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FARM AND DAIRY

RURAL HOME

PETERBORO, ONT.

AUGUST 25.

1910.



A FIELD IN HURON COUNTY, ONT., UNDERGOING PREPARATION FOR FALL WHEAT. Considerable fall wheat is grown in Huron and other counties of Western Ontario. To ensure the best results with this crop, the land should be prepared early and worked down to form a good seed bed. Late plowed stubble land, should the season happen to be dry, often gives very poor germination of the seed. The illustration herewith shows a four-horse team working on a fallow on Mr. George Laithwaite's farm, which last year took a creditable stand in the Dairy Farms Competition conducted by Farm and Dairy.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

He Didn't Blame the Cows

He was one of these men who look for a reason for everything. When the cheese factory closed, and he started using a separator and sending his cream to the nearest butter factory, his pay cheques were not as large as he thought they should be. He investigated. His cows were milking well. He was getting a good price for his cream. Evidently he was not getting all of the cream. He decided to get a new separator. What make should he buy?

After looking carefully into the merits of a number of machines,



He Bought a SIMPLEX

He was delighted with the results. The size of his pay cheques increased. His new separator turned easier than any other separator he had ever handled. He was never troubled with the bowl getting out of balance, because it was fitted with the **SELF-BALANCING BOWL**, an exclusive feature of the "Simplex" Separators. His wife was delighted, too. The new separator could be washed in half the time it took to wash the old one.

When buying a separator, be sure that you get a "Simplex." Have one sent you for a month's free trial, and prove for yourself that it is the best machine made. Write for our illustrated booklet.

D. Derbyshire & Company

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Our new catalogue contains a lot of valuable information for you if you are building a new barn or remodeling your old one. It is free, and a post card with your name and address plainly written will bring it. WRITE:

BEATTY BROS. - Fergus, Can.
LITTER CARRIERS, HAY CARRIERS, ETC.

Some July Contrasts

On the milk record sheets received at the Dairy Division, Ottawa, from members of cow testing associations there are found some good yields of milk and butter fat for July.

In the Bertie, Ont., association one cow that freshened in May gave 1,320 pounds of milk, testing 4 per cent. fat, equal to 23 2/3 pounds of fat. One herd of 17 cows at Glanworth, Ont., has an average of 926 pounds of milk, the herd including 5 two-year-olds. Some cows in this herd have given 4,840 pounds of milk in 4 months. At Cassel, Ont., 183 cows average 858 pounds of milk, 3.6 test, 28.3 pounds of fat. The records of many individual cows in these and other associations show a yield of barely 650 pounds of milk and 22 pounds of fat, or less than half of many good yields.

Dairy farmers, it is not difficult for you to make three very simple deductions from these remarkable contrasts. First, there are plenty of cows still being kept for milk production that are not worthy the name of dairy cows. Second: scores of dairy farmers are getting excellent records from selected herds. Third: records alone do not increase the yield of milk and butter, there must be intelligent selection of good cows based on the lessons that individual records teach. —C.F.W.

Don't Dog The Dairy Cow

Editor, Farm and Dairy.—The old saw that there are two sides to a question again becomes evident in the short article by Mr. John Steel, of Lanark Co., Ont., in Farm and Dairy, Aug. 11. There are dogs and dogs. My experience has been that it is highly doubtful, even with the best dogs, whether or not it is advisable to take them near the cows at all. With the average dog, and it is surprising how many must be classified as such, or enter a lower classification, it is direct loss every time they are used to bring the cows from the pasture.

As Mr. Steel rightly contends it is most trying on one's patience to bring cows out of the pasture, especially in the early morning when each one requires to be escorted individually while all the time she is trying to make out her morning meal. A man armed with a good long whip, however, can bring them from their senses, and while it may take a little longer to get the cows than with the dog, they will invariably give more milk to amply repay any extra time spent in thus bringing them from the pasture.

I should like to hear what has been the experience of other Farm and Dairy readers upon this matter of dogging cows from the pasture. T. R. James, Middlesex Co., Ontario.

Cobourg Summer Horse Show

The Sixth Annual Cobourg Summer Horse Show held last week was again a marked success in spite of the unfavorable weather encountered on two days of the show. Much interest was evinced by local people as well as by many from a distance who flocked into the lakeside town of Cobourg to witness the performance and see the judging of many of the best horses that can be found anywhere. In addition to the horses shown by the larger exhibitors, many local animals owned in the adjoining counties were shown. In fact the Cobourg Horse Show has several classes open only to the local counties of Northumberland, Durham, Prince Edward, Hastings, Peterborough, Victoria and Ontario, and their by-law exhibits by amateurs are greatly encouraged.

Each afternoon of the four days of the show the many events of the program were run off with a clock-like precision. Visitors to the show, in this way, were well entertained through-

out all the events. Credit is due the management for their complete and thorough organization of the details connected with their exhibition, especially in view of the fact that there are no stables on the grounds.

The principal exhibitors were: Hon. Clifford Sifton, Ottawa, who showed a large string of hunters and jumpers; Iton J. R. Stratton, Peterboro, high stepping, harness and combination horses; Amelius Jarvis, Toronto, hunters and jumpers; Mrs. Chas. Wilmot, Belleville; Crow & Murray, Toronto; Mrs. Darland Smith Cobourg; Hon. Robt. Beith, Bowmanville; T. H. Hassard, Markham; The Dunganon and the Pontiac Stock Farms, both of Cobourg and many others.

Mr. Stratton's high stepping horses, the jumpers shown by Hon. Clifford Sifton and Mr. Amelius Jarvis as well as the ponies shown by Mr. Wilmot, were subjects of much favorable comment. The exhibits by local amateurs were of high quality and were a distinct credit to the horse breeding interests of the local and adjoining counties.

Apple Growers Organize

Representative fruit-growers of the united counties of Northumberland and Durham met in Cobourg and perfected the organization of the Apple-growers' Association of Northumberland and Durham.

The following officers were elected: W. H. Gibson, Newcastle, President; W. H. Dempsey, Trenton, Secretary, and Thomas Mentague, Newcastle, Treasurer; these with five others constitute the Executive Committee. This district is regarded as the very heart of the best apple producing area in the world, and this association has been formed with the dominating idea of establishing its position for exhibition and educational purposes. It is believed that the conditions are present, and it is now proposed to utilize and improve them.

Items of Interest

The Dairy and Cold Storage Branch of the Department will have an Informal Bureau in the dairy building of the Toronto International Exhibition. Information will be given on cow testing, cool curing of cheese and so forth. All interested are cordially invited to call.

The Fifth Dry Farming Congress will be held in Spokane, Washington, U. S. A., from Oct. 3-6. It will be purely an agricultural congress. Problems relative to farming on dry land will be thoroughly discussed by the world's best agriculturists. Legislation relating to irrigation will also be discussed.

In the death of Prof. J. A. Craig, America has lost one of its best authorities on all matters pertaining to live stock. Professor Craig was a native of Russell Co., Ont., and was one of the members of the first graduating class of the Ontario Agricultural College. He has been connected with agricultural work in many parts of the States and Canada, and his book on "Live Stock Judging", is probably the best that has ever been written on the subject.

The commissioner of the Cold Storage Branch, J. A. Ruddick, reports that the demand for cows is unprecedented this year. As high as \$100 has been paid for well-graded cows. The shipment of cream to the United States continues from Southern Quebec, along the St. Lawrence River, and from Westport, Ontario, all factories within driving distance of the border east of Richelieu River are skimming the milk and selling the cream.

Farm and Dairy is all-right. The special numbers are fine.—Allan Dick, Ontario Co., Ont.

Issue Each A

Vol. XX

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FOR WEEK ENDING AUGUST 25, 1910.

No. 34

THE FEED AND MANAGEMENT OF A HIGHLY PRODUCTIVE DAIRY HERD*

Edmund Laidlaw & Sons, Elgin Co., Ont.

How Cows are Cared for on a Prize Farm. A Remarkable Record Secured from an Old Cow. The Secret of Handling Cows to Get the Best Results. Profit Derived from High Feeding.

WE try to give the cows in our herd it possible from six to eight weeks' rest before freshening. We do not expect them to live this length of time on straw. If a cow ever wants good wholesome food it is while she is dry. She has her progeny to support and also to recruit the energy expended in her last year of work and to get ready for the coming year. We do not mean that she should have a lot of heavy grain; but she should have a small ration of five to eight lbs. a day of bran and oats, equal parts, with a little oil cake, until she comes near freshening. Then we would give her mostly bran until she has gotten straightened up after calving. This ration with a good ensilage and clover or alfalfa hay will put the cow in good shape for the work of the following year.

FEEDING THE FRESH COW

After the cow has straightened up ready for work we would increase her grain ration up to from 12 to 18 lbs. a day according to the cow's capacity. A man who starves his cow six or eight months of the year can not afford to feed like this at any time. We always make the cows clean their mangers of ensilage and hay. If one leaves a little we give her a little less next time.

We hear on every side that it does not pay to feed as we have mentioned. This last fall we had the four-year-old cow Molly of Beyham, third under official test, out of all she could digest. We thought this a good opportunity to see whether or not it paid to feed as we had a man here to see what we were doing. In two months we fed her 1,240 lbs. mixed grain at \$1.20 a cwt. Taking her ensilage, roots and hay as they figure it at Guelph, it cost \$24 to feed her.

HEAVY FEEDING PROFITABLE

This is a lot of money in the eyes of many men. We will see what she gave us in return. The 5,025 lbs. of milk which she gave sold at the Aylmer Condenser for \$72.86, leaving a net profit of \$48.86. This is only an illustration of what can be done with a little care and feed, fed in proper quantities and at the proper time.

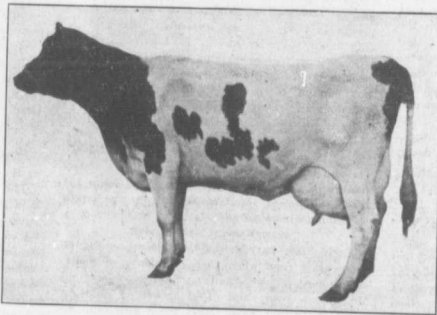
The best way to determine whether or not it pays to feed is to weigh the milk from each and every cow at every milking and keep a record of the same. At the end of the year the feeder

*This article is part of an essay prepared by Mr. Laidlaw, as required of him by the rules of the Dairy Farms Competition in which competition Mr. Laidlaw's farm secured a high standing last year. Part of this essay appeared in Farm and Dairy last week. Another part illustrated by one of his grade cows, which sold for \$125 by public auction last spring, will appear in the Third Annual Exhibition Number of Farm and Dairy next week.

will know where he is at. When the only grade cow that we now have on the farm was in her milk for five years old we decided to weigh her milk for the season. She was the best cow in the herd. We fed her fairly well and she gave 9,001 lbs. milk in 10 months. We thought this was a great record when we heard about the cows in Ontario averaging from 2,000 to 3,000 lbs. of milk in the season.

AN INCREASE FROM GOOD FEED

We started to take better care of our cows, and in her 15th year this same cow gave us 13,155 lbs. of milk in 10 months, giving in one day, 77½ lbs. of milk. At her prime she never reached 60 lbs. in a day. When this cow was



A Fifteen Year Old Cow with a Remarkable Record

During her time, the grade Holstein cow illustrated, which is owned by Edmund Laidlaw & sons, Elgin Co., gave 9,001 pounds milk in 10 months. This he considered to be a great record. Since then, Mr. Laidlaw has become con-founding, in her fifteenth year, this same cow produced 13,155 pounds of milk in 10 months. Read in the adjoining article how Mr. Laidlaw made care of his cows, and become convinced that it pays to feed.

young neighbor told us she would not last to be over 10 years of age. She looks like a five-year-old yet. Does it pay to feed?

Of course the rations we have been talking about in this article are winter rations. In the flush of the grass we do not recommend feeding so heavy. However, we like to feed a little grain the whole season through, the amount varying according to the milk each cow is giving. It holds their flesh to tide them over a dry spell.

Water is as necessary to the dairy cow as it is to all other animals. The water should be where she can get it whenever she wants it. We have water basins in front of all the cattle and have often noticed the cows each over and take a drink while they are eating. They never miss taking a drink when through eating at night. If they had to be turned out to a trough to

drink they would not get their evening drinks.

We had an incident come under our notice regarding the water question which we will mention. The man who bought the four best cows at our sale in March, 1910, on taking them home found that they did not come up to his expectations. On looking into the matter we found that he had no water system. He said the cows would not drink and consequently would not feed well. We told him that they had been used to having the water in front of them and they missed it. As soon as they went to pasture where they could get water whenever they wanted it two of them went up higher in milk than they ever did with us. It has been a great object lesson to him.

Another necessity is plenty of salt. Keep it in a box where the cows can get at it in summer. Put it in their feed when in the stable.

Cows cared for in the way we have outlined that do not prove good should go to the butcher, and the quicker the better. The only way to

find out which ones they are is by the use of the Babcock tester and scales. The dairy business is improving, but the average of the dairy cows in Canada should at least reach two and a half to three times what it is at present. To show you that we practise what we preach we may say that at every milking the milk from the individual cows is weighed, and recorded so that we know what we are doing.

NO SECRET IN LARGE RECORDS

People in general think that large records are made by some secret process. On the contrary there is nothing more to it than merely what we have mentioned. Our grade cow Victoria, milked twice a day, did not give 81½ lbs. milk a day and 16,500 lbs. in 10 months by a secret way of handling. Neither did she give it without feed. It was just a case of good care in the way we have outlined. The sires we have used have all been good ones, and the consequence is we have not get a rough animal in the stable. All are good ones at the pail.

The dam of our first bull gave 14,000 lbs. of milk in the 10 months and was a first prize winner at Toronto. The next sire was Schuiling De Kel, who was also a first prize winner at Toronto, London and Ottawa and whose dam was a first prize winner in the dairy test at Guelph. The next was Lord Roberts De Kol whose dam made 18.28 lbs. butter in seven days as a three-year-old and whose sire was also the sire of Tidy Pauline De Kel whose seven day A.R.O. record was 28.44 lbs. of butter. The present stock bull is Dutchland Colantha Sir Aberkerk, whose dam's record is 28.44 lbs. butter in seven days and whose sire's dam is Colantha 4th's Johanna, 35.22 lbs. butter in seven days; 138.54 in 30 days and who holds the world's record for the year with 1,247.82 lbs. of butter and 27,432.50 lbs. of milk.

The Use of Manure

M. F. Miller, University of Missouri.

The farmer should appreciate more fully the value of manure and of proper methods of handling it. He should figure it as worth at least two dollars a ton and he should get that amount, or in many cases much more than that out of it by proper handling. Just how it shall be handled will depend upon conditions. The best method where cattle are fed in barns, sheds or lots, is to haul the manure to the fields day by day or week by week as it is made. There is the least loss in handling it in this way, although this plan is not always feasible.

The next best plan is to feed under an open shed where the manure may accumulate and where it will be kept tramped down compactly by the animals. Under such a plan it will be kept sufficiently compact and moist to prevent rapid fermentation, and next to hauling to the fields as made, this is the plan which gives the least loss of fertilizing constituents. One of the cheapest plans is to feed directly back on the fields but too often in this case the feeding is done on some hillside where washing and leaching carries away the larger part of the fertilizing constituents contained or the cattle are fed in some sheltered wood lot where the manure is lost to the fields.

THE SPREADER SAVES MANURE

In this connection it should be said that a manure spreader will pay on the average farm of 100 acres or over, and where much stock is kept it will pay handsome returns on farms of much smaller size. Most men think that the value of a manure spreader lies in the saving of labor, and while this is an important reason for its use, it is not the only one. A reason that is as important, or even more important, is the fact that manure put on evenly and rather lightly over a large area will give larger returns per ton of manure applied than the same manure put on heavily and irregularly over a smaller area. This difference in return will frequently pay for the spreader in a single season. There is one other reason why a man should own a spreader and this is that when he has his money invested in such an implement he will almost invariably take better care of the farm manure.

Prepare the Foal for Weaning

L. C. Shaw, Kent Co., N.B.

A colt should be so fed for several weeks before weaning that it will not be seriously affected by the loss of its mother's milk. The secret of success in dealing with foals is never to let them lose their colt flesh. Keep them growing and vigorous from the time they are born. This cannot be done by making them depend altogether on poor pasture and what nourishment they can get from their mother's milk right up to the time of weaning. It is such care as this that produces the small, potbellied, ewe-necked colts which we see on too many farms in the fall of the year. A foal properly cared for will not seriously feel the loss of its mother's milk.

As soon as the foal is large enough it should be taught to eat grain. If the mare is fed grain in addition to the pasture the young thing will soon be seen nibbling the grain from the same box. If the pasture is poor it is desirable to make special provision for graining the foal. Some breeders who wish to push the foals along provide a small paddock in the corner of the field. The mares are allowed to eat grain in this paddock at first to accustom the foals to eating there. Bars are then arranged so that the foal can get under but not the mother. Oats and bran can be fed in troughs in this enclosure. The foals will soon get in the habit of visiting this enclosure regularly.

When weaning time comes, which is at five or six months old, the colt should be eating a regu-

lar grain ration two or three times a day. This will provide sufficient nourishment to keep the colt growing when deprived of the mother's milk. If the colt has been running with its mother all the time up to weaning it should be fed four or five times a day when weaned as it is used to frequent feeding from its mother. Weaning time is one of the most difficult periods in the life of a foal. No great difficulty will be experienced in bridging this period, however, if it has been properly cared for beforehand.

Principles of Soil and Cultivation

A. D. McIntosh, B.S.A., Hastings Co., Ont.

Soil has been described as the cemetery of all ages and the resurrection of all life. All things begin with the soil and at last all things return to it. Many agencies are continually acting upon the soil making possible the growth and development of plant and animal life; there are the heat and light of the sun, the frost and snow, the rain and wind, the floods of spring, the earthworms, the action of countless microscopic organisms, the decay of plants and animals, and so forth. Man calls on nature to assist him with all these agencies, and gives her an extra chance by exposing the soil frequently with plough and cultivator.

Soil is not plant food. It is the place where plants grow. It holds the plant firmly in one place and furnishes the material that is left in the ash when the plant is burned. It also furnishes the water to carry this material in solution to the leaves of the plant where the plant food is manufactured and stored in root, stem, fruit or seed according to the nature of the plant. Without the sunlight and heat there could be no green in the leaf of the plant. The energy furnished to the soil by the sun is so enormous that it seems incredible. By cultivation, man takes advantage of this energy and stores it up till such times as he wants to produce a crop. Soil being opaque, however, it is not enough to merely turn the ground over occasionally. Only thorough cultivation gives the soil the best chance to store energy. If a man were to get electric power for nothing he would think he had a bonanza, but when Nature lavishes her free will offerings of countless horse-powers of energy to produce his crops he is too often indifferent about connecting up the power to his machinery so as to get the full benefit.

AFTER-HARVEST CULTIVATION

Early after harvest shallow cultivation can be done at a time when there is plenty of moisture, a plenty of heat and an abundance of light to cause a ready and rapid growth of countless weed seeds that have found their way into the soil. Not to mention the inestimable value of the conservation of moisture, there is a great deal of energy stored up in the soil, a great deal of soluble plant food made available, a great deal of humus mixed in, and a great deal of anxiety dispelled when the crop is sown in the spring.

The Ontario farmer who is blessed with a sufficient annual rain-fall to produce a crop does not so fully appreciate the benefits of a great deal of shallow cultivation, as does the Western farmer on the arid plains where it requires two years' rainfall to produce a crop; and where the farmer cultivates one-half his land for the whole dry season to conserve the rain-fall of the year while the other half of his farm is producing him a crop. We, in Ontario, are fast coming to recognize the fact that while nature bestows on us an abundant rain-fall, there must be something done here as well as in the West if we are to get satisfactory crops. The land must be kept loose and friable; the sunlight must get in; the moisture must be conserved; the weeds must be held in check. Early after harvest, shallow and continuous cultivation goes a long way towards filling the bill without the loss of a crop for a year.

Finishing the Market Hog

E. F. Eaton, Colchester Co., N.S.

The rate and economy of the gains made in the final feeding of the market hog will depend on the way it has been fed during the previous three or four months and the age and weight of the hog. Hogs which have been kept on pasture with enough grain fed to keep them growing and vigorous are in ideal condition to make rapid and economical gains. The green feed and exercise give the pig a good hearty appetite. Its digestive organs have been shown by actual experiment to be larger and stronger than are those of the pigs fed grain only. The feeding of green feeds, as rape, in the peas, have the same effect on the digestive system though to a lesser extent.

YOUNG PIGS GAIN FAST

Another factor which has a large influence on fattening is the weight and age of the hog. We have found that when hogs get to be eight or nine months old and weigh 250 to 300 lbs., it takes considerably more grain to produce gain in weight than it would to get the same gain at five or six months. We aim to have our hogs marketed when six months old. They then weigh from 170 to 190 lbs. each.

For the final feeding which lasts about four or five weeks the pigs are confined in their pens with a small yard to exercise in. Too much exercise is not conducive to economical gains. The green feed is gradually reduced and the grain increased. At the end of two weeks we have them on full feed. A little rape or green oats is still fed once a day to keep their digestive organs in shape. This green feed also produces a firmer bacon than a straight grain ration.

DIRECTIONS FOR FEEDING

For grain we use a mixture of shorts and corn-meal, equal parts. This mixture, with a few, gives better results than either fed alone. Occasionally we feed ground oats but they are not economical, as whole oats can always be sold for 45 cents a bushel on our local market. The meal is fed three times daily in the form of a thick slop. Sometimes skim milk is used to mix the feed with, but more usually water. I cannot give any set rules as to the amount of slop to feed. It varies greatly with different bunches of hogs. Feed just as much as they will eat up greedily but no more.

The time the hogs are making the money for us is when they are on pasture or when huddled on rape. It costs almost as much to put on the added weight in finishing as it is worth. The profit for the final operations comes in the increased value of the whole weight of the hog. If the hog weighs 150 lbs. when we start to feed him and the pork is worth one and a half cents more as a result of finishing we have a profit of \$2.25 for our work in finishing.

The Work Horse in Warm Weather

G. H. Blair, Carleton Co., Ont.

Working on the field during this hot and dry weather causes the horses to perspire, and the skin will fill with dirt and dust, which is held by the perspiration as it dries. Unless this is removed, the skin will become irritated, and it makes the horse uncomfortable. In order to remove this, and to improve the general health of the animal, he should be well brushed nightly and morning. It greatly adds to the comfort of a horse to be brushed in the evening after a day's hard work. The curry comb should be used as little as possible, and only to loosen dirt that cannot be removed with the brush. To groom the horse well after hard work, does not only clean the skin, but it prevents various parasitic diseases of the skin. It gives the horse a glossy coat and keeps him in better condition.

If the horses have been perspiring when brought into the stable, it is a good plan to let them roll in the yard and then rinse them with water that is slightly warm. This will remove the dirt and

sweat. A currier skin should be laid on the farm at this time to be the care and the year of continuing should

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sweat. The body should then be gone over with a curved, round scraper. Following this, the skin should be rubbed with a cloth to get it dry and lay the hair flat.

Farm work horses are apt to be neglected at this time of the year, because of the general rush of farm work. This should, however, not be the case; but, instead, they should have more care and attention than at any other time of the year. There are still two or more months of continued hard work ahead, and our horses should be in the best of condition.

What About an Agricultural College? Course?

R. B. Cooly, B.S.A., Hastings Co., Ont.

Agricultural education has passed through a period of development which has appealed to the few rather than to the many. Men of special parts have attended the Agricultural College. For such men there are always special opportunities.

Why are there not more men attending the O.A.C. College at Guelph? Over 60 per cent. of our population are engaged in agricultural pursuits, yet less than one per cent. of farmer's sons avail themselves of the opportunity.

Thirty-five years ago the Ontario Agricultural

powers of making plain to others what we have learned, is well cultivated.

DOES IT PAY TO TAKE THE COURSE?

One of the first questions a parent may ask is: "Will it pay me to send my son to take an agricultural course?" In answer I would refer such a one to those who have taken the course. Almost without exception, the answer is given in the affirmative without the least inclination to hesitate. Parents who are anxious that their son should improve should give him a chance. The course as given at our Agricultural Colleges, if taken, will have a direct and practical bearing upon his whole life on the farm. His powers of observation will be made keener; his judgment will be developed. It will develop his creative and constructive instincts showing him the purpose and true meaning of his vocation.

Talk this proposition over with your boy. De your duty by giving him a chance to improve himself. It is not fair to start the boy in a life work on the farm without preparing him for it.

Top-dress Weak Clover

J. R. Westlake, Carleton Co., Ont.

The success which we will have with our clover crop next spring depends on the care which we

Harvesting the Corn Crop

N. B. Stuart, Oxford Co., Ont.

We regard maturity as the most important point to be taken into consideration in deciding the date on which the corn will be harvested. Many of our neighbors are always in fear of having their corn frosted. We would rather run the risk of frost than put the corn in the silo before it is properly matured. Corn which is cut very green and put into the silo is very apt to sour, has too much water in it and does not make a nutritious feed. Corn in which the ears are starting to glaze if well tramped down will keep well and makes an ideal feed for all kinds of cattle.

The importance of maturity in corn is well illustrated by some experiments which were carried on by a New York Experiment Station, the results of which I have before me. From the time the corn tasselled until it glazed, the dry matter increased 350 per cent.; the ash 125 per cent.; proteins, 180 per cent.; arbo-hydrate, 570 per cent.; and the fat 200 per cent. This shows that between the tasselling and the glazing stage, the corn extracts from the soil, almost all of the nutrients which make corn our cheapest feed. This experiment also explains why the cows often fall off in milk when we start to feed green corn in the fall. We are really feeding them little more than water.

SILAGING THE CORN

All of the silo owners in this section cooperate with several of their neighbors for the silo filling. We have 25 acres of corn and to get this crop in without delay, I have my own team on the corn binder, four teams hauling in from the field and two men in the silo. The owner of the engine and cutting box supplies a man to feed the corn to the machine. Two or three men are needed in the field to pitch the corn onto the waggons. The corn binder is started to work at noon the day before the engine arrives.

The cutting box which we usually have cuts the corn in from one half to three-quarter inch pieces. A small boy can operate the hood at the top of the blow pipe so as to distribute the corn evenly in the silo. To put two men in the silo may seem like a waste of labor but we believe in having the corn thoroughly tramped. It should be particularly well tramped around the outside.

TO MAKE DOORS AIRTIGHT

We have a continuous door in the silo which is filled up by staves cut to the proper length. This door is not quite air tight. As the silo is filled, a roll of building paper is gradually unrolled between the corn and the door, thus making it perfectly air tight.

The layout of the farm has an important bearing on the amount of labor necessary to harvest the corn crop as well as all other crops. Our farm is not properly laid out. The farm is divided into four fields of 25 acres each, and the buildings are situated at one end. While four teams is quite sufficient when the corn happens to be in one of the two fields next to the barn, we find that seven are needed when the corn is in the more distant fields. Properly matured corn, well tramped in an air tight silo are essential if we wish to get the best possible returns from the corn crop.

If the implement shed is not located too far from the main buildings it is convenient to have the workshop in conjunction with it, so that all the machinery can be inspected and readily mended before work starts in spring. Doing this preventive work in the idle winter months will save a great deal of annoyance and delay during the busy season. Every implement should be gone over and repaired before it is taken out for the season's work, and many idle and stormy days can be put to profitable use in this way.—Mac C. Cutting, St. Paul, Minnesota.



A New Ontario Farm House Built by an Early Settler, Mr. E. Wickham

When Mr. Wickham and his wife went to live on their New Ontario farm some eight years ago, they spent the first few nights in an old shack on the road. The story of Mr. Wickham's career in New Ontario, is told in the article on page 6 of Farm and Dairy this week.

College was established at Guelph. In the early years of its inception it struggled against severe prejudice and an almost overwhelming hostile public sentiment. As time went on, however, such sentiment changed until to-day the College is admitted by all fair-thinking, broad-minded people to be a practical necessity, far-reaching in its influence and invaluable in its work.

DOES IT EDUCATE AWAY FROM THE FARM?

It has been asked how it is that so many who have attended the Agricultural College, never return to the farm. But, the great majority do return to the farm and with a far brighter and happier future facing them than those less fortunate fellows who have returned to the soil, gives the quietus to pessimist's assertion: "The Agricultural College educates the boy away from the farm."

When taking an Agricultural Course one is away from home only in the late fall and winter, when the work on the average farm is readily managed without him. The benefits of a course in agriculture are manifold. One's appreciation of agriculture is strengthened and the very fact that one gains a knowledge of agricultural science teaches him its true significance. By means of regular practice in public speaking and through the influence of the college Literary Society one's

give it now. The first point to be observed is to leave quite a long stubble, say five or six inches when cutting the grain. This stubble will hold the snow and protects the young and tender plants. On no account allow cattle to be pastured on the clover stubble. When we see a fine growth of clover, the temptation to turn on a few of the young stock or the milk cows for a few hours a day is strong, but if we hope for good results next year, we must be content to lose a present profit for greater returns in the future.

While we do not believe in top dressing of meadows as a general practice, nevertheless there is no manure applied on the farm from which we get greater returns than from that which we apply in the fall to help along the young clover. When the grain is cut and the clover well started, it is easy to detect where the catch is poor or where the clover is not doing well, due to lack of plant food. A thin application of manure at the rate of seven tons to the acre to these backward spots will bring them along nicely and very little if any difference from the rest of the field will be detected the following year. This manure should be applied with a spreader.

Where sheep are kept on a farm more rape is sown on which to fatten them, and rape when sown in drills makes a splendid cleaning crop.—T. G. Raynor, B. S. A. Seed Branch, Ottawa.

A STORY OF SUCCESS IN NEW ONTARIO

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

In New Ontario there are many successful men. Perhaps a more striking example of a self-made man, who has persevered through hardships, sometimes privation, cannot be found in the province than Mr. Ed. Wicklum. At present Mr. Wicklum is farming near Charlton and has a beautiful farm with good buildings and stock.

Something over six feet in height and upwards of 200 lbs. in weight with square shoulders and flat shoulder blades, he is the picture of health and strength. Behind these, even the casual observer, can read courage, energy and perseverance as the prominent characteristics of a pleasant optimistic disposition.

Mr. Wicklum's career in New Ontario is remarkable in so much that when he came to the country he had

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Minister of Agriculture,
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not a cent and now after a residence of eight years is worth 10 or 12 thousand dollars. However that fact in itself is not enough. We must know that he made every cent of it in hard work. That he did not go into mining and "strike it rich" as the people of the north say like many, perhaps most of the wealthy men in Northern Ontario.

I had always followed the bush for a living. Mr. Wicklum began, after we had done justice to a meal, such as any farmer's good wives ever learn to prepare. "In the winter of 1901 I was laid up for some time with a bad foot and in the spring decided to start out in search of something better. At the time I had just \$175 in the world and of that I left my wife \$100 and took \$75. When I left my home in Centre Simcoe I did not know where I was going but was satisfied that I would find something better or not return.

"I took the boat at the foot of Lake Temiskaming. There were several others on board going into New Ontario in search of a home. As it was early in the spring the ice was still in the Lake above the Old Mission, about 20 miles from New Liskard. The boat could go no farther and we had to go back or walk the 20 miles to the head of the lake. I was the only one to leave the boat. The rest returned to the foot of the Lake. With my pack on my shoulder and only a small lunch and whatever animals I could shoot to live on, I tramped through the bush for six days, finally arriving at New Liskard.

Sleeping out in the open in the spring brought back the rheumatism

and I was again laid up for a few days. The accommodation was bad and the cost great. I spent a short time in looking around and then located a place north-east of the town but found out soon after that it was of no value and had it cancelled. I then followed the road to Milberta and came on through the bush to this place, 30 miles from New Liskard.

WITHOUT A CENT

"By this time I had not a cent left. I could not buy a postage stamp and when my stuff came later I had to borrow \$1.50 to pay the freight. I got work on the road. I worked on my house in the morning before seven and in the evening after six. By the time my wife came a month later the house was ready. We had no bedding as our 900 lbs. of goods had not arrived so I paid 85 cents for a flake of hay and a good neighbor loaned us a quilt. For three weeks we had only the hay and one quilt for a bed.

"Our first house was in Milberta but at old times I would come in here and chop on my own place. At that time and until two years later there was only a trail through the bush and I had to carry my living on my back 18 miles.

"In October of that year I took the typhoid fever and for six weeks lay on the broad of my back. However, we

ories of a life of hardship and privation finished, for Mr. Wicklum continued: "With the finishing of that house our hardship was practically at an end.

"From then on we have suffered no real hardship of any kind. Of course we have worked hard but work is never a hardship. Little by little we became better off. First our buildings were small but as we got more land under cultivation the revenue became larger. In order to make ends meet I was compelled to work on the road and at other jobs but put as much time as possible on my farm."

THE FRUITS OF MUCH LABOR

To-day Mr. Wicklum is reaping the fruits of his labor. His log house was replaced last year by a new and modern one. It is well equipped, has telephone connection to Englehart, is large and comfortable. He put up a new barn a year ago, 40 x 60 feet with 200 foot posts. Two years ago he erected a sawmill at a cost of \$2,245 and when seen by Farm and Dairy had 450,000 feet of lumber awaiting shipment, all of which was taken off his own 160 acres.

At the present he has 20 acres under crop and 70 chopped and burned which he expects to have logged this year and under grain next. He grows no hay—oats, wheat and peas, with an acre of vegetables constitute his crop.



Clearing Land in New Ontario—Mr. E. Wicklum's Farm

The first task that faces the settler in Temiskaming is that of clearing his farm. This land is much more readily cleared than was land in older Ontario in days gone by. Mr. Wicklum has over 40 acres cleared. He has been in the district for eight years. Mrs. Wicklum may be seen in the picture.

got through the winter. In the spring I purchased a team. I could only afford to pay \$25 down but paid the balance in instalments. With the team I worked clearing the townsite of Milberta.

A HARD STRUGGLE

"We continued this way for two years, living, but never knowing for how long. Starvation dogged our every footstep, but we were all neighbors and those who had game of their living to those who had not. In 1904 we moved to our farm. All around here for miles and miles was a dense forest. There were no roads—just trails through the bush. The road from Milberta could be travelled with a horse in winter but usually there were paths or merely a blaze on the trees.

"The first few nights we spent in an old shack on the road. Our bed was made from our potatoes that had been brought in during the winter. But as the snow melted, the water rose in the shack, forcing us to move. We had started work on our house but it was without a roof. However we slept in it before the chinks were filled or there was a single board as a roof. In a few days we got the house in better shape and in the summer finished it.

THE END OF HARDSHIP

Here an expressive smile spread across Mr. Wicklum's face and his wife sitting near also smiled. Evidently the thought of finishing that house brings to them pleasant mem-

This year he put out 20 fruit trees.

A WEALTHY MAN TO-DAY

He has five horses, 18 head of cattle and nine pigs, besides poultry. Five of his cattle are pure bred Herefords which he purchased at the Toronto Exhibition in 1908 from the late John Govlock, of Forest.

The success that Mr. Wicklum has made of farming in the Great Clay Belt stands out a striking example of what courage and a determination to win can do in Temiskaming. "Today I am the richest that I have ever been and also the poorest because when I make a dollar I put it back on my table. But I feel satisfied that I could sell out and show in cash a sum considerably over \$1,000 for every year I have been in this country."

"Eight years ago not able to post a letter and to-day worth \$10,000 or more is in short the story of Mr. Wicklum's life in New Ontario. He has triumphed over difficulties and discouragements and has made of himself a farmer that not only Temiskaming but the whole of Canada may well feel proud.—COLIN W. LEES.

High hanes should never be used on horses that are being worked in an orchard, otherwise much damage will be done to low branches of the trees by knocking off the bark.—W. F. Kidd, Elgin Co., Ont.

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The General Purpose Horse*

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This term is used to cover a class of horses which may be and are used for a variety of different kinds of work, all calling for a horse of some form the general purpose horse may be called upon to do almost any kind of work depending upon where he is most needed rather than upon his local adaptability to any particular line of work. The advisability of breeding general purpose horses with which to do farm work is doubtful as it will usually pay the farmer better to breed or buy the heavy ones for his field work and heavy hauling, and then keep one horse or a pair of horses of the carriage or roadster type for his road work.

Upon reaching the city this class divides itself into three sub-classes or types based again on the work to which each is best suited, namely, delivery wagon, express wagon and fire horses.

THE DELIVERY HORSE

The demand for good, stylish, showy delivery and express horses is always brisk and the prices paid for them are high. There are, however, many "weeds" among the horses used on delivery wagons which sell very cheaply. The best of the delivery wagon horses are produced from standard bred or coach stallions on medium sized, clean limbed mares. Some may be pure blood coach or standard bred horses lacking sufficient finish, quality, style and action to be suitable for driving purposes. They should stand from 15 to 16 hands high and weigh from 1,100 to 1,400 lbs.

A neat, clean cut head, sloping shoulders, a deep, strong middle with strong coupling and smoothly turned fore hindquarters are important considerations in form. Legs and pasterns should be of good length to allow of a long stride. In view of the fact that most of their work is done at the trot on the hard city streets, strong knees and hocks, long sloping pasterns and sound feet of the toughest quality are of prime importance. The canons must be free from long feather. The stride is important, particularly at the trot, the stride should be straight, long, free and springy. A neat head, sloping shoulders, style, quality and finish add greatly to the value of the delivery wagon horse.

THE EXPRESS HORSE

Express horses are used by express companies in the collecting and delivering of goods to and from railway stations. They vary somewhat in size depending upon the nature of their work and size of wagon they are hitched to. A range of from 15.3 to 16.3 hands in height and 1,300 to 1,600 lbs. in weight will cover practically all horses used for express wagons. The most desirable type is a horse that stands 16 to 16.1 hands and weighs from 1,400 to 1,450 lbs.

The express horse differs from the average delivery horse in that he is larger, a little more muscular in build, and heavier boned, though the legs must be free from long feather. In breeding they usually carry a large amount of draft blood. Slope of shoulders, strength of back and loin, and strong limbs, large, tough feet, and straight, free action are of greatest importance. Style and finish add to their value. It should be noted that express companies have difficulty in securing horses of good form of the right type to do their work even though they are willing to pay high prices for them.

THE FIRE HORSE

In cities there is a limited demand coming from fire companies for a certain type of horse which is commonly best suited to fire department

work. In form the fire horse must be a little more rangy, stand freer in the hind flank than the express horse, yet must have a strong constitution and short, strong back with a straight loin. Only geldings are used. Intelligence and obedience to command are factors that enter into the selecting of fire horses.

Two types of fire horse are in demand. One standing from 16 to 17.2 hands high and weighing 1,500 to 1,700 lbs. for heavy truck and engine purposes. The other is a smaller horse standing from 15 to 16.2 hands high and weighing from 1,200 to 1,400 lbs. and weighing less without feather on the legs. While the demand is very limited good fire horses are so scarce that they will be picked up by a fire department at good prices almost any time of the year.

Late Potato Blight

Farmers are advised to be on the watch for potato blight this month. August is the month when the blight does its most disastrous work. It is doubtful if spraying will now be beneficial on the early varieties, but it can do no harm to try it with Bordeaux mixture.

The late varieties are in greater danger now, and spraying with Bordeaux mixture is the only remedy. Use from 60 to 75 gallons an acre. This has proven effective in Minnesota the past two years. If blight appears on the potatoes anywhere in the neighborhood, spray at once, and continue spraying every ten days, in good weather, whether a field is attacked or not. Spray more frequently in hot, humid weather.

Neglected Machinery

A. Hector Outten, Colchester Co., N.S.

When harvest is finished how many of us clean, oil and pack away our machinery? We know how much we have to pay for implements. Formerly a wagon, sleigh, plow, harrow, scythe, cradle, axe, grindstone and a long chain would be an outfit. Now we must have drills, sulky-plows, binders, straw-cutters, pulpers, tedders, horse-rakes, pitching gears for unloading hay, and so forth.

After investing in an outfit of this kind there is negligence if a suitable building is not provided for their reception when not in use. It is safe to say that more machinery is rusted out than worn out. The life of a mowing machine is estimated at 1,000 acres, say 10 years cutting 100 acres, or 40 years cutting 25 acres each year, or 20 years cutting 60 acres. Does it last that time? If not why not? How many mowing machines are left out from the time they cut their first field of hay until the last is cut? How many more are left out until late in the summer or autumn? And how many more are left out all winter?

One may drive in any direction at this season of the year and find machinery of new kind, wagons, sleighs, and so forth, standing just where they were last used. The writer has seen plows left frozen in the ground all winter by good farmers. Others, however, when doing up a field of hay drive their sleds down to the barn out of the sun, and whatever kind of weather that day might bring forth.

Again, are workshops provided with the tools kept in order. Is sufficient number of bolts, nuts, copper rivets, wire and so forth kept on hand so as to repair any little breakage instead of having to go to a blacksmith shop, perhaps in the midst of harvest?

Pig Queries.—In regard to brood sows, Henry Wallace gives the following advice: "Go over to those

that have had pigs the present year and ask them the following questions: How many pigs did you have this year? Were they even in size and form? Were they all good ones, or did you have two or three choice pigs, and were the rest quite inferior? How did you take care of those pigs? Are you a good suckler? Are you good or natured? Are you a good mother, or are you one of the nervous, fidgety kind always worrying and fretting for somebody will hurt you and your precious piglets? If the brood sows on being interrogated, cannot give satisfactory answers to these questions it is not worth while to sold her or give her a moral lecture. Just turn her into the fattening pen; for there is where she belongs."—From Colburn's "Swine in America."—Price through Farm and Dairy, \$2.50.

Spray for Turnip Lice.—I have found that a spray of one pound of Paris green and five pounds of lime in one barrel of water makes an ef-

fective spray for the turnip louse. I have not seen a sign of a louse since applying this mixture.—A. S. Minioli, Lambton Co., Ont.

Young Calves Need Whole Milk the first few days. The calf should always have the first or colostrum milk of the cow and be allowed to nurse the milk until the eighth or ninth milking, when the milk is suitable for human food. Feed often with small amounts to avoid over-feeding. Teach the calf to drink and feed whole milk for at least three weeks, changing to a skim milk diet gradually.—D. H. Otis, Madison, Wis.

I enclose \$2 for my renewal for two years, to Farm and Dairy. I am well pleased with the paper and find many interesting things in connection with the dairy industry as well as agriculture and think it is a paper that should be in every farmer's home.—W. R. Fraser, Felton, Ont.



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HORTICULTURE

A Poorer Fruit Crop

Reports from various parts of Canada, Great Britain and European countries indicate that this year the world's fruit crop will be decidedly short. British Columbia is reported to have the largest crop in its history; Ontario, Quebec and the Maritime provinces, however, all report a short crop.

The outlook for the orchard men would seem to be poor. But as it often happens, in years of short crops, higher prices are likely to prevail.

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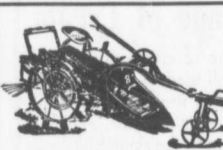
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The smaller crop will in all probability be harvested and attention will be given to proper packing and storing.

The foliage on the trees is excellent, wood growth has been good, which would indicate a bumper crop for next year. If this year of shorter crops teaches us the advantages of proper harvesting and packing, the short crop will be a blessing in disguise.

Our Fruit Crop Report

Latest reports from all the fruit growing districts in Canada received by Farm and Dairy, indicate that the total crop this year will be much smaller than last year's. Of all the provinces, British Columbia alone reports a full crop. They expect to harvest the largest crop in their history.

Prof. M. Cumming, Secretary of Agriculture for Nova Scotia, writes: "The fruit crop is the most signal failure since it became commercially established in the province. Frosts in the latter part of April followed by cool, wet weather and severe frosts on June 5th and 6th explain the shortage in fruit."

Theodore Ross, Secretary of Agriculture for Prince Edward Island, writes that they do not expect more than a 50 per cent. crop for that province. The fruit crop in Prince Edward Island was injured by heavy frosts on June 4th and 5th.

Mr. Aug. Dupuis, director of experiment stations, reports that the apple crop in the province of Quebec is light. The fruit set well but the crop has been heavy. Cherries failed completely and plums will be an average.

EASTERN ONTARIO
Reports from five of the principal fruit sections in Eastern Ontario would indicate that early apples are plentiful but little effort has been made to market them profitably. Fall apples will be a mediocre crop but winter varieties are estimated at only one half to one third of a crop. Some correspondents report a complete failure. Pears will be a good crop. The plum crop has seriously injured the plum crop in many sections. In spite of the crop failure, it is pleasant to learn that orchards are being pruned and sprayed more than formerly, so that what crop there is will be of good quality.

WESTERN ONTARIO
Conditions in Western Ontario are much the same as in Eastern Ontario. There will be a light apple crop, a good pear crop and up-to-date

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orchard practice is on the increase. The plum curculio is also very much in evidence, though correspondents who spray, report that it can readily be controlled. Apples in the Georgian Bay District are almost a complete failure.

The reports of our correspondents include the following:

Small fruits are a good crop; cherries good; plums light. Famense apples medium to full crop. Spot developed rapidly but is at a standstill now. Wealthies, Seaside, Pyram and McIntosh Red, medium crop; winters, light.—Harold Jones, Grenville Co., Ont.

Apple crop is very poor. There has been a lot of spraying done.—H. F. Retsoner, Grenville, Ont.

Apples are not more than half a crop. Spraying is not practised and bark lice and codling moth are bad.—Chas. Thompson, Northumberland Co., Ont.

The fruit crop is fair this year but not so good as last. Apples will be as good as last year but the quality will be poorer. Snowdrops and McIntosh Red, medium crop; winters, light.—W. J. Wood, Durham Co., Ont.

I would estimate the apple crop at one third of what it was last year. Quality will be good. Plums are light. Insect pests have not given much trouble. Quite a number of trees have leaf curl.—Cecil Walsh, Durham Co., Ont.

Apples are not a good as last year. Early varieties are very small. Winter varieties are doing very well now and will be a fair sample. Orchards will be pruned but spraying is not practised.—J. A. Ontario Co., Ont.

The apple crop is very light. Bloom was good but dark, damp weather prevented setting. Clapp's Favorite pear was loaded but all others light. Plums are a failure. Work the plum curculio is in evidence.—D. B. Hecker, York Co., Ont.

The apple crop is a failure. There are many winter varieties and not many fall apples. Spraying is not general. Plums and cherries are light; pears good.—Geo. W. Mahon, Halton Co., Ont.

Orchards which last year yielded large crops will have a very short crop this year. The plum crop is also very small. The pear crop also.—Wm. Harph, Halton Co., Ont.

Apples are very short crop. Most of the orchards have been pruned and had three sprayings, so that what fruit there is will be of good quality.—J. C. Foster, Norfolk Co., Ont.

In the north part of Norfolk, the apple crop is not as plentiful as last year. There is very little spraying done here. Sprayed plums are a fair crop; the rest leaves a great deal to be desired.—Albert Jull, Norfolk Co., Ont.

Astrachans, Duchess and Wealthy will be a full crop. Fall varieties about half a crop; winter varieties one third of a crop. Pears are a fair crop. More spraying is being done every year.—Frank Barber, Norfolk Co., Ont.

The outlook for fruit is very poor. No apples worth speaking of.—Geo. Pittman, Norfolk Co., Ont.

The apple crop is almost a complete failure, not more than one tenth of what they were last year. There is not much spraying done.—N. A. Bryant, Middlesex Co., Ont.

Small fruits are less than half a crop, caused by early frost and drought. Apple crop is very light. Orchards are not well pruned or sprayed and the codling moth is prevalent.—Wm. Dawson, Middlesex Co., Ont.

Apples are a very poor crop. Pear trees are well loaded.—Geo. Hill, Middlesex Co., Ont.

The fruit crop is almost a complete failure.—R. R. Stean, Huron Co., Ont.

Apples are almost a total failure.—D. G. Salkeld, Huron Co., Ont.

New Market for Tomatoes

Three boxes of tomatoes packed in peat and sawdust were shipped to Covent Garden Market last week. "It is expected that they will find a ready market," said Mr. Lockie Wilson in an interview with the Toronto Globe. "The northwest is now a good exporter for Ontario fruit but if an fall-off in the demand from there should come it is as well to have an English market cultivated. In any case a brisk trade could be developed with the old country. That this would be to the advantage of Ontario growers is evident from the fact that whereas the Prince Edward county farmers get 25 to 30 cents a bushel (60 pounds), the price in London is from five to 10 cents a pound.

DEMAND IS GOOD

The demand in England for Canadian fruit generally is good. The peach trade has been picked up to Covent Garden from the continent are yellow, thick-skinned, and juicy, being grown in hot, dry countries, like the southern California apples, which are punky and juiceless, especially those grown on irrigated land. The juicy, well-flavored Canadian fruits should, therefore, command a ready sale at good prices.

That our tomatoes would reach the British market in good condition Mr. Wilson thinks is certain, as there were shipped last year nearly a million bushels of tomatoes from one of the Canary Islands. It takes seven days by steamship for their fruit to reach Liverpool. A box of Kent county tomatoes came from London in about ten days, but in about three-quarter days. Mr. Wilson expects the Canadian product to do fully as well as the Canary Island shipments.

Successful Cooperation

J. E. Wait, Northumberland Co., Ont. The Grafton Fruit Growers' Association are having a fair success in the handling of our fruits and to aid each member in taking better care of his orchard in the way of spraying, pruning and cultivation. All spray materials are given to the members at cost price.

The aim of the association is to put up an honest grade of apples, the price being a fair representation of the entire contents of the barrel. All the fruit is picked at the proper time. When buyers are handling the fruit a large amount of it is often picked either before maturity or long after when the best of the fruit is on the ground.

In the past the average buyer has made practically no difference in price between the classes of apples he got. He would pay the same price for an orchard that graded 60 per cent. No 2 and No. 3, with poor varieties as for an orchard that ran 40 per cent. No 2 and No. 3, with the very best varieties such as Spies, Kings, and Russets. This was unfair to the grower.

THE REMEDY FOUND

Our association was formed to overcome these evils. Each member is compelled to properly spray his orchard together with thorough pruning and cultivation. When the fruit of the orchard will return at least 75 per cent. No. 1 fruit for which he gets a fair price.

So far we have gotten a good price for each crop shipped. Last season Greenings averaged 19 shillings, Snows 20, other varieties 15 to 20 shillings. For the present season we have a large number of inquiries as to how we can get our fruit. All our members are well satisfied with our cooperative society. They feel that it is the only satisfactory way of handling our fruit.

Renew your subscription now.

Provision- ble, for that of done d, ing a sh, ing simply a r of the r, of a kind ar tested, s than the o. Where this dows shak doors taken dws and the mites p of the num ing to the s are ap- pied to the roosts plan is to a week with If the f yards, the n with as the over, for in a success leaves that laps the n to dispense baths should pen, or the w with vermin ground splu be beneficial.

BREEDING

As usual, son is over broodiness a taly if they pingtons or numerous prates. Success as plus a water, and u standing up, troublesome. A effective for two days of food and hens in the them and af been fed. The looking for th will forget abe lion resume here for another f as before. T for the worst be fed five days.

FEED

A careful in the chickens to clean and are satisfy them. Use increas Everything you keep them gro mature early a first-class. This will be ill-garden or on t not old enough by scratching. If good by eati and earthworms orchen enemies getting the be variety of food. and currien chickens will have the garden for taste for these!

JUN

Another word chickens hatched justification for ability to hatch chickens will m if there are no them out. Who chicks, it is bet than a and msk number than t care of small ch trampled on and

POULTRY YARD

Poultry Notes

S. Short, Carleton Co., Ont.

Provision should be made, if possible, for the laying stock to roost out of doors during the summer by erecting a skeleton nesting house which is simply a roof of four uprights to support the rain. Roosting quarters of the kind are much less likely to be infested with red mites and other vermin than the closed stuffy winter quarters. Where this cannot be done, the windows should be taken out and the doors and doors and wire-netting windows and doors substituted. Should the numerous insecticides for applying to the roosts will be effective. If they are not available, coal oil applied to the under surfaces and joints of the roosts are excellent. Another plan is to seal the roost at least once a week with boiling water.

If the fowl are confined in small yards, the males may be dispensed with as the hatching should now be over, for late chicks are not usually a success. The removal of the male heads that much more room and benefit the neighbors will not be sorry to dispense with his crowing. Dust baths should be provided in every pen or the fowl will become infested with vermin. The dust bath of a little ground sulphur to the dust bath will be beneficial.

BREAKING BROODY HENS.

As usual, now that the setting season is over, there is a tendency to broodiness among the layers, especially if they are Plymouth Rock, Orpingtons or Wyandottes. There are numerous practices to break up broodiness advocated by thoughtful people, such as plunging the hens in cold water, and using devices to keep them standing up. These are cruel and not wholesome. The simplest and most effective way is to confine the hens for two days in a small quantity of food and water, and release the hens in the morning before feeding time and after the other fowl have been fed. They usually be so busy looking for their breakfast that they will forget about the nest. Should a hen resume her nest, confine her again for another two days and release her as before. This is usually sufficient for the worst offenders and having been fed they will lay again in four or five days.

FEED CHICKS WELL.

A careful inspection should be given to the chickens to see that they are kept clean and are being fed sufficient to satisfy them. Growing chickens require increased rations every week. Everything possible should be done to keep them growing so that they will mature early and make winter layers of first-class table birds. Chickens should be allowed to forage in the garden or on the lawn for they are not old enough to do much damage by scratching, but will do a great deal of good by eating up cut worms, bugs and earthworms, thus destroying numerous enemies of the garden while getting the benefit of an excellent variety of food. When the strawber-riens will begin to ripen, the chickens will have to be removed from the garden for they soon acquire a taste for these fruits.

JUNE CHICKS.

Another word about late chicks or stragglers hatched in June. The only justification for hatching in June is inability to hatch before, and June chicks will make splendid progress if there are no older ones to crowd them out. Where there are earlier chicks, it is better to give attention number than to have the worry or the care of small chickens that are being trampled on and crowded to the wall

by the larger chicks, which stunts their growth and causes numerous fatalities.

The Moulting Period for Hens

A. G. Gilbert, Poultry Manager, C.E.F. Ottawa.

It is best to have the moulting period in the summer months. The summer moult usually lasts from eight to ten weeks. Mr. James Shackleton, a well known authority contends that by feeding specially prepared rations this period may be shortened.

The following treatment has been used several years. During the early part of July—after the breeding season is over—the fowls were placed on half the usual quantity of rations for 15 or 20 days. The effect of this treatment was the stopping of egg production and the loosening of the old feathers. At the end of 15 or 20 days the full rations were resumed. A little lined meal may be added to the mash with benefit on the resumption of full rations.

Before the beginning of operations to bring on the moult the cock birds are removed from the breeding pens and placed in company with the hens. The hens were then allowed to run in small fields where they could find insect life, clover, grass, and so forth.

In the feeding of fowls during moult care should be observed that they do not become too fat. The fowls are more apt to become overweight from too generous feeding during the moult than after they have got over it and recommenced laying. It may be interesting to note in relation to the annual moult that experience of many years has shown:

1. That yearling hens usually moult earlier and easier than older ones.
2. That moulting is more gradual in progeny from good parents than in the majority of cases, have usually moulted at the same period.
3. That the moult is more benefited by a run in a field where there is grass and insect life may be found.
4. That where moulting fowls are confined to limited quarters, meat in some form and green food should be regularly supplied in abundance before Committee on Agriculture.

Feeding Dry Mash from a Box

In feeding a dry mash from a hopper or box there is apt to be some waste unless the hopper or box is especially constructed to prevent it. Hens will hook the feed out with their bills if they can, and when this is prevented they sometimes scatter it by getting large mouthfuls and drawing their heads away from the hopper.

There are hoppers which effectually prevent waste. Many of these hoppers are expensive and, as I keep hens principally in small flocks which would require a large number of hoppers, I use instead a feed box consisting of dry mash. This is a box five inches deep, 10 inches wide and from four to eight feet long, according to the size of the flock. I cut four pieces of 1x2 inch stuff 10 inches long; nail one of them to the side of the box at each corner, so the lower end is even with the bottom of the box on the outside.

Then I cut two pieces of the same material two inches longer than the width of the box and nail them to the upright corner posts, the top of the strips being 1 1/2 inches above the bottom of the box, or 3 1/2 inches from the top of the box. This makes a rest for the cover. The cover can be made of one or more boards and should be just wide enough to fit snugly between the corner posts and rest on the cross pieces. If the cover is made of two or more boards the cleats holding them together are nailed to the under side, so as to come close to and

inside the cross pieces which support the cover. This will prevent the cover from sliding out of place. This leaves a space 3/8 inches between the sides of the box and the cover for the hens to stick their heads in to eat.

The box will prevent the hens from soiling the feed or getting into it with their feet. To prevent waste when feeding dry mash I make a frame of lath about one-fourth inch shorter and narrower than the inside of the box, so it will work up and down in the box easily. I cover this frame with two-inch mesh poultry wire. The frame may be made of better material than lath if desired, but its thickness of about the width and used I soak them over night in water to prevent splitting when nailing on the wire. Double-headed tacks can be used to fasten the wire or small nails can be driven almost through the lath and bent over. I fill the box about two-thirds full of dry mash and place the frame on top. The frame or the hens, as it is called will prevent the fowls from looking into the mash out of the box with their bills, and they would do if the follower were not used. The follower will sink down as the feed is eaten from under it.—L. E. K.

Hens Eating Eggs

My hens have formed the habit of eating their eggs. How can this be stopped?

—L. K. Huron Co., Ont.

The habit may be started by having an egg broken accidentally or it may be due to the flock as a whole laying soft-shelled eggs. From either cause the habit may be started by developing an abundance of grit and oyster shell should be provided and the habit will be checked in the course of a few days.

When the habit is started by eating eggs broken accidentally dark nests should be arranged to prevent direct light from coming into them. I would also suggest changing the flock and putting them into new pens. Change and range are the most effective remedies.—M. C. Herner, O.A.C.

Shade for Ducklings

It does not seem to be fully realized that ducklings are very liable to suffer, and even die, from exposure to the heat and glare of the sun. Thousands of them are lost every year through ignorance or carelessness on this point, and many people who raise ducklings are surprised when they find some of them every day turned on their backs, dying or dead, in the open fields, from no apparent cause.

A common error is to place ducklings in wire pens in the fields where there is not a particle of shade from the sun's rays, and when this is done the birds cannot fail to suffer some ill effects. This plan is even more hurtful than allowing them to run in a field, for if they are confined to a small space under wire, there is no possibility of their obtaining any shade in one of the fences.

In summer the most suitable place for rearing ducklings is under cover of a shed or in the shade of a wood. Or the runs may be placed under the boughs of a large, well-leaved tree. Those who have neither sheds nor hedges in their fields might set up shelters of canvas stretched on a light frame, with a strip of netting round the sides to keep out the duckings in. In many large duck farms these artificial shelters may be seen, and the ducklings always rest under their general shade during the warmer hours of the day.—I.H.E.

Line for Poultry Houses

L. K. Shaw, Kent Co., N.B.

Those poultry houses which have not already been lime-washed should be done now. The unslaked lime should be put in a pail or bucket with a little water in it, just to slake it so that it all rises up like wet steam powder, then the water should be mixed with it ready for lime-washing. It can be put on hot. In this way it kills all the vermin, whether of insect life or disease.

Many people use lime which has been slaked for a long time, but new lime is far better. By this we mean the unslaked lime, as when once it has been slaked it never gets hot again. One dressing when the lime is hot and new is worth three times as much as when it is cold and slaked.

Warm Houses Affect Fertility.—Results in fertility of eggs, as shown by testing on the sixth or seventh day after being put in incubators is in favor of the cooler front houses as compared with eggs laid by hens in a partially warmed house. In one instance, of 98 eggs laid by Buff Orpington pullets in a certain front house, on being tested only eight were unfertile. In the case of 38 eggs laid by Barred Plymouth Rock pullets in a partially warmed house, when tested no less than 28 eggs were found unfertile.—A. G. Gilbert, Poultry Manager, C.E.F. Ottawa.

I have been a subscriber to your paper for a great many years and appreciate it very much.—W. A. Casselman, Simeco Co., Ont.

GRAND TRUNK RAILWAY SYSTEM

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FARM AND DAIRY AND RURAL HOME

Published by The Rural Publishing Company, Limited.



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FARM AND DAIRY PETERBORO, ONT.

DAIRY TESTS AT FALL FAIRS

Dairy tests, or milking competitions, where they have been conducted at fall fairs have provoked great interest among exhibitors and have given a great impetus to the showing of dairy cows for milk production—not cows simply conforming to the special show points of any one particular breed. Sherbrooke Fair (P.Q.), August 27th to September 3rd, are making a special feature of the dairy test. In class No. 131 a silver medal and a bronze medal are offered for the best cow under test for butter fat. The rules governing the test will be similar to those in connection with the Woodstock fair as published in Farm and Dairy last week.

It has probably now become too late to organize more of these dairy tests for the fall fairs of this year. Another year should see dairy tests more common at the fall fairs of Ontario and Quebec. The extension of these competitions should speedily awaken interest in a greater milk production and result in a far better class of dairy cattle among lactating patrons.

WHAT GOOD FEED DID

It is not often that such strong testimony in favor of good feed for dairy cows is brought to light as is given in the article on page three of this issue. It is remarkable that such a phenomenal increase was secured from a cow past her prime as was the case with the grade cow owned by Edmund Laidlaw & Sons. A record of 9,000 pounds of milk in 10 months would satisfy many owners of dairy cows. In fact only a comparatively few ever attain such a record. But this same cow in her fifteenth year, under letter care, gave 13,155 pounds of milk in 10 months and nearly 78 pounds of milk in one day; the record is marvellous when it is considered that in her prime this cow was never known to give as much as 60 pounds in a day.

The results secured by Mr. Laidlaw with this cow are in accord with the experience of good feeders the country over. Progressive dairymen have long known that you cannot fool a cow and that it pays to feed cows well.

THE GAIN FROM GOOD SEED

It is a mere platitude to say that on the farm, as in other pursuits, the effectiveness of a man's labor depends on the intelligence with which it is applied. Not at one point only, but at all points. We may bestow infinite pains upon the plowing and the preparation of the seed bed. Then we may lose half the reward which might have been ours, because we have not taken the same pains in the selection of the seed. Perhaps we have grown up in the belief that "corn is corn," and that it makes "little difference" what seed we plant, so long as it comes from our own apparently "sound." So we plant as father planted, and harvest 30 bushels an acre, where a small fraction of the time spent in plowing and cultivating—if given to the selection of seed ears according to the ideas which have been thoroughly tried out at our experiment stations—would have given 40 to 50.

"The new farming," which is transforming agriculture from a merely manual to an intellectual and business pursuit, differs from the old chiefly in this: that it directs attention to a thousand before unobserved details, the study of and attention to each of which counts heavily in determining whether a crop shall be large or small, of good or of inferior quality. And of these details those which relate to the securing of the best seed are manifestly among the most important.

WEED INSPECTORS NEEDED

Under the present legislation in Ontario it is impossible for good farmers to keep their land free from noxious weeds. Some weeds can be kept off the farm by proper care in the buying of seed and by proper cultivation. There are many weeds, however, over the distribution of which the farmer has little if any control. Seeds of the perennial sow thistle and of the Canada thistle are

carried long distances by wind. Hence the farm of one slovenly farmer in a district may be a constant source of contamination to the farms of all his neighbors.

The best way to solve this problem is by cooperation among all the farmers in a district for the eradication of such weeds. But some farmers cannot be induced to join in such a movement. To meet this exigency legislation is necessary. It is not right that the sloth and indifference of one man should be allowed to interfere with the prosperity of his neighbors.

There is a law in Ontario which pretends to deal with these cases. But it is not satisfactory. One man in a neighborhood is appointed by his neighbors to control the spread of noxious weeds. Often he is not independent. Independent inspectors appointed by the Provincial government, inspectors who are well acquainted with all our weeds and having certain parts of the province assigned to them as in the case of our dairy inspectors, is the proper way to deal with this evil.

The rapid gains that thistles are making all through the Province indicate the necessity of some stringent system of inspection.

TESTING NEW VARIETIES

It is always well to go slow when it comes to paying exorbitant prices for new varieties of grain. From time to time such are placed on the market and widely heralded as being superior to all others.

As a general rule, these novelties do not turn out well when tested. It would be wise to wait until the excellence of these new grains is thoroughly proved before investing heavily in seed of this kind.

All new varieties of grains as they come out are tested on the experimental plots of the Ontario Agricultural College and at other similar institutions. By keeping informed on the work of these institutions, through the annual reports they publish we are able to tell accurately how these novelties compare with old standard varieties commonly grown.

The folly of going after these new grains too soon was well illustrated two years ago in the case of the famous Alaska wheat. In the United States, also in Canada, many were induced to pay tremendous prices for this new wheat, which was represented as yielding easily 60 to 100 bushels to the acre. Had these same men taken the trouble to write to their nearest experiment station enquiring about this new grain, they would have found that it had been grown in an experimental way for a score of years and was one of the poorest varieties of wheat ever tested.

The information about varieties of farm crops gained through the work of experiment stations is most valuable. We should avail ourselves to a greater extent of this information. By taking full advantage of what is known about these things we might often save what would otherwise result in heavy loss.

FACTORY METHODS ON THE FARM

The development of manufactures has reached its present vast proportions through a careful study of methods and machinery, and the sifting out and adoption of the best; through a close husbanding of material, and the use of every available shred thereof; through the conversion of much that was formerly considered valueless waste into valuable revenue-producing by-products; through such a systematic drill and specialization of labor that, aided by improved machinery, one skilled workman now accomplishes from two to a hundred times as much as formerly. The marvellous abundance and cheapness of manufactured products is the result of these methods.

What reason is there that each and all of these "factory" ideas should not be adapted to the processes of the farm? In a sense every farmer is a manufacturer; the only essential difference between him and the factory owner being that the farmer works in partnership with Nature. And Nature shows her approval of factory methods by showering her largest rewards on those who give her the opportunity to demonstrate what she can do as a business ally.

Factory methods in their perfection, however, will demand in agriculture the same specialization of industry that is seen in the cotton mill or the machine shop. The men who can combine, with the possession of the most advanced theoretical knowledge, the manual skill and dexterity essential to the most perfect success in each department, are few indeed. The specialization seen in the factory is the outcome of an evolution which has been going on for more than a hundred years. A similar evolution is now going on in agriculture. It will not probably take so long to reach, here, the perfection now seen in the factory, since the factory has done a great amount of pioneering of which the farm may share the benefit. But when farm management shall have been placed on the same level, in attention to detail and in business-like procedures, as the factory, then every acre of land will be made to produce many fold as much as to-day. He who secures the very best results from every one of a hundred acres ranks with the "captains of industry" in our great manufacturing centres.

Elgin Leads in Farm Competition

(St. Thomas Times.)
Elgin county has attained the proud distinction of being the foremost dairy centre in the entire province of Ontario. "Farm and Dairy," a leading agricultural weekly, has conducted a dairy farms competition for the past two years to determine the best dairy farmers in Ontario. Six farmers have been awarded the foremost places, and the list is headed by Mr. R. A. Penhale, whose farm is on the Edgeware Road, in Yarmouth township, just northeast of the city. Mr. Penhale was awarded the first prize with 777 points to his credit. "Farm and Dairy" says: "The honors these six men have won are high. They and the members of their families will have reason to be proud of them as long as they live." And likewise the township and

county has in the distribution by demonstration all Ontario proficiency. The report of the highest tri-taste, refined exhibited a successful of ing illustra-farmer of convenience combining with essentially

A New
J. E. H.

Rocket or a weed rocket. It is a sort of gun here in alfalfa. It is a simple machine which has been invented by a farmer from the College about a year ago.



Rocket or

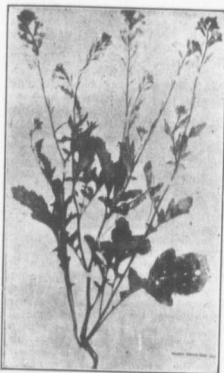
and this year and been received. As the plow as to whether prove a bad considered a bad country but ground for us of our worst portance in origin. So fa-tion as to the after the break the put, and the We should be attention is would make o and so extend the Since it is Wild Mustard seeder we think ners should against it. hand pulling if it is present in grain. Who more numerous cutting the alf of the Rocket is an annual a- ing most rapid care cannot be seed free from Farm seed sh- under a writte- or a sample of care cannot be for purity at ment at the O

county has much reason to feel pride in the distinction achieved for this section by Mr. Penhale. He has demonstrated that Elgin county leads all Ontario in dairying and general proficiency in agricultural methods. The report of the judges paid the highest tribute to the evidences of taste, refinement and management exhibited on the farms of the six successful competitors, and is a striking illustration of the fact that the farmer of to-day may possess all the conveniences and luxuries of the city combined with those pleasures which essentially belong to a rural life.

A New Weed in Alfalfa

J. E. Howitt, M.S.A., O.A.C.

Rocket or Salad (*Eruca sativa*) is a weed recently introduced into Ontario. It is a native of the Continent of Europe and has been brought here in alfalfa seed. In habit it resembles Wild Mustard but is distinguished from this plant by the distinct dark purple veining of the petals. The first specimen of the weed was sent to the Ontario Agricultural College about two years ago. Last year a number of specimens were sent



Rocket or Salad (*Eruca Sativa*)

and this year many enquiries have been received.

As the plant has been introduced so recently there is little indication as to whether or not it is likely to prove a bad weed. It is not considered a bad weed in its native country but that is not very safe ground for us to go upon since some of our worst weeds are of little importance in the country of their origin. So far we have no information as to the persistence of the weed after the breaking up of the alfalfa and the putting in of a hoed crop. We should be glad if those whose attention is called to the matter would make observations to this end and so extend our exact knowledge of the habits of the plant.

Since it is a close relation of the Wild Mustard and is evidently a free seeder we think it advisable that farmers should take due precautions against it. We would recommend hand pulling before it goes to seed if it is present only in small quantity in grain. When in the hay crop and more numerous we would recommend cutting the alfalfa before the seeds of the Rocket are mature. The plant is an annual and if kept from seeding must rapidly die out. Too great care cannot be exercised in selecting seed free from the seeds of the weed. Farm seed should be either bought under a written guarantee of purity or a sample of it sent to be examined for purity at the Botanical Department at the O. A. C., Guelph, or at

the Seed Commissioners' Laboratory, Ottawa. Such tests are made without charge.

CITY MILK SUPPLY DEPARTMENT

Ottawa Milk Supply

Robert Law, Medical Health Officer, Ottawa.

That the city of Ottawa has the cleanest and healthiest milk supply of any city in Canada is the decision of the Ontario Milk Commission. This is due in no small measure to the strict enforcement of the rules laid down by the city board of health. The rules and regulations which must be observed by dairymen in the care of cows and handling of milk delivered in the city are as follows:

1. The cows must be kept clean.
2. Manure must not be permitted to collect upon the tail, sides, udder, and belly of any milch cow.
3. The cow's stables must be well lighted and ventilated.
4. Floors must be tight and well drained.
5. Manure must be removed from the stalls and gutters before the morning and evening milking where the cows remain in the stables all day.
6. Walls and ceilings must be kept clean.
7. The ceilings must be so constructed that dust and dirt therefrom shall not readily fall onto the floor or into the milk.
8. Stables must be whitewashed at least twice a year.

THE WATER SUPPLY.

1. The water used in the barn and for washing milk utensils must be free from contamination.

THE MILK HOUSE.

1. A milk house must be provided, which is separated from the stable and dwelling house.
2. It must be kept clean and used for no other purpose except the handling of milk.

THE MILKERS.

1. No person having any communicable disease, or one caring for persons having such disease, must be allowed to handle the milk or milk utensils.
2. The hands of the milkers must be carefully washed immediately before milking.

THE UTENSILS.

All milk utensils, including pails, cans, strainers, and dippers, must be kept thoroughly clean, and must be washed and scalded after each using.

1. Milk from diseased cows must not be used.
2. The milk must not in any way be adulterated.
3. The straining of the milk must be done in the milk house only.
4. All milk must be cooled to a temperature not above 50 degrees F. within two hours after being drawn, and kept thereafter below 50 F. degrees or less if not delivered.

5. The use of any preservative or coloring matter is an adulteration, and its use by a producer or shipper will be sufficient cause for the exclusion of his product from the City of Ottawa.

The annual report of the Canadian Forestry Association for the current year (1910) has just been issued. Much valuable information is contained in regard to the protection of the forest from fire, the wood pulp industry, the education of professional foresters or forest engineers and many other aspects of forestry, especially in eastern Canada. Requests for copies of the report should be addressed to Jas. Lawler, Secretary Canadian Forestry Association, Ottawa, Ont.



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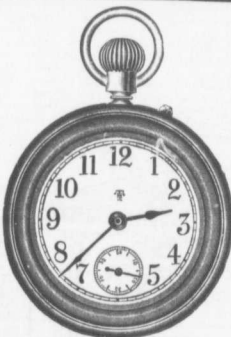
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Creamery Department

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.

Co-operation in Australia

In cooperative enterprise Australian dairymen are decidedly ahead of Canadians. Although our home market for butter and cheese is developing rapidly, Canadian dairymen must depend for a long time to come on Old Country markets for the disposal of a large part of their produce. Among the colonies, Australia is the chief rival of the Dominion in the matter of the world. It believes us, therefore, if we wish to successfully compete with them that we keep up to date in all methods of producing and marketing.

In the state of Victoria with an area of less than 88,000 square miles, are 211 butter factories. More than half of the factories are conducted upon a cooperative basis. In establishing a factory, the farmers in each district meet together and subscribe the required number of shares and capital necessary to erect a building and install the plant. A board of officers and directors is appointed by the shareholders. It is usual for each patron to purchase shares according to the quantity of milk delivered. By following this method, the farmers maintain control over the manufacture of the butter and its disposal.

COOPERATION IN SELLING

For many years the practice of cooperative butter factories was to trust the sale of their produce to agents in Melbourne. These agents were not always honest and the system proved unsatisfactory. The farmers decided that if they were to get full returns they must extend the system of cooperation to the marketing as well as the producing end. As a result, the cooperative factories in Victoria formed themselves into two cooperative companies for the marketing of their butter. The companies operate in different territory and do not interfere with each other. Each factory has shares in the distributing company proportionate to the output of that factory.

The rules of the association were carefully drafted to prevent speculators from obtaining any interest in

the company. Distributing centres were established in various parts of Australia and in the United Kingdom. Since cooperative selling has been established, the factories have received for their butters one penny to two pence a pound more and the cost of marketing has been decreased. The producers have the satisfaction of knowing that they obtain full value for their produce.

RUN ON BUSINESS LINES

These companies are run on strictly business lines. Last year they handled produce to the value of \$15,000,000. When shipments are made to Old Country markets, cheques based on Melbourne prices for these shipments are sent to the factories supplying the butter, and these are negotiable at the banks. As soon as the produce is sold in London, the prices realized are cabled to the selling company in Melbourne. Subsequently cheques are forwarded to the factories for any surplus due to them over and above the advances already made.

As well as marketing their produce the Australian cooperative societies start in to manufacture boxes for packing butter. Creamery supplies, such as parchment paper, are bought in large quantities from the lowest bidders.

Mr. H. W. Osborne, manager of one of the most successful Australian cooperative concerns, says: "I do not know the conditions existing among the cheese makers and dairymen in Canada, but I see no reason why they should not cooperate successfully on the same lines as we have done. In order to make distributing companies successful, however, it is absolutely necessary that the shareholders forward all of the butter or cheese to their own company."

A Successful Creamery

The Adams Creamery Association started two and one-half years ago getting the cream from 250 cows, and are now handling the cream of nearly 3,000 cows. They have nine collecting teams, each team bringing in from 250 to 300 gallons of cream daily.

The success of the creamery has been due largely to the hearty co-operation between the creamerymen and their patrons. An instance of the method they use to "get next" to their patrons is by means of an annual picnic. This picnic is not only for pleasure but for instruction as well. This year, an address on

cow testing was given by Mr. C. F. Whitley, of the Department of Agriculture, Ottawa. Mr. Whitley is already beginning to see the fruits of his labors in the increased number of farmers joining the cow testing associations and taking more interest in this work.

Points for Creamery Patrons

J. B. Lorry, Creamery Instructor, Hastings Co., Ont.

Cream delivered to a creamery should be cooled down immediately after it is separated. Then do not mix the warm cream with the cold until it is cooled down to at least 55°. Keep it cool until it is delivered at the creamery.

The cream should be delivered three times a week. The delivered cream should be regulated so as to skim a 30 per cent. cream. The separator should be washed every time it is used.

Factors in Producing Good Cream

W. A. Wilson, Supt. of Dairying, Sask

Every dairymen should use a thermometer because without it one must guess at the temperature of milk or cream. The practice of using one's finger to ascertain this is not modern or reliable. The cost of a thermometer is about 25 cents. Its accuracy can be determined by placing it under one's tongue for about two minutes when it should register 98 degrees. This is the approximate temperature of a person in good health. Whatever the thermometer may vary from this may be noted and subsequent readings corrected accordingly.

A factor which will assist in producing good flavored cream is to skim it rich so that it will test at least 35 per cent. Germs feed on the ingredients of the milk serum, or the substances contained in the skim milk. Butter fat so far as is known is of little value as germ food. Between a 20 per cent. and 35 per cent. cream there is in every 100 pounds of each 15 pounds more of the milk serum in the former than in the latter. In consequence of this it is possible for more germs to be in the thin cream where there is more food for them, and deterioration is more rapid. Reduce the germ and food content and the cream will keep longer in the latter. Besides the farmer retains more skim milk at home for feeding purposes when a 35 per cent cream is skimmed. Space for holding cream and cost of hauling is

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SOLD BY ALL HARDWARE MEN

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reduced. To present a summary of advantages: The cream will keep sweet for a long time. There is less skimming sent away from the farm. The space for storing cream is saved. Cost of hauling is reduced.

STILL ANOTHER DELIVERY TO CREAMERY. Every farmer means which will aid in producing first-class cream and butter, is to have the cream made into butter before any strong odors develop. The common practice is semi-weekly deliveries and sometimes once a week. Three deliveries is much preferable where arrangements can be made to this effect consistent with economy.

In the conduct of their work, farmers, cream haulers and creamery managers should bear in mind that "quality" is the important factor in extending and securing the markets for butter. The quality of the cream depends upon the quality of the butter and the quality of the butter depend upon the flavor of the cream, and the price depends upon the quality of the butter. There is a large market that wants good butter and is quite willing to pay for it. Our aim should be to supply the best. The whole matter of production, development, extension of markets, and to a large extent, profit may be summed up in the one term "quality," and this in turn rests with the "man."—Extract from Bulletin No. 15.

Dairy Notes

Mr. G. J. Bouchard of the Dairy Commissioner's staff, Ottawa, will demonstrate butter making at the Sherbrooke (P. Q.) Fair.

Mr. L. Trudel of the Dairy and Cold Storage Commissioner's Department will judge dairy products at the Bedford (P. Q.) Fair which is to be held on August 23rd-25th.

The Iced Refrigerator Car Service for the carriage of butter to Toronto and Montreal from the Owen Sound Subdivision will for the balance of the season, be operated fortnightly, instead of weekly, as heretofore. The next car will leave Owen Sound on Tuesday, August 16th.

At a meeting of the executive committee of the National Creamery Buttermakers' Association, held in the office of the secretary in Chicago last Wednesday, Aug. 17, it was unanimously decided to accept the offer of the National Dairy Show Association of \$2,000 in cash, with free meeting room, also free admissions for all buttermakers, creamery managers and secretaries, members of the association and hold the next annual convention and hold the next annual convention of the National Creamery Buttermakers' Association in Chicago, Oct. 26, 27, and 28, during the dairy show.



THE Butter Worker made for Practical Butter Makers—that's the National! The National Butter Worker, built entirely of hard wood, is unquestionably the most practical butter worker sold in Canada to-day, and is in use in the leading dairies of the Dominion. Every dairymen and farmer who makes butter owes it to himself to know more about the superiority of this practical device—it's a matter of dollars and cents on the profit side of his books, to own a National.

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Cheese

Makers are invited to this department relating to suggestions and letters to The

Too Many

The quantity of cheese from Quebec is not only too much for the factories, W. and crowded to for either milk or butter to be induced to and poorly following letter and Dairy condition of a common:

"In 1899 I received a Cheese Company 50,000 lbs. of made 52,000 lbs. will be still less years I engaged have to run order to make for our large that another 200 miles away since this factory is from a third of three years past three factories only two."—L. Out.

A condition created by this not only to the patrons, V. tories, properly managed, better made, higher than would be found. The central would probably makers out of necessary to have distance, but the ready demand of industry on a greater profits.

Pay for

M. Rowell, Jr. The advantage according to that the patrons their milk since cared for will not that has been Where pay for P. Q. to get pure system of dividing not worth while crooked and tar for they will not ter they add or might happen to from the better i factory when it to the test, we can and more cheese milk. The only explanation for the give for the method not being universal testing makes a work. A man m right before he give

FOR SALE AND

TWO CENTS A WORD

WANTED—Good farm Good, Brantford, O.

WANTED—Herdman or State wages. C. Cummings, Bdg. Co.

FOR SALE—Iron Pig Iron, Chain, Wire etc., all sizes, weight, stating what you state and Metal trial.

Cheese Department

Makers are invited to send contributions to this department, to ask questions on matters relating to cheesemaking and to suggest subjects for these features. Write to The Cheese Maker's Department.

Too Many Cheese Factories

The quality of the cheese output from many points in Ontario and Quebec is not what it should be, due to the existence of too many factories. Where factories are small and crowded close together it is not possible to install proper facilities for either making or curing cheese. A first class cheese maker could not be induced to take one of these small and poorly equipped factories. The following letter received from a Farm and Dairy correspondent tells of a condition of affairs which is all too common:

"In 1899 I engaged with the Bogart Cheese Company, that year we made 30,000 lbs. of cheese. Last year we made 22,000 lbs., and this year it will be still less. For the last three years I engaged an assistant. Now I have to run the factory alone in order to make ends meet. The reason for our large falling off in make is that another factory was built three miles away since this one was built three years ago. This factory is just one mile distant from a third factory which was built three years previously. There are three factories where there should be only two."—L. Rutter, Hastings Co., Ont.

A condition of affairs such as described by this maker is discouraging not only to the maker, but also to the patrons. With large centres and factories, properly equipped and well-manned, better cheese would be made, higher prices received, and there would be more satisfaction all round.

The centralization of factories would probably put several poor makers out of a job and make it necessary to haul the milk a greater distance, but the higher price and ready demand would put the cheese industry on a firmer basis with greater profits to all.

Pay for Milk by Test

M. Bethwell, Frontenac Co., Ont.

The advantage of paying for milk according to the fat it contains is that the patrons take better care of their milk since milk which is not cared for will not test as high as milk that has been given proper care. Where pay by test is in vogue, we are sure to get pure milk for under that system of dividing the proceeds it is not worth while for anyone to be crooked and tamper with their milk, for they will not get paid for the water they add or for the cream they might happen to take off. Again, from the better milk received at the factory when it is paid for according to the test, we can make better cheese and more cheese per 100 pounds of milk.

The only explanation that I can give for the method of paying by test is not being universal in Ontario is that testing makes a terrible lot of extra work. A man must have the test right before he gives it out. We have

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tested every patron's milk three times and some four times for our first payment this year.

Another reason why there is not more testing done in factories is that it is not generally known that the test for butter fat gives true value of some per cent. that milk testing cheese as will milk testing four per cent. will make as much cheese. If such were the truth, then the test is by no means fair. When this matter has been proved, it will either stop paying altogether.

Our main reason for paying by test at our factory is that we may get the best quality of milk.

A Prince Edward Island Letter

J. B. McDonald, King's Co., P. E. I.

We have 75 patron sending milk. Our largest patron sent in 702 lbs. of milk on Monday. Our largest make for a day was 14 cheese. We could not take a lot more. We have a fine factory. A steel wool tank was installed and it is a great benefit. We are going to have the whey precipitated, which will be a great improvement in the quality of the milk cans.

We find the steel whey tank a great convenience and would not be without it again. It is cleaned every morning after the patrons take their whey. The temperature in our curing room has not exceeded 64 degrees this year. We do not use ice but believe it to be a fine thing during the heat of summer in the spring and fall we make butter.

Gassy Milk

Our milk seems to be in good condition when it arrives at the factory, but I am having great trouble with the cheese. There are long holes in the cheese. Cause of this?—K. C., Dundas Co., Ont.

This is a difficulty that many makers are experiencing at the present time. The trouble is due to a yeasty or gassy condition of some of the milk. The remedy lies in having the milk produced under sanitary conditions, cooled to 65° immediately after milking, and covered up. If the defective milk cannot be detected on the weigh stand, the method of accurately determining what milk is giving the trouble, is to make an individual curd test of each patron's milk. By this means they will be able to locate the trouble at once. Where makers are experiencing this difficulty, I would advise them to get the milk sweet, cut the curd fine, draw the whey with a light acid, stir the curd out, reasonably dry before packing and shrink the curd well after milking and before salting. When it is possible, press for two days, turning the cheese in the hoops in the morning.—G. G. Publow, Chief Dairy Instructor, Kingston, Ont.

Selling Cheese Cooperatively

Ovide Lacourieres, Champlain Co., Que.

Our society for the cooperative selling of cheese was formed last spring by the Department of Agriculture of Quebec at the demand of the Dairywomen's Association. Thirty proprietors of factories agreed to the season to sell their cheese cooperatively. These factories receive on an average 4,000 lbs. of milk a day. They have good curing chambers in which the temperature can be controlled and good system of making cheese. The cheese has to be at least 10 days in the curing chamber before shipping.

The government appointed as general inspector and judge of the cheeses, Mr. Eli Bourbonnau and Mr. Aug. Tremblay as salesman. The cheese is inspected each week in the market on its arrival at Montreal. It is graded

and sold to the highest bidder in the Montreal Board of Trade rooms at four p.m. each Thursday. The decision of the judge is final.

RESULTS SATISFACTORY

Although the society has existed only a few months it is already giving very satisfactory results to the 30 makers who first started in the movement. There are now 41 members. Every day requests are received for admission to the society. To be accepted as a member of the society, however, the applicant and his factory must come up to the standards called for.

At the outset the buyers did not look favorably on the existence of the society. At present however, seeing uniformity in the quality, appearance and packing of our cheese, they seem to be more favorably impressed if one can judge by the prices which they pay us. The cooperative society buys the cheese boxes, muslin, and other supplies for its members.

The society has the approval of all persons seriously interested in the betterment of our dairy industry. In the future it will render great services to our province.

Dairy Notes

Attention has been drawn, by an important body connected with a grocery trade, to a resolution passed by one of its local branches in the north of England relating to the reported defective quality of the muslin used for wrapping many Canadian cheeses. Complaints have also been made in various quarters regarding the use of too heavy wrappings consisting of several thicknesses of muslin, the result being an undue loss in weight when the cheeses, however, to relate principally to the inferior character of the cloths utilized by a limited number of Canadian cheese manufacturers.

It is stated that complaints are being made in regard to recent consignments of cheese, that these have been ripened too quickly, shipped out in a green state, and waxed with paraffin wax to prevent shrinkage, which latter practice is said to have a distinctly deteriorating effect. It was also pointed out that the cheese when unboxed and divested of its cloth shows a rind as soft as when it was first made and that when it exhibits cracks. It seems desirable to again draw the attention of cheese exporters in Canada to the necessity of providing boxes of suitable wood and of proper size to prevent breakage.

We are paying by test this year and it improves the quality of the milk wonderfully.—R. J. Hoople, Stormont Co., Ont.

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More Profit
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Do not be satisfied with experimental silos, get the one that by years of use has proved its worth. In justice to yourself you CANNOT AFFORD to use any other. Be guided by the verdict of our users, the only men who are the most competent to judge.

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50 lbs.	65c "	65c "
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If we are not responsible for the thoughts that pass our doors, we are at least responsible for those we admit and entertain.

—Nevocab.

MISS SELINA LUE

A NOVEL OF GOOD CHEER, BY MARIA THOMPSON DAVIESS

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(Continued from last week)

SYNOPSIS OF FORE GOING INSTALLMENTS

Miss Selina Lue, generous and tender of heart, and endowed with what is called "faculty," keeps the grocery at River Bluff. One day Bonnie Dodds runs in to 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. Her friend, Cynthia Page, a charming young girl, calls on her and learns that she has taken a young artist, named Alan Kent, to board. 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. Cynthia, alone with Miss Selina, considers her fears that her beautiful home must be sold and is taken to see Kent's pictures.

"THAT'S it! I knew it had something to do with the weather. Anyway I am learning to know 't when I see it, like out the back door at early sun-up when I take in the Flarity twins. It seems like all the men in the Painters' Union, tries to paint with it. Once along come a man named Singer and painted it better'n any of 'em 'cause it's borned in some folks, like the making of pies and cake and sitch. That's a copy of the picture the man done of his own mother, over there by the cot. Mr. Alan always takes it with him 'cause he ain't got no picture of his own mother, who had the misfortune to die when he was borned. He says the picture means everybody's mother anyway—and I think it do."

"Oh, Whistler's mother! How beautiful! I wonder if he made the copy himself?"

"Yes, he done it over across the ocean—in Jerusalem, I think. And the man's name is Whistler instead of Singer. I remember it was some kind of a musicianer. He talks and tells me all about every kind of art-thing and sometimes I am kinder slow at catching on, but I like it and I feel like I was a-hearing a person come back from Heaven and a-telling about what's over there. And Mary Ellen Dobbs and Miss Kinney and the rest feels the same about it, him being just as kind about telling and showing there as can be. Mary Ellen left Ethel Maud to watch the pot for dinner the other day while she come over here to see a picture he had painted of her back yard and clothes-

line I was a-telling her about, and the child let the bacon and cabbage burn and then tasted 'em! When her mother got back she ran screeching something orful with a burnt tongue. Mr. Alan put some of his own tooth-wash on it to make her bush; he's such a hand with children as I never saw often."

As Miss Selina Lue talked, Miss Cynthia was looking from one picture to another, rapt in delight. The rough sketches of men and draft horses and great loaded carts and straining mule teams were awe-inspiring, but were relieved by tender bits of landscape and quick sketches of the children in charming characteristic poses. How strange it seemed to find them hanging on the walls of the old Bluff barn! And yet perhaps no stranger than to find the painter himself coming and going among the Bluff people in perfect sympathy and friendship. For a moment her heart was abased before him in admiration—and could it have had a touch of longing?—when Miss Selina Lue precipitated the old enmity upon her again.

"And this here picture of you, Miss Cynthia, is jest done to a burn. When I first seen it I took such a fit over it that he promised to do a real big likeness of you some day. But what-er ever made him paint the back of you I don't know. It was on the river road, wasn't it?" And Miss Selina Lue picked up a small sketch that stood against a pile of books on the table.

The recently melted blood in Miss Cynthia's veins froze again stiff and

hard as she gazed on the picture in Miss Selina Lue's hand. It was a bit of the river road with the forked tree in the distance, and retreating down the vista was a back view of herself, skirts switching, ribbons flying, and Every line in the figure breathed stiffness and snubbery, and it was the cleverest bit of work she had ever seen. Oh, why had she passed him strictly to the lane, only to give him such a chance? The wretch! And under the picture was a line that added injury to insult—"What care I how fair?" Her face burned and an explosion was imminent, but was cut off in the fuse by Miss Selina Lue.

"I think the writing under it is so sweet and good, and like him; for of course he means he likes you just as much with your blue eyes and yellow hair, even if it ain't the style he mostly admires. Looks don't make no difference in his liking; though a heap of men is all for looks, and nice goodness in women don't interest them in plenty of your own kind. Dearly me, if I ain't left the grocery to mind myself! I must hurry on down, but you come along when you're done looking. He says his friends are all ways welcome to come up and look and I know he means you more'n anybody."

Miss Selina Lue paused as she gathered her stiffly starched gingham skirts about her preparatory to descending the ladder. "Honey," she said, "I've jest got to tell you what she's a-goin' to do for me. You know

CHAPTER V

"When I see a curl of religion sprouting up, I think it's best for kinder shine on it pleasant-like, but not to take too much notice until it roots good."

—Miss Selina Lue.

FRIDAY, the thirteenth, dawned clear and mild for Miss Cynthia, and the early morning breezes that ruffled the fair hair on her pillow breathed no hint of adventure, though they awakened her long before the usual hour. She opened her eyes on a window-framed landscape with the down-river hills and banks in the distance. She had the feeling that she was going on with a dream in the top of the barn in which she had been just about to voice her admiration for the picture to a tall and glorified Miss Selina Lue in gray knickerbockers, when her consciousness formed complete connection and she sat up and stretched her white arms with a smile. The imperativeness of the man to promise to mix in her dreams, even if his pictures were wonderful!

As Miss Cynthia dressed in a leisurely way she found it hard to keep her thoughts from straying to the Bluff and the barn. She had for more than a week controlled the inclination of her feet to wander in that direction, and now she felt impelled to see Miss Selina Lue and Blossom—and — Oh dear! how she did love these pictures!

On her way downstairs she looked cautiously in at her mother's door and

found her awake and in the act of taking her morning nourishment. Everything Mrs. Jackson Page did was in the way of a ceremony, and she received Miss Cynthia graciously in a polite bow. "Sure? We too distinguish forget. My wife—and our father and lumber king thing to do along and in thousand-dollar bill halls to Where do you had Harold? and he is not have him at twentieth, dread his motion I made with a risk. I don't me at all. I ested."

"How are you, mother, this lovely morn'g?" she inquired gently. Mrs. Jackson Page preferred to be spoken to in cadences of deep-sympathy at all times.

"As well as I can ever hope to be," she answered languidly, though she sipped with the degree of relish the second cup of coffee and began a business-like attack on a substantial tray of breakfast. The conversation had set before her. "Are you going into town to-day? I had hoped you would look at that house on University Avenue. If I have to leave my ancestral home I want a place of abode suitable to our position. It will not do for long I am afraid, and after I am gone— She raised a lace handkerchief to her eyes and left Miss Cynthia in doubt as to whether she was bemoaning the prospect of her daughter's bereft condition on University Avenue or her own on one of the streets said to be paved with gold.

After a proper degree of concern and consolation, Miss Cynthia began a hasty retreat down the steps. The telephone stopped her on her way to the outside world and an animated conversation ensued, conducted by Evelyn Branch, who was up and doing far earlier than was her wont.



She was Wonderful to Behold, was Miss Selina Lue.

that little, old, faded tintype I've got, what is all that's more'n left to me of Adoniram Millsaps? Well, he's going to make me a life-sized likeness of it, all colored according to Mr. Dobbes; you'd love him too for being so feeling towards me, on 'count of Adoniram being snatched so sudden-like from this world. You know better than any one how he is jest still one of the ways of me."

"Oh, Miss Selina Lue, I love—I love his doing it for you!"

"Honey, child, I knew you would. Mr. Alan's a fine man. He couldn't paint sitch pictures if he wasn't beautiful inside himself. The wonderful part is the thinking of 'em; the painting 'em is jest work."

"You de the city, you get you just calling you. I an 'Then I w' worne. I w' the teleph' is the telep' a man."

"To cut want a bri' "Anyt' you reme that perfoe Washington "Which o' "There w know, it w I told you and what thought it Don't you about him? whole thing your heart city!"

"Really?" tried hard pest of it "Yes, I w' night, and I old stop the we couldn't whens, Jan' of that cor' in the stree the summer men at the w' ation to dea there for it you."

"Are you tured Miss C' a polite shoo Sure? We too distinguish forget. My wife—and our father and lumber king thing to do along and in thousand-dollar bill halls to Where do you had Harold? and he is not have him at twentieth, dread his motion I made with a risk. I don't me at all. I ested."

"Dearest, I

At Last The Perfect Washer



Our 'Champion' of all washing. All cogs and n Lever and Hig operating together of washing to 'Don't think of it until you have seen dealer can't show it DAVID MAXWELL &

"You dear thing," she hailed across the city, "to be awake so early! Did you get your worm all right? I was just calling to leave my number for you. I am so excited—I—"

"Then I infer you did catch your worm," laughed Miss Cynthia into the telephone.

"It isn't a worm I am after; it's a man."

"To be early then, dear, unless you want a brisk farmer, dear, unless you—"

"Anything but, *cherie!* Listen! do you remember my telling you about that perfectly delicious man I met in Washington last winter?"

"Which one?"

"There was only one—like him. You know, it was Alan Kent, the artist! I told you about going to his studio thought it was to have him ask me. Don't you remember my telling you about him? My dear, he was the thing all winter. Well, grip city!"

"Really?" Miss Cynthia's voice tried hard to be what Evelyn expected of it.

"Yes, I saw him on the street last night, and before I could make any-thing old stop the auto he was gone and we couldn't find a trace of him Har-wishers. Isn't it exasperating to think of that gorgeous creature loose here in the streets, and times so dull in the summer? There were only three men at the Country Club last night and they were grumpy and attentioned to death. So glad you weren't there for it was bad enough without you."

"Are you sure you saw him?" ventured Miss Cynthia with no more than a polite show of interest.

"Sure? Well, Alan Kent is entirely too *distingue* a man for anybody to forget. My dear, he is most attractive—and it is so romantic about his father and all the old man is a lumber king and refuses to have any thing to do with him as long as he paints. And there the poor dear goes thousand-dollar contracts to decorate guild halls to the old fellow's million. Where do you suppose he can be? I had Harold telephone all the hotels, and he is not at one of them. I must have him at my dinner-dance on the twentieth, dead or alive. Though I do dread his meeting you—the impression I made was too slight to run such a risk. I don't like to remember—"

"I am sure you needn't be interested—"

"Dearest, I don't trust you! Well,

I must say good-by. You are not so interested in finding the dear creature as I thought you would be. How is Give her my love. And so Grasse! sent your pink gown, yet—"

"Delightful! Well, good-by again!"

The moment Miss Cynthia had hung up the receiver she realized that she had deliberately withheld valuable information from her friend—in perfect cold blood. And why? She had been liked to lock him in the barn—out of barn's way. Well, barn was a rather emphatic name for Evelyn—but she was a very lovely thing—especially at dinner-dance times. Miss Cynthia finally reached the door of the grocery and paused a moment on the steps. Nobody being in sight, she called softly.

"My Selma Lue looked her head out for her little leaner, bonnet and greeted her in a voice of bustling excitement. "I'll be there in a minute, Miss Cynthia, honey. Mr. Dubbs have got a holiday and wants us to go up to the Look with him to three-o'clock meeting on the gospel-bud what's tied up there this week. Set down in the cool till I come!"

(Continued next week.)

Watch for our special Household Magazine issue, October 6.

The Upward Look

Look Within

While doubts and forebodings are bound to press themselves to us, from time to time, to some of us more often than to others—we do not sin except when we listen and give way to them. Our doubts are a means by which our faith and love to God is tested. If we act upon our doubts then we sin because we show that we do not trust Him as we should for the strength and guidance that we need. If, however, we resolutely turn away from our doubts and conquer them, then we find that each victory helps us some other to win.

Always remember that God loves us and that He desires us to be full of peace and joy. Then remember that if this is not the inward condition of our frame of mind there is sin there Satan has gained a foothold. Not until the Evil One has been driven out will we know true peace and happiness. It matters not how hard our lot may be or how weak we may feel ourselves to be, we can gain the mastery of our circumstances and rise completely above their power to weigh us down and worry us if we will but put our trust completely in God and strive to do His will in all things even the smallest as they present themselves before us from day to day and even from hour to hour. It is when we are most conscious of our own inability to do what is right that God is the nearest to us: As long as we trust in our own strength God will not let us use His. When, however, we confess our own weakness and ask God to help us and trust Him to do so then it is that we find a new power, the power that we need, a power from God, entering our lives. Gradually we find that we are rising above the things which formerly annoyed us or held us back.

We should not expect such a change to be worked within us suddenly. We can emerge from the world of doubts and fears into the new atmosphere of peace and courage and joy only by degrees. Such a change is a matter of growth, of growth in our spiritual natures. Therefore it requires time.

Our first great duty is to make sure that we are growing in the right direction. If we are entertaining our doubts we are growing weaker. If we are resolutely grappling with them and constantly asking God for strength and guidance we are steadily and surely growing stronger and better.

Every time we conquer a doubt, by bravely facing and grappling with it we take a step that surely brings us nearer to God. Each step, as we take it, may not seem to make much difference. When, however, after a little while, we look back and see the progress we have made we begin to realize that God is leading us and thus we gain fresh strength and courage with which to confront the future. If we are full of doubts and despair the fault is ours. We are not trusting in God and praying to Him as we should. Doubts simply cannot withstand the power we gain through earnest prayers to God who is the source of all power, and wisdom and love.—L.H.N.

Farm scenes, especially home views wanted for our special Household issue. Send them in before Sept. 15.

OUR HOME CLUB

LIFTING THE MORTGAGE

How easily and quickly, wisely or unwisely, our farms or property may be covered with the mortgage "blanket" that may take years of hard labor to wipe out! There are times when a mortgage is justifiable, for instance, in the purchase of property or the making of some much needed and useful improvement. In either case good judgment must be exercised, so that the burden may not be too heavy. A business man once said in my hearing that "seven-tenths of the business of the world was done on borrowed capital." Be this true or no, I have noticed that the farmer who borrows heavily soon goes to the wall.

In paying the mortgage, all that is in every man is brought out. The aim of a very true man is to own his property free from encumbrance. With this as the goal, his every endeavor is toward that end.

To lift the mortgage means that industry, thrift and economy must be practiced. One reckless with time or money never accomplishes the desired aim. Again, there must be continuity of purpose. Without this we fall ere the battle is won. Start out with a decided purpose to meet the payments and interest as they come due. Don't

let them overlap. Compound interest is all right for the usurer, but brings financial ruin to the mortgagor.

Here is where many fail. Promptness in meeting payments has saved many a man from the rocks.

Don't load too heavy. Be discreet in loading up, then when involved, aim to meet every payment when due and you will have the fun and reward of burning the mortgage some "sweet" day.—Father.

Be sure and send us a contribution for our special Women's Issue, October 6. Every article to be contributed by women, if possible. This issue to be by women, for women, and all about women.

Pat the Horses Forehead

"Not many people know how to pet a horse—that is, from a horse's standpoint," said the driver of a big truck.

"Every nice looking sleek horse comes in for a good deal of petting," he went on, as one of the big grays rubbed his muzzle anxiously against the truckman's sleeve. "Hitch a fine horse close to the curb and you'll find that half the men, women and children passing along will stop for a minute and give him an affectionate pat or two. The trouble is that they don't pat him in the right place."

"If you want to make a horse think he is going to the equine paradise rub him over his eyes. Next to that form of endorsement a horse likes to be rubbed right up between the ears. In petting horses most people neglect those nerve centres and stroke the horse's nose."

"While a well behaved horse will

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SOME OF THE CHARACTERISTICS WHICH HAVE WON POPULARITY FOR THE

Gourlay Piano

ARE

- ITS BEAUTIFUL SINGING TONE
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- ITS BEAUTY OF DESIGN, and
- ITS CAPACITY TO WITHSTAND HARD USAGE WITHOUT BECOMING "TINNY."

The Gourlay Piano is supreme in all those qualities which are the desire of musicians and music lovers.

GOURLAY, WINTER & LEEMING

188 YONGE ST., TORONTO

accept the nasal caress complacently, he would much prefer that nice, soothing touch applied to the eyelids. Once in a while a person comes along who really does not know how to pet a horse and is surprised when a horse throws back his ears and acts peevish; but let a person come along who was brought up in the country and knows the horse and his peculiar ways and he will pet the animal by rubbing him between the ears, directly over the eyes."

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has one hundred and fifty graduates in good positions in the City of Belleville where it is best known. You may enter at any time. Write for catalogue. The Belleville Business College, Limited, P.O. Drawer "B," Belleville, Ont.

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unapproachable in sweetness, mellowness and mastery—is possible because the New Scale Williams Piano not only is more heavily strung on its massive plate and scale than other Pianos, but also because of the Harmonic Tone Preserving Bridge which prevents the introduction of faulty and imperfect tones.

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Affiliated to Queen's University,

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For Calendar of the School and further information, apply to the Secretary, School of Mining, Kingston, Ont.

THE COOK'S CORNER

Recipes for publication are requested. Inquiries regarding cooking, recipes, etc., gladly answered upon request, to the Household Editor, Farm and Dairy, Peterborough.

Pickles and Catsups

CHILI SAUCE

To 8 quarts tomatoes, add 3 cups peppers, 2 cups onions, 3 cups sugar, 4 cup salt, 1½ quarts vinegar, 3 teaspoons each ginger and cinnamon, 2 teaspoons each cloves and nutmeg. Chop tomatoes, peppers and onions very fine. Boil 3 hours, then bottle and seal.

COLD CATSUPS

These catsups require no cooking. Peel and cut small or chop 1 peck ripe tomatoes. Sprinkle with 1 small cup salt, let stand for a while and then drain. Add 1 cup sugar, 2 tablespoons each of white mustard seed and celery seed, 2 teaspoons black pepper, and 3 pints vinegar.

Another recipe calls for 1 peck ripe tomatoes, chopped, salted and then drain. Add 2 cups sugar, 2 cups chopped onions, ½ cup white mustard seed, 1 cup salt, 2 red peppers, and 3 bunches celery cut fine, 2 teaspoons black pepper, 1 teaspoon cinnamon, and 2½ pts. good vinegar.

Still another recipe reads as follows: ½ peck ripe tomatoes sliced and sprinkled lightly with salt. Let drain 2 hours. Add 2 roots grated horse-radish, ½ cup fine salt, ½ cup white and black mustard seed, 1 cup onions chopped fine, 4 heads celery chopped fine, 1 cup sugar, 1 teaspoon each of cloves, cinnamon and nutmeg, 3 pts. vinegar. Mix cold; then it is ready for use.

CROW CHOW

One peck green tomatoes, 1 good or half a head of cabbage, 8 small-sized onions, 1 owl or 2 green peppers. Chop all fine or put through a coarse meat grinder. Sprinkle with ½ cup salt and let stand overnight. Next morning drain well, add 1 pt. vinegar, 3 small cups sugar, 1 tablespoon each cinnamon and turmeric

powder, ½ tablespoon each of pepper, cloves, allspice, ginger and mustard, and a very little celery seed. Cook about 20 minutes and seal in pt. jars.

GRAPE CATSUP

To 4 lbs. of the fruit add 1 pt. vinegar, 1 tablespoon each of cinnamon and allspice, 1 teaspoon pepper, a few cloves and sugar to taste. Boil until it begins to thicken.

Another recipe calls for 9 lbs. grapes, 1½ lbs. brown sugar, 2 tablespoons ground cinnamon, 1 tablespoon each of ground cloves, allspice and black pepper. Boil 1 hour, then strain and bottle.

WATERMELON PICKLES

Take 10 lbs. of rinds after they are pared and cut in pieces of desired size, boil in water until tender, then drain. Make a syrup of 3 lbs. sugar to 1 qt. vinegar, with ½ oz. cloves and 1 oz. cinnamon. Pour this boiling hot over the tender rinds. Let stand 24 hours, then drain off, bring the syrup to a boil again, and pour it over the rinds again. Do this three days in succession, then put in jars and seal.

PICKLED ONIONS

The best sort of onions for pickling are the small white "button" onions. Peel and scald them in strong, salty water. Heat boiling hot enough vinegar to cover them, and add to the onions whole pepper and white mustard seed. Then pour the boiling hot vinegar over them to cover. When cold put in wide-mouthed bottles and cork and seal. It is well to put a tablespoonful of sweet oil in each bottle before corking.

A Good Worker

"I received my thoroughbred Tamworth hog, bred by Mr. Bertram Hoskin, of The Gully, Ont., also the pedigree for registration, as a premium for a club of nine subscribers to Farm and Dairy. I am 14 years old. As Farm and Dairy was a new paper in our neighborhood it was rather hard to get subscribers. I let them look at the sample papers and told the people what a benefit it would be to them to subscribe. Also what a benefit the pig would be. I soon got their names."

Farm and Dairy Worker
told the people what a benefit it would be to them to subscribe. Also what a benefit the pig would be. I soon got their names."

Farm scenes, especially home views wanted for our special Household issue. Send them in before Sept. 15.

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 measure for skirts. Address all orders to the Pattern Department.

BOY'S SUIT 673



There is no suit that is better adapted to the small boy than the one made in blouse style with the big becoming sail or collar.

The suit is made with a blouse and knickerbockers. Material required for medium size is 3½ yds. of material for 27, 3½ yds. 30 or 2½ yds. 44 in. wide with 4½ yds. of braided cord.

The pattern is cut for boys of 2, 4 and 6 yrs. of age, and will be mailed for 10 cts.

CHILD'S WOMPERS 690



Rompers that are made with sleeves in addition to the short portion are the latest and the newest. These are practical and attractive in effect, and altogether desirable. The back portion of the rompers are attached to the belt and consequently are easily buttoned in the place. The little garment can be worn over a frock or in place of one as liked.

Material required for medium size is 3½ yds. 24 or 27, 3½ yds. 32, or 1½ yds. 44 in. wide, with ½ yd. 37 in. wide for trimming.

The pattern is cut for children of 2, 4 and 6 yrs. of age, and will be mailed for 10 cts.

PLAIN FITTED CORSET COVER 687



The closely fitting corset cover is a necessity under closely fitting gowns. This one is shapely yet at the same time simple. It can be made as illustrated or cut off at the waist line as preferred, and the neck can be made round or in V-shape.

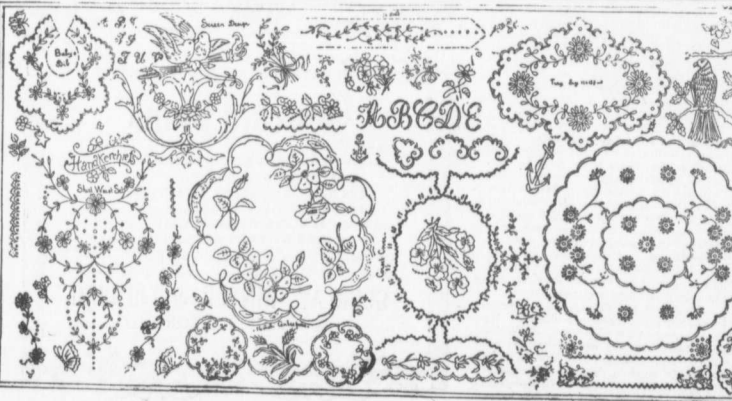
Material required for medium size is 1 yd. 36, 1½ yds. 44 in. wide with 1½ yds. of insertion, ¾ yd. of heading, ¾ yd. of edging.

The pattern is cut for a 36, 38, 40, 42, 44 and 46 in. bust, and will be mailed for 10 cts.

Art Embroidery

No. 571. Special Perforated Stamping Outfit. This splendid outfit consists of about fifty up-to-date and handsome full-size designs, including a Shirt Waist, Corset Cover, Lingerie Hat, Two Complete Alphabets (one 2½ in., and one 1 in.), Centre-piece (size 16 in.), Two Dollies (5½ in.), Two Turnovers, Borders, Belt, Book Cover, Sofa Pillow, and many other useful designs, in all the modern styles of embroidery. The above designs are perforated on a good quality of paper. We also include a calendar of the blue and white of the "Ideal", two Poncettes, and full directions for using the stamping preparation, at the special price of 75 cents for all.

These Perforated Patterns can be used an unlimited number of times.



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Dr. B. J. Kendall

OUR FARMERS' CLUB Contributions Invited.

PRINCE EDWARD ISLAND KING'S CO., P. E. I.

MARION, Aug. 13.—The pastures have been excellent all summer. There is no need for feeding green feed yet. The hay crop is about all harvested. It is about 50 per cent, above the average. Cereals look better. Roots look excellent. Farmers are satisfied for once with their lot.

LOWER MONTAIGNE, Aug. 2.—The hay crop is 50 per cent, above the average. Wheat is good; oats, 25 per cent, above the average; barley good. Potatoes are an average crop. Turnips, sugar beets and other small vegetables are a good crop, but damaged some with fly and cut worms. Pasture is extra good on account of rain. There has been no frost yet. The weather is this year than last. Much of the hard to buy and of poor breeding. This is due to not following some one strain, which shows lack of cooperation. The Yorkshire-Berkshire cross is a favorite in raising breeding. Wages are 50c to \$1 a day, and \$10 to \$15 per acre for the common custom of farming is a three and four rotation of roots, grain and two years hay—G. W.

ONTARIO

GRENVILLE CO., ONT. PRESOTT, July 27.—Pastures are very dry, and on thin soil are completely burnt up. Grain is at a standstill. It will only grow two crops of wheat in any one year, unless rain comes, will not be hard to buy and of poor breeding. This is due to not following some one strain, which shows lack of cooperation. The Yorkshire-Berkshire cross is a favorite in raising breeding. Wages are 50c to \$1 a day, and \$10 to \$15 per acre for the common custom of farming is a three and four rotation of roots, grain and two years hay—G. W.

HASTINGS CO., ONT.

ACTONVILLE, Aug. 8.—Haying is about finished. The hay crop is a little better than last year, but still a light crop. The grain crops are very poor. The straw is short and thin. The summer was dry and pasture is poor. Potatoes and roots will be a good crop if we get rain.—T. K.

EMPEY, Aug. 13.—The hoe crops are good, with the exception of potatoes. Clover has short in the straw but well filled. Pasture was good up to July. Dry weather well now. Pasture is poor. Potatoes and roots will be a good crop if we get rain.—T. K.

PETERBORO CO., ONT.

KERNE, Aug. 12.—The winners in the standing field competition for oats were: J. B. Drummond, J. A. Esson and Peter Drummond, F. A. Esson and Robert Weir tied for third place; J. A. Esson and John Stark were 4th and 5th respectively. Mr. N. J. Casselman of Morrisburg, was judge.—A. S.

LAKEHURST, Aug. 12.—Harvesting is well on the way. Hay and fall wheat were a good crop. Oats only medium. Peas are poor. Corn is growing well and promises a

good yield. Roots are somewhat late. Potatoes promise well. With the large amount of rain which we have had lately grass is good and the clover factory will have a large season's run. Cattle are looking well and what are for sale are quickly picked up. Good prices have been realized.—A. W.

HALIBURTON CO., ONT.

KINMOUNT, Aug. 12.—Farmers are busy cutting oats and hay. Much of which are a good crop. Peas are half a crop owing to the dry weather. Potatoes are good, but never better. Early spring grain will do; the late frosts killed the blower crop. Recent rains have made the second crop of clover fine. Thrill berries are a half crop. Lambs are selling \$5.50, and \$4 for October delivery; \$4.60 is the top notch price for steers.—S. T.

VICTORIA CO., ONT.

BURY'S GREEN, Aug. 8.—Harvest is in full swing. The rattle of the binder is heard on every side. Oats have ripened too quickly, but there will be a good harvest. Barley is fair, and all safely housed. This is promising to be good. Very little fall wheat has been sown. Early corn has light crop and some of the late ones are not so good. Pastures are improving again, which will help sustain the fallow. For stock in good condition. The potato crop promises well. The late turnips are not going to be heavy.—D. D.

DURHAM CO., ONT.

The united counties of Northumberland and Durham now have a district representative of the Ontario Department of Agriculture in R. S. Duncan, B.S.A., who is located at Port Hope. An officer of the Department is equipped with a reading room, on the tables of which are the leading agricultural journals, bulletins of the Department and so forth. It will be the business of Mr. Duncan to assist farmers of the united counties in any way possible. Farmers thunderstorms each year. During the coming winter, short courses in stock and seed grain judging will be conducted at various centers and a six weeks or two months course in agriculture will be given at the Port Hope Collegiate Institute. A stock judging competition for young men is being arranged for in connection with the Port Hope Fair. Other work in connection with the Department will be the laying out of farm drainage surveys, organizing Farmers' Institute Clubs, cooperative egg circles, farm institutes and interesting the school children in gardening.

WENTWORTH CO., ONT.

KIRKWALL, Aug. 13.—During the past month we have had two or three heavy thunderstorms each week. It is therefore difficult to get the grain in for in proper condition. Pastures are fresh and green again. Where they were not picked too close during the summer there is quite a growth. Corn and roots are growing very rapidly. They will be a heavy crop. Wheat judging fairly well to the acre. Stock of all kinds is rather scarce and high in price. Pork has dropped over \$1 a bushel and now only \$8.35. Fat cattle are selling from \$5 to \$5c a lb.; lambs, \$5 each; new wheat is \$1 a bushel; oats 40c.—W. W.

WELLINGTON CO., ONT.

ELOHA, Aug. 13.—Harvest is in full swing. A few days more and the binder will have finished its work. There is a larger acreage than usual of buckwheat and to a late wet seeding, other grains that would have been very late, were replaced by this crop. Owing to the wet weather, the wheat is especially valuable in keeping in weeds such as couch grass and perennials. Notwithstanding the wet weather, cereals are turning out well. Straw in some cases is a little short. Grain is plump and heavy. Prices for all farm produce continue to be in prospect of low prices. Cattle for feeding would seem to be a large crop to prove a safe investment. As the turnip crop does not look like being a too one, a number of feeders put in will scarcely be to the average.—G. W.

WATERLOO CO., ONT.

NEW HAMBURG, Aug. 7.—Farmers have nearly ceased their work. Many fields have been badly affected by the weevil worm. Wheat yielding well. Barley is good. Oats well filled. Peas are fairly good. Many fields seem to have more than the usual amount of thistles. Pasture has been poor. Supplementaries have proved valuable this year. Corn promises a very abundant yield. Mangels look well. Turnips, late sown, are not good. Hurd garran grass and buckwheat look well. Hops are scarce and high. Stockers are selling high. Many good colts are to be seen in the pastures. Apples will be quite scarce. Many farmers are now gang-plowing the stubble. Taken altogether, farmers are feeling the benefit of good times.—A. R. S.

MIDDLESEX CO., ONT.

GLANWORTH, Aug. 8.—The writer had the pleasure of spending some time at the home of Mr. W. E. Wright, of this place, who is a breeder of Chester White stock, Shropshire sheep and big bronze turkeys. He has a fine stock of dairy cows with many Holsteins among them, and a splendidly worked farm. Mr. Wright has also a model apiary. For many years he has shipped large quantities of honey. For William and the West are continually calling for Mr. Wright's honey to sweeten their western bread. Mr. Wright is a great believer in the feeding value of rape. It is good for young stock.—J. E. O.

SCOTTSVILLE, Aug. 8.—Clinton Zavitz has the following to say about his farm operations: "We are milking 25 cows at present. They are grade Shorthorns, and are doing fine so far. We had a good supply of Rowell's Evergreen Sees to feed them, when the grass begins to fall. From our past experience we have found this far the best green crop for summer feeding. Our wheat is very good. We keep several breeds of pigs and find them all very good. We prefer pigs resulting from a Berkshire sow crossed with a Tamworth. In them you have fat, length and bone combined. We feed our pigs shorts, and their corn consists with whey, and in several months expect them to be ready for shipment. We have bronze turkeys. Keep the little points on cornmeal; keep them carefully shut up until quite a size."—J. E. O.

HURON CO., ONT.

BLYTH, Aug. 8.—Harvest is in full swing. Threshing has just started. The wheat crop in many parts of the county will not be much over half a crop as the grain did not fill. The straw was heavy. A heavy hail storm passed over parts of Huron Co., doing untold damage to grain crops. Many farmers had their crops completely destroyed, leaving nothing for them to mow. The hail stones were as large as duck eggs. Several teams ran away. A number of men were hurt. The fruit crop is almost a complete failure. The whole county will not have 1000 barrels of apples this season.—R. E. S.

ESSEX CO., ONT.

ARNER, Aug. 6.—One of the most abundant harvests ever in this locality has just been completed. The only crop yet to secure is oats, which are mostly in good yield. They will be above the average yield. Corn and potato are doing well, considering the amount of drought there has been. The former in many cases being ahead of the latter. The drought has been in the midst of a damp spell at present. To be, although seriously damaged by the drought. It is doing well. It may get an average crop. Beef is scarce and high in price. Some hogs are on the move, the price being \$3.5 a cwt.—A. L. A.

MARQUETTE DIST., MAN.

KELLOE, Aug. 8.—The farmers intend starting to cut this week. Some of the barley is quite ripe. The rest is ripening nicely. We have had very nice rains and in some localities a little hail. We have had no hail here. The oat and wheat harvest will be in full swing by the middle of the month. The hay crop was considerably better than was expected. As we have had ideal haying weather for the last two weeks the farmers are well advanced in this work. The wheat crop is quite badly lodged in spots and will be hard cutting.—L. J. N.

GOSSIP

Visitors to the Central Canada Exhibition at Ottawa, cannot fail to get their money's worth, whether they only go for one day or for the whole fair. The exhibition of live stock at this fair is always one of the largest and best in Canada. Those who are more interested in poultry or horticulture, will also find a visit to this fair enjoyable and profitable. For further particulars concerning the fair, write to Ed. McMahon, Secretary.

On account of the C. N. E. return tickets will be issued at Single Fare, via Grand Trunk Railway System, from all stations in Canada west of Cornwall and Ottawa. Good going August 24 to September 15, inclusive. Return limit September 15. Initial low rate excursions will also be run tickets from any Grand Trunk Agent.

A NOTABLE IMPORTATION

Mr. J. D. Eadie, of Hillcrest Farm, Vars. Ont., has recently made an importation of Clydesdales, consisting of two stallions, one five year old mare, a four year old and three fillies. This is the second importation which Mr. Eadie has made this year. Kingdale, a four year old stallion, is a very typical Clydesdale, showing quality of conformation. He is a well made animal, with a good body and excellent bone. The mares are an excellent lot, possessing the blood of such notable sires as McGregor, Baron's Pride and Sir Everard.

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TOILET PAPERS KENDALL'S Spavin Cure. Cures your horse of Spavin, Curbs, Heaves, Inflammation of the Lungs, and all other ailments of the horse. Write for free literature to Kendall's Spavin Cure, 250 St. James Street, Toronto, Ont.

MARKET REVIEW AND FORECAST

Toronto, Monday, August 22nd. — The markets, which are always experiencing tension of some sort or another, are this week suffering from fright on account of rumors of frost in the Northwest. This is a very real danger to the oat crop and to what wheat remains in the ground. As yet, up to date, the rumors that have been floated have happily proved groundless, and we do not doubt that to influence the prices, business in every branch is being carried on under cloudless skies. Call money in Toronto rules at 5% to 6 per cent.

WHEAT

The Chicago and Winnipeg exchanges seem to be taking things quietly at present—what trading is being done, is done in a sane, rational manner. That there is a large export demand is evident, and dealers are quietly watching developments, which tend strongly towards higher prices in the near future.

Local dealers quote as follows, prices nominal: No. 1 Northern, \$1.14½; No. 2, \$1.13½; at lake ports, No. 2, Ontario winter wheat (old), \$1.03 to \$1.04; this year's wheat, 96c to \$1.01.

On the farmers' market, fall wheat is selling at \$1.01 to \$1.02 a bushel, and goose wheat, from 91c to \$1 a bushel, new wheat is being offered at \$1.00 a bushel.

COARSE GRAINS

The market continues steady for all coarse grains. Dealers show a tendency to be chary in out quotations, owing to their uncertainty in regard to the winter crop. Local quotations at present are as follows: Canada Western oats, No. 2, 41½¢; No. 3, 40½¢; at lake ports, immediate shipment, No. 2, Ontario white, 38c to 39c outside; 41c to 42c on track, Toronto. New oats, No. 2, 36c outside. Corn, No. 2, yellow, 71½¢; No. 3, 69½¢; Canada No. 1, 68c; Toronto freight; barley, 51c; peas, 73c a bushel.

As the farmers' market oats are selling at 46c a bushel; barley, 54c; buckwheat, 58c; peas, 71c to 72c; rye, 68c to 69c a bushel. Montreal wholesale prices for grain are as follows: American No. 1, yellow, No. 2, 70½¢; No. 3, 70c a bushel in car lots; oats, Canada No. 1, 57c; No. 2, 42½¢; No. 3, 40c to 41c a bushel in car lots; barley, 51c; 50c a bushel in car lots, out of store.

POTATOES AND BEANS

There is no great demand for potatoes at present, but dealers are making purchases from the country at 60c to 90c a bag. Old potatoes, of which there are some still selling on the market, are being offered by the farmers at 50c to 60c a bag. New potatoes are coming on the farmers' market at \$1.00 to \$1.10 a bushel. Dealers quote prices for beans as follows: Primes, 82c to 81c a bushel; three pound pickers, 81½ a bushel.

In Montreal trade is steady and prices are firm. Dealers quote potatoes, 45c to 50c a bushel in car lots, and 70c a bushel in a jobbing way.

Beans are quoted as follows: Three pound pickers in car lots, \$1.80 to \$1.83 a bushel.

DAIRY PRODUCTS

There is a steady demand for butter and wholesale prices are as follows: Choice creamery prices, 25c to 26c; choice dairy prints, 15c to 20c; separator prints, 23c; ordinary quality, 10c to 12c. Cheese which is still coming in in generous quantities is quoted at 11½¢ a lb. for large and 11¼¢ a lb. for twigs in the farmers' market, choice dairy butter is selling at 25c to 26c a lb., and ordinary quality at 19c to 20c a lb.

Montreal wholesale prices for butter and cheese are as follows: Choice creamery butter, 22c to 22½¢ a lb.; No. 2 quality, 20½¢ a lb.; western cheese, 12c to 11½¢ a lb.; eastern cheese, 10½¢ to 11c a lb. The trade both in butter and cheese is reported as steady and prices firm.

WOOL

The price for wool remains the same. Dealers quote, washed, 12c to 20c a lb.; unwashed, 12c to 14c a lb.; rejects, 15c a lb.

HIDES

Some classes of hides are slightly higher in price. Local dealers make the following quotations: Inspected steers and cows, No. 1, 10c; No. 2, 9c a lb.; inspected bulks, 8c a lb.; calf skins, 10c to 13½¢ a lb.; sheep skins, 3c to 3½¢; tallow, 10c to 11c a lb. At outlying points, dealers are paying the following prices: Sheepskins, 81c to 81½; horse hides, 82½ to 83; horse hair, 30c a lb.

EGGS AND POULTRY

The trade continues quiet. Supplies are still coming in fairly plentifully and prices remain stationary. Local wholesale dealers quote them at 19c to 20c a dozen, in case lots. On the farmers' market strictly new laid are selling at 15c to 16c a dozen.

Wholesale prices for live poultry in Toronto are as follows: Turkeys, 14c; young ducks, 15c; spring chickens, 12c to 14c; old fowl, 10c to 11c a lb. On the farmers' market, turkeys are selling at 20c to 24c a lb.; dressed chickens, 17c to 20c; and old fowl at 12c to 14c a lb.

Montreal wholesale prices for eggs are as follows: Selected stock, 21c to 22c a dozen; straight; receipts, 17c to 18c a dozen; second grade, 12c to 13c a dozen.

FRUIT AND VEGETABLES

Local wholesale quotations for fruit are as follows: Apples, 15 to 16¢ a crate; plums, \$1.25 to \$1.75 a crate; 50c to 50¢ a basket; black currants, \$1.25 to \$1.50 a basket; California grapes, 8c a box; California peaches, 20c to 25c a box; Canadian peaches, 30c to 50c a basket; Ontario Peas, 35c a basket; gooseberries, 75c a crate; early apples, 25c to 50c; Latest watermelons, 6c to 8c a box; huckleberries, \$1.25 to \$1.45 for 11 quart basket; watermelons, 10c to 12c a bushel.

Vegetables—Beets, 10c to 15c a dozen; cullers, 10c to 20c a basket; carrots, 10c to 15c a dozen; tomatoes, 20c to 45c a basket; beans, 25c to 30c a bushel; cabbage, to 11.5c a crate; celery, 25c a basket; new potatoes, \$2.75 to \$3 a bushel. As for the farmers' market, vegetables are selling as follows: Beans, 25c to 30c a peck; cauliflower, 10c to 15c each; cabbage, 5c to 7c each; lettuce, 4c to 5c a bunch; rhubarb, 10c a bunch; beets, 15c to 20c a dozen; peas, 25c to 30c a peck; carrots, 5c to 10c a bunch.

HAY AND STRAW

There is not much hay offering on the local market at the present time, but prices are higher. Local dealers quote old, medium and new, 18 to 20¢ a ton; timothy, \$13 to \$14; and ordinary quality, \$12.50 to \$13 a ton on track, Toronto. On the farmers' market, timothy hay is selling at \$18 to \$21 a ton, new hay and mixed hay, \$12 to \$15 a ton; lucerne, \$15 to \$18; and loose straw at 15 to 18¢ a ton.

Montreal, wholesale dealers quote No. 1 timothy, \$14.50 to \$15; No. 2, \$13.50 to \$14; clover mixed, \$10.50 to \$11, and clover, 89¢ to \$1.0 a ton; baled straw, \$0.80 to \$0.9 a ton on track, Montreal.

MILL FEEDS

Prices remain stationary; local dealers quote Manitoba bran, \$20 a ton; shorts, \$22 a ton on track, Toronto; Ontario bran, \$20; shorts, \$22 a ton on track, Montreal. Montreal prices are Manitoba bran, \$20; shorts, \$22 a ton; Ontario bran, \$20; shorts, \$22 a ton on track, Montreal.

HONEY

Dealers quote as follows: Honey, in 60 lb. tins, 9c to 10c a lb.; choice comb honey, 82¢ a dozen; 2nd quality, \$1.50 to \$1.75 a dozen; 16 lb. tins and 10 lb. tins, from 7½¢ to 10½¢ a lb.

Montreal prices for honey rule as follows: White clover, 12¢ a lb.; dandelion, 10¢ a lb.; 11½¢ to 12½¢ a lb.; buckwheat honey, 7c to 7½¢ a lb.

HORSE MARKET

Receipts of horses continue light and consequently prices are not much business. Prices remain the same as last week. Heavy draught horses, \$250 to \$350; choice stockers and cutters, \$100 to \$150; horses, \$150 to \$250; medium quality, \$120 to \$140; drivers, \$125 to \$200; expressors, \$170 to \$250; serviceable coach horses, \$40 to \$80.

LIVE STOCK

Export cattle are somewhat lower in price and prices for butcher cattle also are slightly lower than those recorded last week. There is a lively demand at present for lambs. Hogs have been going down and up during the week. In the early part of the week they had declined in price to \$8.60 fed and watered, and \$8.25 on cart, but advanced prices across the border sent them up and they are now \$10.00 fed and watered. In Chicago, hogs have gone up in price and also at New York. Dealers give the following quotations: Choice, 10c to 11c extra, also for 82.5c, medium, 85.50 to 87.5c; ordinary, 84.25 to 85 c a cwt.

Butcher cattle, choice—\$5.50 to 8c; medium, 85 to 85.25; ordinary, 84.30 to 84.75 c. wt. Heavy feeders, choice steers—85 to 85.25; bulls, 83.50 to 84.75 c. wt. Stockers, choice—84.50 to 84.75; ordinary, 84.30 to 84.75 c. wt. Heavy feeders, choice steers—85 to 85.25; bulls, 83.50 to 84.75 c. wt. Stockers, choice—84.50 to 84.75; ordinary, 84.30 to 84.75 c. wt. Milkers, choice, 845 to 860; medium, 835 to 840; springers, 840 to 850; calves, 83.50 to 87.50. Sheep—84.50 to 84.75; bulks, 81 to 82.75; lambs, 86.25 to 87. Hogs, 10c to 11c fed and watered, 87.75 a cwt.

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PETERBORO HOG MARKET

Peterboro, Aug. 22.—Danish hogs delivered in England last week totalled 35,000. The market is very weak. The demand for bacon in the Old Country is very poor. The delivery of hogs on the local market is heavier. The George Matthews Co. quote the following prices for this week's slaughter: F.o.b. country points, \$4.40 cwt. delivered at car, 89 c. wt.; shipment at Montreal, 94.75 c. wt.

ABBOTTSBURY HOG MARKET

Montreal, Saturday, August 20.—The market for live hogs was rather dull. The price for live hogs was rather firmer than it has been the past two or three weeks, and prices have scored a slight advance over those current last week. As high as 96¢ was paid for the best car lots weighed off cars, the prices paid ranging all the way down to 86¢ for some and under 80¢ generally. However, for the future, as the supply of live hogs is likely to be heavy from now on and will soon be more than equivalent to the demand, prices will be lower. Dressed hogs have met with a very fair demand this week and sales have been made at 10¢ to 11¢ a lb. for 115 to 123.75 a cwt. for fresh killed abattoir stock.

EXPORT BUTTER AND CHEESE

Montreal, Saturday, August 20.—This week's local market opened with a rush, and for a day or two it looked very much as if we were to have a record high level of prices for this season. There was no indication of an advance in prices when the market closed last week, the demand at the time being very light. As for the other country markets this week very full prices were paid for white cheese, and on Wednesday the Peterboro prices were pushed up to 11c for colored cheese. This was the high water mark of the week, however. Prices were gradually eased off until on Thursday the market in Eastern Ontario, all prevailing at 10½¢ to 10¢, the latter price for colored cheese, which are still coming in at a premium. For white cheese, although the premium is now reduced to 5c a lb., in some cases a bare six cents is being paid for the best of the week, however, there was a decided improvement in the demand from Great Britain and a good deal of trading was done at the low prices which prevailed then. The make of cheese in Ontario continues to show up well as compared with last year, but the output of cheese in the province of Quebec is rapidly dwindling. In most of the districts along the border very few cheeses will be made from now on this season, and it is probable that the total for that is not a single cheese will be made after the 1st of September.

The market for butter is very firm and prices this week have scored an advance of almost 1c a lb. over those current last week. The advance in prices is due to the rapidly diminishing demand from the local dealers. There is also a fair demand for export at higher prices, and the buying orders coming from the United States of a speculative nature.

CHEESE MARKETS

Canton, N. Y., Aug. 15.—1300 boxes of white cheese at 14½¢. Brooklyn, Aug. 16.—1845 boxes colored and 1005 boxes white offered. Best bid, 10½¢. None sold. Boston, Aug. 19.—3200 boxes boarded, all colored. Highest bid, 10 13/16; 70 s/d at 10 13/16; 950 at 10 1/2¢ balance unsold. Vermontville, Que., Aug. 19.—Three cars of cheese offered at 10 1/2¢. Kentville, Que., Aug. 19.—735 boxes of colored cheese boarded, of which number 375 white and 360 colored. 10 1/2¢. Nanans, Aug. 19.—1225 colored and 695 white cheese boarded. All sold on board and cart at 10 9/16 to 10 11/16. Alexandria, Aug. 19.—500 boxes of cheese, all white; sold at 10 1/2¢. Brantford, Aug. 19.—815 cheese offered; all sold at 10 11/16.

LAMENESS FROM A Bone Spavin, Ring Bone, Splint, Curb, Side Bone or similar Affection. ABSORBINE. Full directions in pamphlets with each bottle. 25c a bottle at dealers or delivered. A. H. ROBINSON, Jr., for mailing, 800 Broadway, New York. Sole Agents: J. W. F. P. & Co., Old Horse, Alanya Park, LYONS AVE., Montreal, Canada Agents.

OTTAWA, Aug. 19.—1243 boxes of cheese boarded: 406 white, 837 colored; 664 sold at 10 1/2¢ for white and 10¢ for colored. L'Esperance, Aug. 19.—369 cheese offered; all colored, 4, 95¢ on board at 10 1/2¢; balance unsold at street as same price. Cornwall, Aug. 19.—1556 boxes boarded: 20 white and 951 colored; white sold at 10 13/16 and colored at 10 11/16.

HOLSTEIN-FRIESIAN NEWS. Farm and Dairy is the official organ of the Canadian Holstein-Friesian Association. All those who are interested in the progress of the industry are readers of the paper. Members of the Association are invited to contribute articles of interest to Holstein breeders for publication in this column.

IMPORTATION TO BRITISH COLUMBIA. Victoria, July 23.—Another important step towards the development of the dairy industry in British Columbia was taken yesterday, when a draft was forwarded by Hon. Dr. Young, in behalf of the Provincial Government, to Edward A. Powell, Proprietor of the famous Lakeside Stock Farm at Syracuse, N. Y., in payment for the purchase of a number of Holstein herd of Holsteins in Western Canada. These will be brought to the Coast at once and placed in quarters at the Cominatum District farm, through which in years to come the dairymen of the province will be enabled to greatly improve the standard of British Columbia stock.

Holsteins, the experts say, have been long since proven by far-ranging tests and experiments, the best of all cattle for milk production. Their herd, with the modern eastern sanitaria now have their Holstein herds, and many of the most famous herds of America have adopted a similar policy, extensively advertising "Holstein milk and butter," as a bait for patronage. Of all the great American stock farms specializing in the breeding of Holsteins, that at Syracuse is reputed to be foremost, and British Columbia may congratulate itself upon having secured a single pick of the herd which, in the opinion of competent judges of dairy stock, has not a single weak spot. The herd is made up of the following:

One two-year-old Holstein bull, from a 25-hundred-pound dam, and best Pontiac sire. Three two-year-old cows, Natick Holstein, Lakeland Veeman De Kol; Lakeside Methodist Melba Anna De Kol; Lakeside Wayne; Northland Segis 11. One heifer two years, Celia De Kol. One five-year cow, Lady Posch Clothide. One three-year cow, Natick Holstein Perfection. Two-year-old heifers, Aerig, Netherland Canada, and Springdale Vale Pauline; Emma Stoffer. Eight heifer calves, one three-year-old and one two-year-old cow.

It is now about two years since the idea was conceived of making of the necessary farm in connection with the Cominatum District, and the officials of the department of agriculture, in view of the fact that the province was without it, and the development of the farm began. How well the plan is working out is told of a special reference to the hospital work appearing in these columns only a few months since. As the stock of the farm is being gradually increased, it is intended, Hon. Dr. Young explains, to weed out all inferior stock now on the province.

MADE FOR SALE. UNION STOCK-YARDS, Toronto. Cards under card accepted during twelve months. CHERRY BANK R. O. P. CO. ARTUR, Nov.



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equipped with all the newest time-saving, money-making devices, showing how to take care of milk from the cow until ready for transportation to the consumer—everything for milk dealers. Be sure and see it.

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CUT AND BIND YOUR CORN WITH A MACHINE



FARMERS too often are forced to waste at least 40 per cent of the feeding value of their corn crop through lack of help or an early cold season. Thousands found that true last year. Early cold snaps will come, and for that reason many farmers gather the ears and leave the stalks standing. The stock turned into the field get only a small percentage of the food value in the stalks. In case of sudden, early cold and snow like last year, almost the entire stalk crop is wasted. The corn-grower saves only a part of his crop at an expenditure of time and labor sufficient to save the whole crop if the proper machines and methods are used.

Corn harvested at the proper time leaves the stalks sweet and nutritious and with a food value practically equal to similarly hay and equal to two-thirds of the value of the ear itself. When the farmer harvests the ear first, he not only loses time and labor by making two operations of getting in his corn crop, but he loses much and often practically all the rich food value of the stalks by leaving them exposed to the weather. The difficulty of getting help often adds to the loss. Last year the sudden long, cold, wet spell destroyed practically the entire stalk crop, and thousands of bushels of unhusked ears were snowed under and lost.

Not only was the sweet, nutritious feeding value of the corn stalks utterly wasted, but winter snows practically covered unhusked corn on thousands and thousands of acres throughout the country.

Many fortunate farmers prevented this loss just as you can.

Weather conditions and lack of help are no problem to the owner of an

I H C CORN BINDER

Deering, McCormick, Milwaukee, or Osborne. The owner of an I H C corn binder does not have to hurry or worry. As soon as the ear begins to glaze, he can drive his team into the corn field, and with no extra help can cut, bind the stalks into bundles, and deliver in piles ready for shocking as he goes—all in one operation. One man and team drive right along and do this.

Don't let your cornstalks stand and dry up. Cut, bind, and feed them as you would your hay crop. It pays big to do this.

Then with an I H C husker and shredder—Deering, McCormick, or Plano—you can easily and quickly take care of your entire crop, harvesting full 100 per cent value with 50 per cent saving in time and labor.

The farmer who uses I H C machines in harvesting his corn is independent of both labor and weather. He does not have to hustle around and help, he does not have to see the value going out of his corn crop as it lies on the ground day after day waiting some other man's convenience; he does not have to feed and pay extra help. He takes care of all his crop himself—at his own convenience—easily; and adds 40 per cent to its value by harvesting it right. Modern methods of corn raising and stock feeding demand corn harvesting machines on every practical farmer's place.

Think these points over carefully, then see your local I H C dealer. He will gladly show you these machines, give you all the information you desire and quote you prices.

Take the matter up with the International local agent and see about buying a corn binder. He will supply you with catalogues and all particulars. Or, if you prefer, write direct to nearest branch house.

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