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VOL. XXIX.

NUMBER 32.

FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

AUGUST 11,

1910.



THE COMFORTS OF CIVILIZATION ARE TO BE FOUND IN THE TEMISKAMING

The illustration herewith shows a modern cement block house on the farm owned and worked by Prof. John Sharp, in the Temiskaming District. The Professor has a fine farm of 300 acres, with good farm buildings. He is engaged in dairying. His herd numbers 21 cows. The milk is bottled and sold in the towns. In Liskard milk sells for 10 cents a quart during summer, 12 cents in winter; in Cobalt it sells for 15 cents. For fuller particulars of this place read the article on page 6 of this issue.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

WOMEN



When your husband is thinking of buying a Cream Separator, have a little talk with him. The make of separator he buys is of just as much importance to you as to him. Perhaps, it is of greater importance. At any rate, you want the very best machine that can be bought. You want a separator that will do the very best work, and **keep on doing it.** You do not want one that is constantly getting out of order. You do not want one that is hard to turn, as you may have to turn it yourself occasionally. You do not want one that is difficult to clean. Or one that if the milk should be cold, you must heat it before the separator will do its work rightly.

The separator you **DO** want is the Simplex Link Blade Separator, with the Self-Balancing Bowl. The Self-Balancing Bowl does away entirely with the vibration which is common in other separators if the bowl gets ever so slightly out of balance. Consequently, there is not the wear and tear which makes the machine turn harder, which wears it out, and makes it impossible to separate cleanly. It separates at a much lower speed than other separators, and so it's much easier to turn. It is easy to clean, as the link blades do not come apart and so can be cleaned and handled all as one piece. It will separate cleanly whether the milk be warm or cold.

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LITTER CARRIERS, HAY CARRIERS, ETC.

Re the Exodus of Americans

Evidently inspired by some official of the reclamation service of the United States. The Breeders' Gazette, under the caption "Canadian Settlers Disillusioned," published the following editorial in their issue for July 20:

"Disatisfied, discouraged, homesick and bankrupt, thousands of American settlers in the Canadian Northwest are turning their faces again toward the land where snow and ice do not cost as much and where a variety of crops can be successfully grown. This is the natural result of the blind rush for lands whose main recommendation was their cheapness. Pictured in the glowing terms of the land-boomer, the semi-arid sections of Alberta have drawn poor but worthy farmers from their comfortable homes to experience the disappointing realization that time has neither milder nor moistened the climate of that land. It is still a place where farming is fraught with difficulties.

"Although the migration of homeseekers to western Canada was larger this spring than a year ago, the tide has turned. Clarence J. Blanchard of the reclamation service reports that he has talked with a great number of the settlers who are forsaking the experiment with Alberta irrigated lands to seek homes south of the line. Alfalfa and wheat have been their main crops, and these are not sure to the short season. The incongenial government, the high freight rates necessary to get crops to market and the long winter have been additional causes for discontent. It is reported that during the last nine months 15,000 settlers have returned to the United States from Canada, and the movement is increasing. These men have discovered the cheapness of the land, but it has cost them dearly in cash and in hardship for their families to find it out."

GIVEN WIDE PUBLICITY

The officials of the reclamation service have been very active lately and have succeeded in getting their views not only into American papers but they have appeared in some of the Canadian papers as well. That such a report should gain a good deal of publicity through the ordinary newspapers and journals of the United States does not occasion surprise. That a paper with the standing of the Breeders' Gazette should become a party to broadcasting such unfounded information is more difficult to understand.

The Superintendent of Immigration at Ottawa writes Farm and Dairy that notwithstanding reports to the contrary the American farmers still keep coming to Canada and that his Department will pay very little attention to the false reports circulated by jealous Americans. J. Bruce Walker, Commissioner of Immigration, Winnipeg, satisfactorily and completely disposed of the mythical assertion of the alleged exodus. The following is in part his letter, to Farm and Dairy, dealing with the subject:

Regarding the subject of the alleged exodus of 15,000 American settlers from western Canada back to the United States, some nine months since, I instructed the Officers on the Boundary Line to keep a sharp lookout and make a note of dissatisfied American settlers returning to the U. S. This has been done. The so-called exodus is purely a myth and without the slightest foundation in fact. On July 23rd, I telegraphed to every Officer along the Boundary Line, between Winnipeg and the Mountains, to the effect that American newspapers were circulating reports that 15,000 dissatisfied American settlers have left Canada and returned to the United States during the past nine months and asking if they had noticed any increased

number of such settlers to the States.

In answer I received the following telegrams:

"Boisevain, Man., July 27th, '10.—Have not seen one dissatisfied settler returning to U. S. from Canada during past year. No such movement has taken place through this port. (Sgd.) D. W. Agnew, Inspector."

"Kingstevie, B. C., July 27th, '10.—There is no such exodus of settlers as reported by American newspapers. There is absolutely no exodus of any kind by this port. N. B.—Have entirely failed to notice any body of returning dissatisfied settlers. (Sgd.) J. Dunlop, Inspector."

"North Portal, Sask., July 27th, '10.—Reports of American exodus from Canada incorrect, so far as this port is concerned. Always a few returning. Number this year no greater than usual and having regard to increased influx, is really less than usual. (Sgd.) J. A. Fovvin, Senior Inspector."

"Gretina, July 27th, '10.—Have carefully watched and have recently searched American export reports. Find that the past nine months six settlers returned dissatisfied. This is a few number than during any similar period in previous history of immigration movement. (Sgd.) O. J. Giesinger."

"Emerson, Man., July 27th, '10.—Inspection of U. S. Custom Books at this Port, show that no more than two families returned to Canada during the past nine months. So far as the exodus of American settlers is concerned, such is entirely unknown at Boundary points under care of this entry port. (Sgd.) T. J. Connell, Senior Inspector."

"Cutts, Alta, July 27th, '10.—All through the immigration years certain dissatisfied farmers have returned to the States. During the past nine months this exodus has been no greater than usual through this port, notwithstanding that since September, 1909, a free grant of half sections of land has been made in Montana. (Sgd.) Chas. Mair, Inspector."

THE YARN EXPLODED

I am happily able to entirely explode the American exodus yarn, by quoting from the official figures of the United States Customs Department at the various entry ports of the United States from Canada, between Winnipeg and Kingstevie, B. C. The Customs reports indicate the following persons, describing themselves as farmers, having returned to the United States since 1st January, viz.: January, 11 farmers; February, 2 farmers; March, 40 farmers; April, 78 farmers; May, 27 farmers; June, 77 farmers; and from July 27th, 15 farmers. A total of 261 persons, declaring themselves to be farmers, returning to the United States from Canada. The insignificance of this return movement will be best appreciated when you compare it with the 50,425 persons who have entered Canada, declaring themselves to be Americans, and desirous of settling in Canada between the same dates and between the same points.

Exhibits of Grain at Toronto

The sum of \$240 has been granted for a sheep competition by the directors of the Canadian National Exhibition, Toronto. This exhibit will include showings of fall wheat spring wheat, oats and barley. Prizes will also be given for two-bushel sacks of the same grains.

The grain winning prizes at the Exhibition will be obtained by the Department of Agriculture for experimental purposes. All entries must be made to J. Lockie Wilson, Superintendent of Agricultural Societies, Parliament Buildings, Toronto, not later than August 15.

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Vol. XXI

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FARM AND DAIRY

RURAL HOME

Only \$1.00
a Year

Vol. XXIX.

FOR WEEK ENDING AUGUST 11, 1910.

No. 32

Fitting Dairy Cattle for the Show

Wm. Retson, Herdsman, N. S. Agricultural College.

To fit dairy cattle for the fall fairs is very interesting and profitable work. It shows what an improvement can be made on the dairy cow when she gets a little extra care and attention. A few years ago when exhibitors were few, they took their cows off the pastures a few days before leaving for the fairs and showed them almost in the rough state. If one were to practise such a method in these latter days, I fear he would not secure many of the coveted ribbons.

If the dairy herd is to be shown at the fall fairs, the exhibitor should begin to fit in good time at least six weeks prior to the fair. Personally, I prefer to keep the cows in the barn during the day, to protect them from heat and flies, turning them out in the evening when it is cool. Keep the barn somewhat darkened during the day and put a light covering on the cows. Feed bags ripped open answer this purpose very well. This is better for keeping off the flies than spraying with oil or other mixtures. It does not injure the coat, and the cows wash out much nicer at fair time.

FEED FOR FITTING

If the pasturage is good the feeding will not cost much more than usual. Give a light feed of grain in the morning and again in the evening before turning out; follow with some green feed at noon. If the pasturage is poor, feed more green feed. For a grain ration I prefer a mixture such as bran, crushed oats, oil cake, and cotton seed meal. One must study each animal to get the best results from feeding, and feed the grain suited to their requirements.

The condition of the cow should determine the quantity and kind of grain to be fed. For the ordinary dairy cow, in full milk, a good ration per day would be four lbs. bran, two lbs. crushed oats, two lbs. oil cake, and two lbs. cotton seed meal. For a dry cow in fair condition, two lbs. bran, one lb. crushed oats, and two lbs. oil cake would be sufficient. No hard and fast rule can be followed in feeding, as breeds of cattle and the condition of individual animals differ greatly. Great care must be taken not to overfeed. A watchful herdsman will soon know just what each cow requires.

DETAILS IN FINISHING

A week before leaving for the fairs, the cows should be kept in the barn altogether, only allowing them a little exercise in the yard every other day. This confinement will accustom them to the treatment they are likely to receive at the fair. Feed good hay and less green feed. Teach them to drink from a bucket. This latter point is important. Cows that have always been turned out to drink are often very fussy about drinking from a bucket.

To trim cattle properly practice is necessary. Generally, it improves a dairy cow to have her head and neck closely clipped, but unless one understands what he is doing he is apt to make mistakes. A cow looks better untrimmed than

poorly trimmed. Give the cows a good wash a few days before leaving home and again the day before exhibiting.

Always have the cattle thoroughly haltered broken before leaving home. The exhibition grounds are a poor place to teach them. A cow that will step smartly round the ring, without having to be pulled and pounded, makes a good impression. There are a great many more details which might be dwelt on, but they can soon be learned from experience.

Crops Used to Supplement Pasture

Edmund Laidlaw and Sons, Elgin Co., Ont.

Where the second crop of clover is done growing, which will be about the 1st of October, we have grass, oats and rye ready for pasture. We sow the rye ready for a grain crop about the 20th of August or the 1st of September. We sow one bushel of rye and one and a half bushels of oats, which we pasture from the first or 15th of October till it is time to stable the cows. We always get a good flow of milk in October and November from this green pasture and the rye is left for a crop of grain the next year. It usually yields from 28 to 32 bushels an acre, so there is practically no loss time in sowing this mixture for fall pas-

Filled with Good, Practical Advice

Farm and Dairy is our favorite farm paper. It is full of good, practical advice written by good, practical men. Every farmer in Canada should have this splendid dairy and farm paper in his home. —H. C. Clarke, Halton Co., Ont.

ture. We often get as much milk in November as we do the latter part of June.

We do not turn the cows out to grass until there is an abundant growth of second year clover and timothy. This will last till about the first of July when it begins to get old. For a change we try to have a field of green oats and rye to pasture. It is a good plan to plow the field intended for the rye the fall before and work it well till the first of June or possibly not quite so late and then sow it with one and a half bushels of oats and one and a half bushels of rye an acre. This will be ready in an ordinary season about the first week in July. We try and sow enough to last till the 25th of July or first of August, when the second growth clover is ready.

Some years, if it is dry weather, the second crop of clover does not amount to much, but we have been top-dressing our meadows for a few years back and we generally have a good second growth.

However, if the clover does fail us, we have a good supply of corn ensilage to tide them over till the ensilage comes again. We do not consider anything equal to good ensilage for summer feeding where there is shortage of pasture. It is handy to feed and is relished by the cows, and they seem to hold to a good flow of milk the whole season when fed on it.

Saving and Application of Manure

J. S. Kemp, Perth Co., Ont.

My method of handling manure has been to put a part of the horse manure into the hog-pens, the balance into the trench behind the cows to absorb and save liquids. For all distant fields I draw it out in large piles direct from the stables, ready to be spread with the spreader when wanted. In this way I save the time that it would take to draw it from the yards and barns in the hurry of seed time and also avoid the waste that takes place when left in the barn yards, in the snow and ice and under the eaves of the stables, exposed to the melting snow and rains which dissolve out and carry away a large per cent. of the fertilizing properties. When drawn direct from the stables there will be practically no washing away, the manure pile absorbing nearly all the melting snow and rain that falls on it.

When spreading manure on plowed ground, I first harrow and then roll; under this method a pair of fairly good horses will handle the spreader that is equipped with a flat-tooth cylinder. I then harrow and roll and the ground is ready for seeding. The fine manure being mixed with the surface of the soil is available to the plant when it will do the most good, which is when it first puts forth its roots in search of its food. The sooner it has a vigorous healthy growth of roots and foliage the better. All plants feed more or less from the air. The vigorous healthy plants get their full share while the poorly fed, stunted plants get very little. It is while the plants are young that they obtain the most food in this way; getting less and less as they advance towards maturity; hence the importance of the plant food being so placed that it can get it when most needed. I never plow down manure, as I am able to get better results by having it mixed with the surface soil. Often in early spring we get more rain than is needed and usually cold rains; these rise out the liquids that have been absorbed, also dissolve and carry down and away the more solvent parts of the solid manure while the plant roots are keeping near the surface to avoid the wet and cold, while what was intended for their food is being washed away.

My farming has always been for the dairy, and when I find a meadow failing I top-dress it. The number of loads to the acre depends how much is available and the quality of the manure. For example if I have two acres that need manure and have only 16 loads, I would divide it and manure the whole area. I have, with good results, put on as low as four loads to the acre. Time, anywhere from the first of August to the middle of October. I like to have the manure on the spot and if possible to spread it when the ground is comparatively dry and just before a rain. Avoid spreading when the ground is very wet, not only that the wheels will cut the meadow but if spread when the soil is wet and the rain continues it cannot absorb the fertilizing properties as they are dissolved and a large per cent. is washed away.

Who Ever Saw a Good Cow a Lazy Cow?

W. M. Pearce, Oxford Co., Ont.

The statement made by Mr. Mallory in Farm and Dairy, July 28, about the ability of the Holstein cow to forage, is the first that I ever heard of a Holstein cow being lazy. It is a good thing that the poor brutes can't talk after they worked for him the way he says they do. I have bought several carloads of cows in the vicinity of Belleville and I have been on nearly every farm there and I saw very few cows that would give 2,000 lbs. of milk in a year; I don't think the cows were all to blame. What Mr. Mallory says about the cows might be applied somewhere else, judging by the looks of the cows that come from Belleville. I believe it would do some of those people good if they would come up to Oxford and see how we keep our cows. Farmers that have bought cows from that section claim that they have to keep them one year before they look like giving milk, and I find by the looks of their teeth, that those cows appear to be to three or four years older than they really are; that is a pretty good sign that they have to grub pretty closely in the summer months to exist, saying nothing of producing milk.

In regard to private weights I weigh the milk from each cow separate every time I milk; but that does not count for everything, as I don't wish any one to buy cows from me on the basis of those weights as they only have my word for them, but what I get paid for is what I have profited.

I have 11 cows—all I have on the place—I bought them in April and they are all grade Holsteins. Some of them are thin so could not get the best results. I saw about eight pounds a day and I lost three cans of milk in June. Last I received from the Condensery Company in Tillsonburg, in May, pay for 16,150 lbs. at \$1.10 a cwt.—\$177.65; in June 15,906 lbs. at \$1.00 a cwt.—\$158.06; in other words I received pay for 2,905 lbs. of milk for each cow for the two months; for reference regarding this statement apply to Mr. Charles Minshall, Inspector of Borden Condensing Co., Tillsonburg.

NOTE.—Farm and Dairy would be pleased to hear of other large records, together with details of feed management and comments thereon.—Editor.

Conservation of Soil Moisture

James Westlake, Carleton Co., Ont.

The ordinary crops grown on the Ontario farm such as clover, wheat, corn, etc., use, on an average, 2½ times as much water as is supplied by the rains which fall during the growing period. The balance of the moisture must be obtained from the supply stored up in the soil. From this fact the value of proper conservation of the soil moisture becomes apparent.

Conservation of soil moisture is simply a case of good farming. Get all the water into the ground possible and then keep it there. In order to lay up a large supply of water during the winter months, the water holding capacity of the soil must be increased. One of the greatest means of increasing the water holding capacity of the soil is by means of underdrains. It has been estimated that soil well underdrained has a pore space which is 28 per cent. greater than the pore space in soil not drained. In other words it will hold 28 per cent. more moisture. The addition of vegetable matter or humus also greatly increases the water holding capacity of the soil. Fall plowed land will hold the snows of winter, prevent surface run off and hence largely increase the water supply in the soil.

During the summer months the great object is to prevent surface evaporation. The early planting of crops, addition of humus to the soil, level cultivation and constant and thorough cultivation to obtain a fine surface mulch and break up

the capillaries of the soil, are the principal means of conserving soil moisture. It should always be remembered that the great evil of weeds in many cases is not so much the fertility that they use as that they rob the soil of moisture which would otherwise be used by the growing crop. It is not going too far to state that good farming is simply conserving soil moisture.

While the rains of summer do not play as important a part as they are usually supposed to in the growth of crops they are nevertheless im-



A Sharp Contrast—Pruned and Unpruned

Two of the trees in the Demonstration Orchard on the farm of Mr. S. Blackburn, Creemore, Ont. (Georgian Bay District) are here shown. The one to the left was not pruned so as to be able to compare results of the old practice as against modern methods of orcharding.

portant, and we should make the best use of them. Soil which is hard and baked cannot absorb this rain and much will be lost from surface run off. A fine surface tith, however, renders this waste impossible. Cultivation within 48 hours after the rain will rewater the mulch, though very few of us consistently live up to such a rule.

A common mistake in cultivating hoed crops is leaving the land behind the cultivator in rough ridges. A little calculation will show that this increases the surface of the soil and hence the chances for evaporation about one third. It is better to use fine teeth in the cultivator or a pulverizing attachment behind to overcome this difficulty.

Facts about Grain for Cows

Edmund Lovell, Elyria Co., Ont.

There are plenty of people who would feed grain to their dairy cows if they had it. They will not buy it, however. They would not think of working the horse without grain, but they think it does not matter so much with the cow.

When the pasture starts to get short and cows need grain the most, is just the time they are without it. Good cows under these conditions will milk all the surplus flesh from their bodies. When they get better feed they are not in shape to respond to it. Then people say it does not pay to grain the cow because she does not respond at once. She is then in no shape to respond to grain.

The man who feeds his cows a heavy grain ration six months of the year and lets them shift for themselves the other six months is the man who is feeding his cows grain at a loss. On the other hand, the man who feeds his cows a good liberal ration 12 months of the year and keeps his cows in good shape all the time is the man who is investing his money where it will bring him liberal returns.

The key to successful dairying is to breed better, to feed better and to butcher the boarders.

A second hand machine is a gamble right from the time it is purchased. It may be all right, more probably it is all wrong; and the defects and worn out parts are not discovered until the machine is well into its work and in the case of a binder any delay while waiting for repairs may often spell serious loss.

General Qualifications of Horses*

Prof. W. H. Peters, M.A.C., Winnipeg.

Any horse, no matter to what class he belongs, must possess certain qualifications if he is to be a useful and desirable one. First among these general qualifications is *soundness*. All horses bought for breeding purposes should be sound in every way, while all horses bought for work should be serviceably sound. As distinguished from a blemish an unsoundness is defined as any malformation which does or is likely to permanently interfere with the usefulness of the horse, while the blemish is merely an eye sore which does not interfere with the actual usefulness of the animal. A horse is spoken of as serviceably sound when he carries some minor defects, such as a small splint, a small curb, windpuffs, knees a trifle weak, etc., which in no way lame him or interferes with his ability to do a good day's work. The most objectionable unsoundnesses and those which disqualify a horse from winning a prize in any show ring are, weakness of the wind, unsound hoofs, total blindness, weak knees, sidebones and ring bones. Any marked lameness should also disqualify a horse in showing.

All horses should possess to a marked degree the indications of durability, particularly of toughness of feet and bone, which indicates that they will wear well and long. Quality is indicated chiefly by a clean cut head, clean limbs with large, flat, dense bone, covered with a thin skin showing silky feather and tough waxy appearing feet.

While action differs materially in the different classes of horses, a long, clean, straight away quick step is a characteristic of any good horse.

No matter what work a horse may be called upon to do, to make a desirable servant he must have a good, intelligent, kind, quiet disposition, not sluggish but wide awake at all times while in the harness or under the saddle. It is important that he be free from vice or bad habits, for there many habits to which a horse's disposition is subject, and once acquired they are difficult to cure.

Style, beauty and symmetry of form should not be overlooked in buying a horse, though they are usually of more value to the seller than to the buyer. Go into any market you wish and you will find the good looking horses selling for more money than horses of even superior merit and usefulness, but not so well fitted and prepared for sale. Style and beauty are worth



Firewood Trimmed from a Small Orchard

This pile of wood was taken out of an orchard at about an acre in extent. Its owner had thought this orchard to be past all hopes of repair. Note the other two illustrations of orchards on these pages.

more in the carriage and roadster types but are of sufficient importance to receive attention in all classes.

Condition, age, color, sex and breed will all influence the value of a horse more or less, depending on the purpose for which he is wanted. Buyers commonly demand market horses, in medium to fat condition. They sell best at from five to eight years old. Almost any color is desirable, though oddly marked horses sell at a discount. Sex and breed become a part of the considerations only when animals are wanted for breeding.

*An extract from Bulletin No. 1 of the Manitoba Agricultural College, entitled "Horses."

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Success with Split Log Drag

K. E. Bishop, Oxford Co., Ont.

After using the split log drag for two seasons we have no hesitation in calling it the finest implement known for keeping roads in order. Our soil in this part of South Oxford was never intended for roadmaking although it is first class for farming. It is on such a soil as ours, a heavy clay loam, that the drag should find its greatest use.

The road running by our farm was rounded up with the road machine two years ago. After each rain we hitched a two-horse team to our home-made drag and worked the drag, starting at the outside and scraping to the centre. This did not take much time but it made such a good job that our neighbours got interested and started to use our drag on the road adjoining their farms. We soon had a first-class road for a mile or more and with very unpromising material to start with.

The secret of the success of the drag on the earth road is that all the ruts are filled up, the road is rounded and water runs off readily. Of course the water must have a chance to get away or the work of the drag would be rendered useless. I do not know how the drag would work on gravel roads. Probably it would fill small ruts and leave a smooth surface. However, it could not do the same work as it does on a road of clay loam.

Marked Advantages in Favor of Silage

A. S. Malcolm, Wellington Co., Ont.

Silage is a great factor in reducing the cost of milk and butter fat production and in increasing the profits from dairying. Dairymen who have so far failed to erect a silo should give the matter of erecting one a great deal of thought at once for it will be only a few weeks until corn will be ready for the silo, and unless this matter is dealt with at once it will be necessary to wait another year before the advantages of the silo will be reaped by those particular dairymen.

The digestive organs of animals that chew their cud are so formed as to require comparatively juicy and bulky food. The cow cannot thrive on dry food as well as the horse. The ideal food for the dairy cow is good pasture, but for a large part of the year green pasture is not available. The best substitute to furnish this succulent feed during this period are root crops and corn silage. Corn yields about twice as much dry matter per acre as do root crops. As root crops require much more labor, silage is by far the most economical for those where corn can be grown.

THE WHOLE PLANT AVAILABLE.

By placing corn in the silo, the stocks as well as the grain are preserved for feeding purposes, and the whole corn plant becomes available. About 40 per cent. of the feeding value of the corn plant is in the stock, leaves and husks, and the other 60 per cent. in the ear. Through handling corn as commonly practiced, much of the 40 per cent. is lost. As corn is cut for a silo before the lower leaves are dry, there is no waste. About twice the amount of dry matter can be stored in the form of silage as in the form of fodder. It has been determined that a cubic foot of hay in the mow contains about 4.3 pounds of dry matter. A cubic foot of space in a silo is worth more than twice an equal space in a mow.

The feeding value of the corn crop is greatly increased through being ensiled, which is due to the fact that silage is very palatable and stock will eat a large amount of it. Its stencency, like grass, has a loosening effect upon the animal and keeps it in a healthy, vigorous condition.

Hogs, beef cattle, and sheep can be fed silage

to great advantage; but its great value is for the feeding of dairy stock. As milk is made up of from 87 to 89 parts of water in every 100, it is evident cows yielding a large supply of milk must consume a large amount of water, and that if a large supply of water is wanting, large yields of milk are impossible.

DIFFERENCE IN FAVOR OF SILAGE.

Experiments carried on by the Ohio Experi-



An Excellent Example of the Intrinsic Value of Even the Most Hopeless Orchards

It was from the brush under the trees, as it is to be seen in the illustration, that the pile of wood pictured on page 4 was taken. The brush as here shown is that from the second trimming. This orchard was considered representative of the Ontario Department of Agriculture, secured permission to take it over for a demonstration orchard. It now presents a very good appearance. Photo by I. F. Metcalf.

ment Station, regarding silage for dairy feeding, as given in an information circular sent out by the Blue Valley Creamery Company, show that the average amount of water consumed by silage-fed cows per day was 93.9 pounds; while that consumed by grain-fed cows was only 69 pounds. Cows fed on the silage ration produced on an average 96.7 pounds of milk and 5.08 pounds of butter fat for every 100 pounds of dry matter consumed; while cows fed the grain ration only averaged 81.3 pounds of milk and 3.9 pounds of butter fat for every hundred pounds of dry matter consumed. The cost of feed per hundred pounds of milk was 68 cents with the silage ration, and \$1.05 with the grain ration. The cost of feed per pound of butter fat was 13.1 cents with the silage ration and 22.1 cents with the grain ration. The average profit over cost of feed per silage-fed cow was \$5.86 a month, the average daily silage ration was:

- 6.4 pounds mixed hay.
- 58 pounds silage.
- 2 pounds oil meal.
- 2 pounds bran.

The average daily grain ration was:

- 6.8 pounds mixed hay.
- +7 pounds corn stover.
- 2.5 pounds oil meal.
- 5 pounds corn meal.
- 6 pounds bran.

It is very evident that silage took the place



Harvesting the Crop on One of the Temiscaming Farms

A view on Mr. T. Chester's farm, Hudson, is here shown. Hudson is said to be the banner township of the district. Considerable information concerning it was given on page 6 of Farm and Dairy last week.

of over one-half the grain in the ration, thereby cheapening the cost of production and also increasing the yield of milk and butter fat. Silage is not only valuable for winter feeding, but is also probably the best feed to take the place of pasture during the dry periods of late summer and early fall.

Poultry Products Sold Co-operatively

A. P. Hillhouse, Bromo Co., Que.

General co-operation in the handling of poultry produce is found to come. The advantages to be obtained from co-operative methods are so great, and the losses from the present system so large, that whenever a co-operative organization or circle is established, the almost immediate benefits from such an organization will be apparent to



all interested. It will prove to them the actual necessity of the work in a business way.

The great point in co-operation is not in the organization, but in the continuation of the enterprise, as each year finds us in a better position than the last. We understand the markets better. We become better known as poultry producers having both quantity and quality.

DISCOURAGEMENTS AT FIRST

As an example of the working out of the co-operative method, I will give our experience at Bondville. We are now in our fifth year. We started in a small way for the first year or two with many discouraging results. We did not have the advantage of any other circle or central organization for assistance. We had to depend entirely on our individual efforts. Naturally our growth has been slow; much more so than will now be the case with any branch circles forming in connection with the Poultry Producers' Association. These societies will have the advantage of the assistance of the central organization in all their work.

This central society is most important, especially in the matter of securing the best markets. We had to find our markets from experience, adverse and successful, and we gradually had to make ourselves known as a point from which quality and quantity of poultry produce could at all times be secured. It took time to develop such a reputation, but from the first it was absolutely necessary that the farmers who would give

the time and care to their eggs and poultry to produce the best should receive a better price.

Immediate pecuniary reward is absolutely necessary to hold any organization of farmers together for better production. Just in the measure as we have been able to secure better prices for

(Continued on Page 9.)

Cows Would Be Ticked

If they heard you were getting

Champion Cow Stanchions

They appreciate a good thing.

They can move head around.

No Weight.

No Blisters.

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ONTARIO WIND ENGINE & PUMP CO.
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WILLIAMS BROS. Ithaca, N. Y.

SYNOPSIS OF CANADIAN NORTH-WEST LAND RIGHTS

ANY person who is the sole head of a family, or any male over 18 years old, may homestead a quarter section available Dominion land in Manitoba, Saskatchewan or Alberta. The application must appear in person at the Dominion Lands Agency, or Sub-Agency, for the District. Entry by proxy is not allowed. Entry is on certain conditions, by father, mother, son, daughter, brother or sister of intending homesteader.

Duties—Six months residence upon and cultivation of the land in each of three years. A homesteader may live within nine miles of his homestead on a farm of at least 80 acres solely owned and occupied by him or by his father, mother, son, daughter, brother or sister.

In certain districts, a homesteader in good standing may pre-empt a quarter-section alongside his homestead. Price \$1.00 per acre. Duties—Must reside upon the homestead or pre-emption six months in each of three years from date of homestead entry (including the time required to obtain homestead patent) and cultivate fifty acres extra.

A homesteader who has exhausted his homestead right and cannot obtain a pre-empted in certain districts. Price \$3.00 per acre. Duties—Must reside six months in each of three years, cultivate fifty acres each of three years, and erect a house worth \$300.

Deputy of the Minister of the Interior,
W. W. COBBY.

N. B.—Unauthorized publication of this advertisement will not be paid for.

THE TEMISKAMING MARKET AWAITS THE PRODUCER

The Fifth Letter from Farm and Dairy's Editorial Representative in New Ontario.

Perhaps no where else in Ontario does the farmer find a readier market for his produce or a more profitable one than in Temiskaming. The extensive lumber operations, the phenomenal mining development and the many new towns springing up through the district afford an immediate outlet for everything and good prices for all farm and garden produce prevail. Indeed, so great is the demand that it cannot always be supplied, and at the present time oats, hay and meat are shipped in from Old Ontario. Some may ask why it is then that settlers have gone into the North Country? The answer is that many have gone in and those who are doing real farming are growing rich.

A day or two ago I found by enquiry from two farm machinery agents in Liskeard that since January, 1910, they have sold the following: Binders 47, mowers 89, seed drills 26, hay rakes 86, hay tedders 10, plows 46, harrows 128, land rollers 13, wagons 66, scuffers 28, cream separators 20. In all something over 20 carloads and this, in addition to machinery handled at

former is much letter equipped than many Old Ontario cow stables. In fact, its equipment is the most up-to-date and sanitary that is possible to obtain. Bottled milk sells in Liskeard for 10 cents a quart during summer and 12 during winter. In Cobalt it is 15 cents.

Asked if he thought Temiskaming would ever be a dairy country? "I should think it would, but not at the present. To make butter and cheese now would not pay," he replied.

Prof. Sharp owns about 300 acres with 100 cleared and 40 stumped. "During the last two years," he said, "more land has been cleared than in the previous 10, and the next few years will see a wonderful change in this country."

The Professor was a little diffident about putting a price on his farm. "Because," he said, "the price at which I value my farm would seem almost absurd to people who know nothing about the conditions up here, so I think you had better not mention any figures." But he has a fine farm with good buildings and a modern cement block house—a home that after all is to be preferred to



Starting a Reaper on Professor John Sharp's Farm, Liskeard, Ont.

Prof. Sharp owns about 300 acres of land in the Temiskaming District. Good arable information concerning him is given in the adjoining article. The professor prefers the farm to university life.

Un Park, Earleton, Heaslip and Englehart and by other Liskeard firms.

Mr. T. Magladery, of Magladery Bros., Limited, hardware merchants, told me while speaking of the progress that had recently taken place and the prosperity that now reigns throughout the agricultural district, that their business had greatly increased and that this year saw the sale of four times as many forks, scythes, etc., as in 1909. "Indications are for a still larger business next year," he said. "Already we have \$2,000 worth of machinery sold for delivery in 1911."

SHARP'S SANITARY DAIRY

It was a pleasure to visit the farm of Prof. John Sharp on the Hallsbury road near here. Professor Sharp first came to New Ontario as a missionary 13 years ago. "At that time," he remarked, "there were only four small houses in Liskeard and throughout the entire section there were not more than 40 families; I mean by a family, the occupants of one shack. If counted as families only those where there was a woman, then there were not a dozen in Temiskaming."

While here the Professor was given a professorship in Morrin College, Quebec, and subsequently one in Queen's University, Kingston. This latter he resigned preferring to farm in Temiskaming.

Professor Sharp has a dairy herd of 21 cows and is one of the few who supply milk to the towns. His cow stable and horse stable are separate buildings about 200 yards apart. The

a life of confinement as a University Professor.

\$1,000 FOR EVERY YEAR IN NEW ONTARIO

At Earleton I met Mr. W. A. Houser, another successful and enthusiastic farmer who came here nine years ago. "At that time," he told me, "there were no roads and all the past was sold bushland."

During the nine years' residence in Temiskaming he has owned three farms. "On the first I cleared \$2,200," he explained. "I sold me \$2,200, and with the lumber I sold it for \$5,000. I took \$5,000 worth of lumber off the second, then sold it for \$2,000." The third farm is the one on which he lives. "I paid \$350 for this one five years ago, and today \$5,000 could not buy it," he continued.

Mr. Houser showed me a field of Red Fife wheat sown May 3 and also some Twentieth Century oats from his own seed. Last year his oats yielded 82 8-11 bushels an acre and his wheat averaged 60 bushels to the acre.

Asked if he farmed in Old Ontario, "No," was the reply. "I was a Grand Trunk station agent at Grimsby, and every one thought me crazy to give up a good job and come away here, but I had worked 12 years and was not a cent to the good—now I can show \$1,000 for every year I have been here."

Mr. Houser is one of those who does not think the Government is doing all it should in the interests of the settlers.

"The settler should be encouraged

not discouraged," he said, "in clearing and improving his farm. But as the present law stands it is particularly hard on the actual working and progressive settler. Every bit of improvement—fences, buildings, fences, clearing—everything he does to clear up and improve his farm and thereby increase the value of the whole district he is fined for, not once, but every year. On the other hand the speculators and non-residents or sluggards pay practically nothing in the way of taxes as they have very little improvements, and besides are a drawback to the whole country and a continual source of danger to the progressive settler in the way of bush fires, which at any time coming from the unimproved lots may wipe out the buildings of good settlers.

"It is almost the unanimous feeling of this district that this matter should be amended at once and improvements exempted up to at least \$1,500.

"Another matter is the cancellation of unoccupied farms. There are numbers of good lots in every town and village, and many of them practically unimproved, of which the Crown Lands Department is entirely ignorant unless some person applies for their cancellation. Then the original lottee is given 30 days to get his lot and you may be sure that just before the expiration of the time he is on it, and then usually the Homestead Inspector happens along and finds the holder actual occupation and working. He goes away and reports to the Department accordingly and the holder follows the inspector out almost immediately. He is seldom seen around the place until he is again given 30 days' notice with the same results.

"A third matter is the importance of having the Government undertake some experiments at points between Hallsbury and Englehart in order to determine the varieties of fruit, roots and so forth that will succeed best in the locality. The same farm at Monteith is too far away to be of much use to us.

"The Agricultural Department should plant experimental plots at intervals along the main road between Hallsbury and Englehart in order to put the requisite amount of work and study on the plot; the work to be carried on under the direction and supervision of the proper person from the Agricultural College at Guelph.

"The settler in this country is struggling to hew out and build up his home and naturally hesitates to go very deeply into experiments when that experiment involves any financial outlay. The more rapid development of resources will be delayed unless the Department will assist us and thereby aid in determining the possibilities of the future of our district in both the soil as well as agriculture.—COLIN W. LEES.

Queen's University and College

KINGSTON ONTARIO.

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Kingston, Ontario.

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FARM MANAGEMENT

Dairy Cows for Cream Production

What breed of cows is best for me to keep which will give a steady supply of cream? T. W. Simcoe Co., Ont.

Almost any of the dairy breeds should meet your requirements. The Jersey is noted for its rich milk and cream of high color. Holsteins while not having so high an average of fat in the milk, would give milk in quantity so as to give possibly more cream than the Jersey. The same is true, speaking generally, of the Ayrshire.

The whole question comes down to a matter of the individuality of the cows you have and of their ability as milk and cream producers. Whatever breed you select, have one that you like and make sure that it is a particular producing strain of that particular breed.

Second Growth Clover for Horses

Is second growth clover safe to feed to horses? J. A. W. Peterboro Co., Ont.

Second growth clover, properly cured and saved, makes the very best of fodder for either horses or cattle. It should be much better feed than hay secured first at the first cutting. It should be cut as soon as the heads have turned brown and before seed has formed or the plants become fibrous and woody.

If carefully saved and if after storing it is in no way mouldy or dusty, you need have no hesitancy about feeding it to horses or other stock to which clover may be fed. Only horses at slow work should be fed clover hay in quantity.

To Rid Land of Ragweed

A field from which I have cut a crop of wheat is badly infested with ragweed. How can I get rid of this, as I intend to sow the same field to corn next season? J. R. Middlesex Co., Ont.

Land badly infested with ragweed can be cleared by a regular system of short rotations, care being taken to cultivate immediately after harvest and to mow down the fall growth on the old meadows. The following short rotation is recommended by Mr. J. H. Grisdale of the Central Experimental Farm, Ottawa: To destroy weeds, probably the best rotation possible in one of three years' duration, including clover and mixed hay, followed by roots or corn, the land shallow-plowed in fall and sown to grain the next spring with 10 pounds of red clover and 12 pounds of timothy an acre. (When the land is heavy or clayey, the 10 pounds of red clover may be replaced by six pounds of red clover and two of alsike.) If a portion of the arable land must be used for pasture, then the under grass or hay for two years instead of the one year, the second being used for pasture, thus extending the three-year to a four-year rotation. The pasture land in the four-year rotation or the hay land in the three-year rotation should be broken up early in August and cultivated at intervals to destroy the successive growths of weeds as they appear. The land should again be plowed or preferably ridged in the fall.

Ragweed is one of few weeds for which hand pulling is a practical remedy. As a rule, the plants are conspicuous and grow near the edges of fields. A little labor in pulling before the seeds are ripe will be well repaid by the clean crop reaped. Special attention should be given to fields liable to be flooded. Good work may frequently be done for this, as for several other weeds, by running a mowing machine around the edges of the field before the seeds are ripe.

Continuous Door in a Silo

E. J. L., Wentworth Co., Ont.

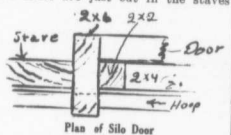
In South Wentworth we have stopped cutting doors in the silo to put out the ensilage and instead have a continuous door, never having to pitch the ensilage up to a door, but can put it cut on the level. In building the silo proceed as follows:

For a silo 28 feet high, take a 12 and a 16 foot stave for each side of the door, placing them on one another flat on the ground. Bore the holes the same distance apart as the hoops and large enough to admit the hoop easily. We use round iron only for hoops. Bore the holes 1 1/2 inches from one side. Then you have the plan for the hoops on the silo when erected. Then, laying a 12 and a 16 ft. stave flat, end to end, nail a two-inch square piece the full length of 28 ft., thus leaving two inches on each side clear of the holes bored.

Take as many 2 x 4 scantlings as you have hoops cut in two ft. lengths. These form a ladder as follows: The two pieces are placed with ends nailed there and the hoop comes on the outside of these. Then there is two inches of these 2 x 6 upright pieces inside of the 2 x 6 uprights, leaving a shoulder on the inside to hold the door pieces which are the staves cut in lengths to fit across the opening starting at the bottom.

CONVENIENCE IN HANDLING

When you come to take out the ensilage you can always throw ensilage out on the level and do not have to sometimes move in the case where the doors are just cut in the staves



at uniform distances. We have one silo of both styles but the one described above is the only kind built now.

Instead of the hoops going through a piece of wood as described, we use iron buckles, which we get at hardware stores in Hamilton, having two holes in them through which the ends of the rod pass and the nuts are screwed on the end of the rods against these. This makes it easy to tighten the rods and they do not pull through in a few years as the use of wood.

ERECTING THE SILO

This ladder or opening for doors is stood on end when nailed together and braced facing the place where you want the opening. Start on one side and place the staves going right around until you get to the other side of the circle, taking the staves to the one place in position before it.

Where the ends of the staves come together, we put a groove lengthwise of the staves, and place a piece of two-inch band iron, 5/8 inches long, which helps to hold the staves in place. This groove is out one inch too deep so that the iron does not keep the staves from sliding down together.

The management of the calf during the first year is much to do with its later success. Plenty of water and salt should be given in the first year. Avoid sudden changes of diet and practise regularity in feeding. Provide warm, dry quarters in damp weather. Give plenty of roughage and not too much grain. Develop a large capacity for handling food as is desirable in dairy animals. When the calf is six months to a year old, milk may be omitted from its ration and a full roughage and grain diet substituted.—D. H. Otis, Madison Wis.

Our Legal Adviser

POSSESSION OF LAND.—1. Does 10 years' possession of land that has been enclosed for that time give possession in spite of the provincial survey recently made?

2. Must the 10 years include but one owner, or does it give same right if land has changed hands several times? A part of this has been under cultivation more than 10 years. Ownership undisputed until surveyor ran lines 20 years ago. No owner sold south end of lot. Lines through middle of lot was not run before. Would he sell south of disputed field if surveyor had not made new line farther north.

3. What is your advice to owner? Neighbour claims land up to new line, and will "Ruralist."

1. Ten years' possession of lands will give a good title as against the true owner provided the property has been enclosed and the possession by the person claiming the land has been for such period "open, visible and continuous."

2. If two or more persons are in possession of lands for periods of time amounting in the aggregate to ten years, the last in possession will be deemed to have acquired the title thereto as against the true owner provided there has been continuous occupation as against the true owner and the successive occupants claim in some sufficient way under each other.

For example, if "A" takes possession of lands belonging to "C," and after remaining in possession for say eight years undertakes to dispose of the property to "B," (even if he gives "B" no actual deed of the property) "B" by remaining in possession for the remaining two years will acquire a title. But if "A" after possession for such period abandons the property and "B" without agreement with "A" subsequently enters possession for 10 years to acquire title, he will require himself to hold possession for 10 years to acquire title. 3. The original owner will have to issue a writ to recover possession if he desires to attack the adverse claim and if he succeeds will be entitled also to compensation for the use of the lands.

PAY FOR HORSE

Last year in June, a young man under age, took my horse to a military camp and entered him to his own name. I knew nothing about it. He has never paid me yet. Can I compel his father to pay it, or shall I notify the Major, and make him pay, or can I make the Major pay, as the horse was not entered in my name? T. R., Manitoba.

You have no right to take proceedings against the major, nor against the father of the young man to recover pay for the use of the horse, but the young man himself is liable for its use, and you probably could recover against him by legal process, if he will not pay without.

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HORTICULTURE

Tomatoes for the London Market

Arthur Knight, York Co., Ont.

It is doubtful if tomatoes can be shipped from Canada to the London market with profit as suggested by Mr. Lockie Wilson in an interview and which was published in the July 25 issue of Farm and Dairy. Prior to coming to Canada three years ago I was engaged in the fruit trade at Covent Garden Market as a retail buyer. Therefore my knowledge is first hand.

It is correct that tomatoes are shipped from the Canary Islands to London in large quantities. They are packed, as Mr. Wilson states, in sawdust and peat, mixed. Mr. Wilson omits to add, however, that each fruit is wrapped in a separate piece of tissue paper. Also, and this is of the greatest importance, they are only sent over while home grown fruit is scarce.

This imported fruit would stand no chance in competition when the Eng-

lish tomatoes are most plentiful in August and September. English fruit of first quality can then be bought at from 40 to 60 cents a peck. The only foreign tomatoes imported during this period are from France. These sell at from two to four cents a lb.

Tomatoes are a soft fruit when ripe. It follows that they must be packed before quite ripe if they are to be shipped any distance. They cannot then be of the best quality when received at their destination. I imagine that Mr. J. Lockie Wilson was in England during the spring months and jumped to the conclusion that the Canary tomatoes he saw then were sent in continuously during the spring and summer. My experience leads me to state that they are only shipped when home grown fruit cannot be had. It might mean a heavy loss to the grower or the salesman who would attempt to find such a market for tomatoes.

Profitable Potato Spraying

Dry seasons tempt even those who believe in potato spraying to omit or slight the practice; but a study of Bulletin No. 328 of the Station of Geneva N.Y., should convince growers that they ought to spray regularly. The past three seasons have been exceptionally dry, and serious potato diseases have, temporarily, almost disappeared from N. Y. State; yet only one-fifth of about 100 tests made by the Station or reported to it in these three years have shown a financial loss from spraying, and the average increase, on more than 1,000 acres sprayed in the experiments, was 36 bushels to the acre.

The Bulletin summarizes the results of 32 Station experiments made during the past eight years, in which the average gain from spraying every two weeks has been 102 bushels per acre at Geneva, 54 bushels at Riverhead; and from spraying three times during the season, 78 bushels at Geneva, 29 bushels at Riverhead.

The average gain made by farmers spraying under Station inspection has been 41.1 bushels per acre for seven to 225 acres running from 60 to 225 acres each year. By farmers spraying independently but reporting to the Station, on areas ranging from 74 to 600 acres yearly for six years, the average gain has been 52 bushels per acre. It is safe to say that the practice of spraying has saved the 288 farmers reporting experiments in the last seven years more than \$50,000. Potato growers should not be tempted by a dry season to omit spraying.

Late Strawberry Setting

Is it too late to set out strawberry plants with the expectation of harvesting a good crop next year?—R. J. Prince Edward Co., Ont.

The general commercial practice in Ontario and in most other strawberry producing sections is to set the plants early in the spring. The "Rural New Yorker" advocates a method for late planting, which is as follows: Four rows of plants are set one foot apart each way, and then a space of two and one-half feet or three feet is allowed for the purpose of using the grower or pickers. Then follows another bed of four more rows of plants set one foot each way, and so on. This method requires a considerable amount of hand labor to plant the requisite number to have all runners kept off and can only be cultivated by hand, although the space between the beds can be worked up for the purpose of weeding. In summary, this method can only be followed on a small scale.—Prof. J. W. Crow, O.A.C., Guelph, Ont.

Renewing the Strawberry Patch

W. S. Horne, Peel Co., Ont.

My method of renewing over a strawberry patch in a second crop is as follows: After the first cropping of the crop is completed, I mow the vines and weeds with a horse mower as close as possible. Let them lie a day or two, rake them up with a horse rake and burn up. Then plow a shallow furrow, say three inches deep, from each side of the row, leaving the row about 15 inches wide.

Lead the plow to settle a day or two then level with the retractor. Weed the row and in a few days cultivate between the rows. Continue the cultivation until the vines have renewed their foliage commenced running. By doing this you will have as fine a looking patch as the new one planted in the spring. With a vigorous patch this treatment will sometimes answer for the third year. The two year old patch is very often the most profitable and produces the best crop. The third year patch is invariably light.

WINTER COVERING

To secure early crops the winter covering should be light and the vines uncovered early in spring. On light sandy land where the drought is severe the mulching is practically useless unless raked off in spring and the land between the rows thoroughly cultivated as late as possible before the berries begin to form. Then replace the covering.

On land with plenty of moisture the winter covering can be raked off the rows and left for a mulch. It also helps to keep the berries clean. No cultivation is needed. On light soil where berries suffer from excessive heat a few weeds left in the row through picking time often prove beneficial by shading the fruit and preventing sun scald.

Worms on Cabbage

My cabbage are badly infested with small worms. What can be done for them?—M. B. Hastings Co., Ont.

Cabbage worms can be successfully combated by applying such materials as dry kail, lime, even road dust. They may be poisoned by Paris green

or arsenate of lead, in the usual quantities, by adding a little soap to the water so that the liquid will adhere to the leaves.—Prof. J. W. Crow, O.A.C., Guelph, Ont.

Vegetable Crop Reports

The crop reports received by the Ontario Vegetable Growers' Association for the central district of Ontario, comprising branches in Oshawa, Toronto, Berlin and Brantford, report the prospects good for early tomatoes. No diseases are apparent at present. Early potatoes are very poor, with late crop medium. Rain came just in time to save the crop. For onions, the blight is very bad, the bulbs small and drying off. Celery reports show the crop to be rather later than last year, but otherwise looking good, no blight showing so far. The acreage in cabbage and cauliflower is slightly larger than last year. Crop rather backward on account of the drought. The corn and bean crops are good and free from disease.

The southern division, with branches at Ojilway, Tecumseh, Dunnville and Hamilton report the condition of the crops fairly good. Celery reports growing about one hundred acres less than last year. Early potatoes are much damaged by dry weather, the onion acreage is suffering the same as last year, but is suffering from drought. Celery is very poor, owing to the dry weather. The acreage in cabbage and cauliflower is somewhat less than last year, and a growth retarded by drought. Melons are a failure at Ojilway. Corn at Tecumseh will be a total failure, unless rain comes soon.

The western district, with branches at Sarnia, Woodstock, St. Thomas, Stratford and London, reports the prospects for the tomato crop as good. Early potatoes are poor; the late ones are better. Onions are very poor. The maggot is reported to be working in some sections. Celery is doing well. No early cauliflower; late cabbage and cauliflower looking well at present.

The eastern division, with branches at Ottawa, Kingston, Belleville and Picton, reports tomatoes to be about two-thirds of a crop at Ottawa, but Belleville and Picton report tomatoes as good. Early ones are troubled with leaf blight. The crop of early potatoes is very small, but later ones are promising well. The onion crop is fair, but blight is showing in some localities. Celery planting was delayed owing to drought. The crop is looking fairly good. Cabbage and cauliflower, early crop is poor, but the later planting looks promising.

Ottawa reports the general outlook for vegetables as poor, and indications are that the vegetable crop in all lines will be much below the average there.

Mulching of Gooseberries

Instead of clean cultivation in my gooseberry patch would it be advisable to mulch with straw to keep down weeds and conserve moisture?—A. J. Russell Co., Ont.

Regarding the advisability of mulching a gooseberry plantation with straw to keep down weeds, preserve moisture, etc., if plenty of straw is available, this would be the ideal method of growing gooseberries. They are shallow-rooted plants and thrive best in cool soils. Heavy mulching with straw holds the moisture, prevents injury to the roots by cultivation and keeps the soil cool.

Straw of course, does not contain in itself as much plant food as would be required by a gooseberry plantation. If straw is not available it should make a very desirable mulch, or manure enough to supply the necessary fertilizing constituents could be used in conjunction with a heavy mulch.—Prof. J. W. Crow, O.A.C., Guelph, Ont.

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13

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POULTRY YARD

Roup—Symptoms and Treatment

Some of our hens have taken a swelling under the eyes, and in the course of a week, the whole head, throat and eyes are so swollen and red that they can neither see nor eat, and they eventually succumb to death. What is this disease and the cause, and is there a cure for it?—G. H. K., Northumberland Co., Ont.

The disease which you describe is roup. Destroy and bury all birds that are badly affected. Thoroughly clean and disinfect the premises. Give the other birds Conkey's Roup Cure, or permanganate of potash, one teaspoonful in one quart of drinking water. If any of the birds are too valuable or strong to kill, wash the throat with a strong solution of permanganate of potash.—Prof. F. C. Elford, Macdonald College, Que.

Poultry Products Sold Co-operatively

(Continued from Page 5.)
our members has our success and growth been extended. If at any time we failed to do this, it was quickly marked by a dropping out here and there and a reduction in the quantity of the product we had to offer. It would take several months of hard work to re-establish ourselves on our former footing.

This was shortsightedness on the part of the farmers. Being a farmer myself, however, and having been brought up on a farm, I have considerable sympathy for them in this respect. It is the conditions in rural sections, not the people, that make successful organization among farmers difficult. Their dollars are few and they know how they came. A great majority of farmers have never seen the broader side of life by travel and from interchange of thought with others. They do not realize that it is sometimes important and necessary in all business that there be a little present sacrifice in order that afterwards a future benefit may be reaped.

SUCCESS AT LAST

However, we have been through all this and we can now safely say that we are thoroughly established as a successful producing centre. We are always in a position to give every farmer a better price for best quality produce than he can secure from any other country or city firm. We are well known to all city dealers and are continually in receipt of inquiries by letter and phone for produce. In most instances we make our own price. With regard to this point I will give a few of last week's inquiries.

"We were expecting to receive a 30 dozen case daily of your selected eggs, but have been disappointed. Rush two cases in at once followed by daily shipments at your own price." (By letter.)

"Ship us to-morrow morning 50 each and from 60 to 75 chickens (broilers) from three to seven lbs. each, followed by another shipment on Thursday. Will phone you quantity desired. Send invoice with shipment and we will remit by return mail." (Phone.)

The following is a letter from a firm who had ordered a sample case of our selected eggs:

"We are pleased to say that your eggs are most satisfactory in size, appearance and freshness. Please ship us a 30 dozen case daily and more if you have them."

ADVANTAGES OF CENTRALIZATION
These are only a small part of the communications received last week regarding poultry and eggs. Our great difficulty now is supply not demand. But from these alone it can easily be seen that if the Poultry Pro-

ducers' Association extends over Canada, as it should do, with a central organization for every province to look after the marketing end, and education between all branches and this central organization, it means thousands and thousands of dollars for the farmers of this country from improved quality and a better price alone. In addition we would have the increased production that is bound to follow the more profitable conditions.

The grading for dressed poultry and eggs established by the Executive of the Poultry Producers' Association at a recent meeting, has now been published by most of the agricultural papers in Canada. This grading was considered by us, from past and present experience, to be the most practical for present use in Canada. We are most anxious for a thorough discussion and criticism of this grading from all interested in poultry production or marketing. The sole object is to get at the most workable system possible.

Honey Prices for 1910

Editor, Farm and Dairy.—The Honey Exchange Committee of the Ontario Beekeepers' Association met at the Secretary's office on Aug. 2, reports were received from 450 points throughout the Province, representing 23,582 hives of bees, an increase of 60% over last year. All parts of the Province were well represented, and the Committee was thus able to get very accurate figures as to the crop conditions.

It was found that there was practically no old honey left on the market and that all reports indicated that the 1909 prices suggested by the Committee were realized. The average production per colony of light honey is 58.3 pounds as compared with 59.1 last year. While the crop in the centre and western part of the Province, where the bulk of the marketable honey is produced, is lower con-

siderably than last year's, there is a much larger crop in the eastern counties which has kept up the average.

After considering the reports carefully the Committee would recommend the following prices for the year:

- No. 1 Light Extracted (wholesale), 10 to 11 cts. a lb.
- No. 1 Light Extracted (retail) 12 1/2 to 15 cts. a lb.
- No. 1 Comb (wholesale), \$1.80 to \$2.25 a doz.
- No. 2 Comb (wholesale), \$1.50 to \$1.75 a doz.

The Committee find that large quantities of extracted honey have already been sold by Peel County Beekeepers at 10% cts., car lots, i.e. b. shipping point for the western markets. In view of the decrease in the crop and the firm prices of fruit, the Committee believe that the above prices should be realized and would suggest that beekeepers hold part of their honey for later delivery unless present prices are satisfactory. We would again suggest that the local demand which is increasing, should be specially looked after.—Wm. Couse, H. G. Sibbald, Claude; Morley Pettart, Guelph. P. W. Hedgects, secretary.

A meeting of British Columbia poultrymen will be held in the exhibition grounds, Vancouver, on Aug. 18 to form

a poultry association. The object of the proposed poultry association is "Better poultry and more of it."

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AND RURAL HOME

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The paid subscriptions to Farm and Dairy exceed \$300. The actual circulation of each issue, including copies of the paper sent subscribers, but not strictly in arrears, and sample copies, varies from 1,500 to 16,500 copies. The total circulation are accepted for less than the full subscription rates. Thus our mailing lists do not contain all our subscribers.

Sworn detailed statements of the circulation of the paper, showing its distribution by country, and the process will be mailed free on request.

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We want the readers of Farm and Dairy to feel that they can deal with our advertisers with our assurance of our advertisers' reliability. We try to admit to our columns only the most reliable advertisers. Should any subscriber have cause to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the matter as fully as possible. Should we find reason to believe that any of our advertisers are unreliable, even in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the dissatisfied subscriber wish to expose them through the columns of the paper, thus we will not only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefits of this Protective Policy, is to include in all your letters to advertisers the words, "I saw your ad. in Farm and Dairy." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

FARM AND DAIRY

PETERBORO, ONT.

INFORMATION ABOUT HORSES NEEDED

Bulletin No. 1, entitled "Horses," recently issued from the Manitoba Agricultural College, fills a long felt want. It is such as we should have had long ago in Ontario. Heresmen of Ontario, whose hopes were raised during the investigations made of horse breeding in the province during 1906, have to date had no realization whatever of those hopes,—not even a suggestion that an up-to-date bulletin be published giving information touching upon breeds, and breeding, markets, types and the classification of horses generally, was acted upon.

Professor Peters, and the Manitoba Agricultural College are to be commended for issuing a bulletin on horses. This bulletin deals with the classification of horses outlining the general qualifications required of a horse belonging to any class and describing each class in detail. Some excellent information relating to the brood mare and to the foal is also included. The bulletin is attractively illustrated and is such that any farmer will read and profit therefrom.

The bulletin is designed principally with the idea in view of assisting farmers in getting their horses entered in the proper class at the agricultural society and live stock shows. There has been great need of such information on the part of the exhibitors at many of the smaller western fairs, where it is a common thing for types of horses to be improperly classed and where it has in the past frequently happened that a good horse has been defeated by a somewhat inferior one because of the requirements more nearly to the requirements of the class called. The same is true of some of the smaller Ontario fairs.

There is a great thirst abroad in the land for information relative to horses and to horse breeding. The most popular and helpful bulletin that could be gotten out by the Ontario Department would be one relating to horses. It is to be hoped that in the not far distant future such a bulletin will be forthcoming.

IMMEDIATE ACTION REQUIRED

Farm and Dairy has frequently pointed out that the Dominion Department of Agriculture is sadly neglecting the important poultry industry. The appropriations made at the recent session of the House of Commons included money for live stock, fruit, dairy and other work, but practically nothing for the advancement of poultry, one of the most popular and best paying branches of agriculture. Practically the only work being done by the Dominion Government on behalf of the poultry industry is what is done in the poultry department at the Experimental Farm. Why does the department fail to appreciate a branch of agriculture in which almost every farmer is interested, and which plays an important part in Canadian trade?

If Canada were producing more eggs and more poultry than she could consume and prices were poor, there might be some excuse for this masterly inactivity. This, however, is not the condition. Never have eggs and dressed poultry been as high in price as at present. Last year we consumed half a million dollars worth of eggs more than we produced. This spring several car loads of Russian eggs have been imported into Canada, and this demand for foreign eggs is likely to continue. Why, then, does not the Government grasp the opportunity and encourage this line of work by helping to put the industry on a better basis?

The Government made its first mistake when it discontinued the Poultry Division of the Department of Agriculture. This department should be revived, and if possible its former chief, Prof. F. C. Elford, of Macdonald College, should be replaced at its head. There is plenty of work for such a division to do. Such questions as housing and feeding poultry, breeds and varieties, system of production, systems of incubation, and so forth, are purely local in nature, and should be dealt with by the provinces. Local conditions vary so

much that each province should work out such problems for itself. When, however, it comes to systems of marketing poultry and eggs, the standardization of breeds, the definition of different grades of products, the passing of required legislation, poultry pathology, and so forth, questions arise which can be dealt with most effectively by the Dominion Government.

The question of markets, both home and foreign, requires immediate attention. Standards for eggs and dressed poultry cannot be adopted too quickly. Poultry products are about the only commodity for which there are no recognized standards or grades. It is hard to imagine any product in need of such classification.

A poultry pathologist is urgently needed. The annual loss to the country through poultry diseases, including the mortality among young chickens is enormous. A competent official should be appointed to inspect the cause of this loss, and this official should be furnished with a poultry plant to facilitate the transactions of his labors.

Had the deputy minister of agriculture at Ottawa been a man possessing agricultural experience, it is probable that work of this nature would have been undertaken long ago. Conditions are such now that longer delay cannot be permitted. It is time for the Department of Agriculture to act, and care should be taken to see that the work is conducted on a scale compatible with its importance. Suggestions for the improvement of the poultry industry have been laid before the Government. They should be acted upon at once.

IMPOVERISHING THE FARMER

In the United States as in Canada, population is flocking from the rural districts to the towns and cities. Conditions in the State of Missouri have reached a point that Governor Hadley has started a movement which aims to check this unhealthy migration. A National Farm Homes Association is being formed to furnish farms, equipment and instruction for worthy applicants who are seeking to escape from the cities to the country. It is proposed to locate colonies of model farms in several States. Each farmer will be allotted 40 acres. A home will be erected for him, and conveniences, utensils, and live stock furnished. Each colony will include a central farm, presided over by an expert agriculturist, who will oversee the work of the other farms.

This movement, like many others of the same kind that have been started, not only on this continent, but in Europe as well, is doomed to meet with failure. We cannot reverse the present tendency until we change the laws which are its cause. Under our present system of taxation, a large share of the revenue produced on our farms is used to build up the cities, although but few of our farmers realize it. Not until a system of taxation is introduced which will lighten the burden on the farms and check the concentra-

tion of industries and population in large centres, may we expect to see an improvement.

Every time a farmer ships a steer or a bushel of grain to the city, he is forced to pay undue charges to the railways, thus impoverishing himself and enriching these great corporations. The products of his farm, when handled in the cities, create work there, and thereby increase the value of real estate. Men buy land in cities, and then wait for the farmers, by their productive work, to increase its value. When all land is taxed according to its value, there will not be the incentive that now exists for people to congregate in cities, and that portion of our productive labor which is now going to build up the cities will be returned to us through a more equitable system of taxation.

PREVALENCE OF COMMON WEEDS

The more common weeds are becoming altogether too prevalent. It was only a few years ago that such weeds as Canada thistle, false fax and ragweed caused farmers much concern and efforts were put forth to free, and to keep free, the land from them. In these later years many of these weeds have come to be regarded with indifference and only such notorious pests as sew thistle are viewed with any concern. The result is that the ripening crops all over the country during the last few weeks have presented anything but an ideal appearance.

There is danger yet, as of old, in these now common weeds. They are a distinct source of loss and should be kept in subjection. Effort spent in subduing them is, to be sure, worth while.

The introduction of a rotation of crops and shorter rotations, included in which are hoed crops, is the most effectual means of keeping these weeds in check. This matter of common weeds needs more earnest consideration on the part of our farmers.

Members of co-operative egg circles recently formed in connection with the Poultry Producers' Association of Canada, should find much of interest and encouragement in the article by Mr. Hillhouse, elsewhere in this issue. The branch organization of which he writes has come through a varied experience and to-day is reaping a rich reward.

There are some things that we can learn from the farmers of the United States. One of them is how to organize. In the State of New York alone, on September 30, 1909, 88,886 farmers were members of the Grange. This showed a net gain in membership for the year of 6,683. By January 1, 1910, the membership had increased to 90,591. There were 736 Granges in the state. The need for a similar organization among the farmers of Ontario is shown by the fact that in the Dominion House of Commons, the province of Ontario, the most thickly populated province in the Dominion, is represented by only six farmers.

The Sharp Contrast

Hoard's Dairyman.

We are being educated by contrasts, by comparison. "As the light shines more and more unto the perfect day," do we see the difference in farms and farmers.

The shiftless, easy going, non-reading farmer, who has low ideals about stock breeding, about soil handling, about stable sanitation, indeed about everything connected with farm management, that man is beginning to squirm as the work of his hands is contrasted with that of the progressive farmer. The work of the "Cow Census" shows up these contrasts in dairy farming. Note how you will always hear the poor farmer grate about his ideas being more "practical." As if ignorance and shiftlessness were ever practical. Note how you will hear him declare that a grade bull is more "practical" than a registered one. How keeping one's self in ignorance of what one's cows are doing is more "practical." How this idea of adding phosphate to our worn-out soils "ain't practical." Indeed in his estimation nothing but his own ignorance and poverty stricken ideas and methods are "practical."

Then contrast him, his cows, his farm, his methods, his profits, with the live, go-ahead farmer if you wish to see what is "practical." It is the "contrast" that tells the story, and by contrasts are we educated to a knowledge of the "practical" truths.

Distension of Rumen

A. J. Murray, M.R.C.V.S., U.S. Department of Agriculture.

This form of indigestion is caused by the animal gorging itself with food, and arises more from the animal's voracious appetite than from any defect in the quality of the food supplied to it. The condition is, however, more severe if the food consumed is especially concentrated or difficult of digestion. In cases of this kind there is comparatively no great formation of gas, and the gas which is formed is diffused through the stomach instead of accumulating in a layer in its upper part. On pressing the flank with the closed fist the part of the hand remains for a short time in the flank as if the rumen were filled with a soft, doughy mass.

This form of indigestion should be treated by stimulants, such as alcohol, wine, or aromatic spirits of ammonia.

If the formation of gas is not great and the distention with a solid material is somewhat limited, the animal may be drenched through a piece of ordinary garden hose, one end being inserted in the animal's mouth like the neck of a bottle, and the other end fitted with a funnel, giving one and one half pints of Epsom or Glauber's salts dissolved in two gallons of water, at a single dose. Immediately after this treatment the left side of the animal, extending below the median line of the abdomen, should be powerfully kneaded with the fist, so that the impacted food mass will be broken, allowing the water to separate it into small portions, which can be carried downward for the process of digestion.

But if the treatment applied fails and the impacted or overloaded condition of the rumen continues, it may become necessary to make an incision with a sharp, long-bladed knife in the left flank, commencing at the point where it is usual to puncture the stomach of a downy and prolong the incision in a downward direction until it is long enough to admit the hand. When the point of the knife is thrust into the flank and the blade cut downward, the wall of the stomach, the muscle, and the skin should all be cut through at the same time. Two assistants should hold the edges of the wound together so as to prevent any

food slipping between the flank and the wall of the stomach, and then the operator should remove two-thirds of the contents of the rumen. This having been done, the edges of the wound should be sponged with a little carbolized warm water, and, the lips of the wound in the rumen being turned inward, they should be brought together with catgut stitches.

The wound penetrating the muscle and the skin may then be brought together by silk stitches, which would pass through the entire thickness of the muscle and should be about one inch apart. The wound should afterwards be dressed once a day with a lotion and the animal covered with a light linen sheet, to protect the wound from insects and dirt. The lotion to be used in such a case is made up as follows: Sulphate of zinc, 1 dram; carbolic acid, 2 grams; glycerin, 2 ozs.; water, 14 ounces; mix. It is clear that this operation requires special skill and it should be attempted only by those who are competent.

Disadvantages of Weeds

1. They rob cultivated plants of nutrition.
2. They injure crops by crowding and shading.
3. They retard the work of harvesting grain by increasing the draft and extra wear of machinery. (Bind-weed, thistles, red root.)
4. They retard the drying of grain and hay.
5. They increase the labor of threshing, and make cleaning of seed difficult.
6. They damage the quality of flour, sometimes making it nearly worthless. (*Allium vineale* L.)
7. Most of them are of little value as food for domestic animals.
8. Some weeds injure stock by means of barbed awns. (Squirrel tail grass, wild oats, porcupine grass.)
9. Some of them injure wool and disfigure the tails of cattle, the manes and tails of horses (Burdock, cocklebur, houndstongue.)
10. A few make "Hair balls" in the stomachs of horses. (Rabbit-foot clover, crimson clover.)
11. Some injure the quality of dairy products. (Locks, wild onions.)
12. Pony cross, and probably others, when eaten by animals, injure the taste of meat.
13. Poison hemlock, spotted cowbane and Jamestown weed are very poisonous.
14. Many weeds interfere with a rotation of crops.
15. All weeds damage the appearance of a farm and render it less valuable. (Quack-grass, Canada thistle, plantains.)

SOME SMALL BENEFITS.

1. They are of some use in the world to induce more frequent and more thorough cultivation, which benefits crops.
2. The new arrival of a weed of first rank stimulates watchfulness. (Russian thistle.)
3. In occupying the soil after a crop has been removed they prevent the loss of fertility by shading the ground.
4. Weeds plowed under add some humus and fertility to the soil, though in a very much less degree than clover or cow peas.
5. Some of them furnish food for birds in winter.—W. J. Beal, Lansing, Mich.

Unsound Advice.—The person who first wrote that advice to farmers not to take a dog along when going for cows evidently never went for cows and had to economize each individual cow out of the pasture. It would seem to me as though it was the result of inspiration on the part of some smart chap in an office. What is the experience of other Farm and Dairy readers on this point?—John Steel, Lanark Co., Ont.



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Lawn Swing for two adults or four children, strong and well made, selected from well seasoned hardwood lumber. The foot rest can be placed on level with the seat, thus forming a bed or hammock; uprights painted in a bright vermilion.

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Creamery Department

Butter makers are invited to send contributions to this department, to ask questions on matters relating to butter making, and to suggest subjects for discussion. Address letters to Creamery Department.

The Need of an Export Trade

It seems that the need of an export demand to work off the accumulated surplus stocks of butter is deemed absolutely necessary, and consequently buyers have reduced their prices in the country, sales at the Cowanville board being made at 22½ cents and at St. Hyacinthe only 21½ cents was paid last week, says The Trade Bulletin. A letter received from one of the large provision firms of Tootley St., London, by last mail says: "Unless prices on your side come down to a parity with ours, I fear your chances for utiliz-

ing this market will have flown for this season, as the liberal supplies of home make along with plentiful imports of Danish and Siberian, along with fair offerings of New Zealand and Australian for this season of the year keeps the market well within the buyer's zone; and we do not look for any advance such as is needed to warrant shipments from your side, for some time."

This is not very cheering news for exporters in view of the desultory demand from the Northwest and the Coast. A dealer in and shipper of butter stated on 'Change on Tuesday, Aug. 2: "I have contended from the very start this season, that prices were too high to admit of a profitable business for the middle man; and I have good reasons for saying that the comparatively small lots now going forward to Liverpool, Glasgow, and Bristol cannot possibly net a profit; but they may bring on a better demand later. I hope so."

It is the opinion of some in the trade that as soon as the cooler weather sets in during the coming fall that the make will be very small, owing to the exports of cream being much larger. We were led to expect this result, however, at the beginning of the season; but it has not materialized, the receipts for the season up to the close of last week,

July 30, amounting to 218,025 pkgs. against 193,600 pkgs. for the corresponding period last year showing an actual increase of 24,855 pkgs. The exports to same date were 7,511 pkgs. against 9,520 pkgs. last year and 50,223 pkgs. for the year previous. Our experts, therefore, have declined in value about \$570,000 this season to date as compared with those of '08.

Dairy Notes

The Beard of Trade returns of imports into the United Kingdom for the first six months of the year furnish the following particulars respecting butter. Supplies from all sources for the first half of this year, compared with the corresponding period of 1909, show an increase of 7,822 tons, or an average weekly increase of 300 tons. Receipts from the Australian colonies and New Zealand were over 12,000 tons more, while supplies from foreign countries showed a decrease of over 4,000 tons. The only foreign country to show an increase was Holland. From the United States, only 22 cwt. of butter were received. Notwithstanding the large increase in supplies, prices have been on a higher scale than last year, but signs are not wanting that they will rule lower shortly.

There is an abundant make of butter almost everywhere. The British markets are quite steady. Really choicest quality maintains its price, but a great deal of the butter arriving is inferior, and has to be sold on its merits. Irish creameries have a good demand, but prices are unremunerative.

The Apple Crop

There has been an additional fall-off in the apple prospects this month throughout Eastern Ontario. The June "drop" has been heavy.

In Southern Ontario early apples still show for a fair to good crop, but winter varieties will be a lighter crop than usual.

The crop of apples in the counties of Huron, Bruce, Middlesex, Brant and Lambton will be the lightest for several years. Many correspondents report their crop a total failure, and assert that there will be few, if any, winter apples for export. In the Georgian Bay district the crop will be light; there is a fair crop of early apples, but the winter varieties are not half a crop.

FLIES ARE DEADLY

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COOPER'S FLY
KNOCKER

Does this Safely and Cheaply

NO TROUBLE NO WASTE
NO MILK TAINTED

SOLD BY ALL HARDWARE MEN

and by

G. A. GILLESPIE, Peterboro, Ont.

Along the north shore of Lake Ontario, the "drop" has been very heavy on account of continued drought, and the outlook for the apple crop has been materially reduced. In the counties of Northumberland and Prince Edward fall and winter apples will not be more than one-half of last year's crop, and a poorer sample than usual will be harvested from unsprayed orchards. The crop will be light, also, in Durham and Ontario counties, but the fruit is reported at present of somewhat better quality.

In Eastern Ontario and along the Ottawa and St. Lawrence River valleys the drop has been heavy, but a fair to good crop of Fameuse, McIntosh and Alexander will be harvested.

Winter apples are almost a failure in Perth, Wellington, Waterloo and Simcoe counties.

Apples have fallen badly in Southwestern Quebec, and the crop there, with the exception of early varieties, will be below average.

In New Brunswick apples will be rather light. Prolonged wet weather was unfavorable for the setting of fruit, though the blossom was heavy.

There is no improvement in the prospect for the apple crop in Nova Scotia. The crop in the Annapolis, Cernwallis and Gaspareau valleys will be very light. In Hants and the eastern parts of King's county, the prospect is somewhat better than in the western part of King's and Annapolis counties. Throughout the centre of the valley, along the Dominion Atlantic railway, the crop is nearly a failure, but along the mountains, the South Mountain particularly, the outlook is for half a crop. Unless the quality should turn out to be very good, which from reports received is rather doubtful, the quantity of apples exported will likely be less than 350,000 barrels, or less than one-half of last season's exports from Nova Scotia.

Apples in Prince Edward Island will be hardly up to the average. It is reported that late frosts have seriously damaged the crop.

British Columbia will have a large crop of apples, both early and late. Wealthies are very heavy.—Fruit Crop Report No. 3.

Every man in the country should be impressed with the belief that it is an absolute crime to throw a lighted match or cigar stub upon the forest floor, to leave a camp fire burning, to burn brush close to the woods in a dry season, or in any other way imperil valuable forest property.—A. H. D. Ross, M.A., Faculty of Forestry, University of Toronto.

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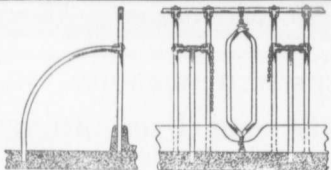
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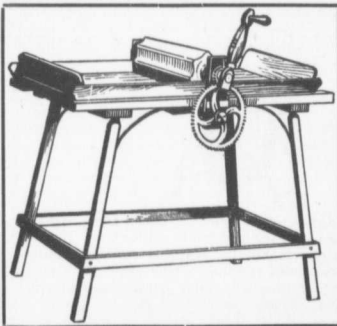
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Write to us for full particulars; we will gladly give information and send our Booklet Free on request

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Makers to this d matters suggest letters

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The su shipping each week by a gov auction, certain f to think Farm anter from Ontario, to see ab extreme l range to the cold each week inspected the highes The fact man to r each whate sure exper tories in like to fu are in vite to Mr. F Dairy.

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Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheesemaking, or to suggest subjects for discussion. Address letters to The Cheese Maker's Department.

A Chance to Co-operate

The success that the syndicate of cheese factories in Quebec, which are shipping their cheese to Montreal each week and having it graded there by a government official and sold by auction, is meeting with, is leading certain factories in Eastern Ontario to think of adopting the same plan. Farm and Dairy has received a letter from Mr. N. Rothwell, of Navan, Ontario, stating that he would like to see about 25 good factories in the extreme Eastern part of Ontario, arrange to ship their cheese to one of the cold storage houses in Montreal each week and there have their cheese inspected and sold on their merits to the highest bidder.

The factories could appoint a salesman to represent them in Montreal each week and thereby greatly reduce expense. Any officers of factories in Eastern Ontario who wish to like to further consider this matter are invited to write either direct to Mr. Rothwell or to Farm and Dairy.

Additional Cheese Reports

Several additional reports concerning the make of cheese have come to hand from various parts of Ontario since going to press a week ago. These bear out the contention that the make of cheese up to the middle of July is in excess of the make last year up to the same date.

"Our make of cheese so far this year has been better than any previous year. The quality of milk received has been better."—Roy Hastings, Perth Co., Ont.

"The amount of milk is about the same as last year, but has taken in as high as 16,200 lbs. of milk in one day."—Maxwell Haley, Lanark Co., Ont.

"The make of cheese so far exceeds the make last year. We made 100 more cheese during May than during the same month last year."—Ed. Carter, Hastings Co., Ont.

"I am getting about 1,000 lbs. of milk more a day this year than at the same time last year."—O. Davis, Prince Edward Co., Ont.

"The amount of milk and the quality is good. We expect that this season will exceed all others."—J. W. Goodkin, Frontenac Co., Ont.

"We have had the largest flow of milk this year since 1905—probably about one-third larger."—G. W. Frances, Russell Co., Ont.

"The quantity of milk received has been much larger than up to this time a year ago."—R. J. Hoople, Stormont Co., Ont.

The Sour Milk Problem

John Snetinger, Stormont Co., Ont. The milk delivered at our factory has a tendency to be gassy and over-ripe. We have had little or no trouble with food flavors, only these two defects for which the producers are wholly responsible.

There is absolutely no excuse for farmers delivering gassy or over-ripe milk to the factory. A little care on their part will make the maker endless trouble, and save considerable money for both. Gassy and over-ripe milk has made much trouble for the makers and has cost them no small amount of money during the last 15 or 20 years. It is to say nothing about the loss incurred by the producers themselves.

Milk in a gassy or over-ripe condition will continue to be a source of loss as long as some farmers are merely "asked" to care for it. It is plain

that there are a few careless, and possibly lazy farmers delivering milk to each factory who have been told what they should do and why they should do it for the last 15 years, and yet they continue to neglect to care for their milk. The expenditure of a dollar or two and about four or five minutes each day caring for the milk would be all that is necessary in order to keep it as it should be.

REFUSE ALL ROY MILK.

Every maker should prove to each patron (and it can easily be done) that there is no excuse for delivering inferior milk to the factory and that bad milk is the result of carelessness or laziness, or both; then reject every can of inferior milk. Such a course would bring about a greater change in the quality of the milk than merely telling and explaining to patrons the results of improper care. Just so long as some farmers think that there is the least excuse for them delivering bad milk to the factory they will continue to do so.

At every factory there are a few patrons who properly care for their milk and deliver it as it should be delivered. These farmers are demonstrating to the rest just what care will do for milk. The makers who have been doing their best to get these careless individuals to do their duty. The provincial government is doing a great deal in this respect, and is instructing and impressing upon patrons the necessity for delivering good milk to the factory. And yet this evil exists. The writer has been maker in the present factory for the last three years, and has found that there are a number of patrons who have always supplied first class milk. What it is possible for these men to do is possible for the rest.

How Prize Cheese Was Made

F. S. Hodler, Green Leaf, Wisconsin.

The cheese which I had on exhibition at Winnipeg, and which received first prize, were made in a factory which received 7,000 lbs. of milk a day. The milk was delivered by individual farmers. The milk came in in fair condition and is all in the vats by seven o'clock. I use two per cent. commercial starter. I use before starting. I ripen the milk to 10 acid or three per cent. on Marshall's rennet test. I use four ozs. of Marshall's rennet to every 1,000 lbs. of milk. The milk coagulates and is ready to cut in 20 minutes. As soon as cut I rub the sides of the vat with my hands to remove what may be on the tin after cutting. I stir with a common rake. Turn the steam on five minutes after cutting.

The milk used in making my prize cheese was set at a temperature of 86°. It was heated to 102° in 35 minutes. This makes one hour from setting to the time the highest temperature was reached. The whey tested .12 per cent. acid at this time. The curd was dumped .01 per cent. in each 20 minutes. I ran the whey off at .16 per cent. acid, which makes one hour and 20 minutes from the highest temperature to dipping. In order to have the curd firm in this time I ran part of the whey off at .14 per cent. acid. Curd racks were used 20 minutes from the time the curd was all on the racks. It was then cut for the first time, and turned over. At this time the whey tested .26 per cent. acid. I piled only three high and milled with the knife mill. Three hours later the whey tested .70 per cent. acid. After milling the curd was turned every 20 minutes and salted at 1.25 per cent. acid, which test is reached two to four hours after milling. I raise the curd, however, with our balls of water before salting. This water should have a temperature of 90°. Salt at the rate of 2½ lbs. to every 1,000 lbs. of milk. 45 minutes after

salting, when the curd was mellow or silky, it was put in the press at a temperature of 83°. One hour after putting in the press the cheeses were dressed and again put in the press for 36 hours.

Dairy Notes

In the Cheshire cheese market very little is doing and inquiries are only for finest, which bring from 58s. to 60s. Medium bring from 56s. to 54s., and common 45s. Lancashire cheese continues to meet a quiet demand, purchasers chiefly centring their attention on best grades. Arrivals continue plentiful, and values are practically unchanged. Finest bring from 60s. to 65s., and fine from 55s. to 57s. Canadian cheese continues in good demand at 54s. to 56s. for both white and colored.

There is a better feeling in regard to cheese on the English market. The reduction in price has stimulated the demand. The home supplies, which are very abundant, are causing only a moderate demand for Canadian. Forward purchases, however, are tending to strengthen the market as the June cheese has been sold short by many of the importers. If prices can be kept within reasonable limits there is a good prospect for an increased consumption of Canadian. The quality is excellent, and this fact has given great satisfaction.

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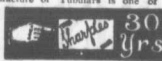


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NEVER fancy you could be something if only you had a different lot and sphere assigned you. What you call hindrances, obstacles, and discouragements, are probably God's opportunities.

—Horace Bushnell.

MISS SELINA LUE

A NOVEL OF GOOD CHEER, BY
MARIA THOMPSON DAVIES

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(Continued from last week)

SYNOPSIS OF FOREGOING INSTALLMENTS

Miss Selina Lue, generous and tender of heart, and endowed with what is called "fanciful," keeps the grocery at River bluff. One day Bonnie Doda runs in to the grocery to ask her to come and unsex his sister's thumb which she has caught in the machine. On her return she feeds the five babies whom she cares for in soap boxes by a sunny window in the rear of the store. Miss Selina Lue, a young artist, named Alan Kent, calls on her and learns that she has taken a young man, named Alan Kent, to care. They are introduced and Cynthia is annoyed at the young man's apparent assumption of instant friendliness, and leaves abruptly. Miss Selina tells the young people at a later visit of her encounter with a city club woman, and how she came to the bluff.

"SOMEbody oughter been setting by ter keep his mind offen himself; but the poor boy wandered down the back hall to the porch to get a drink of water to quench his thirst and help him swoller the lump in his throat and had the misfortune to git mixed up with the wedding-cake what they had set on a table in a dark corner by the door to be lit up with candles. When I got there they was both on the floor, and he had run his foot plumb through it and was gormed with frosting something terrible. I used soft soap and patience, and by hard work I got him and the clothes ready to stand up at the wedding. Then I whirled in and mixed another sixty-egg cake in a milk crock and baked it in a dish-pan with astonishing luck. I frosted it liberal with curly-cues, and me and it both was ready by the time folks got to coming. I laughed all the way down the road next day at the remembering of his face when I found him." And Miss Selina Lue chuckled at Mr. Alan's shout of amusement.

"Wait," he said, as she rose to go in and quell the calls from the soap-boxes, which were fast becoming a demonstration. "Tell me some more; let them roar."

"There's not much more to tell," she said, as she looked up and down the quiet street. A temporary lull had descended upon the back regions. "I drove in along about sundown. I knew that Tom Withers, a Warren County man, kept a grocery somewhere on the bluff. But it wasn't like this now. They was a crowd of loafers setting on the steps

talking loud—and they was a counter back there where the soap-boxers are now, with kegs and bottles under it. And his poor wife was consumed almost to death. Before I laid my head on the pillow over in the lean-to that night I had bought him out at a fair price, with the horse and rock-away to boot, so he could start right off with her to the West. It dug a hole in my sock of money, but that woman was a-dying and had to go."

"So you hadn't intended to enter commercial life?" asked Mr. Alan, his eyes bright with interest.

"Oh, no," answered Miss Selina Lue, "but I had put my mind so as to follow any good leading that come. If you had seen me go at this grocery with a broom and a mop the next day—and first thing I rolled all the kegs out into the street and emptied 'em, and the bottles, too—you would have thought I had come just fer that special purpose. A young man team-driver started to say something impolite ter me about the river of beer down the street, but Mr. Doda stepped over by him and that ended it. And Ethel Maud was horned that very night—and I've had my hands full ever since."

"And your heart too," added Mr. Alan.

"Yes, looks like God do pour it full to running over on other folks. I—but here comes Bonnie! How was Miss Cynthia, honey?"

"Sho," answered Bonnie. "Didn't nothing stir her; she jest laughed and said, 'Thanky, ma'am, fer the camphire, she'd save it till something did.' Mr. Alan, I told her you give me the dime to hurry back and

tell you if she was hurted, but she got red and said you could wait to hear till I could git a hot tea-cake from the cook. But here's the dime 'cause I didn't hurry." Bonnie tendered the bit of silver in a hot, dirty but honest little hand.

"You oughter dome as Mr. Alan said, Bonnie, honey," said Miss Selina Lue in mild reproach. "Course he was worried until he heard; so was I."

"Bennie," said Mr. Alan with a glint in his eyes, "keep the dime; you earned it."

CHAPTER IV.

THE WONDERFUL BARN LOFT

"They can't nobody tell what a mortgage and a Golf Club will do."

—Miss Selina Lue.

"Now, Bennie, run home as quick as you can, for I know your mother is in a hurry for the things. Here's the nickel head of cabbage. Put it under your arm, and take the sack of meal in your hand. See if you can't carry the potatoes on the other arm and the piece of bacon in your other hand. Instead of the sorghum molasses she sent for, I am going to send three-for-ten cakes of soap, for she's forgot to buy a bit for more'n a week, and I am sure she would rather have it. My, what a load for a boy! Open your mouth for this ginger snap, and go careful but fast." And Miss Selina Lue steered the heavily-loaded youngster down the steps and started him toward home.

As she came up again she paused and resting her hands on her hips, leaned out to look far up the street. There was the shadow of anxiety on

and cold; it's good to—look at," remarked Mr. Alan as he seated himself on an returned peck measure and reached to the Clements to heap a pile of scrubbing-brushes she seemed bent on chewing.

"Well, I've got a feeling in my bones she'll come to-day, and I'm going to expect her any day. Miss Kinney's bones always gives her notice of trouble, but I've got mine trained so they ache for the coming of good." Miss Selina Lue's window was an unconscious adaptation of one of the principles of a very modern thought.

It was at the lull time at eleven o'clock, when the bluff dinners were all in the pot, and Miss Selina Lue could get a breathing spell until the afternoon rush for supper provender. The bluff bought supplies a meal at a time and brought the nickels and dimes in payment thereof. Miss Selina Lue had no need of a book-keeper—she put her money in a cracked vinegar jug behind the counter. Nor did she ever have enough to make her deposit, for her stock was bought on much the same principle as that on which it was sold, a little at a time and cash down.

"For," she confessed her neighbors, "having on hand, most of time means wasting, and the piece of meat oughter go into the pot according to what you know you oughter have and not what you think you oughter have." Lets of folks stoinks ain't as greedy as they is."

Mr. Alan had come in for his dinner a little before the time. He spent most of his money at the ferry sketching the roustabouts as they loaded the early boats; but when

the wharf was deserted, he found it pleasant to come and chat with Miss Selina Lue as she prepared the simple meal he shared with her. He liked to watch the babies tumble and crawl about the grocery before their non naps, for the floor and low-lying regions of the store offered unlimited opportunities for adventure to cressers, and it always interested him to see what they could manage in the way of exciting catastrophes.

Miss Selina Lue at such times fairly radiated good cheer and interest and he felt constrained to do likewise. In fact, Miss Selina Lue invited confidences as the sun invites the buds in the springtime, and her views of life were sound if unusual.

The non-appearance of Miss Cynthia was uppermost in her thoughts, and she seemed possessed of an inexhaustible store of admiring anecdotes of that disturbing young person. There was in his mind a sneaking suspicion—nay, a shameless fancy, certainly—that his own presence was the cause of her seeming neglect of Miss Selina Lue, and his conscience hurt him. Both the girl!

Why should she pass him in the lane as if he were non-existent and manage to convey an impression of his utter obnoxiousness to him of he so much as caught a glimpse of her in the distance? He was of her world and accustomed to the amenities thereof, and he was not in the way of being startled even a very pretty pair of "first family" feet. His pride rebelled. He was something of a "first family" himself, and was in the habit of receiving unlimited expressions of regard from the fair sex, especially those who were admitted through the sacred portals of his studio.

And, forsooth, what had he done



Her Arms Held Young Jim Peters

her usually unfrilled brow, and she sighed as she picked blossom out of the cracker-box and put her far back on the counter, hemming her in for safety with two brooms.

"I feel like I ain't seen Miss Cynthia fer a year," she said, "and it has been more'n a week since she came down. The cook comes after things and she says the child ain't sick, so I ain't got no cause to worry; but I'm jest hungry to see her. Seems like she is a kind of a frosted cake—the more you git of her the more you want."

"Yes, thick with frosting, and white

Has one
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Mention Farm and Dairy when writing.

to arouse such animosity? It really seemed an old-fashioned spell of jealousy over his place in the affections of Miss Selina Lue and the soap-boxers. He felt decidedly annoyed that any one should presume to question his rights in the River Hill grocery household. Indeed, he felt entitled to call himself a soap-boxer if he chose—and he was about to say so aloud when he was interrupted by a glad cry from Miss Selina Lue as who hurried down the steps and waved her hand to the inspiration of his disturbing thoughts, who was leisurely approaching from up the street, surrounded by a group of small admirers.

Bennie Dobbs, having deposited his packages at home, was backing before her with upturned, beaming face, and Lella Kinney and Ethel Maud pressed close to her side, while her arms held young Jim Peters, carefully regardless of his youngness. She was smiling at puppy up for a small and very happy up for her to see, and Ethel Maud and Lella were joining vociferously in her admiration of the recent Dobbs acquisition.

He was about to step to the door, really excited at the sight of so much animation, when suddenly he felt himself an alien and alone. Clemmie had crawled to the top step and was leaning out, enraptured at the uproar, and Blossom hung over her broom fence and gurgled at the glimpse she could get through the window of the high-held, squirming puppy. They had all forgotten him; he was a stranger who had no right even to look on at the triumphal return of the queen to her realm of babies and puppies, and smiling Miss Selina Lue and proud Mrs. Jim in the background. He seized his hat and sketching-kit and slipped out of the back door and off to the river, sore and determined to go dinnerless, though not exactly deciding whom he would injure by such a proceeding. Both the girl and lother the hat that toned in with her cheeks, and both the eyes that tensed with the sky!

As he disappeared behind the barn he heard Bennie's shrill voice high up in the scale saying: "Oh, Miss Cynthia, we've named him for Mr. Flarity, 'cause he got him for us, but the first puppy he has we are going to give it to you."

"If it's a boy puppy you can name it for Mr. Alan, too," chimed in Ethel Maud, with loudness enthusiasm showing in the tone of her voice and shining through the dirt on her little face. "Ain't he just the cutest puppy?"

(Continued next week.)

The Upward Look

The Source of Our Doubts

It is just as much a sin for us to listen to our doubts and allow ourselves to be guided by them as it would be were we to get drunk or steal or lie. Few of us realize this. That is why we are so prone to give way to the luxury of doubting. Sometimes we may even allow ourselves to entertain the thought that we might do better had the Lord not burdened us down with so many unresolvable difficulties. Thus we endeavor to stifle our consciences by laying on the Lord the responsibility for our own sins.

It is because of the sin of listening to the doubts suggested—without our realizing it—by Satan is such a common one among professing Christians that I have said so much about it and am again referring to it this week. Our doubts stifle many of our best and most holy impulses. We see opportunities to do little deeds of kindness to those around us but are

prevented by doubts as to how our actions may be construed. Opportunities come to us to undertake new lines of effort which promise to accomplish great results, but we doubt our own ability. We feel that certain conditions in our daily life that may be hard and exacting should be grappled with and changed. Our doubts whisper to us that if we attempt to overcome them our efforts will only cause trouble and be sure to prove failures. We listen to these doubts and then weakly give way to them and try to be resigned to what we call God's will when all the time it is God who is calling us to His service.

Even in our churches the results of the sin of doubting are only too apparent. Church officers often refuse to lead in prayer because they have listened to Satan who has told them that they are not fit or competent or that people will laugh at them. Church members decline to help in the church services for similar reasons. This is one of the main reasons why our churches are not accomplishing more for God. Too many church members listen to the promptings of Satan instead of to those that come from God. Every impulse that leads us to de-

When You See How It Works



You will want a "CHAMPION" Washing Machine right off. The Momentum Balance Wheel, which almost runs itself—the up-and-down stroke of the Lever, which means greatest power with least effort—the absolute perfection of the "CHAMPION"—will make you want one for your home.

"Favorite" Churn gets all the butter out of the cream. Easy to churn, too. If your dealer does not handle these home necessities, write us.

DAVID MAXWELL & SONS, - ST. MARY'S, ONT.

HECLA FURNACE

Has 30 Years Experience Behind It

Invaluable experience to you, who are going to buy a furnace this year.

20 years ago, we invented and patented the most important improvement made in furnace construction—our now famous FUSED JOINTS.

These joints mean an absolutely gas, dust and smoke proof furnace.

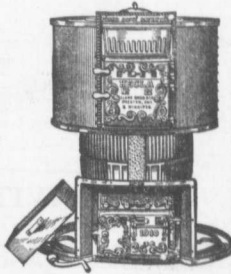
Then we adapted the FUSED JOINTS to the firepot and fused 97 steel ribs into the castiron, thus increasing the radiating surface three times that of any other firepot. An accurate three years

test, proved that the "Hecla" Steel Ribbed Firepot saves one ton of coal in seven.

We learned that a steel combustion chamber was not durable. By experimenting, we found that an all-castiron chamber would last longer than a steel one.

We can help you, too, in planning the right heating for your home. Our book will tell you. Write for free copy.

CLARE BROS. & CO. LIMITED
PRESTON, Ont.



sire to do some worthy act, say some kind word, improve existing conditions, is from God and should be acted upon. Every doubt that tends to keep us from putting forth the needed effort is from the Evil One and should be resisted as we would resist any other sin.

Just as we can, through God's help, and by means of faith and sincere efforts on our own behalf overcome the sins of pride, ill temper and other defects of character, so we can overcome this proneness to doubt. We must believe that with God all things are possible, we must rely on His promise to give us the strength and wisdom that we need and we must ask Him to help us. Just as soon as we do we will begin to find our doubts leaving us and a new strength, a new confidence, a new joy entering our lives. Christ will be only too glad to come to our aid when we invite Him and just in proportion as Christ begins to mould and fashion our thoughts Satan will decamp. Satan fears Christ and flees at His approach. We must always remember that "My (our) God shall supply all your need according to His riches in glory by Christ Jesus." (Phil. 4, 19).—I. H. N.

FOR SALE

Three Burrough Stewart and Millen hot air wood FURNACES. All in GOOD CONDITION. Cause of removal, extending premises, and installing steam plant.

SUITABLE FOR FARM HOUSE or FACTORY.

For particulars apply

B. F. ACKERMAN SON & CO.
Peterborough, Ontario



AN INVITATION

is extended to you to come and examine our display of Gourelay Pianos. Even if you are not yet ready to purchase, come now and spend an hour in seeing and hearing these superb instruments.

Gourelay Pianos

are all of one quality—the best. The lowest priced style is as well made as the highest. The ambition of the makers of Gourelay Pianos is not to make the greatest number of instruments, but to make each one so rich in tone, so responsive in action, so artistic in design and so durable in every way that it will bring prestige and added reputation.

If you cannot come in write for Catalogue and prices.

GOURLAY, WINTER & LEEMING
188 YONGE ST., TORONTO

Error Last Week

On page 16 of the August 4th issue of Farm and Dairy, under our Home Club, the first article in the Club appeared without any signature. It should have been signed, "Aunt Rachel." The second article under the Home Club of the August 4 issue, "The Farmer's Wife," was contributed by "The Daughter." "Aunt Rachel's" article only comprised a part of the first column on page 16.—Household Editor.

Special Household Issue

On October 6, we shall publish our second annual Household Issue of Farm and Dairy. We have been publishing special magazine issues all through the year, of interest to the men folks. Now comes the women's issue, and it is our intention and aim, to make it the very best special magazine issue of the year. It will also be of interest to the men folks as well. Of course there are few women farmers as compared with the other sex, but when we come to look into the farm home, we believe that the women are the real backbone of the farm, who carry the burden of thought, besides doing far too much of the work on the farm.

Our special Household issue will be for all the women on all of the farms. The issue will be filled from cover to cover with live, up-to-date, interesting and valuable information written by women, and about women. It is our hope to have every article in this issue contributed by women. We want all the women readers of Farm and Dairy to help to this end. If you know of any women particularly interested in any special branch of farm work, send us their names at once, that we may write them, for a description and illustrations of their work. Every bright farm woman is asked to contribute some-

thing to this special women's issue. Send us the names and addresses today. Photographs of farm home scenes will all be welcome. Watch for the second annual Household issue of Farm and Dairy.

Our Back Yards

Laura Allen, Gray Co., Ont.

I have always been much interested in Farm and Dairy, and especially in the "Home Club." It is always very helpful and instructive to read and discuss matters pertaining to our everyday life.

If there is anything I place care and emphasis on in my home, it is the back yard—to keep it free from rubbish of every description. I will give you my plan. After I was married I had a receptacle brought (an old discarded rat barrel) and placed in a convenient place near the back kitchen door, where everything, such as old cans, bottles, bones, etc., are thrown. When it is filled it can easily be placed on a stoneboat, taken away and emptied. By so doing, one never needs to have an untidy yard with things strewn here and there.



A Comfortable Corner

A corner of the family sitting room in the home of Mr. Richard Allen, of Grey Co., Ont. Good taste is displayed in pictures, arrangement of furniture, and wall decorations. Our furnishings used not be elaborate, but always in harmony with our surroundings, and not gaudy. Have nothing without its use. "Prove all things, and hold fast to that which is good."

This is a matter I consider of great importance, and yet many people neglect it.

System in everything is what we need. Another subject pertaining to the back yard is that of the clothes-line. How many people have their clothesline stretched on the front lawn or possibly on a line between the house and barn. Won't you agree with me that it looks ridiculous to see a lot of garments strung along in such a fashion, when with very little trouble one could have them placed in the back yard, where they would be out of sight as much as possible. We would by giving more attention to these little details be making a beginning in the problem of beautifying our surroundings.

Care Must be Given

We cannot urge too much on women ordering patterns, the importance of carefully giving name, address, size of pattern and number of copies. Several orders are awaiting to be filled, each one of which lacks some one of these essentials.

To Hemstitch by Machine

Take three thicknesses of new paper and a needle large enough to penetrate without breaking and you can obtain a perfect hemstitch from any sewing machine. Use paper according to how fine or coarse you wish your stitch and after taking materials from machine open gently and you will find you have a nice stitch without using any attachment whatever on the machine. You can practise on small pieces of material which are of no use.

The Sewing Room

Patterns 10 each. Order by number and size. If for children, give age. For adults, give bust measure for waists, and waist for dresses. Address all orders to the Pattern Department.

FANCY BLOUSE 640



The blouse trimmed with frills at the front and one of the features of the season. This one can be treated in that way or left plain as liked. In the illustration it is made of messaline and rat-tail cord is applied over 2 1/2 in. neck, and front edges to give a distinctly novel effect, the frills being arranged over the front and their edges concealed by the braid. There is a little tulle inset of all over lace, top, and the blouse is trimmed with frills.

The pattern is cut for a 32, 34, 36, 38 and 40 in. bust, and will be mailed for 10 cts.

RUSSIAN BLOUSE COAT FOR MISSES AND SMALL WOMEN 658.

The simple blouse-coat in one material. It can be worn with a belt as illustrated or left loose as ordered, and this one also allows a choice of three-quarter, full sleeves or long plain ones. It is appropriate for all suitable materials, those of the summer as well as those of the fall, and a great many combinations are in vogue.

Material required for medium size is 3 1/2 yds. 24 or 27, 2 1/2 yds. 32 or 2 1/2 yds. 44 in wide, with 1/2 yd. of all over lace, 1 yd. of lace for the frills, and 3/4 yd. of braid to trim as illustrated.

The pattern is cut for a 32, 34, 36, 38 and 40 in. bust, and will be mailed for 10 cts.



The pattern is cut for girls of 14, 16 and 18 yrs. of age, and will be mailed on receipt of 10 cts.

POINTED TUNIC SKIRT 646

Every variation of the tunic skirt is fashionable but this pointed one is smart and attractive. It gives becoming lines to the figure and is a great many materials.

Material required for medium size is 2 1/2 yds. 36 for the bodice portion; or 2 1/2 yds. 27, 2 1/2 yds. 32 or 2 1/2 yds. 44 with 1 yd. of pointed portion.

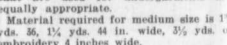
The pattern is cut for a 22, 24, 26, 28 and 30 in. waist, and will be mailed for 10 cts.

CLOSED CIRCULAR DRAWERS 645

Circular drawers that are wide and ample are much liked. They mean smooth fit over the hips and give perfect freedom about the knees. They are made of batiste with a wide band of embroidery, but all materials that are used for undergarments are equally appropriate.

Material required for medium size is 1 1/2 yds. 36, 1 1/2 yds. 44 in. wide, 3/4 yds. yds. of embroidery 4 inches wide.

The pattern is cut for a 22, 24, 26, 28, 30 and 32 in. waist, and will be mailed for 10 cts.



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Prices

Barrels, 425
1 1/2 Bbls., 200
10 lbs., 100
50 lbs., 25
25 lbs., 100

Order
MANHATT
55 FRONT ST

cheese at the country markets has been keen, and at every point has commanded a premium over white of from 5c to 1 1/2 a lb. At no market since Peterboro, however, has the price there been equalled, the best price paid since being 10c, which was paid at several points in Ontario for colored cheese, and this price was also paid for the finest colored sold at the auction sale of Quebec made cheese held in Montreal every Thursday afternoon. There seems to be a shortage in the supply of colored cheese in Great Britain just now, and the demand is largely for this class of goods. Until it is fully supplied we are likely to see colored cheese at a premium over white. The general demand this week, however, has not been as keen as during the past few weeks, and on the whole the market seems to be slowly declining downwards, and the general expectation is that we shall see lower prices ruling next week.

The receipts into Montreal continue to show a falling off as compared with last

CHEESE MARKETS

Stirling, Ont., Aug. 2—740 boxes offered, all sold at 10 1/2c.
Campbellford, Ont., Aug. 2—940 boxes offered, all sold at 10 1/2c.
Woodstock, Aug. 2—268 boxes white and 1145 boxes colored cheese boarded. Sales were at 10c.
Madoc, Aug. 3—450 boxes cheese boarded. All sold at 10 1/2c.
Peterboro, Aug. 3—454 boxes cheese offered. The prevailing figure was 11 1/2c. few boxes sold at 11c.
Brookville, Aug. 4—1625 white and 2525 colored offered; 325 white and 310 colored sold at 10c.
Kingston, Aug. 4—Registration was 766 colored and 600 white. The sales were at 10c to 10 1/2c; nearly all the stocks were taken.
Belleville, Aug. 4—320 white cheese offered. The sales were 1240 at 10 1/2c and 815 at 10c. The balance was refused.
Winchester, Aug. 4—105 boxes register-

China, Japan and South Africa. A partial list of the users of the Goulay piano, as well as a description and particulars of this popular make, may be had by the readers of Farm and Dairy on sending in request to Goulay, Winter & Leeming, 189 Yonge Street, Toronto, Ont.

Some 34 years ago found me on a worn-out farm in the province of Quebec, Canada. The problem was how to reclaim this worn out soil. I decided to engage in the dairy business, to keep hogs and feed for beef. I was very careful in the saving of the manures, both liquid and solid, and in their application, realising that the plant must take its food in the liquid form,

Dr. Bell's Veterinary Medical Wonder cures inflammation of lungs, bowels and kidneys. The 20th century wonder. Agents wanted in every county. Write for a free trial B. bottle. This offer only good for 60 days. Limited to one bottle.

DR. BELL, V.S., Kingston, Ont.

MISCELLANEOUS

TAMWORTH AND BERSHIRE SWINE—Hams and sows for sale. J. W. Todd, Corinth, Ont., Maple Leaf Stock Farm. Etr

TAMWORTHS AND SHORT HORNS FOR SALE—Several choice young Sows sired by Imp. Boar, dams by Colville's Choice, Canada's champion boar 1901-03 and '05, recently bred to young stork and sired a few mature sows. A few very choice yearling and two year old Shorthorn heifers. First class family. Excellent milking strain. Prices right.

A. A. COLWILL, Box 9, Newcastle, Ont.

PURE BRED HAMPSHIRE PIGS FOR SALE

A few nice young Hampshire pigs for sale at a reasonable price, if sold soon, to make room.

J. M. RUTHERFORD, CALEDON EAST, ONT.

AYRSHIRES

SUNNYSIDE AYRSHIRES. Imported and home bred, are of the choicest breeding, of good type and have been selected for production. THREE young bulls dropped this fall are sired by "Nether Hall Goodtime"—26641—(Imp.) as well as a few females of various ages sale. Write or come and see.

J. W. LOGAN, Howick Station, Que. (Phone in house.) 1-6-11

STONEHOUSE STOCK FARM

Is the home of most of the coveted honors at the leading stock exhibitions, including first prize old and young herd. FOR SALE a few Choice Young Cows, also Bull Calves.

HECTOR GORDON,
0-8-10 HOWICK, QUE.

RAVENSDALE STOCK FARM PHILIPSBURG, QUE.

CLYDESDALES, AYRSHIRES, YORKSHIRES, eastern Exhibitions, including 10 months old, of good dairy type; also culls and brood mares, high grade or pure bred. Write for information, private.

W. F. KAY, Proprietor

SPRINGFIELD AYRSHIRES

Imported and home bred stock of a ages for sale. Stock shown with great success at all the leading fairs.

ROBT. HUNTER & SONS
Long Distance Phone. Maxville, Ont. E-1-7-11

AYRSHIRES OF ALL AGES

Imported and homebred. Write for prices, which you are sure to find attractive.

LAKE-SIDE FARM, PHILIPSBURG, QUE.
GEO. H. MONTGOMERY, Prop.
164 St. James St., Montreal

"Le Bols de la Roche's" Stock Farm

Here are kept the choicest strains of AYRSHIRES, imported and home bred. YORKSHIRES, also the types WHITE ORPINGTON, WHITE WYANDOTTES and BARRED ROCK Poultry.

HOB. L. J. FORBES, Manager
E-6-7-11 Ste. Anne de Bellevue, Que.

I was careful to spread the manure as fine as practically possible by hand; but I could not get my horse to do the work satisfactorily, neither could I do it myself as well as I knew it ought to be done; and one day while engaged in spreading manure, the thought occurred to me that there ought to be a manure spreading machine. So I built the spreader that is saving a great amount of the heaviest labor of the farm, and getting twice the value that is obtained under hand spreading. This also led to more carefulness in saving, as the spreader is saving many million dollars every year to farmers.—J. S. Kemp.

HOLSTEINS



BULLS! BULLS!

At less than half their value for the next 30 days. Write:

GORDON H. MANHARD,
MANHARD, Ont., Leeds Co., 3110

FOR SALE—Cornelia's Pouch, 8th time 1st prize bull at Toronto and London Pairs also Ave of his sons, all from record of merit cows. Also 25c. all ages.

THOS. HARTLEY Downsview, Ont.

Do you want a first class Cow or Heifer bred to a first class bull? Francy 3rd, Admiral Ormsby has on hand, Dam, Francy 3rd, Canadian Champion Butter Cow. Sire, Sir Admiral Ormsby, sire of the world's champion 2 year old heifer.

TF J. A. CASKEY, Box 144, Madoc, Ont.

HOMESTEAD HOLSTEIN HERD

Headed by the great young sire, Dutch land Colantha Sir Abberker.

Dam, Tidy Pauline De Kol, butter 7 days, 23.44. Sire's dam, Colantha 4th's Johanna, butter 7 days, 35.22. Average of dam and sire's dam, 34 lbs.

Bull calves offered, one to seven months old, from dams up to 25% lbs. butter in 7 days.

EDMUND LAIDLAW & SONS

17-2-11 Box 254 Aylmer West, Ont.

RIVERVIEW HERD

Offers bull calves at half their value for the next 30 days. One ready for service, one sired by a son of King of the Pontiac, dam daughter of King Segra, Record, 18.37 lbs. butter, 7 days.

P. J. GALLEY

R-16-1-10 Lachine Rapids, Que.

LYNDALE HOLSTEINS

We are now offering for sale a 13 month old son of "Donal E. Kol Presterji's Paul" out of a 29 lb. dam; also a son of Sara Hengerveld's Korry from an 18 lb. cow. Both choice individuals. \$1 for service.

BROWN BROS., LYON, ONT.

LAKEVIEW HOLSTEINS

Count Hengerveld Payne De Kol, who heads this herd, together with several of his get, will be at the Canadian National Exhibition; come and see them. There are several very choice young bulls among them. No young stock priced till exhibition time.

E. F. OSLER, Bronte, Ont.

FOR SALE—My stock bull, Duplicate Pouch, No. 4768, bred by Logan Bros., Amherst, N.S. Is kind, sure and gentle. Dropped May 2d, 1906. One of his daughters in milk yet but she gave around 50 lbs. per day. We have several coming on, which we expect to put in Record of Merit, Price, \$150, or would trade for females.

J. J. TANNABILL, White's, Que.

AYRSHIRES

BULL CALVES

Up to ten months old, from Record of Performance Stock, both sire and dam. Prices reasonable.

JAS. BEGG, Rural No. 1, St. Thomas, Ont.

BURNSIDE AYRSHIRES

Fresh importation just landed of 12 of the choicest young bulls I have ever landed, from the best herds in Scotland, such as Obourne's, Buchanan's, Mitchell's, Bagenoch, Barr of Hobsland and Mitchell's Leuchtergus, all of the best types, female cows, 3 year olds, 2 year olds, and 10 choice 1 year old heifers. Correspondence solicited. R. H. BEGG, Burnsides Stock Farm, Howick, Que.

Sir Rooker Pasch 2nd—A Championship Holstein Bull

The Holstein bull here illustrated, which is offered for sale by Duff Bros., of Warwick, has had an interesting career. Three years ago this bull when a calf was won by Mr. E. J. Duff as a prize for securing 30 new subscriptions for Farm and Dairy. Since then it has developed into a grand animal, which Mr. Duff has exhibited at all the local and county fairs in the Counties of Northumberland and East Peterborough and diploma. It is always won first prize, and has won several prizes in the Dominion. It is richly bred from stock with high official records. His dam, Blanch Akrum, has a record of 11,000 lbs. of milk in one year at two years old, and gave 50 lbs. a day, four months after calving, as a four year old. Her dam, Laquisha, has an official record of 60 lbs. in one day, and 12,000 lbs. in a year. The dam of his sire, Flora Rooker de Kol, has a record of 65 lbs. of milk in one day as a three year old. Sir Rooker Pasch was three years old last March. He has been leaving splendid stock, including good heifers. The judge at the Norwood Fair, Mr. A. A. Colville, of Newcastle, in referring to this bull when he won first prize in the two year old class of any age, said: "This is a bull of splendid size and quality. In fact, I don't think I have judged a better animal throughout my circuit of fall fairs this season." Duff Bros. are offering the bull for sale to avoid inbreeding. Their address is Warwick, Ont.—Advt.

ed, 410 were colored and the balance white. A few colored and white held on the board at 10c.

GOSSIP
MUSIC IN THE HOME

No modern home is complete without an instrument to produce music, which is so essential to the life of mankind. The piano is found in an indication of the popularity of this instrument. These homes are found in all parts of Canada, from east to west, and in the United States.

Card under this head inserted at the rate of \$4.00 a line per year. No card accepted under two lines, nor for less than six months, or 25 insertions during twelve months.

BREEDER'S DIRECTORY

ORMSBY GRANGE STOCK FARM, ORNSTOWN, P. QUEBEC. — Importation and breeding of high-class Clydesdales, a specialty. Special importations will be made.—DUNCAN McEACHRAN.

SPRINGBROOK HOLSTEINS AND TAMWORTHS—High-class stock, choice breeding. Present offerings, two year old heifers, fresh and in calf. Young bulls. Five Tamworth hogs from Imp. stock, ready to wean.—A. C. HALLMAN, Breslau, Ont.

ONE 2 YR. STALLION by Champion High Forward. Imp. One 2 yr. filly by Barron Beau, Imp. Yearling stallions and 5 fillies by that greatest of sires, Am. Imp. Monthly all from imported stock. Three (Imp.) 2 year old fillies just received.—R. M. HOLTRY, Manchester P. O., and G. T. R. Station; Myrtle C. P. R., E. D. Phone.

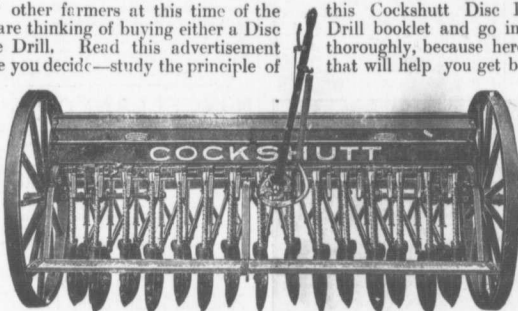
CHEERY BANK STOCK FARM—The home of High Class Record of Performance for R. O. P. Cows and Heifers. The average test of the herd is 4.12.—P. D. McARTHUR, North Georgetown, Que.

BIGGER CROPS — BETTER GRAIN MORE MONEY IS THAT WHAT YOU WANT?

LIKE lots of other farmers at this time of the year, you are thinking of buying either a Disc or a Hoe Drill. Read this advertisement carefully before you decide—study the principle of

this Cockshutt Disc Drill—get our Drill booklet and go into this matter thoroughly, because here is a machine that will help you get better crops.

Cockshutt
New
Model



15
Disc
Drill

Also made with 13 Discs

THE particular advantage which the Cockshutt Disc Drill possesses, is that it sows the grain 6 inches apart—not 7 inches as is the usual method. Close seeding gives the grain a better chance to germinate—to sap all the nourishment of the soil. Thus the grain grows up closer and firmer—holds moisture better—resulting in a bigger yield and better grain. Close seeding does not mean that you have to sow more seed—you simply plant the same quantity of seed as you would with old style machines, but you plant with more discs. Farmers who have used this Cockshutt Disc Drill report an increase of from 2 to 5 bushels an acre, in other words this Cockshutt Disc Drill will easily pay for itself in one season and still leave you a nice profit over and above. Read all about the other advantages it has—then write us and get our very instructive booklet about it.

The discs on this machine are 6 inches apart—not 7 inches like old style machines. Footboard runs the whole length of the machine, which makes it optional with the driver whether he walks or rides. Footboard can also be used for carrying seed bag to the field. The frame is built of high carbon steel, the corners being reinforced by heavy malleable castings and steel corner braces. The castings pressure bar and short self-aligning axles are rivetted to the strong I beam which runs the

whole length of the machine. One of the great advantages of this I beam is that it never allows the machine to sag in the centre. Axles are made of cold rolled shafting, always uniform in size and set at the right angle to give the wheels proper pitch. The self-oiling device keeps the disc bearings in good shape a whole season. The grain flows down the closed boot right into the bottom of the furrow and is always sown at uniform depth. The space between the grain boots and discs gradually widens from bottom to top, preventing mud and trash stopping the discs from revolving. No matter how wet or sticky the soil, these discs will always revolve and cut. Scrapers are provided so as to keep discs clean on each side. The feed on this Cockshutt Disc Drill is a positive force feed of great accuracy and is driven by a short steel chain from the axle, each half of the feed being driven separately. The seed box is made of choice seasoned lumber and the cover locks automatically.

We use metal bridges between feed cups to prevent grain from clogging, so that the last seed is sown out of the box at the same rate per acre as when the grain box is full. You can't realize all the advantages and improvements of this Drill until you read full explanations in our booklet. Don't buy a Drill of any kind until you read it.



Read These Letters—Then Write for Booklet

Cockshutt Plow Co. Ltd.,
Brantford, Ontario

Dairy Farm, Bay View
May 31st, 1909

Cockshutt Plow Co. Ltd.,
Brantford, Ontario

Thorndale, July 20th, 1909

I purchased a Cockshutt 15 Single Disc Drill from your agent, Mr. J. H. Finlay of Collingwood, and I desire to state that I am more than pleased with the work done by it. After giving it a severe trial in lumpy ground, also in wet and sticky soil, I could not clog the drill. I would recommend this drill to all farmers intending to purchase.

(Signed) R. S. BAKER.

Gentlemen:—

I have very much pleasure in recommending the 15 Single Disc Drill purchased from your agent, W. McMartin of Thorndale. After putting in seventy acres of spring seeding with two horses I think it the best drill I have ever seen, and the easiest to operate. I have not seen its equal, and think it has to be made yet. I cannot say too much for it.

(Signed) JOHN MORDEN.

COCKSHUTT FLOW **BRANTFORD**
CO. LIMITED