as to the kind of soil required, the methods of cultivation and the manner of harvesting, etc. In this connection it will pay every farmer to read the Sugar Beet Department of The Farming World.

Selling Eggs by Weight

Since eggs vary more or less in size it has been proposed that they should be sold by weight rather than by the dozen, which is the usual custom in this country. The North Carolina Experiment Station, in investigating this point, recorded the weight of eggs per dozen and the number produced during six months by pullets and old hens of a number of well-known breeds and by ducks. Generally speaking, larger eggs were laid by hens than by pullets of the same breed. The eggs laid by Pekin ducks (old and young) averaged 35.6 ounces per dozen, and were heavier than those laid by any breed of hens. Of the different breeds of hens tested the largest eggs weighed 28 ounces per dozen, and were laid by Light Brahmas. The Black Langshan and Barred Plymouth Rock hen's eggs weighed a little over 26 ounces per dozen, while those laid by Single Comb Brown Leghorns, late-hatched Plymouth Rock, White Wyandotte, and Buff Cochin hens ranged from 21.7 to 23.7 ounces per dozen.

Of the pullets, the heaviest eggs (weighing 26.5 ounces per dozen) were laid by the Black Minorcas, the lightest by the Single Comb Brown Leghorns and Silver-Laced Wyandottes. These weighed 17.5 and 22.1 ounces per dozen, respectively.

In the North Carolina test all of the eggs, regardless of size, had a local market value of 13 1-2 cents per dozen at the time of the investigation. If a dozen Single Comb Brown Leghorn pullets' eggs weighing 17 1-2 ounces were worth 13 1-2 cents per dozen, or 12 cents per pound, the eggs of the other breeds would be actually worth from 16.3 cents for the Single Comb Brown Leghorn hens to 21.6 cents per dozen for the Light Brahma hens, or from 20.7 to 60 per cent. in excess of their market value. The eggs of the Pekin ducks would be worth 26.7 cents, or 97.8 per cent. above their market value. On the basis of the results obtained, the station advocates selling eggs by the pound instead of by the dozen.

Farmers' Bulletin, U.S. Dept. Agriculture.

Studies in Nature

A Monthly Review of Insect and Bird Life on the Farm

Edited by C. W. Nash.

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

Bird Notes.

From all over the province I have received reports of the arrival of the first representatives of our early birds. These reports show that the extreme south-western part of Ontario is the first point reached by the northward-moving migrants; this, of course, was to be expected, though the difference between the dates of arrival at Pelee Island in the west and Kingston in the east is greater than I had anticipated.

In order to trace the movements of our early migrants in distributing themselves over the province it will be sufficient to take four of the best known species and compare the dates of their arrival at a few points along the southern boundary from Pelee Island to Kingston, and then follow the northward flight along the west side of the province from Pelee Island to Port Arthur, and on the east from Kingston to Pembroke.

The great majority of land birds when migrating avoid as much as possible crossing large bodies of water, and will usually skirt along the shores of our lakes for some distance in order to pass over them at their narrowest parts, consequently the three routes most frequently followed by the birds in entering this province are first at the south west corner where they cross the Detroit river, next by way of the Niagara peninsula, and last across the St. Lawrence from Kingston eastward. The dates of arrival at each of these crossing places are as follows:

Pelee Island, Essex.—Observed by Mr. Thaddeus Smith—Robin, March 9; bluebird, March 9; red wing blackbird, March 16.

Dunnville, Haldimand.—Observed by Dr. McCallum—Robin, March 12; bluebird, March 12; song sparrow, March 14.

Kingston, Frontenac.—Observed by Dr. Clarke—Robin, March 17; bluebird, March 17; song sparrow, March 24; red wing blackbird, March 24.

This shows a difference of eight days between Pelee Island and Kingston, though the latter place is only about two and a half degrees north of the former. The movement in the case of all the species mentioned by the gentlemen who observed them appears to be quite regular.

On the west side of the province the progress of the birds northward was much more rapid than it was on the east. Starting from Pelee Island

and taking Dundalk, Port Sydney and Port Arthur as the points of observation the records are:

Dundalk, Grey.—Observed by Mr. Palmer—Robin, March 19; song sparrow, March 20; red wing blackbird, March 19.

The distance from Pelee Island to Dundalk, as measured on a map, appears to be about two hundred and ten miles. To cover this distance the robins took ten days, probably because they worked quietly along as the snow disappeared; but the red wing blackbirds, which did not arrive at Pelee Island until March 16, reached Dundalk in three days, arriving on March 19. No doubt they then had more favorable weather and travelled almost continuously.

Port Sydney, Muskoka.—Observed by Mr. Alfred Kay—Robin, March 24; bluebird, April 2; red wing blackbird, April 2; song sparrow, April 11 (Huntsville).

Port Sydney is about eighty-eight miles from Dundalk.

Port Arthur, Algoma.—Observed by Mr. T. A. Gorham—Robin, April 11.

This is the only bird as yet recorded from Port Arthur.

On the east side of the province, after leaving Kingston, the birds appeared at Queensboro', about forty-five miles away, on the following dates:

Queensboro', Hastings.—Observed by Miss Annie M. Thompson—Robin, March 21; bluebird, March 24; song sparrow, March 26.

Their journey from this point to Pembroke, only eighty-six miles further on, seems to have been performed very slowly.

Pembroke, Renfrew.—Observed by Mrs. W. Richards—Robin, April 4; song sparrow, April 13; red wing blackbird, April 7.

The records I have received from Kingston and Picton seem to show conclusively that the birds do not generally cross the lake when coming into the province. The dates of arrival at Kingston, as given by Dr. Clarke, are several days earlier than those given by Mr. E. B. Yarwood from Picton, though Picton is a little south and west of Kingston. Mr. Yarwood gives:

Picton.—Robin, March 23; bluebird, March 20; red wing blackbird, March 20.

Mr. Yarwood, however, says: "The birds were, some of them, seen on the lake shore a few days earlier, so they must, of course, cross the lake." The Picton record for the red wing blackbird is earlier than that for Kingston, and it may be that the blackbirds do sometimes make the long passage

across at that point, but, so far, I have never been able to see them cross Lake Ontario anywhere, but, on the contrary, have often seen the migrating flocks skirting the shore.

I am very glad to hear from several places that the bluebirds are more abundant about their old breeding places than they have been for some years past. In the neighborhood of Toronto many pairs are frequenting the orchards, and will, no doubt, remain, if they can find suitable nesting places. This may be a difficult matter, unless boxes are provided for them, hollow trees are scarce, and snake fences, with convenient woodpecker holes no longer to be had. Every fruit-grower ought to see that the birds do not leave his premises for want of nesting accommodation.

Already the robins here have commenced nest building, and, as is usual with them, early in the season they are placing their ragged looking structures just where everyone can see them, so that, in this neighborhood at any rate, their chances of saving their first eggs are very slight. On the 28th of April I found a song sparrow's nest nearly completed. This is so beautifully hidden under a tuft of grass that it ought to be safe from human foes, and I will take care that no young cow-bird is raised in it.

I have to thank a large number of correspondents for notes on the migration of this season. Want of space prevents my making use of them at once. They are, however, of great value, and I shall from time to time publish them in these columns as occasion requires.

INSECTS.

Fruit growers who have not already sprayed their trees at least once, should do so immediately if they wish to destroy the tent caterpillar. By this time the eggs that produce this pest have all hatched and the larvæ have crawled to the leaf buds to feed. These and all other insects can be most easily destroyed when they are young, but very little poison will then suffice to kill them, and everyone killed now is effectually prevented from doing any damage forever. If strenuous efforts were generally made for the destruction of injurious insects in the early part of the season, while they are small and susceptible to the remedies in common use, the few that would escape our mechanical devices, would most certainly fall a prey to their natural enemies later on, and we should in a few years cease to suffer serious loss from the depredations of these creatures. To be successful in this, however, we must do our share of the work early and thoroughly. All the trees in the

country must be protected, otherwise the neglected ones will continue to furnish a sufficient supply to keep up their excessive numbers.

ANSWERS TO CORRESPONDENCE.

A. M. T. (1).—I noticed a small slaty blue bird, whitish underneath, with considerable white about tail and wings. Its habits are much like the house wren, hopping and creeping

a tree, and uttering these clear whistling notes, which are so very different from those we generally hear from it that but few people associate them with our common little friend.

The Fit of Horse Collars.

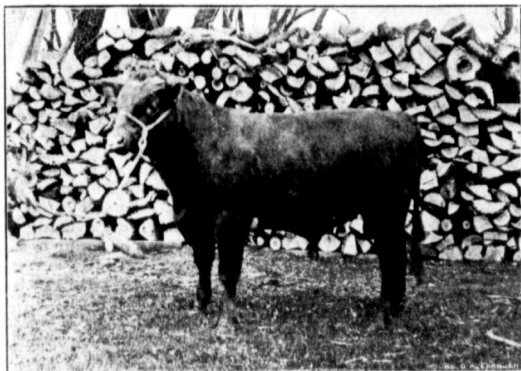
Every horseman knows well the value of a perfect-fitting collar to the horse's neck and shoulders, and every

short of perfect adaptation of the collar to the shoulders and neck will be satisfactory to either horse or driver.

Every horseman knows that not one collar in 100 in daily use is a perfect fit; many will do, but a large majority of them are too wide for the neck and not adapted to the shoulders. Every horse should have his own collar to be able to do his work with comfort, and every collar should be fitted to the horse that is expected to wear it. If the collar is too long it should be cut off at the top; but if too wide and not adapted to the shoulders of the horse, don't think you must get a pad to fill in the space. Pads to the horse's shoulders in summer are about what overshoes would be to our feet—makes them tender and soft instead of firm and tough.

Select the style and length of collar best adapted to the work to be performed, and whether a new or old collar, soak it in water over night before fitting it to the horse. When ready to put on, wipe off the surplus water from the collar, put it on and adjust the hames at top and bottom so as to bring the collar to the neck snugly its entire width. Don't have it wide at the top and close at the bottom, nor vice versa; but a close fit to the sides of the neck, so that the collar will set firmly and not slide from side to side over the shoulders, but as nearly immovable as possible sidewise.

When the collar is soaked thoroughly it can be brought to the sides of the horse's neck perfectly; but when the collar is dry and stiff this cannot be done with any degree of satisfaction. When the wet collar has been fitted to the horse's neck, with the hame-tugs draft at the proper place (neither too high nor too low), then work the horse in this wet collar at moderate draft until the collar is dry, and a perfect fit can be obtained.



SHORTHORN BULL—HARRY II—36371. Aged 11 months.

Bred and owned by H. C. Graham, Ailsa Craig, Ont., whose announcement has appeared in these columns recently. He is from a good milking family, having in his pedigree such sires as Chief Baron got by Indian Chief (imp.), etc.

round an old building and woodpile. About size of blue bird. I could not identify it.

Ans.—The bird is probably a Junco sometimes called the blue snow bird (*Junco Hiemalis*). Did you notice the form and color of the beak? If it was a Junco the beak was very pale colored, almost white.

Query (2).—A bird has appeared here during the last two days. It has a most pleasant song, ending in several musical whistling notes. It answers to the description of lark sparrow in McIlwraith's "Birds of Ontario."

Ans.—Your bird is not at all likely to be a lark sparrow, which is a western bird, its range extends as far east as Toronto, but it is not common in Ontario. In all probability the bird you saw was the white throated sparrow.

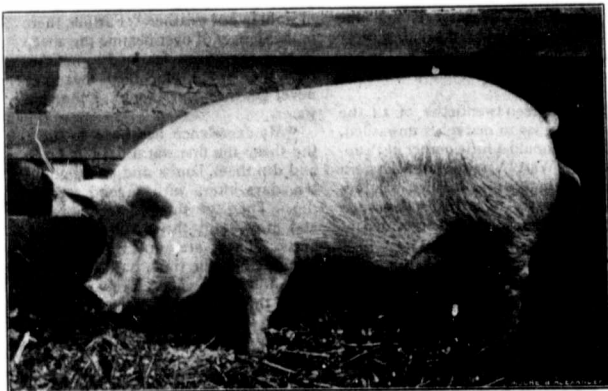
Query (3).—Do you know of any periodical devoted to Natural History published in Canada or United States?

Ans.—There are several, but they are all monthly publications "THE FARMING WORLD" has now under consideration the more frequent publication of its nature columns.

M.C.F. Query.—April 9th, 1901. About two weeks ago there was a whistling bird about our farm * * * had a beautiful clear whistle just like a human being * * *. It would whistle once or twice clear and sharp as if a man were whistling for a dog. Can you tell me what bird it was?

Ans.—The note you heard was undoubtedly the spring song of the chickadee. This little bird in early spring has a habit of perching high up in

horseman also knows the annoyance, irritation and torture to the horse, to say nothing about spoiling an otherwise good disposition, or making a balky horse of the naturally true puller, by a collar that is too long, too wide, and not adapted to the form of the shoulder. The harness horse does his work "from the shoulder," and certainly everybody will concede that for the comfort of the animal, and value to its owner, it deserves a perfect-fitting collar, and that nothing



YORKSHIRE SOW—OAK LODGE JULIA 13TH, 4731.

A Yorkshire Sow bred and owned by Brethour & Saunders, Burford, Ont. She won second at both Toronto and London in 1900 as sow under one year, but at the Provincial Winter Fair at Guelph won first place over the sow which had beaten her at Toronto for sow under fifteen months, and at the same show won sweepstakes over all ages in the Yorkshire classes. She will be on hand at next Fall's shows.

Does It Pay to Wash Sheep?

The Views of Some Leading Sheep-Breeders on the Question

The practice of washing sheep is not followed so largely by farmers as a few years back. In fact it may be conceded that the practice is slowly falling into disuse. Yet there are farmers in many parts of the country who, as regularly as the sun shines, conceive it to be their solemn duty about the 24th of May every year to wash their sheep. But the practice is neither necessary nor advisable. The only sane reason for so doing is that the wool sells better. But the gain in this respect is lost many times over by the injury to the health of the animal from washing and the loss of wool, and the growth of ticks caused by having the sheep kept too long before shearing.

We took the trouble a few days ago to ascertain the views of a number of our leading sheep-raisers on the subject, and have already received replies from two of Ontario's most prominent breeders, which we publish herewith. As an introduction to what they have to say we submit the views of a leading Ohio sheep-breeder on the same subject. Among the reasons given by him for not washing sheep are the following, and which show clearly the position of the American sheep-breeder to this whole question:

"1. As now practiced by the great majority little is washed from the wool. The writer has repeatedly shorn some sheep early before the wool was soiled or the grease started in large quantity and shorn a part of the flock later, washed and allowed to run the ordinary time, and the latter always weighed as much as the former.

"2. All admit washing to be a farce as practiced by the great majority of wool growers, but as it is well understood that the only object in taking the sheep to the water is that the owner may be able to say they were washed, no one is deceived and hence the moral effect of the deception is not so bad.

"3. Nineteen-twentieths of all the wool that goes to market is unwashed, and why should a little corner of Pennsylvania, West Virginia and Eastern Ohio continue a practice that was probably necessary in an early day when wool was spun at home or carded at the nearest home factory?

"4. Whatever buyers may say or do the unit of value is the scoured pound, and any process that hinders the buyer in arriving at that value, as the partial washing of wool, is ultimately against the seller, as the buyer always takes the benefit of the doubt. An unwashed clip of wool of any kind of sheep is more uniform than a washed clip, because in every flock there will be sheep that on account of condition or kind of oil cannot be washed by the ordinary process.

"5. Washing wool on the sheep's

back is injurious to the sheep, hence stud flocks never have been washed.

"6. Washing prevents the shearing of sheep as early as the health of the sheep and the growth of the future fleece require. September and April are the months in which wool grows the most rapidly, but if sheep are burdened with a heavy fleece in the warm day of April, it is evident that the sheep cannot grow much wool, if indeed it can retain what has already grown.

"7. Washing wool as now practiced injures the wool. Scientific men now tell us that each fibre of wool is encased in a sheath of oil, and partial washing breaks this sheath and leaves the fibre less lustrous and less strong. If the sheep is allowed to run until this sheath is repaired it might as well never have been washed. The partial breaking of this sheath of oil accounts for the discolored appearance of wool for the first week after washing and all have learned that wool must remain on sheep after washing long enough for some oil to rise."

NOT PROFITABLE OR BENEFICIAL.

Henry Arkell, Arkell, Ont., writes: "In answer to yours of May 2nd, re washing sheep before shearing, I do not think washing sheep before shearing either beneficial to the animal or profitable to the shepherd.

"If washed, the sheep have to carry their wool until the last of May, or the beginning of June, and consequently loose a lot of wool, especially if infested with ticks, as I am sorry to say they too often are, with careless, happy-go-lucky shepherds.

"Then again, sheep do not thrive nearly as well, with the encumbrance of wool in hot weather. Further, there is the danger of over-heating the sheep if they are driven far, and sometimes they die, or are so chilled that they never get over the shock of the cold water.

"My experience has been to shear the sheep the first warm days in April, and dip them, lambs and ewes, about ten days after, with a good reliable dip. Then the sheep have comfort, and grow, and thrive on the fresh grass. They are not rubbing and scraping half the time, but can quietly feed and rest. My sheep were all shorn this spring before the last snow-storm. They were kept in sheds until the snow was gone, and have gone right along since.

"About the difference in price of washed and unwashed wool, the price will be fully made up with the pieces of wool that would be rubbed off, and the extra weight from the grease and dirt. Although that is another thing shepherds would do well to study, and not send their unwashed wool to the

dealers full of all kinds of seeds and dirt. If flocks are kept as they ought to be, clean and tidy, not only will the sheep and lambs do that much better, but the shepherd's pocket will get heavier. It is poor policy not to treat your sheep well."

SHEARING WITHOUT WASHING BEST.

John Jackson, Abingdon, Ont., writes: "Whether is it advisable or not to wash sheep before shearing? It is not so much practised now as it was in years gone by. The reason for it being practised at all is perhaps more from the force of habit than from anything that can be said in its favor. There is only one argument that I know of that can be put up in support of the practise, i.e., that more is realized from the wool, and this is a debatable question.

"There are a number of objections, and I will point out a few: the length of time the sheep have to carry their wool in warm weather is one. If sheep are to be washed before shearing it is usually about the 24th of May before the weather is settled to be safe to wash; this brings it to the 1st of June before shearing takes place. If the flock is troubled with ticks, and most flocks are more or less, well it's very little use dipping the lambs before the wool and ticks are all off the old sheep, and even as late as this there may be a change of weather that will cause the sheep to take cold. Think of a man wearing his full winter clothes till the 1st of June, and suddenly changing all at once for the lightest summer suit. Is he not about sure of a heavy cold, with all the advantages of house and fire to help him out?

"On the other hand, in favor of shearing without washing there are a number of things to be considered. It can be done when time is of less value. I think the best time is, say the first half of April, while the sheep are yet housed, and the breeding ewes as soon as the lambs are all to hand. They get used to the want of the fleece before going out to grass, the wool gets a little start as well, and they suffer no inconvenience even if the weather is a little cold and raw.

"Another advantage is, that with the ticks, and wool to harbor them off, the old sheep, when the lambs are smaller, can be dipped (and this is very important) at less expense, and less dip does the work. Besides, they are rid of the ticks weeks earlier, and consequently will thrive and go forward instead of worrying with the annoying ticks. In fact the dipping, when put off till so late, is often neglected altogether. Then again, wool at present prices, washed or unwashed, cuts very little ice in the returns from a flock of good sheep."

The Sugar Beet World

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

EDITED BY JAMES FOWLER

ONTARIO BEET SUGAR ASSOCIATION. OFFICERS FOR 1901.

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Why Farmers Should Grow Beets.

Because

The beet industry offers a grand opportunity to one who possesses but a small amount of land, and also to the one who desires to cultivate a few acres instead of large fields.

The man who has had experience raising this new crop will never drift back to the old careless ways of doing things.

A very important feature of beet farming is the fact that weeds are gotten rid of, leaving a farm more valuable on that account.

The farmer who raises sugar beets is positive of the value of his product, and uses his time and attention in the interests of a large crop without worrying about the market.

The boy who has had experience in the production of this new crop will grow up better adapted to farming, and will be what the farmer should be—particular about the details of his work.

More people are given an opportunity to follow agricultural pursuits, thus leaving other industries in a less competitive condition.

To the thrifty and practical laborer beet farming comes as a benefactor with opportunities for wealth and happiness.

Though all classes are benefitted, the farmer is in a position to reap more results than any other, since he has an opportunity to produce a more valuable crop from his soil than he has been raising in the past, and as the cultivation of sugar beets comes into practice more and more his land will naturally enhance in value on account of the increased profits of the crops which he sells.

In raising this crop boys can do an important work, namely—thin the

plants after they have been bunched with a hoe.

They can do the bunching also, after a little practice, and of course they can pull and top beets when harvest time comes.

Beet farming gives a man a fairer estimate of his abilities as a farmer and business manager than any other branch of agriculture, and also leads him into systematic farming, thereby making his occupation less a drudgery, and more a science and pleasant vocation.

Implement factories turn out more implements, and the genius sets his mind toward improving those in use, in order to enable the farmer to do a large business with less expense.

Beet Sugar in Canada.

A Review of the Industry in Quebec.

(Continued from last issue.)

The hon. member for East Grey (Mr. Sproule) has referred more particularly to the bounties granted to the iron and steel industry. There are many other industries which could be added to the list.

As we all know, our industries have been developed under the favoring influence of protection and large bounties; and in my humble opinion no capitalist could be induced to embark in an industry which requires the outlay of such large capital without being satisfied that he will be given aid at least for a limited number of years, so as to enable him to face the deficits which will undoubtedly occur at the initial stage of his operations.

What have we not done in the past in favor of the sugar refiners? What protection did they not enjoy? For many years they have been highly protected, and even to day they are still receiving indirectly a pretty high protection. But let me add here that such protection goes to benefit the refiner alone. For every ton of sugar

manufactured the refiner hardly shows \$5 in the country, while the sugar manufacturer will spend at least \$20. In those factories worth from two to three million dollars, the refiner gives employment to about two thousand workmen. The building of the sugar factories, which would entail an expenditure of from fifteen to twenty million dollars, would for a time give employment to mechanics, and once ready for the production of the sugar they would require over ten thousand laborers, without mentioning the army of farmers and agricultural laborers engaged during the summer season in the cultivation of the beet.

There are many advantages accruing to this country from the beet-root sugar industry for which the sugar manufacturer might claim credit, such as the high state of cultivation to which the lands are brought in raising sugar beets, which is intensive farming in every sense of the word; the progressive increase of crops; the raising of cattle on a large scale; the increase in the output of milk, and consequently the erection of dairies and creameries which naturally follow in the wake of factories.

The sugar refiner cannot show anything to his credit favorably comparing with those results. Now, since all governments, without any exception, have realized that it was in the interest of the community to protect sugar refineries, I do not see the reason why we should deny protection to an industry far more beneficial to the farming community than the sugar refining industry.

Should we succeed in introducing this great industry into the country, I have no hesitation in saying that it would prove most beneficial to the people of Canada in general, and that it would give a great stimulus to the farming industry. It is beyond question that whenever this industry is established in a locality it results in an all round improvement. The culture of the beet, as I said, would have a most excellent effect on the development of farm lands by bringing them up to a higher state of cultivation, while it would give stimulation to corollary industries, such as the raising of dairy cattle, thus increasing the general wealth of the country. Even towns have sprung up in the wake of those sugar-beet factories.

It is stated, in a report published by the United States government, that a small town, Oxnard, owes its existence to no other cause than the introduction of the sugar beet industry into that district.

Why, Sir, within the past few years, have we not seen small towns, like Grandmere, Shawinigan, Sault Sainte

Marie, springing up as if by magic, in the wake of new industries? History will repeat itself here, and the introduction of this industry into the country will be attended with similar results: new towns will spring up around those factories, and a new impetus will thus be given to progress in those districts and in the country in general. And once the factory is in full operation, business men, traders, mechanics, workmen of every description, will be seen flocking thither and settling down in the vicinity of the factory, in order to supply the wants of the people employed in this industry, thus forming the nucleus of a new town. One of the by products, the refuse molasses, might also be converted into first-class alcohol, and manufacturers would no doubt avail themselves of the opportunity for starting this industry. There are many other advantages which would accrue to the country from the introduction of the sugar beet industry; but, as I do not wish to trespass upon the indulgence of the House, I need not refer to them at any greater length.

With these few remarks which I wished to offer to the House, I hesitate not to say that I can approve the resolution which is now in your hands, Mr. Speaker. When the opinion of this House is known, I hope that the government—and here I appeal more particularly to the hon. Minister of Agriculture (Mr. Fisher), who is an expert in such matters and who realizes all the good likely to result to the country from the introduction of such an industry—the government, I say, should not hesitate to grant a reasonable aid, so as to induce capitalists and manufacturers to invest their money in the building of sugar beet factories.

I am quite aware that the greatest care must be experienced in such matters, and that it behoves us to move slowly; but I do not think there are any insurmountable obstacles in the way, and I hope the government realizes that the time has come for them to assist this industry; thus promoting the dearest interests of the country. The government, I have no doubt, will not hesitate to take the means of bringing about the successful establishment of this industry.

In connection with the sale of the Berthier sugar factory, I may say that those who were present when the machinery was being removed, prior to its being shipped across the line, felt, no doubt, very keenly the loss of that industry, but they thought that perhaps it was no such great loss, after all, seeing that the machinery was obsolete and without the required capacity for an output large enough to make it a paying business. It is out of the question that a beet sugar factory must be provided with the most approved machinery and labor-saving appliances, with the capacity of turning out an output large enough to make the business paying. Now this factory could utilize but 220 tons of beets per day, and as is well known, no such operations can be profitable unless a factory has a capacity of 500 tons a day.

The government are conversant enough with what is being done to-day in this line in the United States, to be able to decide upon the course to be adopted by them. Is it not a pity to see eight or nine million dollars yearly flowing out of the country, to pay for our home-consumption of sugar, an article which could be manufactured here?

I think I have said enough to satisfy the government that they should come to the assistance of an industry which would prove so beneficial not only to the farming community, but to the country in general.

Instructions in Beet Growing.

Professor Shuttleworth, of the Ontario Agricultural College has issued the following circular of instruction to farmers who are growing sugar beets this season for experimental purposes:

The usual methods of cultivation and manuring practised in growing mangolds, turnips and potatoes would if followed in the cultivation of sugar beets, produce an unprofitable crop for factory purposes.

The beet does best in warm, moist soil, having an open subsoil which is also naturally warm and moist.

The best results can be produced only when there are available to the plant in the right form and quantity in the presence of other required conditions, the four most important constituents in the nourishment of beets, viz., nitrogen, phosphoric acid, potash and lime. It is better to apply farm-yard manure to a preceding crop. Unleached wood ashes is a valuable manure for sugar beets.

Late, deep plowing is an essential part of fall cultivation for sugar beets on any soil.

Spring cultivation for planting must be shallow, the object being to prepare a seed bed whose soil is reduced to the highest degree of tilth, resembling the surface soil of a well prepared onion bed.

The choice of seed is a matter of very great importance. Plant, as early as soil will permit, 16 pounds of seed per acre on the flat, in rows 21 inches apart. The seed should be in moist soil, having been planted to a depth of about one inch.

After planting, keep the surface soil loose and clean by the use of Breed's Weeder. During the development of the third or fourth leaf, thinning should be commenced, and finished as early after as possible.

Keep the surface soil well cultivated and clean of all weeds. Cultivation preserves moisture and promotes growth; but it must be discontinued when found to injure the leaves.

Correspondence Invited.

You are invited to correspond with the undersigned regarding any and all matters connected with the growing of sugar beets and the beet sugar industry.

JAMES FOWLER.
C/O FARMING WORLD,
Toronto, Ont.

Growing Beets at the Ontario Agricultural College.

A quarter of an acre at the Ontario Agricultural College has this season been sown to sugar beets in precisely the same manner as the three hundred and fifty farmers are supposed to sow their experimental plots. The ground was prepared in the following manner: The ground used had been fall plowed. The spring cultivation consisted of harrowing once, then cultivated three inches deep, allowed to dry sufficiently to roll, harrowed twice, and when sufficiently dried, rolled again to compress and moisten the seed bed. Seed then sown with a drill, 16 lbs. to the acre, and then gone over once with a light seed harrow to preserve the moisture.

Beets for Profit.

Among the newer phases of agricultural methods which seem not fads that soon fade is that of beet growing. Variety is a recognized necessity in the domestic animal no less than in the genus homo. In the beet is found not only an appetizing but a nutritious food, some even placing the root cellar before the silo in usefulness. Without discussing the comparative merits of these two essentials, it is noticeable that those who have given beet culture a trial are most enthusiastic in its praise.

The ground should be light and rich, the alluvial soil bordering a stream is an ideal one. Deep ploughing, preferably in the fall, is desirable. Then it may be re-plowed in spring and dragged until thoroughly pulverized. One of the essentials in successful beet culture is to free it from lumps, hence the advantage of a naturally loamy rather than clay soil.

Drill the seed in thickly, and thin to eight or ten inches apart, leaving the more robust plants and carefully removing the others by hand. This is the most laborious part of the work, but one has the satisfaction of knowing that if carefully done, this one weeding out is final. Of course weeds must be kept down and the soil loose, but this is done with improved garden implements. After the leaves are large enough to shade the ground the plants will take care of themselves.

In harvesting, some prefer to leave them in the ground as late as possible, until the last pleasant days of November. By this method there is the added growth of late autumn and the roots do not have so long a time to spend in the root cellar, where, be the conditions the best possible, no root can be so well preserved as in the virgin soil. Of course there is some risk in this late harvest; and those depending upon it will do well to secure a strong force of hands in advance that the work may be rushed through on some favorable day. Break the tops rather than cut them; the latter method causes more "bleeding."

Aside from their value for stock, the beet sugar industry bids fair to furnish

another mammoth demand upon the farmers. Until recently experiments in this line have been restricted to limited areas, under the impression that the roots could not be made to produce sufficient saccharine matter save in a few favored localities. Recent experiments, especially in the central states, have been highly successful, and even now the beet sugar product has nearly reached the proportion of that of cane sugar.

Says R. S. Baker, in a recent issue of the *Review of Reviews*, of the three factories recently established near Bay City, Mich.: "The beet sugar industry is contributing wealth to the Bay City region in a manner quite unexampled, except in other neighborhoods where the new industry is equally prosperous. This year (1900) the three factories will pay in cash for beets something more than \$400,000 to the farmers within a radius of 25 miles of Bay City. Certain it is that the farmers of that part of the State never before saw such a cash income as this."

A leading point in favor of their culture is that they are not soil exhausters. Nitrogen and phosphates are not carried out by them. The leaves may go back to the soil, and the pulp, an ideal cattle food, is converted, if so the farmer wills, into fertilizer as well as food.

Stock Feeding on Pulp.

The Standard Cattle Company, of Ames, Nebraska, has had the past winter the first thoroughly complete and satisfactory experiment of beet feeding. Mr. Allen, manager, writes: "We have fed 30,000 sheep, of which 13,000 are still on hand. During a portion of the time we probably fed a little too much pulp, the large wethers eating as much as ten pounds a day for a considerable period. It will probably be better to feed slightly less. We believe that the sheep have fattened with more uniformity than is usual in the corn belt on corn and hay. They have been very well fattened, and have been bringing the highest price on the Omaha market, and we believe that the dressed carcass gives a very high percentage of mutton to the live weight. In individual sheep that we have killed on the farm the dressed weight has reached 56 or 58 per cent. of the live weight, and returns from entire shipments at market have been as good as 51 per cent., or better. We have not succeeded in getting information of late as to the percentage of dressed weight, and I believe that it is so good that the buyers do not care to give the figures. At the present time the most successful sheep feeding is on corn and alfalfa in Colorado, particularly with lambs, i.e., as to the gain in weight and market price for the fattened article. We feel that our sheep feeding on pulp is a better proposition than feeding on corn and hay in the corn belt, without pulp. We feed all the hay and other dry fodder that the sheep want, and a sufficient ration of grain from a pound to a pound and a

half to each sheep or lamb per day, which is less than the grain feeding usual in the corn belt."

What California is Doing.

In Southern California they have been in the sugar beet business for some time, and find it particularly profitable, though somewhat hampered by the dryness of the seasons, and necessity for irrigation. The factories there, like everything else, are run on a large scale, and some interesting information is obtained from their operations. One of the largest of these factories is the Oxnard, in Ventura county, which began operations in 1898, and has a capacity of 2,000 tons of beets per day. The Oxnard factory has been paying particular attention to the seed question, and the result of the investigation is given in the *Farmers' Review*, a California publication, by M. G. Kains, who describes the beet selected as giving the best results.

The beet favored by the Oxnards is named from the little German town, Wanzleben, about fifteen miles southeast of Magdeberg, where it originated, and is called the Kleinwanzlebener. The fields differ little from ours, except that they are plowed by electricity and are much cleaner. In the chemical laboratory no less than 5,000 analyses of beets are made to find out the percentage of sugar they contain. The results are carefully recorded, and the percentage of sugar, the size, shape, specific weight, shape and number of leaves, relative weight of root to top, and other items are noted before a particular beet is replanted for seed. Such beets are carefully stored and planted the following spring. Their seed is sown, and if the beets so raised are as good as the parents, or better, they are replanted, and so on. This work costs something like \$125,000 annually.

A test of 100 seeds selected from carefully chosen samples is soaked in distilled water for a full day and then planted in sterilized sand. When they germinate the percentage that grows, the number of sprouts arising from each seed capsule, and the effect of nipping off the sprouts are each recorded, as is also the number of seeds in a certain weight. If the general average of a particular sample does not reach a set standard the seed is sold only in the neighborhood; not an ounce is offered to the general public. In this way foreign purchasers receive only the best.

It will be something of a surprise to most readers to learn that this work has been carried on with marvellous system for more than forty years, each year becoming more extensive and complicated. Not a scientific fact has been overlooked in the effort to improve the beet from a sugar standpoint. The result of these four decades of labor is that Kleinwanzlebener is now yielding double the quantity of sugar that it did at the start, and is considered one of the best varieties to plant for sugar.

Another matter of interest to the industry to be established here is the fact that they are meeting with much success in using beet sugar pulp as feed for stock. The pulp is fed in troughs along with straw, to give it coarseness, and the Californians report that stock fed on it fatten very rapidly. The method of procedure, and the extent to which the use of the pulp is being carried are thus described by the *Los Angeles Daily Times*, the operations being those of the Oxnard factory:

On Sept. 14 work was begun on filling the silos, and it was of much interest to farmers and stockmen, who think of using the pulp for stock feed in the future. A flume extended out from the north side of the factory to a length of 300 feet, and within it a large belt two feet wide conveyed the pulp to a track at the end of the flume, where the cars stood waiting to be filled. When a car was loaded it was run down to the excavations, the sides of the cars were taken out in sections, and the pulp unloaded into the trench with forks. The pulp weighs 60 pounds to the square foot, and is heavy enough to pack itself when thrown into the silos. Near the silos are the stockyards, which consist of 16 pens, each surrounded by high barbed wire fences, 1,968 feet of troughs in which the feeding is done, sheds, hay racks, watering troughs, etc. The feeding troughs stand with the bottoms two feet from the ground, and are about as large as the watering troughs in common use in the country. They are placed in each pen so as to furnish feed for 70 head of stock, and in this way over a thousand head of cattle are fed at one time.

The manner of feeding is also of interest. Specially prepared cars are run down to the silo and loading begins from one end, and as the feed grows less works towards the opposite end of the excavation. The cars are out and lead directly into the stockyards, where three tons are unloaded into the troughs of each pen.

Not only has the pulp been successfully siloed at the factory, but it has also been successfully shipped and siloed at Los Angeles and other outside points at a very low price.—*Bay City Times-Express*.

**OXNARD
CONSTRUCTION CO.**

NASSAU STREET,
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**Build and Remodel Beet
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**Adaptability of Location
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**Beet Seeds and all Neces-
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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.

His name and address of each member, and the stock he has for sale, are published once a month. Over 1,000 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.

His 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 10th of each month, of the number, breed, age, and sex of the animals. Should a member fail to do this his name will not appear in that issue. The data will be published in the most condensed form.

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

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

G. C. CREELMAN,
Superintendent Farmers' Institutes.

Names of Delegates, Titles of Addresses and Meetings to Be Attended by Each Delegate.

The delegate whose name is at the head of each section will address the meetings in that section, and on such subject or subjects as may be selected by the local Institute from among the list submitted.

In order that the speaker may arrive at the various places in time, the list of meetings has been arranged on the basis of an afternoon meeting only, commencing at 1:30 p.m., and ending at 6 p.m. In case an evening meeting can be held, and the delegate arrive at the next place of meeting before 1:30 p.m. on the day advertised, an evening meeting may be arranged for if desired.

SECTION I.

Delegate.—Miss Laura Rose, Lady Instructor in Dairying Ontario Agricultural College, Guelph.

Subjects.—"Bread and Butter Making," "The Properties and Care of Milk," "Difficulties in the Dairy and How to Overcome Them."

Shelburne, Dufferin, June 3.

Durham, Grey, S., June 4.

Clifford, Union, June 5.

Paisley, Bruce, Centre, June 6.

Port Elgin, Bruce, W. (Women's Institute), June 7.

Tara, Bruce, W., June 8.

Owen Sound, Grey, N., June 10.

Kemble, Grey, N. (Women's Institute), June 11.

SECTION II.

Delegate.—Miss Blanche Maddock, Guelph.

Subjects.—"Scientific Dairying," "Bacteria as They Effect the Home, the Soil, and the Dairy," "Bread Making," "Domestic Science," "Women's Institutes, Their Aims and Objects," "A Few Points in Dairy Work."

Cookstown, Simcoe, S., June 3.

Weston, York, W., June 4.

Agincourt, York, E., June 5.

Cannington, Ontario, N., June 6.

Fenelon Falls, Victoria, E., June 7.

FARM HELP EXCHANGE

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

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

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

Help Wanted

Man wanted to work on a farm in York County, also a girl to do housework. Apply to Jas. White, Wexford, Ont. a

Herdsmen wanted for stock farm in Eastern Ontario. Must be a good milker and one who understands dairy cattle and pigs. Wages, \$35 per month to capable man. No. 809. a

Good, steady, industrious farm hand, single man, about 30 years of age, wanted on a farm for 6 months or longer. Farm is near Howick, Que. Wages, \$12 a month or more, according to capabilities of man. No. 805. b

Wanted, at once, a good, steady, single man on a large farm where all kinds of stock are kept. Must be a fair plowman, and understand the care of horses. Three or four men kept. Would hire for six months or by the year. Wages, \$100 for six months, or \$160 by the year, with board and lodging. Apply to H. G. Arnald, Kenilworth Farm, Maidstone, Ont. b

Man of good habits can have a place on a farm near Toronto, close to Yonge street, electric cars. Wages,

\$16 to \$18 a month, for 6 or 8 months. No. 807. b

Wanted, a first class, experienced cattle feeder (for a large Shorthorn herd), one that has had experience with young stock. Good wages and steady employment to good man. No. 808. b

Domestic Help Wanted.

Housekeeper wanted on a farm in Ontario County. Very small family. No. 810. a

Housekeeper wanted on a farm in Brant County, where cows are kept, but no butter made. The farm is situated about one mile from the village. No. 811. a

Middle-aged woman or girl 15 or 16 years of age wanted to work on a farm. Steady employment and good home. Apply to Miss Michael Drumm, Brookside, Ont. a

Housekeeper wanted for farm home, where there are six in the family. Must be honest and truthful. No. 813. a

Housekeeper wanted on a farm in Perth County. Housework light. Two inmates, self and man. Will have to milk and take charge of poultry. Must have good health, also honest and trustworthy. Will pay \$9 a month to a suitable person. Middle-aged woman preferred. Good house. Give references. No. 812. a

Situations Wanted.

Position wanted on farm out West, by young man 18 years old. No. 931. a

Situation in cheese factory wanted by a young man with 8 months experience. For particulars apply to C. Turnbull Scott, Lakelet, Ont. b

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

Alphabetical List of Institutes, Giving Date and Place of Each Annual Meeting.

Addington, Centreville, June 15.
Algoma, C., Sault Ste. Marie, June 8.
Algoma, E., Sowerby, June 15.
Amherst Is., Stella, June 8.
Brant, N., St. George, June 15.
Brant, S., Brantford, June 8.
Brockville, Lyn, June 19.
Bruce, C., Paisley, June 6.
Bruce, N., Warton, June 4.
Bruce, S., Walkerton (Fruit Station), June 18.
Bruce, W., Tara, June 8.
Carleton, Stittsville, June 11.
Cornwall, Cornwall Centre, June 4.
Dufferin, Shelburne, June 3.
Dundas, Winchester Springs, June 4.
Durham, E., Millbrook, June 7.
Durham, W. (place not named), June 1.
Elgin, E., Aylmer, June 11.
Elgin, W. (not heard from).
Essex, N. (not heard from).
Essex, S., Leamington (Fruit Station), June .
Frontenac, Kingston, June 4.
Glengarry, Alexandria, June 20.
Grenville, S., Mattland (Fruit Station), June 12.
Grev, C., Clarksburg (Fruit Station), June 25.
Grey, N., Owen Sound, June 10.
Grey, S., Durham, June 4.
Haldimand, Cayuga, June 8.
Halton, Milton, June .
Hastings, E., Plainfield, June 11.
Hastings, N., Madoc, June 11.
Hastings, W., Belleville, June 15.
Huron, S., Hensall, June .
Huron, E., Brussels, June 4.
Huron, W., Nile, June 18.
Kent, E., Thamesville, June 15.
Kent W. (not named), June 1.
Lambton, E., Forest, June 14.
Lambton, W., Bridgen, June 12.
Lanark, N., Almonte, June 15.
Lanark, S., Perth, June 20.
Leeds, N., and Grenville, N., Merrickville, June 1.
Leeds, S., Lansdowne, June 1.
Lennox, Napanee, June 15.
Lincoln, St. Catharines (orchard of T. Archibald), June 1.
Manitoulin, E., Manitawaning, June .
Middlesex, E., London, June 1.
Middlesex, N., Ailsa Craig, June 1.
Middlesex, W., Appin, June 4.
Monck, Wellandport, June 18.
Muskoka, C., Utterson, June 8.
Port Carling and Bala, Port Carling, June 15.
Nipissing, W., North Bay, June .
Muskoka, N., Huntsville, June 1.
Muskoka, S., Bracebridge, June 5.
Norfolk, N., Delhi, June .
Norfolk, S., Vittoria, June 6.
Northumberland, E. (Fruit Station), Trenton, June 11.
Northumberland, W., Cobourg, June 1.
Ontario, N., Cannington, June 6.
Ontario, S., Myrtle, June 4.
Oxford, N., Embro, June 11.
Oxford, S. (not named), June 11.
Parry Sound, E., Sundridge, June 4.
Parry Sound, W., Parry Sound, June 8.

Peel, Brampton, June 4.
Perth, N., Milverton, June 4.
Perth, S., (not named).
Peterboro, E., Norwood, June 3.
Peterboro, W., Peterboro, June 1.
Prescott, Vankleek Hill, June 15.
Prince Edward, Picton, June 8.
Renfrew, N., Beachburg, June 20.
Renfrew, S., Renfrew, June 8.
Russell (not heard from).
Simcoe, C., Craighurst (Fruit Station), June 5.
Simcoe, E., Orillia, June 4.
Simcoe, S., Cookstown, June 3.
Simcoe, W., Duntroon, June 12.
Stromont, Newington, June 4.
St. Joseph Island, Marksville, June 1.
Victoria, E., Fenelon Falls, June 7.
Victoria, W., Lindsay, June 12.
Waterloo, N., Waterloo, June 11.
Waterloo, S., Haysville, June .
Welland, (not heard from)
Wellington, C., Hillsburgh, June 4.
Wellington, E., Kenilworth, June 7.
Wellington, S., Guelph, June 8.
Wellington, W., Drayton.
Union, Clifford, June 5.
Wentworth, N., Freelon, June 5.
Wentworth, S., Visiting Fruit Stations.
York, E., Agincourt, June 5.
York, N., Newmarket.
York, W., Weston.

The Farm and Its Privileges.

By T. M. Robinson, Gravenhurst, Ont.

It is safe to say that there is a tendency in human nature to belittle, if not to decry, the life employment that has fallen to each. There is an idea that if our lines had fallen to us in other places we could have done better. We are apt to think that our energy and perseverance deserve a better reward than has fallen to our share. We nearly always see the dark side of our cloud and the bright side of our neighbor's. While we may assume that this holds good in most walks of life, it is particularly true of the farmer. While he looks with envious feelings on the apparent success of the merchant or the manufacturer, he forgets that in many cases their success is only apparent, and forgets the numbers that he could count in his own experience who started with good prospects, flourished for a time like the proverbial "green bay tree," and were swept away and lost sight of. Could the farmer know the anxious days and sleepless nights passed by many men in the commercial world who appear to be living in luxury, he would hesitate before wishing to change places with them. That life on the farm entails much hard work goes without saying, but that we enjoy—or might enjoy—many privileges that do not fall to the lot of workers in towns is also true.

WE OFTIMES BUY WHAT WE DO NOT
NEED.

It must be obvious to all that the whole social structure rests on the farm and its products, and it is difficult to see how this, the most im-

portant employment, upon which the others depend, comes to day to be so low in the social scale. The farmer owning the farm that he cultivates should be the most independent man in the community, but unfortunately this is not always the case. That "progressiveness" which is so much admired on every side is much to blame, as inducing us to buy what we do not need, or what at least we could do without until we had the money in hand with which to pay.

The farmer should supply himself and those dependent on him with the necessities of life produced on the farm, and out of his abundance such luxuries as he can afford. We, as a class, are too apt to yield to the persuasions of those who make a business of inducing unwilling purchasers to buy what they have no particular need for, and thus things that would contribute materially to the convenience and comfort of the home are neglected.

I would like to impress on all, more particularly the young, whose habits are not yet formed, the necessity there is of keeping out of debt. Remember the wise advice:

"Neither a borrower or lender be,
To loan oft loses both itself and friend,
And borrowing dulls the edge of husbandry."

And that "the borrower is ever servant to the lender." No man can preserve his independence and be in debt, and in losing that the farmer loses one of the most valued of his privileges.

FARM LIFE SHOULD BE WHOLESOME.

Another of the privileges of the farm is the healthfulness of the employment. We must remember, however, that it depends very much on ourselves whether we embrace these opportunities. We who live in the country make, in a great measure, the conditions in which we live, and to make those conditions as nearly perfect as possible should be our aim. Whether our dwelling is large or small there are points that should not be neglected, such as the location of the house on gently rising ground with good drainage, natural if possible and artificial if necessary. This is indispensable, as is also an abundant supply of good water for the house and the stock. In a country so well supplied with water as Canada it is a pity that so much impure water is used. To this cause may be traced many of the periodical ailments that we are subject to.

SHORTER HOURS AND MORE FORE-
THOUGHT.

The homestead should be sheltered by trees, but not too many nor too close to the building. In Canada there is no good reason why a house should be standing out on the bleak hillside, as some may still be seen. It is pleasing to note the growing improvement in this direction, and no doubt in the future groves of trees will dot the landscape of Ontario. It

to the present time all the effort seems to have been expended in trying to get them out of the way. With these points attended to, and with more sunshine in our bedrooms and better ventilation, farmers and their families would be taking advantage of another of their great privileges. As a rule the early settlers worked too hard. Shorter hours and more forethought would accomplish as good results in the end, and the young people would have no cause to dread the unending round of toil that has frequently driven them to worse employments.

In the home life on the farm lies the greatest privilege, and there also devolve the greatest responsibilities. It is at the fireside that can be cultivated those qualities that go to constitute individual and national greatness. It is to home training that we must look for the formation of those high principles that are the basis of a sturdy self-reliance, which alone can build up a national character.

CHARACTER BUILDING.

In looking over a list of names of men who have made the century just closed, what do we find? The men who have stamped their names indelibly on the pages of its history are those who have been brought up under home influence which have developed their individual character. To what can we attribute the influence of Scotland and Scotchmen in the shaping of the world's destinies to-day but to the influence of Scotland's homes? Who will say that we in Canada, and we in Muskoka particularly, have not a great responsibility along this line? On the farm our opportunities for the development of character are greater than anywhere else, and it behoves us to make our privileges serve the need of the age.

In cities and towns, and even in villages, with children of all classes herded together in public schools, exposed to the worst influences of the worst members of the community, there is no restraining influence but that of home, and if that is so weak as to be hardly felt, there is a bad prospect for the future of the country. It is therefore our duty as well as privilege to cultivate, by every means in our power, a strong home tie that will bind not only the child and the youth, but that will last all through life. To do otherwise is to miss one of the greatest satisfactions of advancing age.

The strong migratory instinct which is so strong in some of us is responsible for the unattractive homes. As long as the farm is regarded as a temporary residence, as a speculation in which so much capital is invested, so long will it be unattractive and un-homelike.

READING MAKETH A FULL MAN.

The opportunity afforded by the long winter evenings on the farm, where there are few of the outside attractions offered by the towns and villages, should not be overlooked.

Whether the heads of the family are readers or not, it is their duty to provide good reading for their family. Let it be entertaining, and such that it will create a taste for solid reading. It should never be made a task. The habit of reading aloud should be encouraged as an accomplishment as well worthy of cultivation as music, and more easily acquired. It is a pleasure to note that the popular taste for "Detective Stories" has declined, and a better class of literature is taking its place. Simple games are a help in making the evening pleasant, but they should not be carried to extremes, and games of chance should be excluded from the family circle. By these and other means the fireside may become a strong element in the education of our successors in the battle of life.

It is not necessary to mention that in the home education the great principles of truthfulness and integrity should be firmly implanted. Always remember that example has much more weight than precept. Never deviate from the truth in any particular, and cause the children to lose faith in the parents. If we are to be satisfied with our calling in life, we must walk honorably before all men, and if so, we will have no reason to blush for our profession, but every reason to be proud and self-respecting, for "An honest man may stand before princes."

RESPECT YOUR CALLING.

My apology for the mention of so many points that all know as well or better than myself, is because of my strong conviction that we do not fully appreciate our advantages, and that we are lacking in self-respect and respect for the calling we follow. We should inculcate to the best of our ability a sense of the independence, morality, healthfulness and contentment which is the heritage of every tiller of the soil. We must remember that the future of the race depends upon the principles that are instilled in the mind of the young, and that home influence counts for much more than any public school system that has ever been introduced. We must bear in mind that we cannot shuffle off our responsibilities and place them on the school teachers or Sunday-school teachers, but that they are our own.

I would add that now, at the opening of a new century—with the world-encircling minute guns still in our ears, and dirges not yet silent that proclaimed the end of a glorious epoch in our country's history—now, when every day shows greater combination of capital for its self-protection, we should rouse ourselves, and prepare for what the new century has in store.

Although we do not see what we could do individually toward making history, yet, like the coral insect in its cell, we are collectively building the foundation of a nation, and we are working with the hope that in laying these foundations firm, the superstructure may be as lasting as the ages.

Treatment of Mares in Foal.

A cruel and reprehensible practice with many farmers is to work their mares constantly and severely up to the time of foaling. They are not aware, perhaps, that it is productive of serious injury, not so much to the mare as to the colt. At no period during gestation should a mare be put to very hard work, and for at least a month before foaling she should be required to do none other than the lightest labor, and for 10 days before foaling be relieved entirely of any work—receiving during the time the best of care. Food and attention then tell powerfully on the unborn colt and starvation and neglect of the mare equally so. There are occasions that often compel the working of a mare at this juncture, but no farmer has any business to breed horses who cannot afford to allow his mares the necessary rest and attention at this critical period. In many cases, too, mares are put to excessive work too soon after foaling. Nature has not had time to recover from the severe task. With the additional imposition of hard work, she is apt to run down in condition, and not supply proper nourishment to the colt, and thus is laid the foundation of another inferior horse. No mare should be put to work for a week or so after foaling, nor should heating food be given her for at least six weeks. Corn is especially objectionable, and not at all suitable, but chopped food, bran mash, oats and good hay or fodder are all proper, and should be given liberally.

It must be remembered that the mare, during the period of gestation, as well as after, has two lives to sustain, and more food is therefore required. When spring work is behind, and the plowing retarded, the temptation is almost irresistible to work mares in such condition a little harder and a little longer than either humanity or good judgment would dictate, and great care should therefore be taken lest by yielding to a supposed temporary necessity a practice be not acquired alike unwarranted by either humanity or economy. — *Baltimore Sun*.

Castle Garden, New York city, is a historic spot. It was originally a fort and afterward was transformed into a summer garden, and in that way derived the name it now bears. Half a century ago it was used for civic and military displays and receptions. In 1824 Lafayette revisited America, and a grand ball was given in his honor at Castle Garden, and President Jackson, in 1832, and President Tyler in 1843, were publicly received there. Later it became a concert hall, and there Jenny Lind made her first appearance in this country. In 1855 the immigrant depot was established within its walls. The present building at Castle Garden was erected after the partial destruction by fire of the original structure in 1876.

The Farm Home

A Song of Cleaning House.

Sing a song of cleaning house!
 Pocket full of nails!
 Four and twenty dustpans,
 Scrubbing brooms, and pails!
 When the door is opened,
 Wife begins to sing—
 "Just help me move this bureau here,
 And hang this picture, won't you, dear?
 And tack that carpet by the door,
 And stretch this one a little more,
 And drive a job I have for you:
 This closet door will never catch.
 I think you'll have to fix the latch;
 And oh, while you're about it, John,
 I wish you'd put the cornice on,
 And hang this curtain; when you're done
 I'll hand you up the other one!
 This box has got to have a hinge
 Before I can put on the fringe;
 And won't you mend that broken chair?
 I'd like a hook put up right there;
 The bureau drawer must have a knob,
 And here's another little job—
 I really hate to ask you, dear—
 But could you fix a bracket here?"
 And on it goes, when these are through,
 With this and that and those to do—
 Ad infinitum and more too,
 All in merry jingle.
 And isn't it enough to make
 A man wish he was single? (Almost.)
 —Exchange.

Adventures of a Queer Boy.

"Amid the flood of anecdotes connected with the late Queen and royal family that has been pouring through the columns of the press," writes Edward Vizetelly in the *Free Lance*, "I do not think anyone has called attention to the adventure of the 'boy Jones' at Buckingham Palace a few years after the Queen's marriage. This young fellow was twice caught within the royal residence without anyone being able to explain how he got there. On the first occasion he was surprised by a porter early in the morning leisurely surveying one of the apartments. On being searched nothing of importance was found upon him, but he had made up a bundle containing a sword, a pot of bear's grease and some old letters.

"He was covered with soot from head to foot and looked like a sweep, but denied that such was his calling, pointing out that his sooty appearance was due to his having concealed himself in chimneys in the daytime. For a while he had occupied the vacant bedroom of one of the equerries, and had left the sooty imprint of his frame on the sheets. He stoutly declared that his intrusion was not for the purpose of theft, but to find out how royalty and 'great swells' like royal footmen jived. His examination before the magistrate caused great amusement. He admitted that he had been in the palace on previous occasions, and for days together. In fact, he had 'put up there,' he said. He had found it a very comfortable place. The apartment he liked best was the drawing room. During the day he hid behind the furniture, when he was not up a chimney, but late at night, when

everyone had gone to bed, he walked about, went into the kitchen and got his food. Then he related that he had seen the Queen and her Ministers in council and had listened to all they had to say. When asked if he had worn the same shirt all the time he calmly replied:

"Yes, when it was dirty I washed it in the kitchen."

"And then he volunteered the information that he knew his way all over the palace, and had been right through it—in the Queen's apartments and all. He had found out that her Majesty was very fond of politics, he said.

"This lad revealed himself such a pleasant vagabond, with his amusing ways and astounding impudence, that no very serious punishment was inflicted on him. He was merely put away for a short term. Nor did he fare very badly when caught a second time. On this occasion he was caught crouching in a recess, and, being dragged out of it, was taken to the police station. He then told the magistrate that he had concealed himself under a sofa in one of the Queen's private apartments, and had overheard a long conversation between her Majesty and Prince Albert. He was sent to the House of Correction for a few months, in the hope of breaking him of the mania for intruding on the sovereign's privacy, as the offence was mildly termed. But soon after his release he was found prowling in the vicinity of the palace. Finally the authorities induced him to emigrate to Australia, where he evidently blossomed into a well-to-do colonist. It was soon after these events that Baron Stockmar was brought over here to introduce order and discipline into the royal residence."

Hints by May Mantou.

Woman's Blouse Waist, No. 3812. To be made with or without the Fitted Lining.

The simple blouse waist with a sailor collar is always effective and is prominent among the season's styles. The original, from which the drawing was made, is of albatross in pastel blue, and is trimmed with bands of narrow black velvet ribbon and the singularly successful imitation Russian lace, and includes the fitted lining. The design, however, is well-suited to a variety of materials, both made with skirt to match and as an odd waist. Pique, duck, Mercerized pongee, linen batiste, madras and chevot are all available washable fabrics, while the various waist cloths and simple silks are equally appropriate. When made from any of the latter the lining should be used; but gowns that require to be laundered are better without the foundation and should have the V-shaped shield attached to the fronts beneath the collar.

The lining fits smoothly and closes at the centre front. The waist proper is smooth across the shoulders at the back, but the fronts are each laid in



3812 Woman's Blouse,
 32 to 40 in. bust.

two tiny plats that provide soft folds below and both fronts and back are drawn down in gathers at the waist line. The sailor collar is joined to the open neck. The shield and stock collar are attached permanently to the right side of the lining and hooked over into the left. The sleeves are in bishop style, finished with straight cuffs.

To make this blouse for a woman of medium size $3\frac{7}{8}$ yards of material 21 inches wide, $3\frac{3}{4}$ yards 27 inches wide, $2\frac{5}{8}$ yards 32 inches wide, or 2 yards 44 inches wide, will be required.

The pattern 3812 is cut in sizes for a 32, 34, 36, 38 and 40 inch bust measure.

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

The Clothes Moth.

We may marvel at grubs growing fat and succulent upon such unpromising fare as old timber affords, but that achievement is improved upon by the insects that prefer to draw their entire nutrition from woolen fabrics, fur horsehair, feathers, tanned leather, and the like, and apparently without ever a desire to "wet their whistles" by anything of a juicy nature. Any small, silvery-winged moth that is seen flitting about the house is regarded as a "clothes moth," but every one killed is not an enemy, for there are a number of moths of similar size and appearance that have come from outdoors and have been occupied as grubs in destroying green leaves. It is an error to suppose that it is the clothes

moth that does the mischief, though by destroying the moth we prevent the laying of innumerable eggs from which come the consuming larvæ, whose cutting jaws would be actively and incessantly employed in mutilating choice fabrics and valuable furs. These caterpillars are rarely seen by the housewife, because their first care on leaving the eggs is to disguise or hide themselves.

The clothes moth proper has yellowish-gray wings, with three or four in definite brownish spots upon them, and in consequence of its marked preference for furs it is known to science as *tinea pellionella*.—*Good Words*.

Lettuce.

Lettuce is often allowed to waste unnecessarily. It is not always possible to select a close, compact head, with a large portion of light, curly leaves, but when your specimen has many loose, tough leaves, do not throw them away. Wash them and nip off any part that shows signs of decay. Rinse each leaf separately to be sure it is free from grit, lay the inner leaves, such as may be used for a salad, in regular order in a wet napkin, and put them away in a cold place. Break up the tough, outside leaves and cook them until tender in boiling water, as you do any greens. They may be cooked with the blanched celery leaves and tough stalks, or with spinach; then drained, chopped, and seasoned with butter, salt, and pepper.

Some Dainty Fish Dishes.

Pike or Pickerel.—Clean and wash a fresh fish of three or four pounds' weight. Tie it in a piece of netting, or lay it on the drainer if you have a fish kettle. Cover with boiling water, add two level tablespoons of salt, two tablespoons of vinegar or lemon juice, a sprig of parsley, a dozen pepper corns, and one small onion, sliced. Let it cook slowly, a mere bubbling, about half an hour. Lift the fish carefully from the kettle, drain it, and slide it off on to a hot dish, on which is a folded napkin to absorb the moisture. Garnish with parsley and lemon points, and serve with horseradish cream sauce. Cook two rounded tablespoons of flour in one rounded tablespoon of butter till smooth; then stir in two cups of scalded cream. When smooth, add four tablespoons of fresh, grated horseradish. If this cannot be procured, season with salt and pepper, and add two heaped tablespoons of capers.

Muskallonge.—This is the pike of the Great Lakes. Small specimens may be cooked whole, baked or boiled, but as they are a slimy fish, they should be scalded with hot water before they are cleaned. Large fish are sold in thick portions for boiling or baking, and in slices for frying. For a salad, have several slices of the fish cut one inch thick, remove the skin and bones, cut them in pieces two

inches square, lay them on a plate or on the perforated plate of a steamer, and steam them about fifteen minutes. Drain well, and, when cold and ready to serve, dip each piece in thick mayonnaise; lay them on lettuce leaves, or a bed of watercress, and sprinkle the top with minced capers, pickles and parsley.

Halibut a la Conant.—A slice of halibut from the lower part, cut one inch thick. Scrape the skin, and wipe with a clean, wet cloth. Season with salt and pepper; lay it in a pan, and spread over the top surface one tablespoon each of butter and flour, creamed together. Cut two thin slices of fat salt pork into narrow strips and lay them diagonally across the top. Bake about twenty minutes; or it may be broiled under the gas flame. Lay it diagonally across a hot platter, and pour white sauce in the lower right corner, and arrange a mound of Parisienne potatoes in the upper left corner. Garnish with parsley and lemon points.—*American Kitchen Magazine*.

The Well-Dressed Girl.

Hints for Her Guidance When Choosing Her Summer Attire.

White holds first rank this summer, as it did last, for children, young girls and young women, and for older ones also when combined with black.

White lawn graduation gowns this year are trimmed with dainty hemstitched or lace trimmed ruffles upon the skirts, the waists being tucked and hemmed, with embroidered or lace insertion set in.

White and colored wash silk shirt-waists, made like ordinary cotton ones, will be much worn this season.

Wide sashes of soft ribbon used as belts, and ending with long ends coming to the edges of the skirts, are to be used with summer gowns.

Collars are made from two to three inches deep, and over foundations that may be bought in all sizes. As a rule the collar is made of the dress material and trimmed as the waist is.

Many of the parasols this season are of striped silk in white colors, and many others are of plain black and the dark shades. The sticks are long, and as a rule are less ornate than they were a year ago.—*May Ladies' Home Journal*.

Improved Proverbs.

Quacks are stubborn things.
It's a wise girl who knows her own mind.
Society's the mother of convention.
Home was not built in a day.
Modesty is the best policy.
Circumstances alter faces.
A rolling gait gathers remorse.
All's not old that titters.
Let us eat, drink, and be married, for to-morrow we dye.
Charity uncovers a multitude of sins.—*The Smart Set*.



To produce the best results in fruit, vegetable or grain, the fertilizer used must contain enough Potash. For particulars see our pamphlets. We send them free.

GERMAN KALI WORKS,
93 Nassau St., New York.

HORSEMEN! THE ONLY GENUINE IS
GOMBAULT'S
CAUSTIC BALSAM.

Take genuine without the suspicion of
The Lawrence-Williams Co.
Sole Agents and Importers for the
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The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle, SUPERSEDES ALL CAUTERY or Every bottle is warranted to produce scab or bluish. PRICE. Impossible to give satisfaction. Price Express, charges paid, with full directions for its use, send for free descriptive circulars.
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The worst possible Spavin can be cured in 45 minutes. Curbs, Splints and Ringbones, just as quick. Not painful and never has failed. Detailed information about this new method sent free to horse owners.
Write to-day. Ask for Pamphlet No. 1.
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Cheese and Butter

Makers of these articles, in many instances, do not pay the necessary attention to the quality of the salt they use. Some people think that "salt is salt," and it does not matter where it comes from or who makes it. This is a great mistake, for it is essential that to produce the best Butter or Cheese nothing but the purest salt should be used.
The number of prizes obtained by users of

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COLEMAN'S" DAIRY SALT

at the various exhibitions is conclusive proof that these brands of salt stand unrivalled. For prices, etc., address

R. & J. RANSFORD,

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The Farming World

▲ PAPER FOR FARMERS AND STOCKMEN.

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

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CONFEDERATION LIFE BUILDING
TORONTO

Business Notes

Stock advertisements, pages 972 and 973.

To accommodate land-seekers in New Ontario, the Commissioner of Crown Lands has arranged a special 15-day excursion to Temiskaming. This excursion furnishes an excellent opportunity to parties desiring to see New Ontario. See advertisement on front cover.

Leaky shingle roofs may be made water-tight and durable without removing the shingles by covering the roof with Red Star Brand Ready Roofing, manufactured by the Paterson Co. In their advertisement on front cover will be found cuts to show how it is laid. It is very economical, durable and fire-proof. Send for further particulars and samples to their address, Berkeley and King streets, Toronto.

A big thing is offered by the Atlantic Refining Co., manufacturers and importers of all kinds of oils, grease and specialties. They have an especially prepared elastic carbon paint, adapted for farm buildings, in fact, any out-door painting. Absolutely no connection with any combine or trust.

Housekeepers should learn all particulars of the Ideal Steam Cooker, sold by the U.S. Specialty Co., Toronto. A whole meal can be cooked over one burner, on gasoline, oil, coal or wood stove. Meats and poultry, no matter how tough, are made tender and palatable. Write for their prices, which are very reasonable considering the advantages derived.

The great demand for incubators shows how poultry-raisers know a good thing when it comes their way. A visit through the factory and poultry yards of J. C. Daniels is very interesting. He finds it difficult to keep pace with the orders. The Cyphers is a machine warranted, no moisture required, and a girl or boy nine years of age can run it perfectly safe.

Wm. Reutecke, of Vonn, Ill., writes to The Lawrence Williams Co. the following: "I used Gombault's Caustic Balsam on a horse last spring for splint, and it proved alright." This balsam is recommended by everyone who has used it.

One Teaspoonful of Pain-Killer in hot water sweetened will cure almost any case of flatulency and indigestion. Avoid substitutes, there is but one Pain-Killer, Perry Davis'. 25c. and 50c.

QUESTIONS AND ANSWERS

Clover and Other Ensilages.

J. A. G., Petrolia, Ont., writes:

(1) Will clover put into a silo alone keep for ensilage? If so, at what stage would it be best to cut it?

(2) Would peas and oats (sown at the rate of 2 bushels of oats to 1 bushel of peas) cut green and put into a silo alone keep for ensilage? If so, at what stage of growth would it be best to cut them?

(3) In what proportion would you mix clover ensilage, peas and oat ensilage and corn ensilage to make a well-balanced ration for cows?

Answered by J. H. Grisdale, Agriculturist, Central Experimental Farm, Ottawa.

In reply to your correspondent I would say:

(1) Clover put in the silo alone will keep for ensilage, and should be put in just freshly cut when in full blossom. Our plan has been to cut early in the morning, and put into the silo with the dew on. We find that it succeeds when put in long, but anticipate better results where it is cut.

(2) Peas and oats sown at the rate of 2 bushels oats and 1 bushel of peas, cut green, will make good ensilage. We have not tested this at Ottawa yet, but on the Farms at Brandon and Indian Head this or similar material has been used with good success. They should be cut when in the dough state.

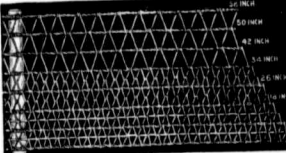
(3) It would be impossible to make a properly-balanced ration from any mixture of the ensilages mentioned. A fairly good ration would be one-third of each, as it would be both palatable and of good composition.

From West to East.

Mr. J. W. Mitchell, who for the past few years has held the position of superintendent of the Government creameries in Assiniboia, has been transferred to the east, and will in future act as Dairy Superintendent for the Maritime Provinces on the Dairy Commissioner's staff.

Leaves for New Zealand.

Mr. W. M. Singleton, Newboro, Ont., leaves this month for New Zealand, where he will act as chief assistant to Mr. J. A. Kinsella, the Canadian who succeeded Mr. J. C. Ruddick as Dairy Commissioner for that colony. It is gratifying to Canadians that they are being sought for in important work of this kind. Canada's reputation as a great dairy country cannot be discounted abroad.



Ellwood Steel Wire Fences
Six styles—18 to 58 inches—best steel wire, heavily galvanized. Expansion and contraction provided for. Every rod guaranteed. Sold by local agents. If no agent in your town write to the makers.
American Steel & Wire Co., Chicago or New York.



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The Perfected Product of Many Years' Experience.
Also Makers of Steel Windmills and Waterworks Outfits, Etc.
WRITE US.

GOLD SHAPLEY MUIR & CO. BRANTFORD CAN.

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Windsor Salt makes good butter because it dissolves easily and quickly, and, too, because the butter receives the full goodness of each flake of the Salt and the delicate flavor of pure Salt.

Windsor Salt

Best grocers sell it.

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Limited
WINDSOR, : : : : ONT.

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"RESTAURANT" TORONTO

Dinner for 20c.

6 Dinner Tickets \$1 Served from 11.30 to 3

and from 6 to 8

Farmers and their wives visiting Toronto will find this to their taste.

When writing to our advertisers, it will be to your advantage to mention "The Farming World."

Eastern Dairymen Meet.

A very important meeting of the board of directors and instructors of the Eastern Ontario Dairymen's Association was held at Brockville on May 9, Mr. John R. Dargavel, chairman for this district, was in the chair. There were present: J. A. Ruddick, chief of the Dairy Department, Ottawa; instructors Publow of Perth, Zufelt of Chesterville, Purvis of Maxville; directors W. E. Eager of Morrisburg, J. R. Dargavel of Newboro'; president Derbyshire of Brockville, and secretary R. G. Murphy of Elgin. For some years all the instructors have done the work of inspection in connection with the milk supplied the factories as well as instruct the makers; but at this meeting Messrs. Publow and Zufelt were named to attend solely to the work of instruction, while the others will continue as before. It was also decided to recommend the manufacture of an 80-pound cheese as the most suitable for the market, and to insist on the use of a better quality of box.

Pony Breeders' Society.

A society has recently been formed for the purpose of bringing into prominence ponies which could be recognized as a distinctive and representative type of Canadian ponies, to look after the interests of pony owners and breeders throughout Canada, as far as possible, and to secure to all who desire to exhibit their stock the best conditions possible through the managers of exhibitions, to bring dealers and breeders of ponies into closer communication with one another and to put the business if possible on a proper and paying basis. The officers of the society are: David Miller, Markham, president; W. H. Knowlton, Toronto, treasurer; H. M. Robinson, Danforth road, secretary, and Thos. E. Knowlton, corresponding secretary. The society is desirous of enrolling as members as many as possible of those throughout the Dominion who are breeders or dealers in ponies or who take interest in matters of this kind.

The Toronto Exposition.

Good Prospects for a Great Show in 1901.

In expectancy of an unusually large number of visitors this year from eastern and western Canada and the United States, the directors of the Toronto Industrial Exhibition, which is to be held from the 26th of August to the 7th September next, are making extra efforts to make another advance onwards and upwards. Manager Hill has received a large correspondence from distant points enquiring as to the date of Canada's Great Fair, all tending to show that a very large number of prominent agriculturists and manufacturers who have never before been at the Industrial propose to take in the Pan-American and the Toronto Exhibition at the same time.

Plans have been prepared for the

erection of an immense new manufacturers' or main building containing 100,000 square feet of floor space, and estimated to cost over \$100,000; a new dairy building 240 feet long by 60 feet wide, divided into different departments for the exhibit of butter and cheese, dairy utensils and a working dairy, and costing \$15,000; and a new art gallery costing \$10,000. A by-law to provide the money for the erection of these buildings will be voted on by the citizens on the 31st of May, and if carried, as there appears to be every probability of its being so, the work will be proceeded with at once. In the event of the erection of a main building it is proposed to use the present crystal palace for the exhibit of vehicles, and the present music pavilion will be set apart as a "Woman's Building." Other extensive improvements are also contemplated.

The prize list has been revised, and will be found to contain many special and attractive features, including judging competitions for farmers and farmers' sons, butter-making competition, sheep-shearing competitions, and other competitive tests in several departments. As the Toronto Fair immediately precedes the show of cattle at the Pan-American, special inducements are offered to breeders to show at Toronto. The list of prizes offered for Shorthorns alone amount to \$2,200, half of this amount being given by the Industrial and the other half by the Shorthorn Breeders' Association. Several specials are also offered in other classes.

As the manufacturers of Canada are not exhibiting to any extent at Buffalo, they are going to make an extra display this year at Toronto. The prize lists will be ready for distribution about the end of this month, and as there will undoubtedly be a much larger attendance of visitors from outside of Canada at the Toronto Fair this year than usual, and who will without doubt be on the lookout for some good stock, the breeders of Ontario should put forth a special effort to make the display one that will be a credit to this country.

Two challenge trophies will be given in the dairy department, one for the best exhibit of cheese and the other for the best exhibit of butter. These are given over and above the usual prize list, which will have as many attractive features as heretofore.

Central Canada Fair.

Secretary McMahon, of the Ottawa Fair, is busy getting ready for next fall's exhibition, which will probably excel all previous efforts. The prize list will be ready for distribution about the 1st of June. The number of gold medals to be given this year will be largely increased. There will be one for each division in the live stock classes. In all probability a department will be provided this year for a machinery exhibit by farmers. The management is at work on this feature.

Poultry

Parkhill Poultry Yard

Offers Eggs from the best of stock of the following varieties: L. Brahmas, Black Langshans, W. and Barred Rocks, Golden Silver Laced and W. Wyandottes, Buff, Brown and W. Leghorns, S. S. Hamburgs, and Golden Seabright. \$1.00 per 13 eggs. Pekin Duck eggs, \$1.00 per 13. M. B. Turkey eggs \$2 per 9.

D. A. GRAHAM, Parkhill, Ont.

Yorkshire Hogs, White and Barred Rocks, Rouen Ducks and Bronze Turkeys.

Eggs from White and Barred Rocks and Ducks, \$1 per setting; Bronze Turkey eggs \$2.50 per setting. T. J. COLE, Bowmanville, Ont.

ENGLESIDE FARM

Eggs for hatching from high-class poultry. Ideal types of table food with great laying and exhibition qualities.

Barred and White Plymouth Rocks, Silver-Laced and White Wyandottes. Selected matings from noted breeders in the United States and Canada, including A. C. Hawkins, Lancaster, Mass. Prices, \$1.00 and \$1.50 per setting. Liberal reduction on incubator lots.

J. W. NEWMAN,

Box 457
Phone 246

Brockville, Ont.



CYPHERS INCUBATORS and BROODERS

Have no equals. In use in seven experimental stations in Canada. Warranted to outmatch any other machine on the market.

A girl or boy nine years of age can run it. Perfectly safe.

C. J. DANIELS, 196 River St., Toronto
Sole Canadian Agent.

SHROPSHIRE

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

W. D. MONKMAN, Bond Head, Ont.

Choice B. P. Rocks

Am not breeding for fancy or feathers, but size and quality, what farmers want. Old cocks in use weigh ten pounds each. Eggs \$1.00 per 13. Apply to

F. X. BEINGERSNER, Mildmay, Ont

A CHANGE OF SEED PAYS

I can supply the following varieties of potatoes: Early Varieties—Manes Early Thoroughbred Michigan Early, and Early Six Weeks. Late Varieties—Sir Walter Raleigh, Uncle Sam, American Wonder, Great Divide, and First Choice. Also Salzer's Big Four Oats, early and productive.

Large English Berkshires and Ohio Improved Chester White Swine. Young stock for sale, registered and express paid. Prices reasonable.

TILMAN E. BOWMAN, Berlin, Ont.

When writing to advertisers please mention **The FARMING WORLD.**

Quarantine Regulations in the Territories.

Commissioner Perry, of the N.W. M.P., has charge of the quarantine regulations throughout the Territories, and a departure has been made which it would be well cattle men should notice. According to orders of the Government of the United States breeding cattle and cows for export to that country must be inspected before they will be allowed to enter the United States. The Department of Agriculture at Ottawa, however, has arranged with the Department of Agriculture at Washington that certificates of inspection will be accepted from Dr. Hargraves, V.S. of Medicine Hat, for the district west of Moose Jaw, and from Dr. Little, V.S. of Winnipeg, for the district east of Moose Jaw and for Manitoba. This it will be seen is a matter of great convenience and importance.

In regard to Blackleg, too, a convenient arrangement has been made, in order to give every facility to owners of cattle. The Department of Agriculture at Ottawa will issue Blackleg vaccine at cost price. This remedy is in two forms, a cord vaccine that can be applied by anybody, and also a lymph that requires an injection administered by a veterinary surgeon. Dr. Hargraves has been appointed travelling inspector, and will be sent to any point where Blackleg shows itself; and will also furnish the vaccine to applicants; or if communication with him be not easy, Commissioner Perry, Regina, will see to the matter. It will be remembered that Blackleg and its vaccine was discussed a year ago by the Regina Agricultural Association, and a plan recommended on the lines that are now being carried out.

Another Egg Preservative.

Still another system for preserving eggs for export is to hand. To keep eggs fresh, the *Illustrierte Landwirth Zeitung* suggests the following method: "Take new laid eggs, as new as possible; free them from all impurity with a damp linen cloth, taking care afterwards to see that they are rubbed thoroughly dry. Then pour a few drops of boiled linseed oil into the palm of the hand, and coat each egg well over therewith, so that the oil gets into every pore of the shell, and lay on a clean shelf, well protected from dust, to dry. On the third day a fine skin will have formed over the egg, which is then in a manner hermetically sealed up and ready to pack away in a cool, dry place in the usual way. Care must be taken not to employ either too much or too little oil. In the first case the oil takes long to dry, and when packed away the egg is apt to stick, and so runs in danger of getting broken when being had up for use; in the second case, the egg, of course, is not properly protected, and is sure to become stale. A little practice, however, soon enables any one to find out the happy medium."

Sheep

SHAWANOO HILL FLOCK of Cotswolds
 We breed for Mutton and Wool
Have for Sale
 50 shearing rams, 30 shearing ewes, and 100 lambs, good quality and excellent breeding.
JOHN RAWLINGS,
 Forest, G. T. R. **RAVENSWOOD P. O. ONT.**

THE MODERN WAY TO DESTROY SHEEP TICKS
 is by the use of
INSTANT LOUSE KILLER

It is not a dip, but a powder, that can be applied in any weather. No slop, no muss, no danger.



There is no profit in letting ticks sap the life out of your sheep during winter, and there is no longer any call for it. With **INSTANT LOUSE KILLER** the weather cuts no figure. Examine your sheep at once, and you will probably find ticks and lots of them.

Don't wait on the weather, wait on the sheep with a package of **Instant Louse Killer**. Guaranteed.
 Put up in one-pound packages, with perforated top, ready for use, very convenient.
PRICE 35 CENTS. Sold by dealers generally, or address

The Greig Manufacturing Co.
 Canadian Agents, Montreal



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

RIPPLEY'S COOKERS.
 Bell from \$10.00 to \$25.00. Made of boiler steel. No fire to rust or leak. Can't blow up. Guaranteed to cook 25 lbs. food in 2 hours, and to heat water in stock tanks 500 feet away. Will heat dairy rooms. Call for prospectus and prices mailed free.
RIPPLEY HARDWARE CO., Box 218
 (U.S. Post 7, Graston, Ill.) London, Ont.

OAK LODGE YORKSHIRES



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

BRETHOUR & SAUNDERS,
 Burford, Ontario

CHAMPIONS OVER ALL. BLOOD WILL TELL.
MAPLEWOOD HACKNEY STUD
 Property of **FREDERICK C. STEVENS, Attica, N.Y.,**
 Again Furnished **BOTH CHAMPIONS** at the **NATIONAL HORSE SHOW**
 STALLIONS IN SERVICE FOR THE COMING SEASON ARE

Langton Performer, Clifton 2d, Fandango,
ALL CHAMPIONS.

Magnificent young stallions and mares sired by the above stallions and out of mares equally famous always on hand for sale. Beautiful, high-acting carriage horses, bred, raised and trained at Maplewood, now ready for sale. Here you can purchase four-in-hands, pairs, tandems, single drivers, ladies' pairs and children's ponies. For further particulars address,
E. T. GAY, Manager, Attica, N.Y.

Cattle

SUNNYSIDE Shorthorns for Sale

5 BULLS, Eleven Months' Old
 3 red and 2 roan.
 Also a few **FEMALES**, all registered.
E. A. GARNHAM, | Stratfordville, Ont.

SHORTHORN BULLS

—for sale—
 Also a few **Heifers**
ALEX. BURNS, Rockwood Ont.

T. Douglas & Sons, Strathroy, Ont.

Breeders of
SCOTCH SHORTHORNS

(100 head to select from)
 Offer for sale 14 young bulls, and cows and heifers of all ages, of the most approved breeding, bred to (imp.) Diamond Jubilee—28861—, at head of herd. Farm one mile north of town.

MAPLE LODGE STOCK FARM.

Shorthorns For Sale.

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

GLEN CRESCENT SHORTHORNS AND OXFORDS.

A few shearing rams by imported "Royal Windsor 5th" and one two-year-old bull for sale.
J. W. WIDDIFIELD, Uxbridge, Ont

IMPERIAL HOLSTEIN-FRIESIAN STOCK FARM

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

W. H. SIMMONS,
 New Durham

RETTIE BROS.

HOLSTEIN-FRIESIAN BREEDERS
 A few choice young animals for sale. **RETTIE BROS., NORWICH, ONT.**

PURE-BRED STOCK

NOTES AND NEWS FROM THE BREEDERS

These columns are set apart exclusively for the use of breeders of pure-bred stock and poultry. Any information as to importations made, the sale and purchase of stock and the condition of herds and flocks that is not in the nature of an advertisement, will be welcomed. Our desire is to make 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.

Stewart Bros., Nepawa, Man., have recently bought a splendid Hackney. He is a compactly built, well proportioned horse, clean-limbed, standing 15.3 and weighing 1,300 pounds. Being only three years old, he has yet to make his mark, but, coming from such stock as he does, and being bred by that well-known horseman, Alex. Galbraith, of Janesville, Wis., there is room for believing that he is all that he looks to be—and that is saying a good deal. His appearance and action are sufficient to satisfy the most exacting, and, being tractable and hardy, is just the stamp of horse for the road and light farm work. Stewart Bros. purpose fitting him for the show ring, and will, therefore, use him very sparingly this season.

Mr. J. A. S. Macmillan has returned from the South, where he purchased the following stallions: Baron Henry, St. Christopher, Palestine, and two four year-old horses; also two Clydesdale mares and several pure-bred Shorthorn cattle. Baron Henry was sired by the champion Clydesdale stallion of Great Britain, Baron's Pride, the most fashionable and best stock-getter, standing at a fee of \$250. Baron Henry is also half-brother to Earl of Bombe, the champion Clydesdale of America, owned by N. P. Clarke, of St. Cloud, Minnesota. St. Christopher, a winner at the Highland Show, also at the Chicago International Live Stock Show, is a choice bred one and an excellent individual. Palestine is a very promising imported two-year-old, a valuable horse. A couple of four-year-olds, sired by Macgregor, make up the bunch of stallions. Two fine mares, one of them the noted mare that won second in her class at the Chicago Horse Show, 1897, to the mare, Andrew Montgomery, bought at Col. Holloway's sale, and exported to Great Britain. The balance of the car is filled with eight Shorthorns, six females and two bulls. Particular mention might be made of the female, Countess 3rd, imported from Lord Rosebery's Herd, Dalmeny Park, Edinburgh, Scotland, winner of first and champion at the Edinburgh Show, 1900, beating the cow that was first at the Highland Society Show; Sirling, also one of the aged herd belonging to N. P. Clarke that won the championship at the Chicago International Live Stock Show, 1900.—*Manitoba Free Press.*

Cattle.

The *Toronto Daily Star* gives the following account of some recent importations at Dentonia Park Farm: "There is great interest amongst dairy cattle breeders in the arrival in the city to-day of some twenty-one head of imported dairy cattle, veritable blue bloods of their respective breeds. These bovine aristocrats from across the Atlantic enjoyed the luxury of a palace horse car from New York to Toronto, and well might every pains be taken to give them comfort and safety on their long journey, since they represent a total value of some \$7,000 or \$8,000. Besides a herd of some fourteen Guernseys from the Island of Guernsey, many of them prize winners, there are six Ayrshires from Scotland, and, by no means the least important, a handsome Jersey male with a noble and famous ancestry in the far-famed Island of Jersey. These beautiful and valuable animals will doubtless add further triumphs to the winnings of Mr. W. E. H. Massey's well-known herds at Dentonia Park Farm, which place is to be their future home. This splendid importation is a distinct gain to the dairy breeding interests of Canada."

The Canadian Government have sent an officer specially to this country to apply the tuberculin test to all cattle over six months old for breeding purposes, and to milk cows, intended for export from the United Kingdom to Canada. This arrangement supercedes that which the test could hitherto be applied by veterinary surgeons in this country approved of by the High Commissioner. The officer appointed is Mr. J. G. Rutherford, veterinary quarantine officer of the Department of Agriculture, to whom communications regarding the testing of cattle should be addressed. His headquarters for the present are the Canadian Government Offices, 52 St. Enoch square, Glasgow.—*North British Agriculturist.*

The following is a summary of official records of Holstein-Friesian cows for the two weeks from April 15 to May 11, 1901, issued by the Superintendent of Advanced Registry for the United States: Fifteen full age cows during these two weeks averaged: Age, 7 yrs. 9 mos., 21 days after calving; milk, 412.6 lbs.; butter fat, 14.049 lbs.; equivalent butter 80 per cent. fat, 17 lbs. 9 ozs.; equivalent 85.7 per cent. fat, 16 lbs. 6.3 ozs. Three four-year-olds averaged: Age, 4 yrs. 3 mos. 29 days, 42 days after calving; milk, 372.9 lbs.; butter fat, 12.463 lbs.; equivalent butter 80 per cent. fat, 15 lbs. 9.3 ozs.; equivalent 85.7 per cent. fat, 14 lbs. 8.6 ozs. Eight three-year-olds averaged: Age, 3 yrs. 6 mos., 27 days after calving; milk, 355.6 lbs.; butter fat, 12.127 lbs.; equivalent butter 80 per cent. fat, 15 lbs. 2.5 ozs.; equivalent 85.7 per cent. fat, 14 lbs. 2.4 ozs. Six two-year-olds averaged: Age, 2 yrs. 21 days, 24 days after calving; milk, 277.9 lbs.; butter fat, 8.927 lbs.; equivalent butter 80 per cent. fat, 11 lbs. 2.6 ozs.; equivalent 85.7 per cent. fat, 10 lbs. 6.6 ozs.

The cattle industry of Carberry has assumed such magnitude that almost every week we can record shipments from here. This week Mr. Murphy shipped four cars of prime fat cattle, two cars for Vancouver and two going to Dawson City. This lot of cattle are considered the best shipment ever sent from here, the average weight of the bunch being 1,460 pounds each. Among the number, and without doubt the finest animal in the bunch, was the high grade heifer fed and bred by John Monroe, of Wellwood. The heifer, not yet four years old, weighed 1,870 pounds. It pays to breed good stock.—*Carberry News.*

Sheep.

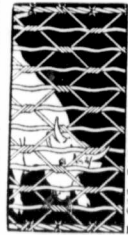
Sheepbreeders, especially those who breed Leicesters, will hear with regret of the death of Mr. John J. Simpson, of Pilmoor House, Hunmanby, one of the founders of the Leicester Flock Book Society. He has been in failing health for some time. Mr. Simpson possessed an excellent flock of Leicester sheep, and was a successful breeder of Leicester sheep, which he exported with great advantage to colonial flocks. He won the first prize for shearing rams at the Royal Agricultural Show in 1897, and this fine specimen of a Leicester was sold at a high figure to go to New Zealand. It was described by experts as the best ram ever seen in the colony, and he was named England's Champion. In the following year, at the Birmingham meeting of the Royal Agricultural Society, Mr. Simpson was awarded three firsts, one second, and a third prize for representatives of his flock; and yearly Mr. Simpson's sheep have been very highly placed among Leicesters. He has been a vice-president of the society and a member of the Executive and Editing Committee since the formation of the Leicester Society at Driffield in 1893.—*North British Agriculturist.*

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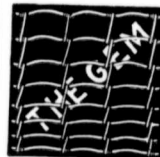
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Market Review and Forecast

Office of THE FARMING WORLD,
Confederation Life Building,

Toronto, May 13, 1901.

Trade has been quiet active in wholesale lines recently. Retailers from the country where trade has been quiet during the seedling have been active in buying for the summer trade. Canadian failures for April are the smallest on record. The panic in New York the last week has considerably disturbed money conditions in the outside markets. The trading in local securities, which were active before the Wall street panic, became quiet and the value of some of the leading stocks declined sharply. But things are now settled down after the flurry, and the money market is in its normal condition.

Wheat.

The wheat market has not been so active. Due largely to the crop scares not materializing and the attention of speculators being directed to Wall street. The *Price Current* has this to say in regard to last week's markets:

"The growing winter wheat crop is maintaining a very promising condition, the weather during the past week having continued favorable. The recent moderate rains over a large section of the wheat area, coming after the hot weather of last week, were opportune and checks for the time being any widespread or serious complaint of drought. The only States in which any material shortage in yield is indicated at present are Texas and Oklahoma.

"In the wheat market prices have had an easy tendency during the week, especially for the long distance futures. Thus, the May price at Chicago declined only $\frac{1}{8}$ ¢, while the July prices declined $\frac{1}{4}$ ¢ during the week. There has been a fair cash demand by both millers and speculators, and rather liberal selling of the July option by speculators. Present prices are affected largely by actual conditions of supply and demand, while values of July are influenced by the highly promising crop conditions. Receipts of wheat at primary points continue relatively liberal and the visible is declining less rapidly than it did at the corresponding time last year. Export clearances have been fairly large, but exporters reported the shipping demand poor. Ocean freights have been dull, with rates at lowest prices, and any improvement would be against grain values in this country. Spring wheat markets have been relatively weaker than winter wheat markets.

The market here has ruled steady under small offerings, quotations being 67 to 68 $\frac{1}{2}$ ¢ for red and white, and at freight rates and point of shipment: 67¢ for goose and 69¢ for spring wheat, east. On Toronto farmers' market red and white bring 72 to 73¢; spring five, 72¢, and goose wheat, 68 $\frac{1}{2}$ ¢ per bushel.

Oats and Barley.

Oats are firm here at 31 $\frac{1}{2}$ ¢ for No. 1 white east, and 31¢ for No. 2 white north and west and middle freights. On the farmers' market oats bring 35 to 36¢ per bushel. Barley is quoted here at 44 to 50¢ as to quality and point of shipment. On Toronto farmers' market barley brings 46¢ per bushel.

Peas and Corn.

Peas are quoted steady here at 65¢ middle freights. On the farmers' market they bring 65¢ per bushel.

The western corn market has been excited and irregular all week. The receipts are enlarging. But cash trade has become very limited owing to the corner in the speculative market. The increased marketing of hogs may also have caused an increase in prices. American No. 3 yellow is nominal here at 51¢, Toronto. Canadian yellow is quoted at 42 to 42 $\frac{1}{2}$ ¢ west.

Bran and Shorts.

City mills here sell bran at \$15.50 and shorts at \$16.50 in car lots f.o.b. Toronto. At outside points cars of shorts are quoted at \$14, and bran at \$13 to \$14.50 as to quality, middle freights.

Potatoes.

The receipts here are small but the demand steady at 30 to 35¢ per bag for car lots on track. On the farmers' market they bring 35 to 40¢ per bag.

Eggs and Poultry.

At the meeting of the Montreal Egg Association last week it was decided to put the price to be paid in the country this week for eggs at 9 $\frac{1}{2}$ ¢ in the stores and 10¢ f.o.b. Prices at Montreal rule at 9 $\frac{1}{2}$ to 10¢ for No. 2, and 11 $\frac{1}{4}$ ¢ for straights. Prices here are steady at 10 $\frac{1}{2}$ to 11¢ for case lots of fresh eggs, with large offerings. On Toronto farmers' market boiling eggs bring 10 to 13¢.

On the farmers' market here dressed chickens bring 75¢ to \$1.25 per pair, and turkeys 12 to 15¢ per lb.

Hay and Straw.

The market for baled hay keeps steady here at \$9.75 to \$11 per ton for car lots on track. The top quotation is for No. 1 grade. Baled straw is quoted at \$5.50 to \$6 per ton in car lots. On the Toronto farmers' market hay brings \$13 to \$15.00, sheaf straw \$8 to \$9, and loose straw \$5 per ton.

Cheese.

The *Trade Bulletin* says: "Almost the entire make of the first week of May has been disposed of west of Toronto, the prices paid being 8 to 8 $\frac{1}{4}$ ¢, mostly 8 1-16¢. The comparatively small make of early foddors has been a steadying factor in the market. A considerable quantity of cheese now being made in the west is said to have a dash of grass flavor, and the full grass goods will no doubt come on the market earlier than in 1900. We hear complaints of some of the receipts being too green."

Nearly all the local cheese markets opened up for business last week. Old cheese is being sold off and shipped out. We heard of one lot bought last fall at something like 11¢ and sold this spring at 8 $\frac{1}{4}$ ¢, which means a big loss for somebody. The demand for new goods keeps active, though prices at some of the local markets late in the week dropped to below 8¢ for colored, white foddors have ruled at from 8 to 8 $\frac{1}{4}$ ¢, though some small lots ran up to 8 $\frac{3}{8}$ ¢ and 8 $\frac{1}{2}$ ¢ at eastern markets.

Butter.

The creamery butter market is, if anything, a little stronger, Montreal quotations being a trifle higher at 17 $\frac{3}{4}$ to 18¢ for boxes and 17 to 17 $\frac{1}{2}$ ¢ for tubs. Butter in boxes has been rather scarce. Cows are now on the grass, and the first of the full grass product will soon appear, when prices may advance somewhat. Creamery has been active here. Prints are selling freely at 18 to 19¢ and tubs and boxes at 17 to 18¢ per lb. Supplies of dairy butter are large, with 12 to 13¢ offering for choice lots in a jobbing way. On Toronto farmers' market butter brings 14 to 18¢ per lb.

Cattle.

American cattle markets have ruled fairly active with cables steady. The New York cable of Friday quoted live cattle firm at 11 $\frac{1}{2}$ to 12 $\frac{1}{4}$ ¢, sheep 13 to 13 $\frac{1}{2}$ ¢, and lambs 14¢ per lb. Trade on Toronto cattle market on Friday was more than brisk. Not for many years has there been such exciting times as were witnessed on that market. So anxious were many of the dealers to secure supplies that they contracted for car loads before seeing them. One dealer bought 160 cattle before the market opened, and nearly all the fat cattle were bought up before 9 a.m. The run of live stock was only moderate, being made up of 974 cattle, 918 hogs, 188 sheep, and 65 calves. There was little improvement in the quality of the fat cattle over that of the past few weeks. All classes of fat cattle were firmer and prices advanced 15 to 25¢ per cwt. over Thursday's quotations. In other classes prices were steady but firm with the exception

of feeders, which advanced in sympathy with fat cattle.

Export Cattle.—Choice loads of these are worth from \$4.85 to \$5.25 per cwt. and light ones \$4.60 to \$4.80 per cwt. Heavy export bulls sold at \$3.85 to \$4.25, and light ones at \$3.40 to \$3.50 per cwt.

Butchers' Cattle.—Choice picked lots of these, equal in quality to the best exporters', weighing 1,050 to 1,150 lbs. each, sold at \$4.65 to \$4.80 per cwt., good cattle at \$4.50 to \$4.65, medium \$4.15 to \$4.30, and inferior to common at \$3.40 to \$3.75 per cwt.

Feeders.—Heavy, well-bred steers, from 1,100 to 1,200 lbs. each, sold at \$4.30 to \$4.70, and other quality at \$4.00 to \$4.25 per cwt. Light steers, weighing 900 to 1,000 lbs., sold at \$3.75 to \$4.00 per cwt.

Stockers.—Yearling steers, 500 to 800 lbs. each, sold at \$3.25 to \$3.50, off colors, and inferior quality at \$2.50 to \$3.00 per cwt.

Calves.—These are lower at Buffalo, choice to extra bringing \$5.00 to \$5.25 per cwt. At Toronto market ordinary calves bring \$2 to \$8 each.

Milk Cows.—These sold at from \$30 to \$45 each. Choice cows would bring more money.

Sheep and Lambs.

These are easier at Buffalo, choice to extra lambs being quoted at \$4.85 to \$5 per cwt., and choice to extra sheep at \$4.25 to \$4.50. At Toronto market on Friday prices for sheep were firm at \$4.50 for bucks, \$4.75 for ewes, and \$3.50 to \$4 for hucks. Yearling graded lambs sold at \$5.50 to \$6.25 per cwt., and barnyards at \$4.50 to \$5.50.

Hogs.

There is a slight advance in hogs as noted in these columns last week. At Toronto market on Friday select bacon hogs sold at \$6.87 $\frac{1}{2}$ per cwt., and thick and light fats at \$6.37 $\frac{1}{2}$ per cwt. Unculled car lots sold at \$6.60 to \$6.75 per cwt.

The Wm. Davies Co., Toronto, will pay \$7.00 per cwt. this week for select bacon hogs, and \$6.37 $\frac{1}{2}$ for light and thick fats.

The *Trade Bulletin's* London cable of May 9 re Canadian bacon reads thus: "The Market has taken on quite a firm tone, and holders have been enabled to establish an advance of 1s. upon last week's prices. No. 1 Canadian bacon 57s. to 59s., fancy lean cuts 60s. to 62s.

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Horses.

The following is a report of the Montreal market of last week:

"There is still a fairly good demand for heavy draught horses for local use, with sales reported at from \$160 to \$200. Light driving and saddle horses are asked for, and sales of same have transpired at \$75 to \$100 up to \$120 and \$150 for the better class. Carriage horses are in fair request, but we had no sales of this class reported to us this week. A large number of horses for cavalry and artillery purposes have arrived from the West, and are being cared for at the Montreal Stock Yards prior to their being shipped from this port for the British Government. The horses attracting most attention are the three Clydesdale stallions which have been imported by Mr. John Dalgleish."

Upwards of 100 horses were sold at Tuesday's and Friday's sales at Grand's Repository last week. Prices were fairly good, though the stock offered was superior. Prices for really good horses are higher, though for the ordinary horse there is no advance. Good work horses sold at \$100 to \$140 each, and drivers at from \$120 to \$175 each.

The value of an acre of land depends upon the amount of cash it will pay its owner each year, and its value cannot legitimately rise above this basis. Here is where the great profit in general comes in from the establishment of the factory and the growing of sugar beets. Land which has heretofore produced, when cultivated in ordinary farm crops of alfalfa and grain, from seven to ten dollars an acre net to its owner, is capable of producing, when properly grown to sugar beets, from fifty to seventy dollars per acre, besides giving employment to at least four times the number of laborers. Hence we can see in the starting of every factory the solution of two great problems, the increase in land values and the maintenance of a fourfold greater population.—*Sugar City Herald.*



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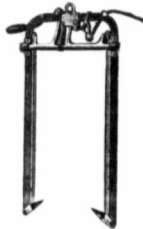
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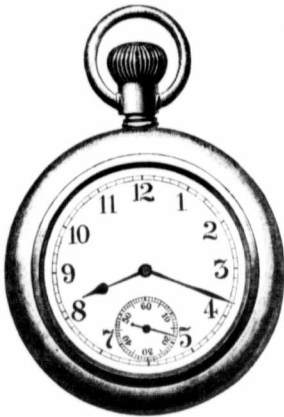
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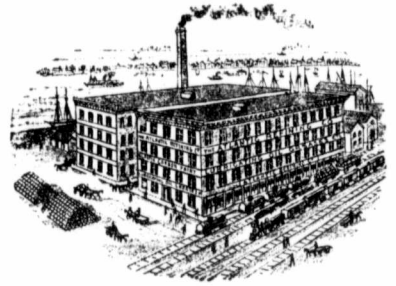
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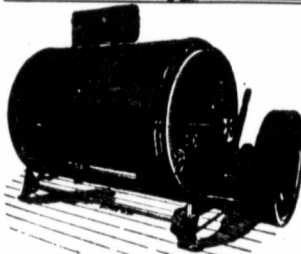
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