

The CANADIAN DAIRYMEN AND FARMING WORLD

Dairy and Cold Storage
Commissioner Fe 19
(Agricultural Dept)

PETERBORO, ONT. SEPTEMBER 2, 1908



CLYDESDALE STALLIONS AT THE CANADIAN NATIONAL EXHIBITION

The holding of the Canadian National Exhibition at Toronto opens the fall fair season in the Eastern Provinces. This great exhibition this year promises to surpass all previous efforts. Its live stock exhibits are its main feature. This shows the important position our agricultural industry holds. As this season, on the whole, has been a prosperous one for our Canadian farmers, and as they are better off than they ever were before, our fall fairs this year should be larger and better attended, and, as a people, we should be deeply thankful for the mercies that we have received.

DEVOTED TO
BETTER FARMING AND
CANADIAN COUNTRY LIFE

Canada's Greatest Dairy Supply House



THE UNLIMITED RESOURCES of our Establishment enable us to ship at a moment's notice anything that may be required for the Dairy or the Farm, the Cheese Factory or Creamery. Our leaders are—

Link-Blade Separators Milking Machines Simplex Churns

Each of them contains features not found in other machines and which places them as leaders in their class. We give small or large orders our immediate attention, and you are always sure to get just what you order.

SEE OUR EXHIBITS AT THE LEADING FALL FAIRS

D. Derbyshire & Company

Head Office and Works: BROCKVILLE, ONT.

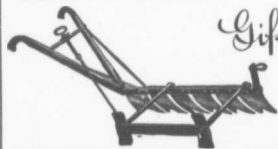
Branches: PETERBOROUGH, ONT.

MONTREAL and QUEBEC

HIGH-GRADE

ICE TOOLS

COAL AND ICE
HANDLING MACHINERY
CUT YOUR ICE WITH A



Gifford Wood Co.
PLOW

SEND FOR OUR NEW CATALOG

Hudson, N.Y.
Chicago, Ill.
Arlington, Mass.

Our Scottish Visitors

The Scottish agriculturists who are touring the Dominion under the auspices of the Dominion Department of the Interior, and of the Dominion Department of Agriculture, on reaching Ontario spent three days in Ottawa where they were met by a representative of The Canadian Dairyman and Farming World. They were a striking body of men. All are practical farmers and have taken some leading part in the development of agriculture in their native land. Strong of frame, conservative in character and keen in intellect they are a high type of the race.

Our visitors are being conducted through the agricultural districts of Canada and are being given every facility for observing all kinds and classes of farming. They travel in two luxurious hotel cars leased by the Canadian government from the Pullman Company. Mr. J. A. Ruddle, Dominion Dairy Commissioner, traveled with them through Western Ontario.

To interview so large a body in the short time they were in Ottawa was impracticable, as well from the point of printing space as from that of time for one might fill many issues with the ideas of such men. Our representative, therefore, first had a chat with the secretary of the commission, J. M. Hodge, who is well known for the leading part he has taken in the development of fruit culture in Scotland.

MUCH IMPRESSED

"Naturally," he said with an accent that Scotia's free air had engendered for generations, "we do not like to speak too freely because as yet we have seen but a comparatively small part of Canada. But from what we have seen we have been much impressed with the greatness of the agricultural resources of Canada. In Prince Edward Island, for instance, we were greatly impressed with the large area of soil that is specially adapted for potato raising. Much of it is of the red character that produces the best cooking types of that vegetable. We have seen in Scotland and potatoes raised upon it bring five dollars a ton more than those raised on other kinds of soil." "What do you think of our system of agricultural education?" asked our representative.

"What we have seen of it," Mr. Hodge replied, "has been most interesting. Your agricultural schools and colleges are doing splendid work. We consider the Macdonald College a wonderful institution. There is nothing like it in our country. Everything that is needed for such an institution seems to be there. It is too early yet to say what part will play in the development of Canada, but to judge by the earnestness of purpose of those who direct it we believe that it will exert a vast influence upon the agricultural life of the country."

DAIRY FARMERS TALK

Mr. Hodge introduced your correspondent to two members of the Dairy committee of the commission, Edward E. Morrison, a noted dairy farmer and James Dunlop, a noted breeder of Ayrshires.

Their views upon our Canadian dairy interests were mutual. Purposely they were asked if they had noted any matters in which Canadian dairymen in the east might improve their methods and their profits.

"We can speak only of what we have seen," was the answer, "but we think that dairy farmers would find it more profitable to go in more for winter dairying. That might necessitate extra feeding, but the land would profit by it, by the extra manuring and would in return give larger crops. More winter dairying would also be the means of introducing more advanced methods of feeding."

"There is another point of great importance," Mr. Dunlop went on "and that is that the herds we have seen

seem to be the product of all the dairy breeds upon earth. A great deal might be done by grading up the herds and sticking to some such deep-milking breed as the Ayrshires. Grading up might be done by milk tests for fat and solids. This has not been nearly done than is generally supposed. The records would then be a guide for selection in breeding."

"We have seen that Mr. Morrison "at the good prices that Canadian dairymen receive for their milk. The prices are equal to, if not superior to what Scottish farmers receive. Generally, we think the Canadian consumer pays as much for his milk and butter as the British consumer. We think too that the farmers within a radius of 50 miles of Montreal, receive more for their milk than any district in Scotland."

The views expressed were given at the request of your correspondent and not in any critical way. There was a good deal of liberal-minded Imperialism about their remarks too, for it must be remembered that they were speaking for the benefit of Canadian dairymen who compete with them in their own market. "We have been delighted with our trip," was the view of all who were interviewed.

NOTED MEMBERS OF THE PARTY

Among those who are guests of Canada on this trip are: W. Barber, M.A., J.P., farms 5000 acres, breeder of Cheviot sheep; W. Bruce, B. Sc., lecturer in East of Scotland College of Agriculture; J. MacFatchen Dobbie, J.P., director of East of Scotland agricultural college; Jas. Dunlop, director of Scottish Chamber of Agriculture; Geo. A. Ferguson, director of Scottish Chamber of Agriculture and breeder of Clydesdales; Ian A. Forsyth, tenant farmer of 375 acres; R. S. Gibbs, M.B., C.M., J.P., farms a large acreage of the county of Berwick and farms 1900 acres; R. B. Grieg, F.R.S.E., lecturer in Aberdeen university; W. Henderson, J.P., farms a large acreage, member of the Free Importation of Canadian Cattle Association; J. M. Hodge, lawyer and fruit farmer; Harry Hope, President of Scottish Chamber of Agriculture; James Johnston, J.P., vice president of the Royal Scottish Arboricultural society; James Keith, tenant farmer of 400 acres; Angus Mackintosh, J.P., land manager for the Congested districts; T. Carlaw Martin, L.L.D., editor of the Dundee Advertiser; E. E. Morrison, M.A., director of the Scottish Chamber of Agriculture and tenant farmer of about 700 acres; A. M. Frain, J.P., specialist in poultry keeping; Sir John Sinclair, Bart., D.S.O., owns 6000 acres in Caithnessshire; John Speir, director of Scottish Chamber of Agriculture and tenant farmer of 400 acres; David A. Spence, farms 800 acres, large potato grower; David Wilkie, J.P., chairman of the commission, tenant farmer and author of large ranching company; R. Patrick Wright, F.R.S.E., principal of the West of Scotland Agricultural College, teacher, experimenter and author. May their trip be a pleasant and profitable one is the earnest wish of all our Canadian farmers.

Tax the land and not improvements, if you would see the farmers improve their buildings. The present method of taxation is not by any means fair. Alex. Anderson, Peterboro, Co., Ont.

Farmers can have rural free delivery if they will. If they demand it. There is no excuse for the Government keeping free rural delivery from the farmers, when they can reduce the rate on drop letters in cities to one cent. The farmers can only get this boon of free delivery by co-operation, by standing together, and demanding it. There would be a rebellion in the country if free rural delivery was taken from the farmers.—J. Lockie Wilson.

BREEDING AND MANAGEMENT OF HEAVY DRAUGHT HORSES

R. E. Gunn, Manager, Dunrobin Stock Farm, Ontario Co., Ont.

Heavy horses should be bred more extensively. In breeding use only the best sires obtainable. If the resulting filly is a better individual than her dam keep her in the stud and sell the dam.

THE breeding of draught horses has been strongly advocated by a number of writers of late. Truly there are many reasons why the heavy draught is the best horse for the farmer to raise. The docile temperament of most heavy draughts, the ease with which they are broken to usefulness, the early age at which they can be worked, their splendid working ability, their high average fecundity, and the ready market awaiting them, are their chief recommendations.

To breed successfully a man must first choose the breed best adapted to his personal likes and the market he aims to supply. This article deals only with that most noble breed, Clydesdales, a breed which has proven eminently satisfactory to Ontario requirements.

THE FIRST ESSENTIAL

To the farmer the first step is to procure a good mare. Small scrub mares of indiscriminate breeding, though often good slaves, are seldom good brood mares. If a man has not a pure bred he should have a mare possessing the general characteristics of the breed he intends to raise. If the mare has a few crosses of pure bred sires, so much the better and if so he should keep to that breed that the crosses represent, and should let no glib-tongued stallion, or a lesser service fee cause a deviation into the paths of cross breeding. Such paths have been proven by dear experience to be the ruination of horse breeding.

The next consideration is to be sure the mare has no hereditary unsoundness. It would be better to leave horse breeding to your neighbor and to buy your work horses than to breed horses cursed with any of the hereditary ills to which horse flesh is heir. Ringbone, spavin, curb, heaves, roaring, ophthalmia and weak feet, are most serious.

The practice which is much resorted to of breeding mares physically unfit for anything else should be discouraged in every way possible.

USE THE BEST SIRE

In selecting a sire, get the best you can, even if he be not as convenient as one of less merit, and even if he be stood at a higher service fee, remembering that the difference in resulting foal, will more than pay for the inconvenience and increased outlay. In making your selection con-

sider rather the foals a sire is leaving, than the individuality of the horse, for many first class show horses are but indifferent breeders.



A Typical Clydesdale Stallion

From the Dunrobin Stock Farm owned by D. Gunn & Son, Ontario County, Ont.

First consider the quality of the horse, then the size. Clean flat bone with silky hair, no "greasiness" or "neatness," pasterns of medium obliquity ending in a large hoof head which in turn expands into what a Scotchman calls a "foot like a tub" is what we want. Then, too the constitution must be considered. A prominent breast, strong shoulders laid well into a deep chest, surmounted by a good crest should appear behind a pleasant countenance. Strong loin muscles, a short back, deep, well sprung ribs should connect squarely formed, powerful croupe and haunches to the pleasing fore-quarters. Gaskin muscles should be prominent, while the hock should be strong, angular and free from any approach to puffiness. In action, a stallion should first of all be the embodiment of good spirits. His walk should be clean and sprightly. His trot should be expressive of control, square action in front, trappy action from the side, and carrying the hocks well together behind without any tendency to interfere. In color, a good individual is never a bad color.

Trouble is sometimes found in getting mares in foal. But this is usually overcome by some one of the many practices known to all first class groomers. It might be said, however, that a horse during a heavy season is not so likely to impregnate a mare, "hard to catch" as a horse serving but a few mares.

An in-foal mare may be worked until the day she foals if she is properly handled. If the mare has heavy work to do work her easy. Do not make her back heavy loads or strain herself in any way. It must be remembered that there are

now two lives to be supported, so her feed should be nourishing and properly balanced. In-foal mares, doing light work, fed on cut, unthreshed oat sheaves should be in splendid condition in the spring. Mares doing heavy work must be fed in proportion, including laxative ingredients, such as turnips and beans.

NEAR THE FOALING TIME

When the mare comes near her foaling time, she will become sluggish in her work—do not hasten, overhear or excite her. If you have the date she is due to foal, you will know when to expect the new arrival. However, there is no infallible rule, usually the mare shows wax on her teats a few days before she foals, and immediately before foaling she becomes restless and there is an increased secretion of waxy milk, the colostrum. Be on hand if at all possible when the mare foals. If all the breeders made a practice of doing this the mortality among mares and foals would be greatly decreased. It is well to have the mare foal as early in the spring as possible, and to foal in the stable. To prevent joint ill, thoroughly disinfect the box stall where the mare is to foal. Don't be half hearted in this, clean the stall out, then sprinkle a pail or more of fresh lime over the floor, and a solution of zanolium or other disinfectant around the walls. Then bed the stall with clean straw and plenty of it. When the foal is about to arrive, examine the presentation and see if it is normal. If the presentation is abnormal, send at once for experienced assistance to have the presentation corrected. If help can be given the mare when the foetus first makes its appearance, some of the most difficult presentations can usually be corrected before the labor pains become severe, thus ensuring a live colt and a healthy mother.

PRACTICE DISINFECTIO

When the colt has arrived, after the navel cord has stopped its strong pulsations, tie the cord near the colt's belly with a strong disinfected string. Then sever the cord. Before letting the tied navel out of the operator's hands, disinfect it with a 10 per cent. solution of formalin, and after that or better still, a patent preparation, "Bismuth formic iodide." Then leave the colt and mother alone for a couple of hours. Usually by that time the colt will be sucking. If the



A Clydesdale Mare

Formation of fore quarters, showing the bone wanted and feet like "tubs."



A Clydesdale Mare

Showing proper conformation of hind quarters. Owned by D. Gunn & Son, Ontario Co., Ont.

colt has not suckled, instead of trying to force it to do so, milk the mother, putting the milk into an infant's bottle and letting the colt take as much as it wants. Seldom will this have to be repeated. When next you see the colt disinfect as before, and continue this every ten days, except at night, for the first three or four days, and again when the navel falls out. If this system were followed, there would be few cases of joint ill.

It is well not to use the mare for at least a month after foaling. At the expiration of that time she can be worked lightly at such work as will enable her to suckle her colt every three hours, until the colt is two months old. Then it can go longer between meals. The colt should be handled regularly to instill obedience, and a kindly feeling towards mankind into its young head. Early lessons are never forgotten.

CARE FOR THE FOALS' FEET

As the colt grows its feet will soon need attention. They should be trimmed, whenever they show signs of breaking or cracking, or when they grow out too far. As colts and yearlings, feed liberally crushed oats, bran and bright mixed clover and timothy. If clover hay is free from dust it is better than anything else. Give the youngsters plenty of roots as well. Young horses require a great deal of exercise, so should be out every day through the winter for a few hours, but not long enough to become chilled, or to fill their stomachs with frozen grass. The fact that they need exercise, and much of it, for their perfect development must be emphasized.

The second summer may be passed in the pasture field. If the grass is not sufficient, give some crushed oats. Usually during the hottest part of the summer it is well to have the colts inside during the day and out at night. Otherwise supply shelter from the wet and flies.

During the second winter, combine the treatment used as foals with plenty of food and exercise. During this winter the young horses should be well halter broken, and, if of good size, perhaps, hitched to light loads on the sled. Briefly, until the fall of the second year, when the horse is rising three years old, when most men put them to work, a heavy draught should have plenty of good nourishing food, and plenty of exercise.

AGE FOR BREEDING

The age at which a filly can be profitably bred, differs with the individuality of the filly. In the case of a large, well-grown filly, early breeding, say, during the second year, so that she may have a foal when a three-year-old, can be practised. But usually it is well to first cover a colt early in the spring of her third year. This ensures proper development of the mother and the colt, and should allow for many years of profit in the stud.

If a good filly be raised, having one more cross than the mother, and be a better individual, sell the mother rather than the filly. The reason that the horse of Ontario is admittedly so much poorer to-day than it was ten years ago, is that most of the good brood mares and fillies have been sold, leaving the inferior individuals from which to breed. Ontario is the seed bed for Canada, and we should strive to raise the purest stock for the younger provinces. At the present, when times are dull, is a good time for the provident farmer to purchase a good brood mare, and a visit to any of the large exhibitions, should give a man an idea of the type demanded in to-day's market.

Cost of Keeping Cows

H. Bollert, Oxford Co., Ont.

The cost of maintenance of the dairy cow is a debatable question. Much depends on whether or not a man wants to keep a cow for the benefit of his health, or whether he keeps her for a profit. In the former case about \$25 a year will keep her. In the latter case it will take \$40 and even more at the present prices of all kinds of

feed. The cost of keeping cows has increased considerably during recent years. Feed and labor are at least one-third higher than they were seven or eight years ago; consequently the cost of keeping the cow has increased in the same ratio.

The Aim of the Mutton Producer

In spite of all things said to the contrary and the discouraging reports on wool markets, there will be just as much profit in sheep this year as there is in any other line of live stock. Of course the profits of last year are not to be expected. It was an exceptional year, particularly for the sheep men. This spring, however, after last winter's financial depression, the mutton market was the first to move, and comparatively speaking, it started very strong.

In the ranching country of the West, it must be admitted that things do not look very bright. That is a country where wool represents half their profit, where sheep are fed in car lots and always sold by the hundred. A year such as



A Good Type of Southdown

this means very little gain for those men and in many cases, serious loss. There, mutton can be grown much cheaper, pound for pound than in Ontario. The same applies to wool. It is they who control the mutton market in Chicago and Buffalo. If Ontario breeders have to compete with them, they have to feed very carefully to show a profit.

The hog man in Ontario soon found that if they were going to raise the fat type of hog they would have to compete with the product from the corn belt. This they realized would be anything but profitable, so they produced a more reliable article, the bacon hog. It found a better market and in consequence, it started a very lucrative trade.

A TRADE IN THE BEST MARKET

The most up-to-date of Ontario's sheep men have already taken a step in the right direction. They have worked up a trade with the best butchers in Toronto, Montreal and New York. As it is, we find that any Ontario mutton has a preference over the average American product. This surely gives feeders something to work on. If, with the aimless breeding at present carried on, they can conform favorably with the Americans, what could they do with improvement?

The main reason, at present, for the ordinary farmer's lack of attention to his flock is that it does not seem to demand any care from him. He probably has from 10 to 20 ewes, that run at large all summer. They pick for themselves, requiring housing and feed for two or three months in the winter. They will, as a rule, clear him five or six dollars a head each year. This represents something like 25 per cent. of the total money invested. With money coming so easily, a man thinks he should make no further effort. But why not double it? With just a little care and attention this is possible.

In the first place, next fall start out with a good sire at the head of the flock. It is conceded

that the ram is one-half the flock. What cheaper way is there of improving the flock than by investing five or ten dollars more in a good ram? Above all things never use a grade or scrub ram. What can be done in the way of improving a flock when a ram is used of whose ancestry the best that can be said is that they were sheep? It is not sufficient that an individual in itself be good. To be any value for breeding, it must be descended from stock that is bred right and true to type. There is also the other extreme when men get a sire with a long line of ancestry regardless of the individual. This is the greater mistake of the two, as the individual must first be selected and the breeding considered afterwards.

The females must also receive some attention. The greatest mistake of the ordinary farmer is that he allows the butcher the pick of his lambs, and breeds from the ones rejected by the butcher. Why not pick out the number needed of the strongest and most typey ewes? Then allow the butcher to take the rest. It will mean money in pocket inside of two years.

Make the first step this fall by laying out enough money to buy a good ram. If the lambs have not been satisfactory, select a sire of a different breed, or in the case of pure breeds, of a different strain of the same breed. Produce something just a little better than last year. By careful selection of females the flock will become not only a source of profit but of pleasure to the breeder.—C. F. M., Middlesex Co., Ont.

Our Corn for Next Year

L. D. Hankinson, Elgin Co., Ont.

There is no time during which the selection of our seeds for the coming season's planting can be so advantageously undertaken as at the harvest time. Then we can more readily locate the most vigorous growing plants, and by spending a little time in this manner we are able to choose the fittest. A little forethought often saves much inconvenience, time and expense at seed time.

Corn harvesting will soon be at hand, and those interested in the growing of the most valuable crop must take the opportunity, and either select the seed from their own crop or procure it from some reliable source. The past year has been an object lesson to many along the line of seed culture in regard to corn. Last year owing to the scarcity of seed corn much inferior stuff was placed upon the market. Now, the result is manifest. Where inferior seed has been used we see uneven, sickly and patchy corn fields, while on the other hand where well selected seed has been used we have everything that tends to be a bountiful crop, thus exemplifying that old established law, "like begets like."

HAVE A DEFINITE AIM

In selecting seed corn, as in animal selection, we must have some definite aim, some fixed standard. Then select with that in view. A good ear of corn, no matter of what variety must possess certain definite characteristics. It should be more or less cylindrical in shape, symmetrical, large and well filled with sound grain from butt to tip. The rows of kernels should run straight—the whole length of the ear—and the kernels should be of uniform size, thus giving a large per cent of grain to cob. A good, mature ear, when taken in the hands, should possess a firmness about it, so that when twisted in the hands, there will be no indication of looseness of kernels or vacancies between kernels. In my experience the best time for harvesting seed corn is while the crop is standing. Then one can see both the parent stock and the ear it has produced. By passing through the field with a basket and stripping down the husks on the promising looking ears, one can in a short time procure the seed he requires. Or when husking is done by hand the selection may conveniently be made then. The husker simply leaving the husk on the ear and throwing it on a separate pile.

In storing seed corn I still stick to the good old fashioned way. That is, after gathering the seed, we tie, or braid it up in bunches of twelve to sixteen ears each and hang them in the sun for a few days to brighten up. Then I store it in the garret above the kitchen. This I consider an ideal place for storing seed corn. Slats are nailed to the rafters and the braid is suspended from the slats. In this way many bushels may be stored in a small space, and the seed is kept perfectly dry, and moderately warm, besides being away from the rats and mice.

GUARD AGAINST DAMPNESS

In the absence of a suitable garret, I would recommend hanging it in the barn in like manner. Precautions must be taken against dampness. Another method frequently used and highly recommended by those who grow seed corn commercially, is to husk the ears and store in ordinary bushel potato crates. These may be stacked one above the other in winter; then they are ready for immediate shipment. But the one drawback to this method is the crates are expensive.

In those sections where corn does not come to the proper stage of maturity for seeding purposes, I would strongly recommend growers to buy in the fall or early winter. Buy it on the cob. By doing this they can store in a suitable place and save the risk of it being spoiled by exposure. By buying on the cob one is more sure of getting varieties true to name, and he sees what he is buying. I would also advise buying direct from the grower. One can then generally get a superior article, and save money by cutting out the middle-man's profit.

The Weed Problem

T. G. Raynor, B.S.A., Seed Branch, Ottawa

Among the many problems which farmers have to face, there is none which gives him more concern than weeds. Not only is the man who has to put up a big fight with them to secure paying crops, concerned, but also the man who has comparatively clean land. It is to be regretted that there are very few weed free farms in the country. Not long since, in driving through the county of Waterloo, where German farmers abound and where they are putting up a big fight against weeds, I learned of a farmer whose mind became unbalanced over the struggle he was having to keep his farm clean. He suicided. It would be sad, indeed, if farmers, like the one referred to, would give up the battle and allow it to work on their minds in that manner, when victory is theirs if they will only persevere in the right way. Yet I cannot help thinking it would be well if there were a large class of farmers who would take the question more seriously than they do. It is the careless farmer who stands in the way of progress along these lines.

In this struggle against weeds there is much hope. As a better knowledge of weed life is obtained as to the plants and their nature of growth much more will be accomplished.

What is a weed? Some one says it is a plant out of place, i.e., where three plants are growing and there is room and plant food for only two, one of them is a weed. Rye in fall wheat, or timothy in alsike clover may be looked upon as weeds. However, it is the useless, or comparatively useless plants which are very hardy and which interfere with the growth of our crops, costing us time and labor, that we usually brand as weeds. Weeds are costing the farmers of this country thousands and thousands of dollars every year in increased cost of cultivation, as well as interference with the growing crops. In case of couch, couch or twitch grass for instance, and few are more persistent, it may be alleged that the extent of loss sustained from it can hardly be estimated. It has few equals, and perhaps none worse in many respects.

Is there any ray of hope for deliverance from these enemies of ours? Yes, I believe there is

abundant hope. What is needed is more definite knowledge of our weeds, and a persistent application of the best methods for their destruction. With good implements and horse force the most persistent weeds must give way. In the persistent and successful fight against weeds we are co-operating with nature in unlocking her abundant store house of plant food for the use of crops which will increase our yields of grain of good quality. Therefore, let no farmer be discouraged and let him remember that now is the time to fight for next year's crop.

Care of the Potato Crop

S. A. Northcott, Ontario Co., Ont.

The potato industry is an important money-making business when looked after properly. It has been neglected to a great extent in Ontario. The past few years the province has not produced sufficient potatoes to supply its own consumption. Car after car of potatoes come into our towns from the east to supply the demand. Many farmers scarcely grow enough for their own use. It is those who grow only a few rows, or less than an acre, that complain most about the potato business not being profitable. It is not to be wondered at when you consider the slipshod way they go at it. Help may be scarce and high priced. Bugs are sure to be present and blight and rot may come. By using up-to-date machinery, one man can look after a 10 acre field with little more labor than would be spent on one acre under the old fashioned method.

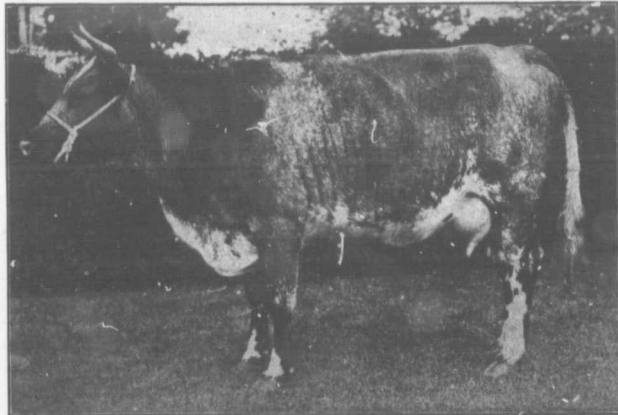
Unless the potato crop is properly attended to the results are not likely to be encouraging. Use the two horse cultivator, and ride, and do two rows at once. You will do it better than with the one horse affair which you have to walk be-

looked after in any case. Help can generally be found for haying and harvesting. Why not find a day to cultivate or spray the potatoes? It will pay ten times over. If the work is not done the potato patch will be practically left to take care of itself. In that case, the results will be satisfactory. The late blight, which is the most destructive, affects the tubers as well as the foliage. Spraying for it should commence about the middle of July. Keep a coating of Bordeaux on the vines till September. One thorough spraying when the blight makes its first appearance will often check the disastrous results which will otherwise follow. The vines can be sprayed four times at a cost of about \$3.50 to \$4.00 an acre. This includes labor, blue stone and lime.

When the crop is ready to harvest a good digger or potato plow will soon pay for itself. The "Hoover digger" or the Erie Iron Works Potato Plow may be used. Both are quite popular. With either of them a large crop may be dug at a small expense and in the minimum space of time. I again urge; "take time to look after your potato field."

Should we Raise our Calves?

Should we buy our cows or raise our own dairy calves? In our territory it will usually cost about \$60 to buy a good dairy cow. Sometimes I can go out and buy cows for \$35 and \$40. Cows that look to be all right, mature cows, in their prime, and by such dairy cow signs as I am conversant with they should be real good cows. Sometimes some of them are. Invariably however, many of them are not. What are they? Hence do they come? Why are they out in the commercial world hunting buyers? The very fact that they are kept moving on puts them under sus-



A Milking Shorthorn at Macdonald College, Que.

Rosaline 5th (imp.)—44,500—(vol. 51, p. 892). Calved July 18, 1904; bred by Arch. Hutton, Cumberland, Eng. See article, "The English Dairy Shorthorn," on Page 19, of this issue.

hind and hold all day and which tires you before night.

It is an easy matter to deal with bugs and blight when a spray pump with attachments for spraying 4 rows at once is employed. The whole outfit can be purchased for \$25. It will pay for itself in one year, even if you only have one acre of potatoes. With it one man can spray a ten acre field in a day and do it easily. The same time would be spent on one acre in the old hand way and then the work would not be done as well. When the work is done by hand with a can of some description there is seldom any attempt made to combat blight. This disease should be

prevented. Frequently they are 'rejects' some one has been weeding them out. Some breeder who has found that all the cows he raises are not good cows has set the disappointments afloat. They are directless, and many of them are 'not worth their salvage. Many of them, very many of them,—in fact perhaps all of them,—are embodied records of their breeder's mistakes. If these cows had been bred right and fed right, they would not now be driven from the pillar of one dairy to the post of the next one. They would have fixed places of fixed honor and profit, and from which no buyer's \$50, \$60 or \$75 would take them.—W. F. 8.

Holstein and Ayrshire Characteristics Compared

Geo. Rice, Oxford Co., Ont.

Since I have started to breed Ayrshires as well as Holsteins numerous have been the enquiries that I have received from farmers who are thinking of investing in one of these dairy breeds and who ask for my views of the merits and demerits of the two breeds. Though perfectly willing to give any information that I can to help a beginner, it would be a physical impossibility to answer my correspondents individually, so from time to time I will try to give the information in a wholesale way through the columns of The Canadian Dairyman and Farming World.

In the first place, I like to take plenty of time to find things out from my own experience. As

good digestive organs, but because she has also the power, in a large degree, to draw upon her own system, and to put the energy and strength that she has acquired whilst dry into producing her milk. The milk she gives is obtained from this stored up energy quite as much as from the feed she eats at the time she is giving milk. Hence, we find, no matter how well we may feed her when milking she loses flesh and weight. This explains why those who understand her, and who manage her right by getting her in good condition before calving, get such great results from her. It is also, the reason why others do not get such good results. They do not consider her nature and do not get her into good condition while she is dry. The milk produced under proper conditions is produced cheaply, especially if we consider only the feed given her at the time she

she is milking, as the feed she has had whilst dry is aiding her in the production. There comes a time, of course, when she has drawn upon that stored up energy until there is no more to draw upon. Then she gradually shrinks in her milk and gives a more moderate quantity, the amount of which depends largely upon the care and feed she gets at that time.

CHARACTERISTICS

An Ayrshire cow, though enabled to draw upon her reserve strength (as all good cows must do), does not seem to

have that peculiar power in nearly as great an extent. And on this account she does not reach as great a production during the early months of the milk period, in proportion to her year's work. But, she keeps pegging away with the result that we find Ayrshire cows, five or six months after freshening, giving nearly as much milk as they have, say two months after freshening, but this is only where they have been getting the best of care and feed during the whole period.

CARE AND FEED NECESSARY

No cow, be she Holstein or Ayrshire, is going to

for human beings is a big tax upon her and it is up to us to do our best for her.

As it is important that this characteristic of the two breeds shall be understood perhaps I can make it more clear by giving a few figures from the different periods of lactation of a cow of each breed that I consider equally representative of each breed.

A Holstein gave 593.6 pounds milk, 19.83 pounds fat in seven days.

An Ayrshire gave 386.4 pounds milk, 15.84 pounds fat in seven days.

Both of these cows were fresh in November and had practically the same feed at that time. The Ayrshire cow is a good feeder, able to handle 18 pounds meal, 40 pounds mangels, 30 pounds ensilage and some hay daily and never miss a meal. The Holstein cow lost more in flesh and that was why she produced, at this time, more cheaply. She could produce more because it was her nature to draw upon her reserve to a greater extent than was the case with the Ayrshire. That it paid to feed her well at that time is shown by their work in June. Seven months after calving the Ayrshire on grass gave 88 pounds milk daily, at the same time the Holstein gave 48 pounds milk daily. If we take their test the same, as when fresh it would be 1,584 pounds butter fat for the Ayrshire and 1,632 pounds butter fat for the Holstein daily. This is not nearly as great a difference as at the beginning of the milk period.

It must not be inferred from this that the Holstein is a less persistent milker for the year. The Holstein strikes a tremendous gait at the start by being able to draw upon her own system. But, when all the reserve is gone, she has to be content with a more moderate pace. The cost of production is nearly always in favor of the largest producer, especially during the producing period. But, at the end of the milk period, in this case, the Ayrshire cow carries the most flesh, she has not exhausted her system to as great an extent and the Holstein cow will require more meal whilst dry if we are to have her in fettle to do as good work next year.

It is not an easy matter to dry up a good Holstein. Instead of half starving her we would rather trust to irregular milking. Milk once a day for two weeks, then keep lengthening the periods. Give her plenty of salt. Keep her bowels loose to ward off garget. Remember, always, and if we would have her repeat next year we must take the means of putting her in shape for another year's work. It is by attention to these little points that many farmers get such fine results. The man who knows how and will do it (that is as regards taking care of a Holstein right) can obtain great results. Because she is such a large producer and because she produces her milk in the way she does, she needs rather more skill and different management than her Ayrshire sister when dry.

The Ayrshire cow when dry needs but comparatively little care. She is carrying as much flesh as is necessary and as much as she can make good use of. All the year through she presents a nice picture to the eye. Her udder, being more flesh, helps her to present a good appearance.

When good milking Ayrshires form the herd, very satisfactory results can be obtained. The results depend quite as much upon the man and his management and selection as they do upon the cows. Unless the herd is very large it is best to be content with one breed. If good results are not obtained, it may be the fault of the man rather than of the breed.

No breed can retain its superiority unless well cared for and well fed. This is most important with dairy cattle, as the production of milk puts an enormous tax upon them. We must keep up the vitality and thrift and avoid crossing. Crossing is nothing more than a mixing of pure breeds. As each breed has its distinct characteristics our aim should be to make the most of these.



JEAN ARMOUR

An Ayrshire cow of the milking type—the kind that dairymen like to own.

yet I have not had time enough to do this with these two breeds.

Our improved breeds of dairy cattle have been developed by improved methods of care, mating and feeding. Not all registered cattle, by any means, have had this necessary attention. Hence many of these have deteriorated and although they may be registered and be pure bred, they cannot be considered to be improved cattle. There is a vast difference between the individual animals of every breed. In order that the character of the different breeds may be studied it is necessary to have many animals of each breed to compare from, and to compare only those of each breed that are equally representative of that breed.

In comparing Holstein and Ayrshire, another difficulty presents itself. Although utility is our standard and we value a cow for the amount of milk, cheese or butter that can be made from her milk, the two breeds have a decided and distinct way of doing business. A good Holstein cow produces enormously. She is able to do this when



MERCEDES CANARY PIETERTJE

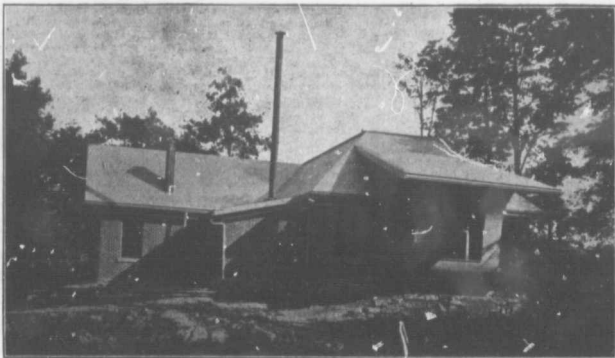
A Holstein cow, in good flesh at calving. Later on she turns all her energy into milk to do her best unless she gets the best care and feed. The production of large quantities of food

A Well Arranged Dairy Barn

One of the best dairy barns in Leeds County, Ontario, is that owned by Mr. J. R. Dargavel, M. L. A., of Elgin, the president of the Eastern Ontario Dairyman's Association. Mr. Dargavel is mentioned as a possible successor of Hon. Nelson Monteith, as Minister of Agriculture for Ontario. An illustration and diagram of this barn appears on this page. The farm on which this barn is located, comprises 275 acres, most of which is rough land suitable only for pasture or for forestry purposes. Only about 100 acres are worked. The farm is known as Glen Farm.

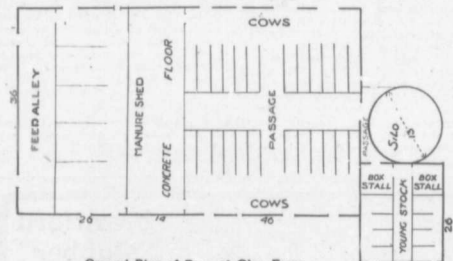
The cow stable is 46 feet long by 36 feet wide and provides accommodation for 25 milk cows and from 15 to 20 young cattle. The stable is divided into 26 stalls. The cows are fastened to the manger with chains or ties. Water is kept before them constantly in iron basins, the water being pumped by the wind mill shown in the illustration.

One of the features of the barn is its splendid system of ventilation. The outside air is admitted through openings in the hollow wall near the ground and into the stable through openings near the ceiling. The foul air is drawn up into the cupola, about 8 feet square, on the roof. This cupola, which may be seen in the illustration, has doors on both the east and west sides. These doors are connected by a rod 10 feet long so that one door is always open. When the wind is from the west it closes the door on the west side and an



Rockdale Cheese Factory, Leeds County

The factory here shown has been completed only recently. According to Mr. R. G. Murray, of Brockville, the well known cheese buyer, it is one of the best factories in the province. It manufactures the milk of a community of farmers, who are so isolated they would be unable to dispose of their milk to advantage were it not for this factory. The building is owned by Mr. J. R. Dargavel, M. L. A., of Elgin, the president of the Eastern Ontario Dairyman's Association. The story of how it came to be erected is an unusually interesting one, and is told on Page 18 of this issue. The patrons of the factory are planning to have a big dinner soon to celebrate its completion.



Ground Plan of Barn at Glen Farm

A well-arranged dairy barn owned by J. R. Dargavel, Elgin, Ont.

iron rod that is attached to a door on the east side opens that door. Thus, when there is a high wind blowing it does not interfere with the escape of the air from the stable. This simple and inexpensive system of ventilation keeps the air in the stable nice and fresh.

The herd of cattle are, for the most part, large producers. The average production of the cows,

as shown by the cheese factory returns a year ago was the largest in the section. Some of the animals are pure bred Ayrshires, the rest being mostly grade Ayrshires, they all being sired by grandsons of the noted cow, Nellie Osborne.

Mr. Dargavel is a firm believer in corn and the silo. From 10 to 15 acres of corn are raised each year. The balance of the arable land on the farm is devoted to grain and meadows. The farm is a profitable one, paying over 5 per cent. on the capital investment.

Hogs are a valuable side line. At present a pen of pure Tamworths are being raised. Generally, however, a cross between the improved Berkshire and Yorkshire is produced for market purposes.

Probably none of the members of the Ontario Legislature whose names have been mentioned

lately as possible successors to Hon. Nelson Monteith, as Minister of Agriculture for Ontario, have as extensive agricultural interests as has Mr. Dargavel who owns in all three farms. Two of these farms, including one of 50 acres, and another of 250 acres are rented. The third farm is Glen Farm which Mr. Dargavel is working on shares.

Mr. Dargavel was the first man in his section who owned a farm who agreed to allow the tenant half the proceeds of the farm. The general rule had been to allow only one third. At first some of the farmers who had rented their farms were very much put out when Mr. Dargavel rented his on a half basis. Mr. Dargavel, however, had convinced himself that a tenant farmer in his section could not make a good living when he received only one third of the proceeds of the farm and, therefore, he stood by the position he had taken with the result that now a large proportion of the farms in his section are rented on that basis.

An interesting little story of what Mr. Dargavel did for the farmers in the section where his farm is located was recounted recently to a representative of The Canadian Dairyman and Farming World while visiting in Leeds County, and is told on page 18 of this issue.



A View of the Buildings and Cattle on Glen Farm, Leeds County, Ontario.

This barn, owned by Mr. J. R. Dargavel, M.L.A., of Elgin, Ont., a description of which, with the accompanying diagram, is published on this page, is one of the best equipped dairy barns in the county, and, in fact, in the province. The building on the left is the hog house. On the extreme right may be seen the windmill, and at its foot the well-equipped milk house. The system of ventilation in the barn is one of its best features, and is giving splendid satisfaction.

Winter Fair Buildings

A deputation from the Guelph city council, consisting of Mayor Newcastle, and Ald. Kennedy, Rowen, Penfold and Humphries, recently conferred with Hon. A. J. Matheson, Provincial Treasurer, to see what arrangements can be made to provide for new buildings for the winter fair.

The Ontario Government is giving \$20,000 and the Guelph council has voted \$10,000 towards the new building. The building will have to be

modified in plan or equipment to come within the \$30,000. The deputation left with the understanding that they were to see what they could get from the county and township councils. If they succeed, the Government will consider an application for an additional grant.

Agriculture at Whitby

The town of Whitby, and the surrounding farming districts, were fortunate in securing one of the two new

branches of the Ontario Department of Agriculture, recently established. Mr. J. H. Hare, B.S.A., who has been selected to direct the movement, was born and raised on a farm one mile north of the town of Cobourg, Northumberland Co., Ont. Here he became thoroughly grounded in all that pertains to the practical side of agriculture. On his father's farm fruit growing and dairying, as well as cattle and hog raising, are carried on. Thus Mr. Hare has had a wide experience in general farm practice. With the exception of one summer spent in the West, Mr. Hare has labored on his father's farm till he accepted his present position.

After his high school training in Cobourg, Mr. Hare successfully completed a commercial course. After this, he attended the Ontario Agricultural College, from which he graduated last June. After graduation, he was appointed demonstrator in drainage on the physical department until he received his present appointment. Mr. Hare is particularly well fitted for the work which he has undertaken. With his farm experience to back him up and his college training, he should be of great service to the farmers in whose district he is located.

The field in which Mr. Hare is located is a splendid one. He will be of assistance to farmers in solving the innumerable problems which confront them. He will be able to assist the farmers investigate fungous diseases, in the eradication of weeds, insect pests, etc., and will be able to give assistance in the line of farm drain-

age, spraying, rotation, tillage, etc. Mr. Hare will also identify himself with organization work among the farmers. An exhibit of educational character has already been arranged for the Oshawa fair. It is likely that the introduction of agriculture into the regular course of the collegiate institute will be deferred for a year.

Feeding Green Corn

I have begun to feed green corn to my cows. They do not seem to be giving very good returns for the amount fed. What is the cause of the unsatisfactory returns.
—J. K. L., Ont.

Green Corn in August is usually very low in feeding value. To get the most profit from feeding green corn, some meal should accompany it. The kind of meal will depend, to a certain extent at least, upon what is available, but the most advisable would be bran, oil cake meal, cotton seed meal or gluten. A mixture of four parts bran and one part each of oil cake meal, gluten meal and oats, may be expected to give about the best results. Lacking gluten or oil cake meal, equal parts bran and crushed oats or barley may be expected to prove fairly satisfactory. The amount to feed must depend upon the market to which the milk is being sold. If for cheese or butter production, it will not, as a rule, pay to give more than a pound or a pound and a half a day a cow. If milk is being sold to a good city or retail trade, then two or three times that much might advantageously be given to the average cow, more, of course, to the best, and somewhat less to the poor ones, or to those far advanced in lactation.

—"After Results."

Don't allow your dog near the cows if you would get good results from them, and above all, treat them kindly.—Mr J Webster, Peterboro Co.

An Up-to-Date Stable

Will be fitted with the best Labor Saving Machinery
LOUDEN MACHINERY COMPANY

Are the Leaders in all kinds of Stable Equipment

Feed and Litter Carrier



Nothing to get out of order!

Cow Stanchions.



All Steel and Malleable iron.

Last year these goods were the best on the Market, but this year we have them still better. Notice our display at the Exhibitions, and see the improvements

Write for Circulars and Prices to—

LOUDEN MACHINERY CO.

Manufacturers of Hay Tools, Feed and Litter Carriers
Barn Door Hangers and Hardware Specialties

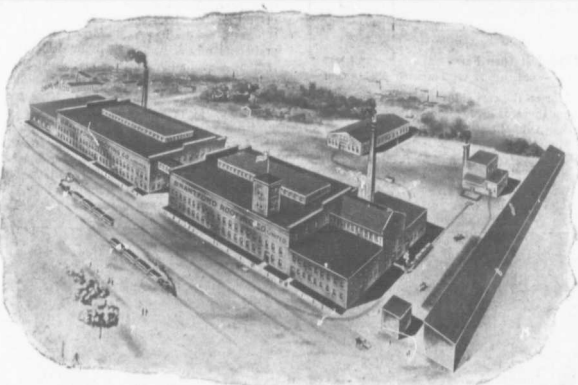
GUELPH - - - - - **ONTARIO**

Brantford "Crystal" Roofing Requires No Paint

Brantford "Crystal" is becoming immensely popular as a fire-protection for pitch roofs. It is soft and saturated, yet very durable, yet very durable, and coated with fire-resistant materials. Will adapt itself to changes of temperature without cracking or crumbling. An especially good roofing for dwelling houses. Ask for sample.

Free Book

Write for our big, handsomely illustrated roofing book, which deals thoroughly with the roofing question. It's worth reading.



Brantford "Rubber" Roofing—Light, Yet Durable

This is acknowledged by roofing experts to be HEST Rubber Roofing on the market. Light, yet phenomenally durable. The saturating compound is a mixture of asphalt and mineral rubber, which completely waterproofs the sheet. Acids, gases, vapors, heat and cold have no effect on Brantford "Rubber" Roofing. With it there is no "sweating" or "dripping" as with metal roofs. Get samples from us and compare it with others.

BRANTFORD "ASPHALT" ROOFING

This roofing is one of the most astonishing wear-resisters in the world. The basis of Brantford "Asphalt" Roofing is a specially high grade of wood felt. This felt is not only completely saturated with Asphalt, but the Asphalt is, by pressure, literally forced through the sheet, so that no single thread can possibly escape becoming thoroughly impregnated with this marvellously durable compound. Brantford "Asphalt" Roofing is proof against evaporation by heat or wind—does not absorb moisture, therefore cannot freeze—does not soften under heat of the sun. Secure samples and convince yourself of its High Quality.

Brantford Roofing Co., Limited

BRANTFORD, - - - - - CANADA

Should Feed More Hogs

Ed., The Dairyman and Farming World.—Owing to the high price of feed and the low price of pork, I understand there is a considerable falling off in the supply of fat hogs going forward to the packers. Hog raising has been rather discouraging to the farmers for the past year, but I do not think it the best thing to do to drop the business, because there has not been much money in it for a single year.

We have fed and marketed 45,296 lbs. of live hogs during the past five years at an average price of \$5.81 a cwt. Perhaps by taking a number of years, it pays as well as anything else, besides we feed up the product of the farm. This latter is quite an advantage to the farmer if it pays, and we think it does.

I have often thought the farmers of this country should feed more hogs than they do, as I am sure it will pay them, especially if they have the conveniences such as good stabling, water and summer pasture close by the pens. But, perhaps if it was gone into on a larger scale it might affect the price of feed, so that it would not pay unless the price of pork would go up to pay the difference. If any

person would like to know if hog feeding has paid us the past year I will give a statement of feed bill and the amount received for the hogs.

I am not one who thinks that the packers are trying to beat the farmers. Such folly would react upon themselves by destroying their own business. If the farmers quit feeding the packers will have to quit packing. It seems to me that if the farmers will go on and produce the right kind of hogs and the packers will pay all they can for them, the industry might be profitable for both. I believe with others that those farmers, who have gone to the trouble and expense of producing the bacon type of hog, should get a better price than those who feed the short fat kind.—Geo. Martin, Manager House of Refuge, Waterloo Co., Ont.

Sowing Red Clover

What do you think of sowing red clover about September 1st? Have you tried it, and what was the result?—D. McL., New Lancaster, Ont.

Our experience in sowing red clover in the fall has not been such as to indicate the advisability of its being practised on any considerable scale.

We sowed an acre last year, mixed timothy, to lbs., and clover to lbs., the first day in September. This started well, but the clover was almost entirely killed either by the late fall frosts or the early spring frozes. The timothy came through in good shape, and we got a very good crop of hay from this piece of land in July. One part of it in the spring, when we noticed that the clover had been killed out, we reseeded with red clover. This spring seeding grew rapidly, but not quickly enough to amount to much by the time it was necessary to cut the timothy. I might add, also, that on the part on which we did not sow clover in the spring, but on which it had been sown in September, and apparently frozen out, clover began to grow later in the season, and made a fairly good showing at time of cutting for hay, although not quite so heavy a growth as where we had sown for the second time in the spring.

J. H. Grisdale,
Experimental Farm, Ottawa.

The annual meeting of the Toronto Milk Producers' Association will be held in Victoria Hall 53 Queen St., East, Toronto, on Monday, Sept. 7th.

SEE THE
MODEL BARN

AT

(West End of Dairy Building)

TORONTO FAIR

IT'S FIRE
LIGHTNING, RUST, and
STORM PROOF

METALLIC ROOFING CO.

LIMITED

MANUFACTURERS

TORONTO AND WINNIPEG

ONTARIO AGRICULTURAL COLLEGE

GUELPH

CANADA



This Class Entered September 15th, '07—We Want YOU to be One of the Class to Enter September 15th, '08

REGULAR COURSES IN AGRICULTURE BEGIN
SEPTEMBER 15th, 1908

FEE TO RESIDENTS OF ONTARIO \$16.00 PER YEAR.

BOARD \$3.00 PER WEEK

For Calendar containing particulars in detail, write

G. C. CREELMAN, B.S.A., M.S., President.

The English Dairy Shorthorn As a Farmer's Cow

Editor, The Dairyman and Farming World.—In accordance with your request, I am sending you herewith a few notes upon the milk records of our college Shorthorns. We are not yet in a position to say much about them, since the records, as may be noted, are very incomplete. The cattle did not reach our stables until last December and daily weighings did not commence until January 1st. May I state that these notes are simply by way of information in answer to your letter? At present, we are ad-

vocating no policy, but simply undertaking an experiment. To put it frankly, we are trying to find out what we can make of the English dairy Shorthorn as a farmer's cow.

We have in our herd at date of writing eighteen head. This number, includes, however, one bull and eight calves. Of these 14 are registered or eligible for registry in the Canadian Shorthorn Herd Book. The other four are registered in the English Herd Book, but are short pedigree cattle and not eligible for registry here. We have considered it very fortunate that so many of the cattle, purchased without much regard for the length of the

pedigree have proven eligible for registration in our Canadian Association.

The records of five cows are here-with given and are perhaps self-explanatory:

Buttercup—Calved October 12, 1907. Milk from Jan. 1st to Aug. 15th, 5276 lbs.; present yield per day (Aug. 15th) 18 lbs.; butter from Jan. 1st to Aug. 15th, 216.86 lbs.

Greenleaf—Calved October 27, 1907. Milk from Jan. 1st to Aug. 15th, 5227 lbs.; present yield per day (Aug. 15th) 18 lbs.; butter from Jan. 1st to Aug. 15th, 207.8 lbs.

Barrington—Calved Jan. 31st, 1906. Milk from Jan. 31st to Aug. 15th, 7260 lbs.; present yield per day (Aug. 15th) 34 lbs.; butter from Jan. 31st to Aug. 15th, 307.64 lbs.

Furbelow—Calved April 26th, 1906 (first calf). Milk from April 28, 1906 to Aug. 15th, 2829 lbs.; present yield per day (Aug. 15th), 23 lbs.; butter from April 28th to Aug. 15th, 125 lbs.

Rosaline—Calved June 25th, 1906 (second calf). Milk from June 25th to August 15th, 1646 lbs.; present yield per day, 31 lbs.; butter from June 25th to Aug. 15th, 56.47 lbs.

Buttercup and Greenleaf calved, one on board ship and the other in quarantine. It will be noted that their records do not include the weight of their milk from October to January last. Considering the disadvantages they were under, they have proven

requirements of the Canadian Shorthorn Breeders' Association. We trust that we shall be able to make the experiment commend itself to farmers and breeders alike and any further information that your readers may desire will be gladly given.—H. S. Arkell Professor of Animal Husbandry, Macdonald College, Que.

Uniformity in Feeders

Prof. J. H. Skinner, Purdue University

In buying feeders, the breed is not of so great importance as the individual, but preference should always be shown for uniformity in color, weight, age, condition, quality and type in a car load of feeders.

When such a load of high grade steers are put in the feed lot and properly fed, the result will be a more rapid and a cheaper gain, a quicker finish, a greater increase in value a cwt., a higher dressing percentage, a greater proportion of high priced cuts, a better quality of meat, less loose fat and a higher price when sold, than if a mixed lot of scrubs were fed.

Uniformity can only be secured in producing feeders by selecting and sticking to one breed through a series of years, placing especial emphasis on individual excellence, and by the use of pure bred and registered bulls of good conformation, on cows which possess at least a fair degree of beauty. There are four or five leading

Gombault's Caustic Balsam

The World's Greatest and Surest

Veterinary Remedy

HAS IMITATORS BUT NO COMPETITORS!

SAFE, SPEEDY AND POSITIVE.

Supersedes All Caustery or Firing. Invaluable as a CURE for

FOUNDER, WIND PUFFS, THRUSH, DIPHTHERIA, SKIN DISEASES, RINGBONE, PINK EYE, SWEENEY, BONY TUMORS, LAMENESS FROM SPAVIN, QUARTER CRACKS, SCRATCHES, POLL EVIL, PARASITES, REMOVES BUNCHES or BLEMISHES, SPLINTS, CAPPED HOOF, STRAINED TENDONS.

SAFE FOR ANYONE TO USE.

We guarantee that one teaspoonful of Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin mixture ever made. Every bottle sold is warranted to give satisfaction. Write for testimonials showing what this most proved remedy has done for us. Price, \$1.50 per bottle, held by druggists, or sent by express, charges paid, with full directions for its use.

The Accepted Standard VETERINARY REMEDY

Always Reliable. Sure in Results.



None genuine without the signature of The Lawrence-Williams Co. Sole Importers for Canada, U.S. & CANADA, CLEVELAND, O.

Finds Caustic Balsam to be Reliable.

I can say that I have for the past three years been a user of GOMBHAULT'S CAUSTIC BALSAM, and have found it to be all that is claimed for it, and have in a great many instances recommended its use to others.—R. D. KELLY, Antioch, Ill.

Canadians Appreciate Caustic Balsam

I have been selling GOMBHAULT'S CAUSTIC BALSAM for years, and it is giving my customers the best satisfaction. I have also used it myself on different ailments with the best results. Can each nation be said in its favor.—W. T. PRICE, Newcastle, Ont.

Sole Agents for the United States and Canada.
The Lawrence-Williams Co.
TORONTO, ONT. CLEVELAND, OHIO.

The Maple Leaf Gold Sheaf Harvest Tools



These tools are tempered by the same process used in the tempering of the famous Maple Leaf Saws. They are the best goods of the kind ever offered to the Canadian public. Every tool is warranted. Handles made of best second-grade white ash. It pays to use the best. If your merchant has not got them, send to the

Maple Leaf Harvest Tool Co., Ltd., Tillsonburg, Ont.

who are the manufacturers. None genuine that do not have the Gold Sheaf on the label
C. C. DIERCKX, President.
J. J. SHERBY, Vice-president.

F. D. PALMER, Treasurer
C. K. JANSEN, Secretary

It is desirable to mention the name of this publication when writing to advertisers



A Champion—"Cheddington Malcolm"

This Shorthorn bull won 1st and championship at the Royal Agricultural Society's show, this year. The property of Sir Richard Cooper, Bart., Ashlyne Hall, Berkhamsted, England.

steady and satisfactory performers. breeds of pure bred beef cattle, all of Barrington we consider our best which are bred with the same end in mind, viz., to produce early maturing and if she continues as at present we animals that have the constitution hope to make her reach almost 13 of capacity to stand heavy feeding and within the year. Furbelow was one that are capable of making rapid beefier with her first calf, is from Lord Rothschild's herd. She tests well and economical gains, finishing quickly, and when fat, yielding the highest gives very fair promise indeed. Rosaline, whose photo is given on another grade of beef. In addition to these points, there are a number of breed characters which are of value in breeding a herd but of minor importance in the feed lot.

They have never suckled their dams but are getting a liberal allowance of skim milk and clover with just a bite of meal. We are trying to give them frames and constitution without making them fat. Necessarily, by our method of breeding and management, we are sacrificing somewhat of the characteristic of early maturity, but in that they are vigorous, lusty feeders, we believe that we are working towards their future usefulness as breeders. It will be understood that we are endeavoring to fix a certain, definite capacity for milk in this particular strain of Shorthorns.

Nothing has pleased us more than to know that we can work within the

FARM PROPERTIES WANTED

Parties having farms for sale may send particulars of same to the Provisional Bureau with just a few lines of information of prospective buyers from Great Britain and elsewhere. The Bureau will not act as a broker for the sale of properties, but will endeavor to find a buyer or agent of the property.

THOS. SOUTHWORTH
Director of Colonisation
HON. NELSON MONTEITH
Minister of Agriculture

The Feeders' Corner

Buying Feed

For the last year and a half or two years feed prices have been excessively high. The prospects of a fair to good grain crop in practically every township of the country, increases somewhat the probabilities for lower prices. While the grain farmer may not view the falling market with any great degree of enthusiasm, the change will be most welcome to Canadian live stock men, no matter what the stock, from the hen to the horse, in which they may be interested.

A common practice, for dairymen at least, has been to order during the summer, and at summer prices, practically all the feed they expected to need for the winter's operations. This refers, of course, more particularly to such feeds as bran, shorts, gluten meal, oil cake meal, cotton seed meal, and other bye-products now so extensively used by all our Canadian stockmen, although possibly most largely bought by Eastern dairy farmers.

Generally speaking, this practice of summer buying is highly advisable, but this year, owing to the scarcity of raw material (grains of all kinds) last year, nearly all bye-products are scarce and prices rise high. The placing of the new grain crop on the market, together with brightening trade prospects will soon increase the supply of such feeds, and consequently have a tendency to lower prices.

During the past few weeks the only feed on the market that has not been unusually dear, was oil cake meal. Until this feed rises over \$35 or \$36 a ton it may be considered as a profitable feed for either the dairyman or the beef producer.

In view, therefore, of the probable

lowering of prices, purchases of feed in large quantities should be deferred till a good deal later in the season. It is certain now that no raise in prices will occur; it is practically certain that prices for all feeding material, for the next few months will have a downward tendency.

"After Results."

Bran vs. Pulp Meal

Which is more profitable to feed, both for milk and fertilizer, bran or pulp meal? The pulp meal is something new this way. I am about to buy in my winter supply and should like to know your opinion—J. L. T. Jr., Coaticook, Que.

The question of profit in feeding a given material depends upon two chief factors, its composition and its cost. Supposing sugar beet pulp meal and bran to cost the same figure f.o.b. your station, then bran is much more likely to be a profitable feed than is sugar beet pulp meal. On the average of a large number of analyses, dried sugar beet pulp meal contains about 6 per cent. protein, and 70 per cent. carbohydrates, while wheat bran contains from 12 per cent to 13 per cent protein, about 40 per cent carbohydrates, and from 3 per cent to 4 per cent fat or ether extract, a very much better balanced feed for dairy cattle than dried sugar beet pulp.

When it comes to their relative values from a fertilizing standpoint, wheat bran is even more to the fore than when feeding values are compared. One thousand pounds wheat bran contains from 26 to 27 lbs. nitrogen, from 28 to 30 lbs. phosphoric acid, and from 16 to 17 lbs. potash; while 1,000 lbs. dried sugar beet pulp contains about 14 lbs. nitrogen, about 3 lbs. phosphoric acid, and about 4 lbs. potash.

It might just be added that the present moment is probably not the best time at which to purchase the winter supply of feed. Owing to small crops last year, bye-products of all kinds

are rather scarce and very high-priced. I would advise delaying purchase till considerably later in the season, unless of course you can get these feeds at prices considerably lower than present market quotations.—J. H. Grisdale, Agriculturist, Experimental Farm, Ottawa.

Unthrifty Cow

Cow is in poor condition. Her breath has a foul odor, and she salivates a greenish fluid when chewing her cud. She occasionally goes lame in front.—P. A. E.

The trouble is probably due to a decaying tooth. Have her mouth examined. If there are any teeth decayed, have them extracted. If nothing can be found wrong in the mouth give her a purgative of 1 lb. Epsom salts and 1 oz. ginger, and follow up with $\frac{1}{2}$ oz. hypophosphite of soda 3 times a day. It is probable she is tubercular, and if so nothing can be done. I would advise you to have your Veterinarian examine her, and test her with tuberculin.



COW COMFORT

With our New

CHAMPION COW STANCHIONS

They are Self-locking and safe. Ends are malleable and sides are brass pipes, also smooth, and will not irritate necks and shoulders. Gives plenty of freedom.

NOW IS THE TIME TO INSTALL

Send for Circulars

Ont. Wind Engine & Pump Co. Ltd.

TORONTO



DR. WILLIAMS'

FLY & INSECT DESTROYER

is the Best Friend of horses, cattle and chickens. Flies, bugs and mosquitoes are as bad now as any month in the year. Better have a can of the "Destroyer." Positively kills all vermin on horses, cattle and chickens in stables and hen-houses. Prevents annoyance from flies. These effects positively guaranteed or money refunded. Always apply as a spray. Absolutely harmless.

Whether you are a farmer or have a summer home with a few animals you cannot afford to be without this remedy. It spreads comfort broadcast.

Send for printed matter, or \$1.00 for 1 gal. tin and sprayer.

Unaffected by Heat or Frost

THE F. WILLIAMS CO.

Morrisburg, Ont. Madrid, N.Y.

Ask Your Dealer for it.

AGENTS WANTED



Silo Curbs

THE LONDON ADJUSTABLE "SILO CURBS"

Will make any size of silo from 5-ft. to 36-ft. in diameter, and will make the walls any taper or thickness desired. This Mould makes a vertical wall on the inside, and a tapered wall on the outside. Those moulds are in operation throughout Canada, and are the only Adjustable Moulds on the market. Let us save you money. Write us for full information.

THE "LITTLE GIANT" CONCRETE MIXER

Does the work of five men. Easy to operate, does perfect mixing, saves cement and labor, easy to clean, easy to operate; large in capacity, small in price. Send for Pamphlet No. 14. We make a full line of Concrete Machinery. Write us fully as to your requirements.



"Little Giant" Concrete Mixer

We make a full line of Concrete Machinery and Cement Working Tools. We give you full information in regard to anything in the Concrete Machinery line free gratis. We are the largest manufacturers of Concrete Machinery in Canada. Let us know your requirements.

When at Toronto Exhibition see our Exhibit in tent immediately East of Machinery Hall. We also have a large Exhibit in Machinery Hall at London Fair.

London Concrete Machinery Company
19 Marmora St., London, Ont.

It is desirable to mention the name of this publication when writing to advertisers.

HORTICULTURE

The Apple Situation

P. J. Carey, Dominion Fruit Inspector, Toronto

Outside of that held by the numerous co-operative fruit growers' associations, the bulk of the apple crop has passed into the hands of the dealers. As "lump" buying is the general practice, it is impossible to say anything definite regarding prices.

The crop of winter apples certainly is light in many districts, but the fruit is of good quality in most orchards, and very large. Baldwins and Russets were as large on August 15 as on October 15 of last year. Large quantities of Duchess are being shipped both to the west and to European markets, and sales so far have been satisfactory.

Western Market for Our Fruit

Robert Thompson, Lincoln Co., Ont.

The shipments of fruits, such as apples, pears, tomatoes, grapes, and so forth, commenced this season earlier than usual, the first cars going out in the latter end of July. The demand has been greater than in previous years. While the shipments have been very heavy the prices have been very encouraging. It looks at this date as if the output to the west would be at least 50 per cent, heavier than in previous years.

The western people are showing their appreciation of the quality of our

fruit. It is up to Ontario growers and shippers to demonstrate that we can grow fruit of a quality that no other country can equal, and, at the same time, place it in the consumer's hands in an attractive shape, by proper packing, and selecting, and also to load it in new cars so that its safe carriage and delivery can be ensured.

Our fruit must be gathered carefully, and only fully ripe or grown specimens gathered. This can be done by making two or three pickings off a tree.

After picking and packing, the fruit must be cooled before starting on its journey, either by placing it overnight in cold storage or by icing the refrigerator car the day previous, and keeping the car well iced while loading.

If the fruit could be properly distributed through our western provinces, we could place in that country every basket that we grow—of any variety that will carry that distance—and then the demand would not be fully supplied. The more we learn about the needs and the requirements, the more we realize the vastness of the west. Later in the season we will be prepared to give the results of several experiments in cooling fruit previous to putting it in the cars, and also in cooling the cars previous to starting on the journey to the west.

Send articles and photographs for publication on this page. They will receive prompt attention and will be welcomed.

Nova Scotia Fruit News

R. J. Mosseger, Annapolis Co., N.S.

More than the usual amount of rain for this season is having its beneficial effect on the late fruits. Apples are growing rapidly, and the concomitant smoothness and freedom from spot is also very pleasing to the orchardist, who grows fruit for the money there is in it. If this season is a sample of the whole of Nova Scotia, we will have the cleanest, largest apples this year that we have had for some years. Even the Graevenstein, which will go scabby on the least provocation, is this year, in all cases where thoroughly sprayed, growing remarkably clean and even in unsprayed orchards, it is cleaner than in the average of years. Baldwins, which in most years bear heavily and grow small, are showing up very favorably at this date (August 18), and are almost as large as they have been at time of picking in some previous years. Kings are very good size, but backward in color. This is true of all apples and no doubt is due to the rains and continued cloudy weather of this month. However, September is our coloring month, and we hope for some continued sunshine then.

The speculators are quiet so far, being numbered probably by the wail of their last year's losses (?). They will soon be buzzing around the farmer filling his credulous ear with stories of immense crops and 75 cent prices. We will never believe that the wail of the operators last year was "much more than a bluff."

British Fruit Crops

P. B. Bull, Canadian Trade Commissioner, Birmingham.

Canadian packers will have to remember that every year sees fresh competing fruit growers entering the British market, and what was considered a fine pack a few years ago, is not considered as such to-day. Canada has much to learn from Tasmania and New Zealand in apple packing, and if the packers were to allow a few more shippers to enter here like those of last year, not much will be heard of Canadian apples in Great Britain. That good packing is done and can be done, is proved from some of the shipments received last year.

GOOD CROP ANTICIPATED

This spring was particularly free from night frosts, consequently the blossoms were not interfered with, neither has there been anything in the nature of destructive hail storms or winds. Weather conditions have been specially favorable, and a good crop of apples is anticipated. Last year, it will be remembered, pears were very scarce in Great Britain, but this year there will be a good all-round

crop of all varieties. The plum crop last year was almost a total failure. This year, however, excellent reports are heard on every hand, and in this district, which has a reputation for plum growing, it is believed that a record crop will be taken from the trees.

Fruit Crop Outlook

There has been a material decrease in the prospects for a crop of winter apples. It is now estimated at about half of last year's crop. The fruit is growing rapidly, and is much larger in size and finer in quality than at this time last season. Correspondents of The Canadian Dairyman and Farming World point out the situation in Ontario to be as follows:

HASTINGS CO., ONT.

Trenton.—The apple crop is the lightest I have ever seen. Some growers claim that they have not enough for their own use. There is a little spot; also considerable railroad worm in some sections, which is causing the apples to drop. Leaf blight is prevalent in some orchards. Baldwins seem to be more affected than other varieties. The buyers are paying from 50c to 81 a barrel, the grower to do the picking.—W. H. D.

ONTARIO CO., ONT.

Oshawa.—The apple crop will be something over one-half of last year. The fruit is large and of good quality. Codling moth is showing quite a lot but very little scab. Only a few varieties are heavily loaded. Pears are very light. Strawberries have been fair; raspberries good. Plums are mostly a failure. The oyster-shell bark-louse has done quite a bit of harm; some orchards are almost ruined.—E. L.

OXFORD CO., ONT.

Ingersoll.—European varieties of plums are rather scarce; Japanese varieties plentiful. Apples are a little more than one-half of last year's crop. Early varieties are very plentiful but Spys and Greenings are scarce in places. As a whole, the crop is fairly clean but very bad when unsprayed.—J. C. H.

BRUCE CO., ONT.

Walkerton.—Early apples are a very good crop; late falls and winter, light, particularly Spys, Baldwins and Kings. The quality is good. The frequent rains are making apples a good size. Plums are medium to good but the rot has started in some varieties and, if the weather continues damp, it will reduce the crop. Pears are light; the twig blight has nearly cleaned them out.—A. E. S.

Seed Wheats of Merit

We offer the following varieties of fall wheat, all of which have given satisfactory results after careful trials. All successful farmers realize the importance of a change of seed also the necessity of growing the newest and best sorts, and we can recommend with confidence those varieties, which have been grown for us by careful farmers, and thoroughly re-cleaned for our trade. All excellent samples.

NEW RED WAVE—Jones' latest introduction, which comes highly recommended. It has had brown chaff; strong, thick-walled, stocky, golden straw; long, broad heads; large dark, hard grain, rich in gluten. It yields heavy, stands up well, and heads being slightly leaning, gives it little chance to sprout in the field in a wet harvest. By freight: Peck 60c; bushel \$1.20; postpaid, 1.35.

NEW PARIS PRIZE—One of Jones' latest introductions. A magnificent hard variety, with white chaff and sturdy straw; large, plump, white grain of splendid milling quality. It grows upright, strongly and evenly, is hardy, and has large, wide, square-built heads. We highly recommend this fine variety. 1 lb. 30c, 5 lbs. 65c; postpaid, By freight: Peck 60c; bushel \$1.20; bushels \$7.20.

ABUNDANCE—A splendid hard white wheat and a great yielder. Splendid quality grain. Very hard and a great stooler. Straw stiff and stands up well. We highly recommend this variety. 1 lb. 30c, 5 lbs. 65c; postpaid, By freight: Peck 50c; bushel \$1.10.

New Mammoth Ohio bushel \$1.00 Red Chief bushel \$1.20
Dawson's Golden Chaff 1.25 Red Clawson 1.25
Fall Rye bushel \$1.10 Hairy Vetch bushel \$3.50
Timothy 3.25 Crimson Clover 6.00
2-bush, cotton baggy head, 2c, each; good, 2c, each; extra.

We also offer the choicest grades of the following, specially re-cleaned for seed:
We allow a reduction of 10c. a bushel on Rye and Wheat (excepting Red Wave and Paris Prize) in 10-bushel lots.
Our descriptive price list of wheat, poultry supplies, and seeds for fall sowing, is ready, and will be mailed free to all applicants.
Our new bulb list, will be issued early in September. Send for it. Free.

JOHN A. BRUCE & CO., SEED MERCHANTS

ESTABLISHED 1850

HAMILTON, ONT.

Buy Our No. 10 if you want an especially good general purpose plow of medium weight.

If you are looking for a medium-weight plow suitable for all kinds of land—that will clean in any soil—that is very light of draft—that is, like all Paris Plows, far above the average quality—then we say **Get Our No. 10.**

All Paris Plow Moldboards are tempered by "refrigerating" process. Moldboards thus tempered never have any "soft" spots, the common fault of those tempered by the "old" process. Ours are always of uniform hardness and score extra well. Ask our agent in your locality for further particulars.

THE PARIS PLOW CO., Limited, PARIS, ONT.

Western Branch:
WINNIPEG, Man.

The Legumes as Nitrogen-Enrichers

F. T. Shutt, M.A., Chemist, Dominion Experimental Farms

Our work in the estimation of nitrogen furnished by the legumes, was begun in 1894, and has been continued more or less every year since that date. The results of these investigations, carried on simultaneously in field, orchard and laboratory, are to be found in the reports of the Experimental Farms. To simplify matters, I have constructed the following table. It states the yield, the nitrogen, the organic matter, and ash constituents contained in various legumes after three months growth—viz., from July 1 to October 1, in the orchard.

ation of all our data leads me to the conclusion that, according to the nature of the soil and the character of the season, we may enrich the orchard soil with from 75 to 125 lbs. of nitrogen per acre by one of these legume crops. This amount would be contained in 8 to 10 tons of fairly good barn-yard manure.

It is a significant fact, that in the case of the two clovers, mammoth red and common red, practically one-third of the total nitrogen is in the root system. Undoubtedly these two are the most useful of all the clovers as orchard cover crops.

Crimson clover seldom survives the winter in the colder districts, and, consequently, gives no spring growth. Neither does it, as a rule, furnish as much nitrogen by its summer and

ORCHARD COVER CROPS

Determinations made at Central Experimental Farm, Ottawa

	PERIOD OF GROWTH		Weight of Crop Per Acre	Nitrogen Per Acre	Organic Matter Per Acre	Mineral Matter Per Acre
	July 1 to Oct. 15 (approximate)					
	Tons	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
CLOVER, COMMON RED— Stems and Leaves..... Roots.....	4	1779	70	1842	481	172
	2	1445	48	1394		
	Total.....	7	1224	118	3236	653
CLOVER, MAMMOTH RED— Stems and Leaves..... Roots.....	6	1310	82	2299	598	219
	3	1200	45	1467		
	Total.....	10	570	130	3678	727
CLOVER, CRIMSON— Stems and Leaves..... Roots.....	11	234	85	3093	602	
	3	301	19	801	109	
	Total.....	14	435	104	3894	801
ALFALFA— Stems and Leaves..... Roots.....	5	1192	75	3964	310	
	5	558	61	3139	613	
	Total.....	10	1750	136	6784	1123
HAIRY VETCH— Stems and Leaves..... Roots.....	11	545	129	3699	425	
	2	345	18	539	50	
	Total.....	14	240	147	4225	481
SOYA BEANS— Stems and Leaves..... Roots.....	7	350	82	3319	313	
	1	900	13	549	28	
	Total.....	8	1250	95	3868	341
HOISE BEANS— Stems and Leaves..... Roots.....	7	733	63	2193	156	
	2	802	15	606	39	
	Total.....	9	1585	78	2798	195

These results are to be considered as representative, rather than absolute; they have been obtained in several instances by averaging the data from two or more seasons. We find, as might be expected, that results vary according to the nature of the soil, and of the season, and the abundance of nitrogen-gathering bacteria in the soils. Again, although the table gives a larger crop yield and nitrogen content for the mammoth red than for the common red clover, it must be pointed out that several of our experiments have shown the reverse. If it had been possible to determine the relative values of these legumes upon soil alike throughout all the plots, and during the same season, the data might have been strictly comparable, but this was not possible.

We cannot state exactly what proportion of the nitrogen, as recorded in the table, has been drawn from the atmosphere, or, to put it in another way, what proportion previously existed in the soil. The probabilities, however, are that the greater part of it is from the air. This assumption is made from the fact that the increase in nitrogen content of soil, by the turning under of clover, has been found almost equal to the amount of nitrogen contained in the clover. Experiments conducted during the past three years show us that, by the decay of turned-under clover, the nitrogen of the soil has been increased on an average to the extent of 85 pounds per annum. A consider-

autumn growth. Its root system does not equal those of the two first-named clovers.

Alfalfa, on suitable soil, has done very well, furnishing somewhat more nitrogen than the clover, half of which is contained in the extensive root system. From all points of view, it is undoubtedly a most valuable cover crop.

The hairy vetch, though a low-growing plant, has given most excellent yields—nearly 12 tons of foliage per acre, containing more than two tons of humus-forming matter. This foliage is very rich in nitrogen, the crop containing nearly 150 pounds of this element per acre. It is, therefore, a plant of high fertilizing value when turned under, in spite of the fact that it has a very small root system.

Soya beans and horse beans, in point of nitrogen, fall behind the crops already discussed. They are nevertheless important as cover crops from the fact that they may be sown in drills, and cultivation of the soil, between the rows, continues much later than if a broad-cast sown crop were used. They are also excellent snow holders.

The Department of Agriculture at Ottawa is making weekly shipments of apples and pears to the Franco-British Exhibition at London, England. Some exceptionally fine specimens of Duchess and Alexander already have gone forward. Mr. P. J. Carey, Dominion Fruit Inspector, is busily engaged in making the selections from Ontario orchards.

MAPLE SYRUP AND SUGAR MAKERS

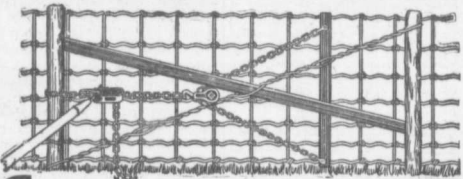
WE WILL EXHIBIT OUR

“CHAMPION” EVAPORATOR

and a complete line of the best and most up-to-date appliances for the Maple Sugar Camp at TORONTO, LONDON, SHERBROOKE and OTTAWA EXHIBITIONS, where our representatives will be pleased to meet intending purchasers and give them full information regarding operating our Evaporator. Illustrated Catalogues and Price List FREE on application.

THE GRIMM MANUFACTURING CO.
MONTREAL - - - - - QUE.

HOW TO BUILD A GOOD FENCE



Our new folder on "Erecting Fences" will tell you and if you will follow the instructions carefully when you are through you will have a good job.

It's full of valuable and interesting information on fence building and tells how to erect woven wire fencing in the quickest and most substantial manner.

No farmer, fence man or any one interested in fence construction should fail to write for a copy. It gives all the information required for building fences and we send it

FREE!

In addition there is also a complete and very interesting description of the manufacture of fence wire. Persons who have never had the privilege of visiting a wire mill will find this article of especial interest.

It also has an article quoted from a bulletin issued by the U. S. Department of Agriculture on the manufacture of concrete fence posts, showing how posts made of this most useful and durable material can be manufactured at home. Don't fail to write for a copy today. Ask for our folder called, "Erecting Fences." Remember it's free. Address THE BANWELL NOXIE WIRE FENCE CO., LTD., Dept. F, Hamilton, Ont.

It is desirable to mention the name of this publication when writing to advertisers.

The Canadian Dairyman AND Farming World

Published by The Rural Publishing Company, Limited.

1. THE CANADIAN DAIRYMAN AND FARMING WORLD is published every Wednesday. It is the official organ of the British Columbia, Alberta, Eastern and Western Ontario, and Bedford District Quebec Dairyman's Associations, and the Canadian Hotelier, Grocer, and Jersey Cattle Breeders Associations.

2. SUBSCRIPTION PRICE, \$1.00 a year, strictly in advance. Great Britain, \$1.50 a year. For all countries, except Canada and Great Britain, add 50c for postage. A year's subscription free for a club of two new subscribers.

3. REMITTANCES should be made by Post Office or Money Order, or Registered Letter. Postage Stamps accepted for amounts less than \$1.00. On all checks add 20 cents for exchange fee required at the banks.

4. CHANGE OF ADDRESS—When a change of address is ordered, both the old and the new addresses must be given.

5. ADVERTISING RATES quoted on application. Copy received up to the Friday preceding the following week's issue.

6. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles.

7. CIRCULATION STATEMENT

The paid-invoice subscriptions to The Canadian Dairyman and Farming World exceed 15,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 15,000 copies (never being less than that) to 20,000 copies. Subscriptions which are renewed, are discontinued as they expire. No subscriptions are accepted at less than the full subscription rates. Thus our mailing lists do not contain any dead circulation.

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

9. OUR PROTECTIVE POLICY

We want the readers of The Canadian Dairyman and Farming World to feel that they can deal with our advertisers with our assurance of the advertiser's responsibility. We are confident to our colleagues only the most reliable advertisers. Should any advertiser ever come to be dissatisfied with the treatment he receives from any of our advertisers, we will investigate the circumstances fully. Should we find reason to believe that any advertiser is in any way dissatisfied in the slightest degree, we will discontinue immediately the publication of their advertisements. Should the circumstances warrant, we will expose them through the columns of the paper. Thus we will only protect our readers, but our reputable advertisers as well. All that is necessary to entitle you to the benefits of this Protective Policy is that you include in all your letters to advertisers the words, "I saw your ad in The Canadian Dairyman and Farming World." Complaints should be sent to us as soon as possible after reason for dissatisfaction has been found.

THE CANADIAN DAIRYMAN AND FARMING WORLD
PETERBORO, ONT.

TORONTO OFFICE,
Room 308 Manning Chambers, 72 Queen St. West, Toronto.

TIME FOR A FORWARD MOVEMENT

Ontario is ripe for a forward step in the interests of horse breeding. During 1906, the deputations of breeders who toured the province, and who met with the farmers and owners of stallions, found that there was need for an improvement in our methods of horse breeding. They found, also, that as a rule, our farmers realize the need for something being done, and that they are in sympathy with the movement looking for a betterment in prevailing conditions.

The report that has been issued by the government, has served to intensify this feeling by showing that numerous inferior and unsound stallions are being used throughout the province, to the great detriment of the industry. Since then the members of

our horse breeders associations have drafted a series of recommendations that they would like to see embodied in legislation. These recommendations have been discussed at the Guelph and Ottawa Winter Fairs, and through the public press, and on the whole, have met with general approval.

This agitation, extending as it has over several years, has prepared the country for measures that should bring about improvement. It is time for the government to take hold of this question, and to deal with it in a comprehensive and broad-minded manner. Half way measures will not be satisfactory. Something more effective is required.

USE PURE-BRED SIRE

Go where we will, we find scrub stock of the most nondescript types and breeding. Worst of all, there seems to exist but little desire on the part of many to raise their standard, or to keep a better class of live stock. It has been proven, times without number, that improved stock is, on the average, much more profitable than stock of inferior breeding. Why, then this indifference? Few, we venture, are engaged in caring for animals solely for their health. We all look for profits. We want, at least, a fair return for our labor and feed, and interest on our capital. If all are realizing this, then some are getting much greater returns than others. The results possible to one, within limits, are available to all who seek them, and follow in the proper course.

It is not necessary to have pure-bred stock. In many cases the possession of such is undesirable. To make a success of pure-breds, one must be a man of many parts. The business is a complicated one. However, there is no reason why anyone should not be done to improve the stock we have. There is no excuse for using scrub sires. A common herd, through the judicious use of carefully selected pure-bred sires, will, in a remarkably short time, greatly increase in value, as well as in its power to pay dividends upon the money invested. Good individuals, of almost any breed of pure-bred stock, can be obtained at reasonable prices. Why not invest part of this season's earnings in a pure-bred sire, one that will bring you profits, one that you will be pleased to show your friends?

Some are at a loss to know which breed to select. Their views keep changing in regard to breeds; as a result of which folly we have to-day throughout the length and breadth of the country, a most heterogeneous mixture of types and breeds. This condition is so general, that it quickly attracted the attention of the Scottish farmers now visiting here.

Good dividend paying stock is not a matter of any single breed. More depends upon individuality. While a greater number of good individuals may be found belonging to some one breed, still there are good individuals in all breeds. We should seek to secure one of the breeding of our choice to head the herd which we already

have, rather than practise indiscriminate crossing.

At the fairs is an excellent time to negotiate the purchase of breeding stock. At the larger fairs, especially, the breeders flock almost without number. There interviews can be secured with men who have the stock for sale, interviews, which were they to be secured at the breeders' homes, would cost heavily, in loss of time and travelling expenses. While stock shown at the exhibitions may not be the most desirable to purchase, such often resulting in disappointment when in the hands of the novice, still most breeders have stock at home the stamp and quality of which can be estimated from that shown. If dealing with a reliable breeder, one is quite safe in buying the stock unseen, and is frequently better off in leaving the selection to the breeder's judgment.

Properly selected pure-bred sires, when used in grading up the common stock, soon return the purchase price. Realizing this, let not the penny held close prevent the eye seeing the dollars farther off. Money invested wisely in this way is much better than in gold or Cobalt stocks, and is much more certain of yielding dividends.

THIS SEASON'S LESSON

The dairy industry has suffered very much from the feed scarcity of last winter. The real effect of this is now beginning to show itself. Up to August 19th, there was a shortage in cheese receipts of over 170,000 boxes. This shortage can be traced directly to the poor condition in which many cows began the season, and the fewer cows being milked because of many dairymen sacrificing their cows last fall, when the feed scare was at its height. Figured out in dollars and cents, at present prices for cheese, this shortage means a loss to the dairymen of Canada of over \$1,700,000. The indications are that this shortage will be increased, rather than diminished, during the next few months, so that we may be safe in concluding that the loss to our dairymen on this year's operations, will be all of \$2,000,000, traceable to the feed scarcity and scare of last winter. With many farmers it was a scare more than anything else, and they stunted their cows unnecessarily.

But all that is past and gone. The effects are still with us, and from the experience gained, dairymen will learn some useful lessons. Two million dollars would buy a lot of feed for dairy cows, even if prices were high. A quarter of that amount would have gone a long way in buying feed last winter. In fact, had a couple of hundred thousand dollars been judiciously expended by our dairymen last winter, in buying feed for their cows, this shortage in output might have been avoided. Would it not have been a good investment? Expending \$200,000 and reaping upwards of \$2,000,000 looks like pretty good business. There is no other business in this country making such returns.

No animal on the farm will pay as well for good feeding, both winter

and summer as the dairy cow. Dairy men would have been money in pocket had they made some sacrifices last winter, and kept their cows up to their usual condition, and not allowed them to run down, through lack of sufficient feed. There was feed in the country. It was very high in price, no doubt. It would, however, have been a good investment for the farmer depending upon dairying for the bulk of his income.

It was expected that after the cows were a few weeks on the grass, they would recover from the effects of the feed scarcity. But they did not do so, and have not done so yet, as the continued falling off in output shows. Moreover, they are not likely to recover from its effects for some time yet. A year or two's good feeding may be necessary to restore many cows to their normal condition. Truly, the effects of poor feeding are very far-reaching, much more so than many realized last winter, when they placed their milk cows on short rations. The experience gained will be valuable if it leads to better feeding of dairy cows at all seasons of the year.

We cannot afford to cut down the rations of our cows, if we expect to stay in the business and make a profit out of it. The milk cow should be as well fed during the month or two she is not giving milk as during the milking period. If she is put on short rations during that time it will tell, not only in her offspring, but in the supply of milk she will give during succeeding months.

The lesson, therefore, of last winter's experience, and the results so far is that it does not pay to keep cows on starvation rations, even in a time of feed scarcity. We do not milk cows for the fun of the thing, though, from the returns some farmers receive, one would suppose that dairying was more of a pastime than anything else. But it is the money in the business that we are after, and there is big money in the business, too, if properly managed. It, however, takes money to make money. Like any other business, some expenditure is required to get a good return, and if we feed our cows well in season and out of season, we will make the most out of the business.

The conditions governing milk production, make this necessary. A good cow, well fed, is a splendid investment; a good cow, not well fed, is a poor one, and a poor cow, poorly fed, is a losing game from beginning to end. How foolish is it then for any of us to expect to make money out of dairying by poor cow feeding. It cannot be done. If proof were needed, this season's experience will supply it. There is not a dairyman, whose cows began the season in this condition but would have made money by investing in sufficient feed last winter to have kept them in good thrifty condition. With the rich pasture and high prices of this season, the cows would, in a very short while, have made good the extra cost for last winter's feeding, and have returned a good profit on the investment by this time.

Dairy Herds Competition

The directors of the Western Ontario Dairyman's Association, in a meeting held recently, decided to offer \$100 in prizes and two Byrie Bros. medals for the dairy herds competition this year. The matter will not be entirely settled until the meeting of the full board of directors to be held in Toronto the second week in September.

The prizes proposed are as follows: Cheese factory patrons: 1st prize, \$15 in cash and a silver Byrie Bros. medal; 2nd, \$15 in cash; 3rd, \$10 in cash; 4th, \$6 in cash; 5th, \$4 in cash. For creamery patrons, 1st, \$15 in cash and Byrie Bros. bronze medal; 2nd, \$10 in cash; 3rd, \$10 in cash; 4th, \$6 in cash; 5th, \$4 in cash.

The rules of the competition are not yet fully decided upon. The statements sent in by those entering the competition will be thoroughly investigated by a committee or by some member of the board before the prizes are awarded. The same individual cows started with in the competition must be the same cows at the finish. In other words, no substituting will be allowed. For cheese factory patrons, the prizes will be awarded for the patrons sending the greatest amount of milk per cow for a season of six months, not less than eight cows to compete. For the creamery patrons, the patron sending the greatest amount of butter fat per cow.—F. Hens, Chief Dairy Instructor.

Over 1,000 New Subscriptions

The best evidence of the growing popularity of The Canadian Dairyman and Farming World is afforded by the fact that during the last six months, over 1000 new subscriptions have been received at our office. These subscriptions have all been taken at our full subscription rates. One of our agents, who has been visiting the cheese factories in Northumberland, Victoria and Peterboro counties during the last two weeks, canvassing only among cheese and butter makers, has met with great success. He has sent us in a club of 36 subscribers, having secured a subscription from every cheese-maker called on, who was not already taking the paper. Many of these cheese-makers have consented to act as agents for us and will try to get those of their patrons who are not taking the paper, to subscribe. Some of these makers may devote the greater part of their spare time when their factories close, canvassing for The Canadian Dairyman and Farming World.

Another of our agents, who has been canvassing in Peterboro County, Ont. for some time past and has, therefore, had a splendid opportunity of judging

what the farmers think of our combined paper, reports that, in his opinion, The Canadian Dairyman and Farming World will secure over 2000 new subscribers in Peterboro County alone, in less than two years.

OUR READERS LIKE THE PAPER.

The following letters will give you an idea of the favor with which our paper is now being received:

"I have taken your paper for a number of years and would not be without it. Although I have quit farming, I could not think of dropping my subscription to The Canadian Dairyman and Farming World. I think I will try and get some of your valuable prizes, if you will send me an outfit."

—Mr. John R. Calder, Essex Co., Ont.
"I have been taking the Farming World since it was first published. I like the new combined paper very much. I am not on the farm now, but I feel that I cannot do without the paper."—Mr. I. Preston, Peterboro Co., Ont.

OUR PREMIUMS.

Why do you not try to win one of these premiums? It should not be hard to induce people to subscribe for a paper with a reputation of this kind. If your neighbor is undecided as to whether he will subscribe or not, point out these letters to him, also the many others which have already appeared in our paper. Draw his attention to the good points of the paper and give him a few sample copies to look over for himself. Then go back to see him again and ask for his subscription. "Keep on keeping on" is a splendid motto to follow when you are trying to get up a club of subscribers for a paper. Do not think of the work you have to do in order to win the prize, but think of the prize you are working for. Here is a letter which we have just received from one of our subscribers:—

"The fountain pen, which you sent me as a premium for one new subscription to the Canadian Dairyman and Farming World, was received this morning and I am well pleased with it."—Mr. B. G. Fraser, Argenteuil Co., Que.

We are to-day shipping a pair of pure-bred Buff Orpingtons to W. R. Beach of Missisquoi Co., Que. Mr. Beach won these fowl as a premium for four new, yearly subscriptions to The Canadian Dairyman and Farming World.

Look back over your copies of The Canadian Dairyman and Farming World and select the premium which you would like to try for. Then, drop us a post card asking for further particulars about the premium. We will gladly send them to you. Do it Today! Do It Now!!



Built Like a Watch and
Finished Like a Piano

The New Model De Laval Cream Separator

is a noiseless and attractive article of furniture in kitchen or dairy, but before all it is

a Daily Source of Profit
and Home Comfort.

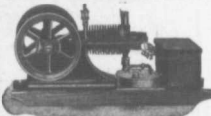
Every part of the machine is built with a view to convenience and durability, and it is so simple that only one tool—a screw driver—is required to set it or entirely remove the parts.

Write for new 1908 Catalog and name of nearest De Laval agent

THE DE LAVAL SEPARATOR CO.

MONTREAL WINNIPEG VANCOUVER

The Gilson Six Horse Power Air Cooled Engine



"GOES LIKE SIXTY"

The Latest and Greatest Success. No tank to fill and empty. No water to freeze. No burnt cylinders. No expense. No time lost. No labor wasted. Always ready winter and summer.

Latest Improved. Highest Grade. Biggest Value. Absolutely Guaranteed. All Sizes. All Styles. Ask for Catalogue.

GILSON MANUFACTURING COMPANY, LIMITED, 201 York Street GUELPH - CAN.

"Ideal" Gas Engines

ARE STRICTLY HIGH-GRADE.

THEY ARE MADE FROM 1½ TO 30 H.P., STATIONARY OR MOUNTED.

Brantford Windmills

ARE KNOWN FROM COAST TO COAST
AS THE STANDARD OF EXCELLENCE

WE ALSO MAKE

Grain Grinders, Pumps, Tanks, Water Boxes and Wood Saws

SEND FOR OUR NEW CATALOGUE, IF INTERESTED.

GOOLD, SHAPLEY & MUIR CO., Limited, BRANTFORD CANADA

POULTRY YARD

Poultry Houses and Fittings

J. R. Terry, Poultryman, O.A.C.

During the last three years, experiments have been conducted at the Poultry Department of the Ontario Agricultural College, to ascertain which kind of poultry house or shed is most suitable for the average Ontario farmer. Whilst a lot of valuable

information is of no use whatever. In a very short time it becomes clogged with dust and becoming practically air-tight, defeats the purpose for which it is intended, i.e., admitting fresh air at all times.

In a house 24 x 12 feet I would use two curtains six feet long, four feet wide, a wooden frame being used to hold the curtain taut, said frame being hung at top and swung inward. The rest of the south side should be of glass, three windows, one at each end and one between the curtains.

As to the cost of such a house, it is difficult to give a very close esti-

mate. I am well aware, that Leghorns are supposed to need much less room than heavier breeds, but if you want eggs (and who does not?), you must give a Leghorn room, especially when confined.

This fact was forcibly brought home to me last spring. Twenty-five brown Leghorns were kept through the winter in a pen, suitable for 15 birds of the heavier breeds. These birds were only laying a few eggs a day whilst so confined. Upon being placed in a pen three times larger, they immediately began to increase the egg-yield. In fact, they doubled it on the second day after removal.

For roosting accommodation, provide two roosts 2 x 4 inches on edge, and running along the north side a foot from the wall. Leave a foot space between each. Make them 18 feet long. Utilise the rest of the space for a coop for the broody hens. Have a droppings board, 3 feet wide, underneath the roosts. Beneath this again, place at least 10 nests. For watering purposes use a common 10 qt. pail. This, together with a fairly large box of coal ashes would complete the furnishings.

Judging Eggs and Poultry by Points

A new feature in the Utility Poultry Club Year Book is the publication for the first time of the following standard which has been decided on for use in the judging of eggs—

Freshness 40 points
Size 15 points
Texture of shell 15 points
Uniformity of size, color and shape 15 points
Cleanliness and gloss 15 points

Eggs to be passed over if (1) they rattle in shell; (2) are double yoked; (3) contents are tainted in any way; (4) are artificially colored or polished. In judging freshness the follow-

ing tests are suggested—Size of air space, density of albumen, firmness of chalazae, toughness of yolk, and by the freedom and completeness with which contents leave the shell when broken.

The standard settled by the club in regard to the judging of poultry and recommended with the object of having the work done according to some understood system, is as follows:—
Size and quality 35 points
Youth, quantity and quality of breast meat 30 points
Straightness of keel, fineness of bone, absence of offal and surplus fat 25 points
General marketable appearance, color of skin, etc. 30 points

Pointers

Every little detail tells in the result desired, and success in poultry raising depends almost entirely on attention to the smaller details.

The best breed is the one you have tested and tried as the one most adapted to your section and for your purposes. There is no best breed otherwise.

Never mind the new breeds, Take good care of what you have. It is better to improve the old than experiment with the new. There is good in all breeds, and it is up to you to get it out of them.

It is no easier to keep poultry than any other stock, as labor and proper management must be used to most success. Less capital may be required with poultry, but it must be judiciously expended, or a loss can result as easily as from any other source. Experience is of more value than capital in poultry raising.

FOR SALE—White Rock Chickens, also Rooster—Miss Hyfield, Brooklyn, Ont. 52

Experimental Poultry Houses at the O. A. College

These houses have been under test for three years. The cheap, cold air house, with a double pitch roof, has given the

information has been gained during this time, the period occupied by these experiments is not yet sufficiently long enough to enable one to draw absolutely conclusive data.

The houses built for these experiments consist of four built with equal floor space, 24 x 12 feet.

Two houses were built single with slant roof. The other two were constructed on the double pitch pattern. Each house is divided into two pens 12 x 12 feet and 20 hens and two males, of the general purpose breeds (Rocks, Reds, Wyandottes or Orpington) are kept in each. It is not necessary to divide the house, unless it is needed for separate breeds. A single pen, besides being capable of providing more space is also more cheaply constructed.

From the deductions drawn, if I were to build a house to accommodate 50 hens I should build the roof double pitch rather than single. The single roof has been found to be much warmer in summer, and the reverse in winter. I should make it 7 feet from floor to ceiling or straw loft. Place a door in the east end coming down to within one foot of the ground. This is important, for when so constructed less snow remains to be shoveled away in winter. The foot board could, however, be made movable so as to enable the attendant to bring in a wheelbarrow, etc., when needed for cleaning out.

Rather than use double doors as is generally advocated for cold houses, would always use muslin curtains, reaching from eave to within two feet of the floor, the rest would be boarded up. This helps to shelter the birds from draughts whilst the curtains are up in winter. The muslin used needs to be of the cheapest or thinnest kind, if one wishes to get the best results. A thick cotton cur-

tain is of no use whatever. In a very short time it becomes clogged with dust and becoming practically air-tight, defeats the purpose for which it is intended, i.e., admitting fresh air at all times.

I advise the building of a hen-house, one cannot get the maximum results from more than this number in one pen. It is presumed that said house is to be stocked with utility or general purpose breeds, as before enumerated. If it were intended for Leghorns, or birds of that class, the best results would be obtained in winter by putting in only



14 Reasons Why Home Builders Should Buy "Safe Lock" Shingles.

Absolutely fireproof and lightning-proof. Heavily galvanized so they will never rust.

Heat and cold have no effect on them.

Lock on all four sides, leaving no raw edges or nail holes exposed.

Made all in one piece—no parts to get out of repair.

Impossible for wind, snow or ice to get up under the shingles. The smooth surface prevents snow from piling on the roof. Dust can't adhere to them, thus assuring clean rain water.

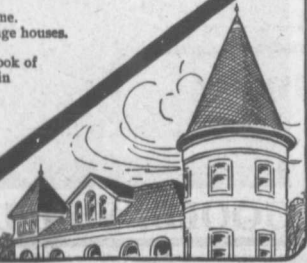
"SAFE LOCK" Galvanized Steel Shingles

Keep the house warmer in Winter and cooler in Summer.
Put on in less time than a wooden or slate roof.
Have stood the test of years and will last a lifetime.
Cost is little more than wooden shingles for average houses.
They cut down insurance premiums.
They are to be seen in all parts of Canada. Our Book of References will give you some names of users in your own district.

If you are going to build a new house or remodel an old one, settle the roofing question for good, by using our "Safe Lock" Shingles. Write us for our free Catalogue No. 20, which illustrates and describes our Matchless Art Metal Goods.

THE METAL SHINGLE & SIDING CO., LIMITED
PRESTON, ONT. and MONTREAL, QUE.

78



Don't Bite

"Cotton Discounts" and "Free Tuition" are familiar baits. They belong to the "nothing-for-nothing" class, and therefore are to be avoided. Only schools that cannot compete on their merits use them. Attend a strong, reliable school, such as

The British-American Business College

Yonge and McGill Sts., Toronto and you will have no regrets. Fall Term begins Sept. 1st. Write for Catalogue.

T. M. WATSON, Principle

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 future issues. Address your letters to the Creamery Department.

Making Exhibition Butter

Miss Laura Ross, Wellington, Ont., Ont.

Every fall I get letters from people asking me to give them suggestions regarding the making of exhibition butter. I thought the hints I give to the few might perhaps be appreciated by the many whose ambition leads them to try for the butter prizes, and perchance add to their fame as butter makers, also a few dollars to their spending money. It is a worthy ambition to help on the fairs in this way and if entered into with the right spirit leads to a wholesome rivalry which is good for a community.

With the greater refinement manifest in all phases of living has come a more fastidious taste in regard to butter. Of this nature one is in closer touch than the expert judges who "taint the fairs. They know what the best buyers in the market are demanding and make the awards to the packages coming nearest to the requirements.

Year by year the desire for a highly flavored butter has lessened and now that butter which is some highest, but a very mild cream flavor—one would almost say a lack of flavor were it not so pleasing and clean-tasting to the palate.

This flavor is brought about by having the cream with a low percentage of acid in it. In other words with a very mild sour taste. Apart from the acid in the cream, the flavor may be due to the kind of bacteria, some forms producing a more pronounced odor and flavor than others. If a butter-maker has doubts about the culture she is using, or the flavor brought about by the natural souring of the cream, it would be well to procure a culture from the O. A. C. or from a creamery where the butter is of No. 1 quality. Always give a new culture a trial test before using it for exhibition butter.

HOW TO PASTEURIZE

If there is the least suspicion of any objectionable flavor being in the cream due to feed, unclean milking, etc. it is wisdom to pasteurize the cream. The method has been often told but it may be best to repeat it. Heat the cream to 160 degrees by setting the can in a vessel of hot water and hold at that temperature for 30 minutes. A higher temperature is now recommended but is apt to give a cooked or boiled milk flavor to the butter, so for exhibition work I would be on the safe side and not go over the 160 degree. The cream should be stirred while heating and after standing the half hour should be quickly cooled to 60 degrees or lower. Such cream needs to have from 5 per cent to 10 per cent good culture added to it, and should be ready for churning the next day.

Hand in hand with the mild flavor

Black Watch

Chewing Tobacco
Rich and satisfying.
The big black plug.

2208

has come the desire for lighter colored butter. A clear straw color meets the taste of the fastidious. It is known butter to be scored severely when the cow alone had been responsible for the high color. However, with the care and attention given to evenness and clearness of brightness rather than the depth or shade of color that counts.

To obtain that firm, waxy texture so desirable I believe it necessary to hold the cream for some hours at a temperature some degrees below churning. Then just before putting the cream in the churn bring it to the required temperature, having it on the cool side rather than have the butter come too quickly and be soft.

There is no use to state temperatures for conditions have to be always considered. With good cream, and the churn not half full, I like the butter to come in from 20 to 30 minutes. I find from experience with cream that the temperature which will bring the butter in at that time is right.

Light salting is also another requirement of the high-class market. It is not desirable to hide the sweet, creamy flavor with salt, neither is it necessary to use excessive salt to keep the butter for it is supposed now to soon reach the consumer.

With small churnings, I prefer when making butter to weigh the butter and salting it at the rate of $\frac{1}{4}$ oz. a lb. This is for prints for the home market. If one is doing a larger quantity and give the butter a slight working. Allow it to stand two or three hours, but do not let it become hard. At the end of this time give it another working, using pressure only, as a sliding, rubbing motion produces a gray tinge. Only work sufficiently to expel excessive moisture and to insure an even distribution of the salt.

Use the best of parchment paper and have the package entirely free from holes and neatly wrapped. Avoid all fustiness.

See that the butter is thoroughly chilled before taking it to the fair, otherwise it is impossible for the judge to pull out with his trier a nice smooth plug of butter from the print. Many a good butter maker does not get the high score he should because his butter is not firm before coming to the fair.

It is always best to make the butter early the day before it is taken to the fair. I consider it gets a better texture and flavor by being at least a day old before being submitted to the trier of a judge.

Losses in Butter Making

More or less loss of the solid material ensues in handling milk for the making of butter. This is shown by the fact that the sum of the solid ingredients in the product (butter, skim and butter milk and slops) does not equal the amount in the whole milk used. This loss falls almost entirely on the fat. The casing and sugar, milk sugar and ash in the products check fairly well with those in the original milk, but the fat does not. This loss of fat is inversely proportional to the amount of milk used and to the care taken in its handling, decreasing relatively with increased volume of milk handled and with greater care. The loss is a purely mechanical one, due to the temperature of the milk when compared to skim-milk. If the cause were chemical or biological as great proportional destruction would ensue

with large as with small lots of milk. The mechanical losses in 22 days' survey of the separation of a small creamery approximated 0.9 per cent.

Pasteurizing Essential

Experienced dairymen who have looked into the dairy processes of Denmark state that they do not exceed, and in some instances are not as up-to-date as those followed in other dairy countries. Types of dairy utensils and machinery described by dairymen in Australia, the United States and Canada years ago as being out of date, are still in use by the Danes. And yet, they excel all other dairymen in the uniformity and good quality of their dairy products. This is especially true in butter-making. Danish butter in Great Britain is the standard by which all other butter is judged. The butter from other countries ranks second to Danish, rarely equal to or ahead of it.

What is the secret of the Dane's success? It is pasteurizing. Whatever defects there is in the system of making butter they cling tenaciously to pasteurizing. The Danes would no more think of making butter without pasteurizing the cream or milk than of growing grain on the sands of the sea. It is an essential part of their butter-making system. Every creamery defects this as a matter of practice. It. They look upon it as just as necessary in butter-making as ripening the cream. Pasteurizing more than any other thing is responsible for Denmark's high standing in the butter markets of the world.

Pasteurizing has been before the dairymen of this continent for many years. Every dairy authority recommends it and advocates its adoption. And yet how few creameries practice pasteurizing in the milk or cream in butter-making. In Canada we are constantly agitating for better care of the cream and milk, a very necessary thing in making fine butter. But we are not doing it. The practice that would help to overcome the effects of bad cream. We do not mean by this, that less attention be given to the care of the cream. Every patron should be urged at all times to give the best of care to the cream he supplies his creamery with. Cream, however, received from a number of different persons giving it the best of care cannot but vary greatly in quality. Pasteurizing will make it more uniform in quality of butter, and thus enable the butter-maker to make a more uniform quality of butter.

Better Cream Needed

Too much cannot be said on the question of separating and caring for cream at the cream gathering creameries. It is a string that cannot be played upon too often in the present condition of the butter business. Cleanliness is at the root of the matter. Keep the cows clean and in clean places. Let the milker be clean, his clothes as well as his hands. Clean the udder before beginning to milk, and milk with dry clean hands.

More patrons are weak in separator management and handling the cream than anything else. One of the creamery triers reported last year that he found separators sitting in every conceivable place from the kitchen to the hog pen. A clean separator is one of the most valuable adjuncts of the dairy. But it cannot keep bad flavors and dirt out of the milk or cream unless properly used. It should be thoroughly cleaned after every use and kept clean. It should be operated in a place where everything is clean and the atmosphere pure. When the milk is run through the separator it is at the temperature of the cream from the cow, or nearly so. In other words, it is just in a condition to absorb bad flavors. In the separating process the

SEND FOR CAT. No. 107 IT TELLS ALL

KING OF THEM ALL

DURABLE

ASK THE USERS

CREAM SEPARATOR

VERMONT FARM MACH. CO., BELLEVILLE, Vt.

Canadian shipments made from our warehouses at Montreal, Calgary and Winnipeg.

milk is exposed to the surrounding air. It passes through the separator in a fine stream, every particle coming in touch with the separator. If the latter is not clean and free from taint, the milk, or rather the cream, is sure to be affected.

There is too much thin, sour cream being supplied. This is due to improper separating. A richer cream should be secured. It will keep better; there will be a smaller amount to keep cool, less food for the driver, and less bulk for the butter maker to handle. The better quality of cream will insure better butter being made and a better financial return to the patrons.

Many creamery patrons lack proper cooling facilities. Some patrons seem to think that the buying of a cream separator will enable them to do without ice. But ice is just as necessary for cooling the cream as it was for cooling the milk to facilitate the raising of the cream before the separator was bought. Ice in plenty should be supplied for cooling the cream as soon as separated.

"I have visited all the creameries in Eastern Ontario twice this season and I have found that a majority of the butter makers are taking The Dairyman and Farming World. They take great interest in the paper." Jas. Stonehouse, Government Creamery Inspector for Eastern Ontario.

Windsor Dairy Salt

—the
Salts Buttermakers'—
thoroughly favoured—
ite,
No lumps
or grittiness.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD, CASH WITH ORDER

CREESE AND BUTTER FACTORY FOR SALE, cheap, and doing a good business in Woodstock, Ontario. Apply, J. H. Williams, Embro, Ont. E-30

OWNERS OF CREESE FACTORIES AND CREAMERIES desiring to make direct shipments to Great Britain, will have the opportunity of meeting a large British importer in July. Further particulars may be obtained by writing Box 7, Canadian Dairyman and Farming World. D. H.

WANTED—A YOUNG MAN to work in cheese factory; with some experience preferred. Must have a good business and be willing to work. Give references and state wages, with board included. Box 14, Canadian Dairyman and Farming World, Peterboro. E-32

Better the Butter

Give it that delicacy of flavor which adds to the original tastiness of the butter **without taking from it**, by using fine pure Salt

*Salt that dissolves at once
Salt that works in evenly, easily, quickly
Salt that does not cake or harden*

Windsor Salt

Every grain is a perfect crystal, with all its natural strength preserved.

And, because it is all salt and strong salt, **less gives a better flavor to more butter** than other brands. It is acknowledged to be the finest and purest.

Used for years by prize-winning butter makers at the leading agricultural fairs.

In spite of the fact that it goes farther and betters the butter, Windsor Salt costs no more than any other salt.

For the same reasons of strength, purity and fineness, Windsor is the best Table Salt.

AT DEALERS EVERYWHERE

CREAM SEPARATORS

We carry in stock a complete line of three of the best makes of Cream Separators: Canadian, American and German makes.

OUR NEW CURD AGITATOR

Is becoming more popular every day. A Complete Agitator will be sent for a free trial—pay for it if you keep it or return to us if unsatisfactory.

COMBINED PASTEURIZER, CHEESE AND BUTTER COLOR TUBS, BOXES, ETC.

WE MAKE A SPECIALTY OF
PARCHMENT PAPER

SEND FOR OUR CATALOGUES AND PRICES
WE SHIP ANYWHERE

The
St. Lawrence Dairy Supply Co.
21-23 St. Peter Street Montreal, P.Q.

It is desirable to mention the name of this publication when writing to advertisers.

The Story of What One Man did to Help His Section.

A story of how the farmers in "California," a small section in Leeds County, Ontario, were aided in making a success of their farms and led to take up dairy farming was told to a representative of The Canadian Dairyman and Farming World recently while he was driving in that county. As the story reflects considerable credit on Mr. J. R. Dargavel, of Elgin, the member for Leeds in the Ontario Legislature, and the possible successor of Honorable Nelson Monteith, as Minister of Agriculture for Ontario, it will bear repetition. "California" is a small section in Leeds county, that is hemmed in by a range of hills and by part of the Rideau Canal. The post office is Jones' Falls. It comprises a section of good farming land about four miles square on which there are now numerous well-kept and profitable dairy farms.

Thirty or forty years ago the farmers in the California section derived their main revenue from the sale of logs and tan bark. They were not very prosperous and found it difficult to earn a good living. About 20 years ago the supply of timber had become nearly exhausted and the residents of the section had no resources to fall back upon for their living.

For over 40 years Mr. Dargavel, who is the president of the Eastern Ontario Dairymen's Association, has kept a general store in the village of Elgin.

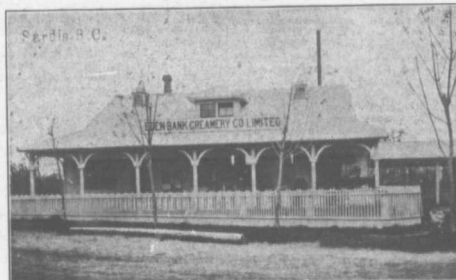
up they sold their cows in order that they might have a little ready money. When spring returned, they again were without cows and thus were unable to patronize the cheese factory. They hated to go back to Mr. Dargavel for further assistance. Again, however, he came to their rescue and furnished them with cows. Each year conditions improved somewhat but for four years some of these farmers sold their cows each fall and for four years in succession Mr. Dargavel helped those who could not get them themselves to get new ones.

During the past 14 years the section has outgrown all need for assistance. It is now a prosperous dairy centre. One of the largest and best farms it contains is the one of 275 acres owned and managed by Mr. Dargavel, that is illustrated in this issue. The old cheese factory that was first erected was later replaced by a better one and within the past two years the fine modern cheese factory shown in the illustration in this issue has been erected. It is owned by Mr. Dargavel and is the best cheese factory in Leeds County.

This is the story of one section and of the good work of one man. Is not that the type of man who should make a splendid Minister of Agriculture.

Dairy Notes

Of the 50 creameries in operation in Alberta, 49 are located north of Calgary, the 50th being located at Pincher Creek.



A Prosperous British Columbia Creamery

The patrons of this creamery last year realized an average price of 30 cents a lb. for butter-fat, after deducting all expenses. The make was 23,629 lbs. butter.

Understanding the position of the farmers of the "California" section, which is some seven or eight miles from where he lives, Mr. Dargavel had been wondering for some time what they were going to do when their supply of timber became exhausted. Finally, so it is related, he decided that their only salvation lay in their taking up dairy farming and he undertook to help them in their part. The support of the cheese-maker of the factory in the village of Elgin, in which Mr. Dargavel had an interest, was enlisted and he was encouraged to start a small factory in the "California" section. At first this cheese-maker ridiculed the thought of a factory ever being managed in that district owing to the fact that only two or three of the farmers had any cows. He told this to Mr. Dargavel but Mr. Dargavel replied that he would see that the farmers got cows. When the factory was started these settlers who wanted to go in for dairying were told by Mr. Dargavel that he would furnish them with cows. They, on their part, agreed to pay Mr. Dargavel for the cows out of the money that they received from the cheese factory.

The first factory was erected about 20 years ago and was a poor affair. The first year the support it received was none too encouraging. In the fall a number of the farmers were so hard

It is flavor that gives butter its appearance. This quality causes butter to sell higher than lard, tallow, or any of the other fats.

Milk has all the ingredients that go to make up good flavor, in butter. Where care and cleanliness are observed the flavor will be all right.

LOVELL & CHRISTMAS

WEST SMITHFIELD

—AND—

TOOLEY ST., LONDON,
LIVERPOOL and MAN-
CHESTER, ENGLAND

MONTREAL - CANADA

Our British facilities give us an unexcelled opportunity to pay

HIGHEST PRICES

—FOR—

BUTTER and CHEESE

Cheese Department

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

Suggestions for September Cheesemaking

G. G. Pabon, Chief Instructor and Sanitary Inspector for East Ontario

The quality of cheese desired by exporters for the month of September is in no way different from that of other months. They, however, look for cheese with better keeping qualities, as those made during the latter part of the season are usually held in storage to supply the trade of winter months and early part of next season, before freshly made cheese are fit for consumption.

A long keeping cheese should have the following characteristics. First, it should be clean and sound in flavor. Second, the body should be firm and the texture close and meaty. Third, The color should be bright and uniform. Fourth, finish should be neat and attractive.

PRECAUTIONS ESSENTIAL

Special attention should be given towards securing a clean milk supply and to the careful use of reliable commercial starters. It is upon these two points that cheese flavor largely depends and which are frequently neglected by makers, especially during the closing part of the season. To insure good body and texture it is essential that the curd be so firm in the whey that it is springy and elastic by the time sufficient acid has developed. This season during September we are likely to have no difficulty in securing such a quality if the following points are kept in mind: 1st. The supply of after-grass is very abundant and high in water content. 2nd. For the above reason curds will

require special attention to prevent the too rapid development of lactic acid in the early stages of manufacture.

SET THE MILK SWEET

To guard against this it is necessary to set the milk sweet, cut the curd evenly and fine, and stir out all free moisture at the time of removing the whey. Too much importance cannot be given to having the curd in proper condition at this stage, for if such is the case and the curd well matured before salting, there should be little danger of further trouble.

To obtain the best results in finish and closeness the cheese should be turned in the hoops every morning, and the pressing continued for two days.

The prevailing high prices being offered for factory cheese this year should be a stimulus to both patrons and factorymen to do everything possible to furnish the buyer and consumer with quality of such a standard that the demand would be increased or at least maintained.

Improves the Value of Whey

Editor, The Dairyman and Farming World.—Our patrons are of the opinion that pasteurizing the whey increases its feeding value to the extent of the cost alone. Besides the cans are much heavier and sweeter whey being returned in them at a temperature of 110 degrees free from grease, than with sour whey. It also has a desirable effect upon the flavor of the cheese.

Judging from my experience I am thoroughly convinced that where the whey is properly pasteurised, "bitter" flavor cannot exist.—R. A. Thompson, Cheese Maker, Elma Factory, Western Ontario.

Experiments at Rideau Factory

The nature of the experiments that are being conducted in Rideau cheese factory, Smith's Falls, by the Dairy Division of the Dominion Department of Agriculture, were explained to a representative of The Canadian Dairyman and Farming World, while in Ottawa recently by George H. Barr, who is conducting the experiments. Arrangements have been made with two farmers to send their milk to the factory by which the Government takes entire charge of the evening's milk from their farms. The morning's milk is sent to the factory by these patrons in the usual manner. The department is experimenting to find the results of cooling the milk in different ways, such as with an aerator, and cooled by the use of ice, and so forth. The milk thus cooled is manufactured in separate vats at the factory that have been placed in the factory in unclean and rusty cans, in order that the effect of such cans on the milk may be determined. The same tests are being repeated at regular periods in order that the tests may be made under different conditions of temperature as affected by the season. The cheese made from the milk is kept in an ordinary cool curing room for 15 days.

About a 45 lb. cheese is made each day. When the test started the milk of 37 cows was used, but, as the season advanced, there was a shrinkage in the supply of milk.

Speaking to the representative of The Dairyman and Farming World, Mr. Barr said: "We intended to make an 80 lb. cheese each day, and to use the milk sent by four or five patrons. We found, however, that it was impossible for us to watch carefully enough the milk sent to us by so many patrons. For instance we described to one patron just how we wanted him to cool his milk by means of ice. When, however, we came to make up his milk we found that the

cheese was gassy. This man stated that he had followed our instructions to the letter. I am convinced, however, that the can containing the ice was placed on the ground before it was sunk in the milk, and that in this way contamination got into the milk. We now take charge of the milk ourselves as soon as the milking is over."

Mr. Barr stated that during September the test may be made of the new casein test. One or two informal experiments on this test have been made. Mr. Barr states that the test is a nice one.

It is almost impossible to carry on a culture and keep it in the proper condition without an acidimeter. An acidimeter is of great assistance in cooking a curd.

It is estimated that there is about 25 per cent. of the patrons of cheese factories who need to be taught or forced to take care of their milk. The 75 per cent. have enough interest in the business to take care of the milk without much urging.

\$16,000

IN PREMIUMS

45 GOLD MEDALS

CENTRAL CANADA EXHIBITION

OTTAWA

SEPTEMBER 18th to 26th, 1908

Fair will be Bigger and Better than any previous year

Live Stock men will be allowed to take out their animals after 4 p.m. Friday 25th

Send for a Price List to
E. McMAHON, Secretary

COLD STORAGE AND A MARKET



Butter and Cheese Makers desirous of selling their products in Montreal will always find buyers at an excellent Cold Storage facilities at the

GOULD COLD STORAGE COMPANY'S STORES there. Leading Factory men throughout the Country have for years made use of these Stores as a market, obtaining the highest prices for their Goods with immediate payment. Write us and learn how this is done.

GOULD COLD STORAGE COMPANY.

Grey Nun and William treats

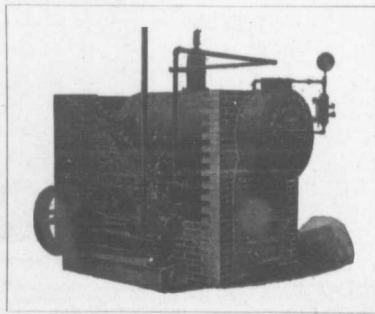
MONTREAL - QUE.

THE SUPERIORITY

—OF OUR—

Dairy Outfits

IS UNQUESTIONABLE



WRITE FOR CATALOGUE AND PRICES

WATEROUS ENGINE WORKS CO., Limited

BRANTFORD, CANADA

It is desirable to mention the name of this publication when writing to advertisers.

The Favorite

and the best value for the money of them all is

Tolton's No. 1 Double Root Cutter



POINTS OF MERIT:

1. To change from pulping to slicing is but the work of a moment.
2. There are two separate wheels, one for pulping and the other for slicing.
3. The united force of both wheels is always used in doing the work in either capacity.
4. The hopper is between the wheels, and does not choke.

The Only Double Root Cutter Manufactured

Fitted with Roller Bearings, Steel Shafting and all that is latest and best in principle material and construction.

Send for Descriptive Circular and Prices

Tolton Bros., Limited
QUELPH, ONTARIO



ENDEAVOR to be patient in bearing the defects and infirmities of others, of what sortsoever they be; for thou, thyself also, hast many failings which must be borne with by others.

Thomas a Kempis.

A Little Child Shall Lead Them

THE annual meeting of the big orthopedic hospital was in progress. Governors, trustees, women's committees, packed the small auditorium to the very doors. Upon the platform in front sat stiffly the entire medical staff, from the four famous-consulting surgeons down to the junior house surgeon. At a respectful distance from the latter was seated the supervising nurse, and at a still greater, and disrespectful distance, lounged defiantly John Schaeffer, inventor of braces for crippled children,—in the words of the enthusiastic house surgeon, "the original orthopedic man of New York, and the greatest crank in America."

Two hours had already elapsed, and a soft sign of content from the audience greeted the conclusion of another report. The surgeon-in-chief arose, glancing apprehensively the bulky manuscript held ostentatiously in John Schaeffer's hands. Nevertheless, he smiled deferentially. "And now we will listen to the report of—" he bowed courteously—"our brace maker, Mr. John—"

John Schaeffer's chair creaked suddenly and ominously, and seemed fairly to oust him to the centre of the platform. He waved his manuscript excitedly in the astonished surgeon's face.

"Brace-maker!" he snarled; "I am a brace-maker! Yah! Scissors, grinder, I suppose! Machinist! Common mechanic! Dot's what I am! You 'ink dot? Bah!" He snapped his fingers and wheeled upon the medical staff.

"Fools! Dondereads! You, mit your know-nothing heads and hands—who bungle all dot I do—who cannot do what I do, you 'ink I am a brace-maker? So! Den-I tell you not you are!" and John Schaeffer gave his opinion at length.

The audience, stupefied at first, showed sudden signs of disturbance. As Mrs. Henry Goldfogle, chairman of the Committee on Linen and House Purchases, caught the significance of certain German oaths, the benevolent lines of her face stiffened into those of severe disapproval, and with a heavy rustle of silks she arose and swept from the room.

Miss Sarah Sterling Watts, chairman of the Committee on Free Beds, beat also a swift and mincing retreat, her chin pointed high in the air. Others, not acquainted with the German tongue, but realizing intuitively that the meeting had suddenly become no place for ladies, developed expressions of mild purity and walked out with determined tread.

One of the famous surgeons held his hand discreetly over his mouth to

hide a smile; the young house surgeon looked white and scared.

They all listened with rapt attention till John Schaeffer finished. They saw him fling his manuscript to the floor and grind it under his heel; saw him kick his chair off the platform in token of his departure for evermore



"You Bring my Channy back?" he cried. "You Bring my Channy Back?"

from annual meetings, saw his huge, ungainly figure disappear violently through a side door.

The famous surgeon who smiled behind his hand, recovered carefully the crumpled manuscript. "This may prove valuable, gentlemen," said he; and so it did. After reading it a month later before the Academy of Medicine, he remarked emphatically: "This remarkable treatise stamps John Schaeffer for what he is, and should be known, a genius and skilled anatomist, a man without a degree and with little recognition, but one,

nevertheless, who has done more for orthopedic surgery than any man, living or dead."

After the incident of the annual meeting John Schaeffer was rarely seen in the hospital wards. When he did appear it was to correct and gloat over the mistake of a surgeon or nurse.

From morning until night he toiled away in his laboratory, a weird room in the hospital basement. Its walls were lined with plaster casts of distorted legs and arms, exhibiting apparently every species of human malformation. With its grizzled, snarl-inmate the room looked, for all the world, declared an imaginative assistant, like the "lair of a man-eating lion. Me boss," he averred, "has no heart whatever; as for his brain, if you open his skull, you'd find it already conforming to the shape of a brace."

Every evening after work, John Schaeffer went to a German restaurant and then directly upstairs to a hall bedroom. It contained a folding bed, a foot-lathe, and a large chest filled with tools and bits of brass, steel and leather. Here were his means of relaxation and his chosen environment. "Vot I know, I know," it was his custom to state. "Dere is not'ings else."

And then one day there flashed upon this dark, grim obstinate man a glaring ray of light. Entering his

regretted his indiscretion. The German turned upon him angrily.

"Vas you doing?—mending braces, or minding my business? Who do it!" he roared, with the ambiguous injunction he slammed the door and hailed an elevator. "Up, quick!" he ordered.

The nurse in Number Four, the bone-tuberculosis ward, smiled easily at the excited German.

"Vot back fits dis?" he demanded. "Vere iss he? Who made it? Now, I catch somebody, eh?"

"That's for Johnny Connors, right behind you. Don't you know our Sailor Johnny?"

John Schaeffer wheeled about and faced a little white bed, from the pillow of which a chubby baby face and two large brown eyes regarded him calmly. As the nurse swept down the covers she revealed a tiny form increased from chin to ankle in rigid casts and braces.

John Schaeffer saw only the braces. Casts he did not believe in. And a human body in his mind was simply something that went into a brace, and should fit it with mechanical precision.

Using only his big, gnarled thumb he turned the child roughly over on his face, and laid the pattern hastily along the spine. There was a cruel, sharp hump just under the shoulder-blades; and as nearly as one could judge, the pattern exactly fitted it.

"Dr. Frank—here he comes now—he put that brace on until a new one could be made," explained the nurse. "Oh, he did, eh? Vell, take it off!"

When the bare spine was revealed, he placed the pattern over it and squinted along the line of union. It fitted perfectly.

"Vell," said Schaeffer testily, "I have never yet seen such a back." He ran his thumb heavily down the crooked bone.

A muffled groan arose from the pillows. "Easy, mate," cautioned a faint voice.

"Who said dot?" said Schaeffer quickly, looking at the nurse and doctor. The nurse smiled and nodded at the pillow.

John Schaeffer turned over the tiny form and looked again into two brown eyes. The boy mouth, pressed hard by the stiff brace under the chin, moved crookedly in one corner, and the same calm voice said resentfully:

"That hurt."

"So?" queried Schaeffer absently. He still peered intently into the brown eyes, as one making a remarkable discovery. They had long, dark lashes, he noted, which curled up to the eyebrows. The forehead was low and white, and swept with golden hair, long and silky. All these things John Schaeffer noted. Surely there was a living form in this brace, a little child with a winsome, patient, manly face and wonderful big brown eyes.

"What you look so at me for?" he demanded weakly. "Cause you look so funny—and made," came the quick response. The doctor chuckled.

John Schaeffer pulled himself together sharply. He was being ridiculed in the enemy's camp. "He had come to correct and found himself in error. That was humiliating; now he was laughed at.

He started to go and then turned back. He dragged a chair to the bedside with exaggerated energy.

"I will attend to his—brace; you leaf me alone," he added warningly, turning to the bed.

"So your name is Channy Connors? Vell, Channy, here you go again." This time he felt over the brace with a gentleness new to his hands. A rearrangement of the straps here and there, a skilful twist of the main ball-bearing joint, and the child shifted itself easily. A pathetic sigh of relief rewarded him and he turned the little patient back again. Johnny snuggled down happily in the pillow,

laboratory late one morning he seized a brown paper pattern from his desk, and eyed it fiercely.

"Ha!" he exclaimed, "some fool at work again, eh?" He turned to his assistant.

"Efer see a crooked back like dot? Do you 'tink dere iss such a crooked back? Bah! Vere from did dis come?"

"Ward Four," the assistant replied laconically.

"So? Den I go and see. Maybe I catch some fool, eh?" The assistant grinned broadly and then promptly

and smiled gratefully at him. "Shall I sing you a song?"

"A song," gasped Schaeffer. He looked about him uneasily, but none of the nurses were paying any attention to him. "Sure, go ahead," he said. "Vat you got?"

The mouth struggled bravely with the awkward chin-brace. "Vat," commanded the listener, and reached along the straps behind the head. "Now, so," he commanded; "how's dot?"

A gay little treble began promptly: "Take me back to New York town, New York town, New York town—"

John Schaeffer, his hands on his knees, listened hungrily until the last piping note was sung. Then he gave a vast sigh. "Vell, py golly," he ejaculated.

After a minute's silence he asked: "Chonny, haf you got a mudder?"

The boy shook his head. "Nefer had one, I suppose," John Schaeffer tried to smile, but the effort cost him a severe facial spasm.

The boy shook his head again. "My father has a wife—"

"Vat!" said Schaeffer. "A new wife," he continued calmly. "I don't like her. She's mean."

"How old are you?" asked Schaeffer suddenly.

"Seven years," murmured Schaeffer looking at the tiny, shriveled body. "You got a fadder? Don't you like him?"

"Yes," said the boy indifferently; then his eye brightened. "I got an Uncle Mart. He brought me here. He's a great man. He's a sailor. I'm growing to be a sailor."

The eyes grew very solemn. "Easy mate! Let her go. Brace the haliards! All hands on deck!" He looked earnestly to Schaeffer for admiration. "I can sing a sailor song."

Schaeffer was regarding him oddly. "And you going to be a sailor, eh! You going to be a sailor—and climb up masts and furl sail!"

He looked again at the crippled, wasted body, and apostrophized the wall. "Ain't it hard! Ain't it hard!"

His voice rose angrily. "Vat right have people to haf kids—and spoil dem? Ain't it a shame? Ain't it fierce? Ain't it —"

(To be continued)

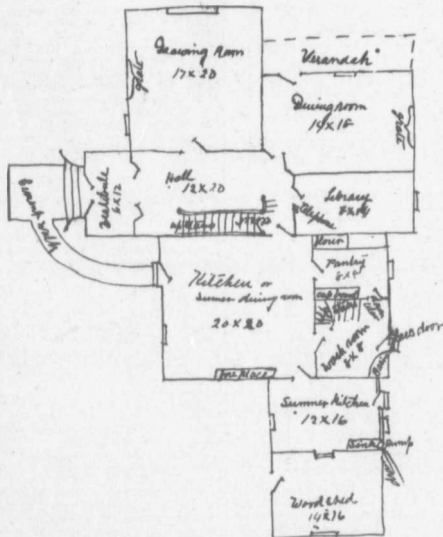
Another Interesting Home

ALTHOUGH not a prize winner in our Good Farms Competition held last year, Mrs. A. F. Jackson, of Downsview, whose farm house scored the most of any in the

of the first and second floors, which are shown herewith. Her letter to us was written early in the spring, and has been crowded out of our columns for lack of space until now.

At the time Mrs. Jackson wrote us house cleaning, the annual bug-bear

Lawn



First Floor Plan of the Home of A. F. Jackson, York Co., Ont. Mr. Jackson's Farm won Sixth Place in our "Dairy Farms" Competition last year.

competitor, writes us an interesting letter regarding her home, and sends us the plans of her house

of the house-work, was just in order. As this occurrence takes place in the spring and fall in nearly every home, a word or two from Mrs. Jackson's letter regarding it may not be out of place. She says: "Housecleaning can be made easy by getting ready before hand. Bed-preads, pillow shams, curtains and all covers of dressing cases can be washed and done up and laid away until the cleaning is over."

In speaking about her home, which won the first place in the Good Farms Competition, as regards the score of points awarded to the houses, Mrs. Jackson writes: "Our kitchen, pantry, wash room and summer kitchen, have hardwood floors, which are easily kept clean and by oiling them every three months, they are always kept in good order. I would not like to be without hardwood floors in these rooms. I use the home-made hooked rugs, which are easily made and can be made very attractive and bright. We have been staining our floors and using rugs on some of the rooms. Imitation of hardwood is very nice with good rugs, and is certainly a labor-saver when it comes to keeping the floors clean."

"Referring to the plan of the first floor of my house, you will notice that the pantry off the kitchen is exceedingly handy. It is very complete with cupboard, shelves and flour box. We go into the cellar from this pantry as will be seen by the illustration.

UPSTAIRS CONVENIENCES

"The bath room upstairs, although in a remote corner, is fairly convenient to all the bed rooms. Our sitting room upstairs is a room much enjoy-

A quick shot



A man who prepares to go hunting expects to find the game wide awake and alert. He cannot afford to be asleep himself when selecting cartridges.

He can inform himself at the store and know how superior Dominion ammunition is. A trial will prove, too, that our cartridges are never asleep when he pulls the trigger.

For all makes of arms. Costs one-third to one-fifth less than dry-panning ammunition. Our guarantee puts all risk on the Dominion Cartridge Co., Ltd., Montreal.



DOMINION AMMUNITION

ed by us all, as are the numerous closets in the various sleeping rooms. The wash room down stairs is also exceedingly convenient. We hang in this wash room, the clothes that we use every day. Our house is heated with a hot air furnace, and we can keep it very comfortable in the coldest weather with about only six tons of coal. In the attic we have a store room and a soft water tank which we get our supply of water for the bath, also the wash room.

OTHER COMFORTS IN THE HOUSE

"We have an open fire place in several of the rooms, and a telephone is conveniently located in our library. It will be noted by the plans that we have a summer kitchen in which we have a sink and a pump. We eat in our winter kitchen, or summer dining room, and the men come in from outside to the sink in the summer kitchen, wash there, and pass on into the summer dining room to eat, without going through the rest of the house, which is a great convenience to me.

INEXPENSIVE DECORATIONS

"I believe in using nice light colors, but not expensive wall paper, and changing it often. The effect of new paper once every year or two is marvelous, and well repays the extra

HOW TO GET THIS PREMIUM FREE

Send us the names of three NEW subscribers together with \$3.00 and we will send you free this excellent FOOD CUTTER COMPLETE. See description below.

It is an easy and simple matter to secure three new yearly subscribers for The Canadian Dairyman and Farming World—Secure three and we will send you this premium FREE.

DESCRIPTION OF THE FOOD CUTTER

It has only two parts, the case and the roll and is taken apart for cleaning.

Four knives are supplied with each machine to cut coarse, to cut fine, to pulverize, and to make nut butter. Substitution of one for another can be made without taking the cutter apart. Any particle of food which can be cut with a chopping knife can be minced with this machine more quickly, quietly and thoroughly.

Working against the steel disk the knives sharpen themselves. The cutters are nickel plated; all other parts of the machine heavily tinned. Constant use keeps the cutters sharp.

The premium is NOT BE SOLD separately. You can secure it only on the conditions outlined above.



OUR FOOD CUTTER

Address: USE THIS BLANK IN REMITTING Household Editor, "The Canadian Dairyman and Farming World," Peterboro, Ont. Enclosed please find \$3.00 to pay for Three Subscriptions to The Canadian Dairyman and Farming World for one year, to include a Food Cutter complete.

Date: _____

Name: _____

WRITE CHRISTIAN NAME IN FULL

Address: _____

(Watch for Next Week's Premiums.)

PIMPLES BLOTCHES ECZEMA



and all skin affections, eczema, scabies, etc., are speedily cured when our reliable remedies are used. It will be unnecessary for you to consult a doctor unless you desire to.

Our Home Treatment

will prove to all sufferers that it is superior to any other made. We know it is; results have proved it to be. If you have tried many cures without results, so have thousands of others that our treatment cured. Consultation free at office or by mail.

SUPERFLUOUS HAIR

Moles, Warts, etc., succumb to treatment and permanently removed without a scar by our reliable method of Electrolysis which is scientific and practical. Satisfaction guaranteed. Send stamp for booklet "K."

HISCOCK DERMATOLOGICAL INSTITUTE 63 COLLEGE STREET, TORONTO, ONT. ESTABLISHED 1899

work. Alabastine, which is so widely advertised at present, makes a nice coating for ceilings, and is also, I find, a good germ destroyer. I like it better than paper for ceilings, as the paper is so much trouble to scrape off when new paper is desired.

"It would be better if more of our farmers would install telephones. We

afford without being extravagant. Have good, harmless games both for winter and summer, such as tennis, baseball, croquet, skating and sleigh-riding, and do not restrict indulgence in these pastimes.

"I believe greatly in letting all the fresh air and sunshine into the house that you can, and also in the old

sides it mars the comfort of the other members of the household.

OUR READING MATTER

"We are constant readers in our home of the following papers: The Christian Guardian, The Toronto World, The Farmers' Advocate, Jersey Bulletin, The Horse Review, The Sportsman, and last, but not least, The Canadian Dairyman and Farming World. I dare not write you any more, as I have already taken up too much space in your valuable paper which, we think is improving all the time."

Surely the inmates of Mrs. Jackson's home must be happy, when they evidently have such a good ruler over them. Mrs. Jackson's family consists of five children besides extra help on the farm. That she is busy and still has time to improve her home, her children, and herself, is a creditable showing for a good Canadian mother.

—Editor.

What Would an Inspector Find at Your Farm?

On most dairy farms, where cream is produced, the men are expected to turn the separator, but the women have to wash it afterwards, and to care for the dairy utensils. Sometimes, in the rush of farm work during the summer months, there is a temptation not to pay as close attention to this work as we should. The careful washing of the separator each time it is used is just as necessary as is the washing of the dinner or supper dishes.

Strange, as it may seem to some, so far have things advanced that in Ontario, and in many other sections, those people who neglect to wash their dairy utensils thoroughly and promptly after use, break the law. As will be described in a future issue, the Ontario Government has appointed an official to visit the homes of patrons of creameries to see how they care for their separators and dairy utensils.

A SURPRISE VISIT

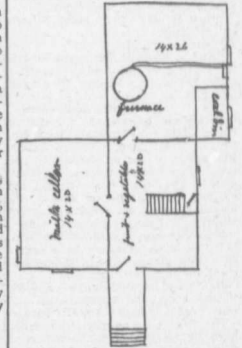
The Government inspector, Mr. Jas. Stonehouse, of Port Perry, accompanied by an editorial representative of The Dairyman and Farming World, recently called, without warning, at the homes of a number of farmers in the Peterboro section. In most cases it fell to the lot of the women to show

Mr. Stonehouse what he wished to see, and to answer his questions. To their credit, it may be said, that in the majority of cases, everything was found to be in excellent condition. Taken unawares, as they were, it was seen that they are good housewives. Where things were not all that they should be, there was nearly always some excuse for the lack of proper care that was found.

CONDITIONS ON THE FARMS

The following is a description of the main points noticed at the different farm homes visited:

Patron No. 1.—The conditions for caring for the cream were all that could be desired. The separator was a new one and was spotlessly clean. The cream scarcely tested 20 per cent. Mr. Stonehouse explained the loss that was being entailed by skimming a thin cream, and adjusted the separator to skim a thicker cream. When asked how the cream was kept, the housewife replied: "I cool it off first thing, and we seldom have it sour. There is nothing like caring for it oneself, and it never does to trust the



Second Floor Plan of the Farm Home of A. F. Jackson, York Co., Ont.

Plan of Cellar Home of A. F. Jackson, York Co., Ont.

boys to look after it. By changing the water in which it is cooled a couple of times, the cream is cooled very rapidly, after which we keep it in the cellar till the cream hauler calls."

Patron No. 2.—Everything was not in apple pie order here, as owing to an accident during the forenoon, everything had not been put "ship-shape." The separator, though, was above reproach. The storage can had not been washed. This patron was taking a very rich cream, which was generally cooled as soon as separated and stored in crocks in the cellar. The mistress did not like it any too well to be caught with the can not washed. Her remarks, as we drove away, were rather humorous. As she washed the can, she said: "You should come around in the winter and inspect the bars, and not at this time of the year, when there is nothing much wrong with them." She wanted to have the men caught.

IMPROVEMENT NEEDED

Patron No. 3.—The visitors were well received but things could not have been in a worse condition. There was some excuse as there was a newborn infant, and much of the work had been left to the men. The place was besieged with flies. Chickens partook of the hospitality of the living room. When the wood shed was visited, before the separator might be seen, the odor proclaimed that the separator had not been washed that day. The separator bowl was found to be full of

are expecting an electric line through here soon, and then we hope to have our house and barns lighted with electricity, thus doing away with the cleaning of lamps and lanterns.

There are so many improvements that we intend to make that I dare not mention them.

ATTRACTIVE HOMES

"We as parents should do all we can to make the home life so attractive that the boys and girls will not care to leave the farm. Furnish the house as nicely as you can possibly

adafe, "Early to bed and early to rise etc." Health comes first, and happiness should follow. Surely there are many stores of happiness in this beautiful world. Out on the farm during the summer season we can revel amid the enchanting beauties which are so lavishly spread out all around us for our pleasure and gratification. Parents who have their boys and girls all at home should indeed consider themselves fortunate. I would like to say one word to the boys before leaving this subject of health. Avoid the use of tobacco, as it ruins the health, be-

"New Century" Washing Machine
Washes a Tubful of Clothes in Five Minutes

There's practically no work for you—just to move the handle back and forth. Ball bearings and perfect balance do the rest.

You simply fill the tub two thirds full of hot, soapy water—put in the clothes—and set the machine in motion. The suds are sent whirling back and forth through the fibre of every garment, and wash everything sweet and clean.

There's no rubbing—no torn garments—and light and heavy, thick and thin, things are washed equally well. Think how easy this makes washing at home—(no worn out irritable women)—no red, chapped hands—no smell—no mess—and the week's washing done in an hour.

"New Century" Washing Machine costs only \$2.50, complete with new Wringer Attachment. (Wringer not included) delivered at any railroad station in Ontario or Quebec. Write for full information.

The Duvessell Manufacturing Co., Limited, Hamilton, Ont.

It is desirable to mention the name of this publication when writing to advertisers.

milk and water, just as it had been left from the morning's operations. As the heat of the sun had been beating on the wood shed throughout the day, the condition of the separator can be better imagined than described. It would be impossible to get that separator in a sweet condition to receive the evening's milking. Mr. Stonehouse pointed out to the woman of the house how the cream and the separator should be cleaned, and suggested means of improvement. The cream was kept in the cellar but seldom cooled.

WASTED CREAM

Patron No. 4.—When it was learned who the visitors were and what they were after, Mrs. _____ began to color. She stated that she had neglected to scrub the milkstand that morning—the first time this season. I told Mary this morning," she said, "that some one would catch her with the stand unscrubbed." The separator, which was kept in a first class covered milk stand, had been noticed as the party drove in. It was in first-class order. On the way out it was laughable to notice that in the meantime a clean cloth had been thrown over the separator. Everything in connection with the handling of the cream was above reproach. It was thoroughly cooled with water as soon as separated and stored in the cellar.

Patron No. 5.—This patron was visited shortly after the milking had been completed. The separator was kept in a cellar kitchen, an ideal location. It was an old machine and sadly out of repair. It was evident that much cream was going to waste in the skim milk. This was pointed out to this patron and he was advised to have a test made of the skim milk. The cream was cooled as soon as separated and stored in cellar. This patron kept the cream from Friday night and Saturday morning for making butter for household use. This was a first-class idea, especially where the hauler called but three times a week. There was no difficulty in keeping the cream sweet over a three days' period. This patron was thoroughly convinced of the great need of scrupulous cleanliness in handling dairy products, utensils and separators, and apparently lived up to all he believed.

A WELL-KEPT PLACE

Patron No. 6.—Everything was in tip-top shape. The separator was housed in a woodshed, the floor of which fairly shone it was so clean. The cream was cooled in water after which it was stored in a creamery can inside the cellar. Mr. Stonehouse remarked that it was a pity there were not more places like this one.

Patron No. 7.—The separator was kept upstairs in the barn. Owing to short help in the house it was washed but once a day, which was quite evident on but casual observation. The cream, however, was well looked after, being taken care of in the prescribed way. The woman of the house was not too enthusiastic about dairying. She said: "I can make more out of my hens. It would pay better to keep the cream at home and sell the butter on the market." She was the only one that voiced that sentiment, the others being fully convinced of the great benefit of the creamery, most of them thinking that they got just as large returns while they were minus the hard work of making butter. This patron was well aware and frankly admitted that she should wash her separator twice a day, but as she was all alone with her work she claimed that it was impossible to do so. She admitted that the cream had frequently soured, and when Mr. Stonehouse suggested that this was due to the infrequent washing of the separ-

ator, she agreed that such was probably the case.

A SEPARATOR INSPECTOR WANTED

Patron No. 8.—The separator in use was one that has only recently been placed on the market. The skimming device was very hard to clean, the discs being fastened together so closely a brush could not be inserted between them to clean them. The mistress of the house cleaned them by inserting the blade of a knife between each, and as there were 176 compartments the work she had every time she cleaned the separator, can be imagined. "I wash it in warm water," she said, "but do not use scalding water, because the separator agent told me not to. He claimed that scalding water would burst the discs, and that its use was not necessary." "That man," replied Mr. Stonehouse, "was decidedly wrong. A man should not sell a machine when to do so he has to go around the country preaching such a doctrine." "Now that the government has gone so far as to appoint me to visit our separators," said the man of the house, "it ought to go a step further and inspect the ma-

chines sold by the separator agents, and not let them sell such separators as this." On this farm the cream tested 50 per cent. Every effort seemed to be made to keep the separator and the dairy utensils in good condition."

A FILTHY HABIT

Patron No. 9.—"I wash and scald the separator every time it is used," said the woman of the house, "although some of my neighbors told me that I was foolish to do so, as once a day was all that was necessary." The separator was at the barn but its parts had been well washed, and were hanging in the sun at the house. The dairy utensils also had been well washed and were out in the sun. Mr. Stonehouse stated emphatically that the separator should be thoroughly washed every time it was used, and said that it was a great mistake to wash it only once a day. "I agree with you," said the woman, "that it is filthy to leave the separator unwashed after use. At this place the cream was not being properly cooled. When separated it was not set in cold water to cool, but merely set on the cellar floor. The woman

admitted that she had been having trouble with her cream souring, and was advised to cool it quickly by setting it in cold water.

(To be continued next week)

150 SONGS with Music, 15c

150 Humorous Recitations, 15c; 1-30 Humorous Distichs, 15c; Family Cook Book—100 recipes, 15c; Two books for 25c; Four for 40c.

USEFUL NOVELTY CO.

Dept. F, TORONTO, CANADA

FOR INFORMATION of the best in BUSINESS and SHORTHAND TRAINING. Fill in and return this Coupon

Business Systems School

22 Spadina Ave., Toronto, Ont.

7, E. Wright, Montreal.

NAME _____

ADDRESS _____

"PURITAN"

RE-ACTING WASHING MACHINE

The Easy Kind

You'll take to a "Puritan" Washing Machine the first time you see it. It has a good substantial look about it that shows it is made right. The improved Roller Gear extra heavy Balance Wheel and Roller Bearings enable your little girl or yourself to do the family washing as well as the strongest man.

The gear is enclosed in a metal cap, making it impossible to get the fingers caught.

If you are rubbing away in the old fashioned way, just try a "PURITAN" and see for yourself what a help it will be.



The "FAVORITE" Churn

Makes Churning Easy

You can churn with your hand, with your foot, or with both, with the "FAVORITE." It is the easiest running churn you ever used. Roller bearings make it so.

The frame is very light, yet very strong and rigid, and is so skillfully braced that it will not "wobble" with the biggest churning.

The locking device which holds the cover on is easily regulated and worked, and makes the cover perfectly tight.

Made in 8 sizes, to churn from 1/2 to 30 gallons of cream.

Ask your dealer to show you the "FAVORITE." If he does not handle the "FAVORITE" and the "PURITAN" Washing Machine, write us direct.



David Maxwell & Sons
ST. MARY'S, ONTARIO

Storing Green Tomatoes

Just as soon as the average date of the first killing frost approaches in the latitude in which you live, gather all the green tomatoes, big and little, and sort them over, putting the fairest and largest in one lot, and the smaller and inferior ones in another. Put a large crumpled newspaper in the bottom of a clean wooden box (a cracker box is best, because it has no resinous odors, such as a pine box gives out, that may be imparted to the fruit.) place a layer of the large tomatoes upon the paper, leaving space of say an inch between; then put on another layer crumpled newspaper, pressing it down carefully into

the interstices and around the edges, so the tomatoes may be kept from contact and from the air, and so on, layer upon layer, with crumpled newspapers between, until the box is full; tuck a cover on, so that neither mice nor chickens may attack them, and set the boxes in your barn or some dry, cool place, such as a fruit or root cellar. If placed in a barn they should be shielded from severe cold with hay or straw, until the weather gets too cold for their safety, then they must be stored in a frost-proof but not too warm place, as heat, of course, will ripen them too rapidly.

If they are kept thus, at a cool and even temperature, somewhat above freezing, the time of their ripening

may be delayed until or beyond New Year's. This may be done by putting them in "cool" storage; but if put into cold storage, with ice, and an exact, even, cool temperature maintained, their time of ripening can be lengthened out almost until spring.

It will, of course, be found necessary to examine them from time to time, to remove ripe or decaying fruit. I have put them up some years, wrapped each one separately in pieces of paper, but this makes the examination more difficult, as each tomato has to be unwrapped to ascertain its condition.

THE SMALLER ONES

The balance of the crop of green fruit, the smaller and rougher specimens, make excellent mince-meat for pies, as treated as follows: Remove stems and leaves, and wash the fruit in cold water, chop them in a wooden chopping bowl, as fine as ordinary mince-meat, pouring off all the green juice. They should then be cooked slowly until tender, in a porcelain-lined kettle or earthen jar or crock, and to a peck of the green tomatoes should be added a teacup each of English currants and stoned raisins, and of sugar or molasses, spices, a little salt and grated lemon or orange peel to suit the taste. Bottle the product hot in self-sealing jars, just as other fruits are preserved. This will be found to make excellent pies no other ingredients, such as apples or meat, being required or desirable. We think no one not let into the secret would ever guess them to be made almost entirely of green tomatoes.

SELLING THE RIPE ONES

The larger ripened fruit should bring a good price in market in midwinter. They should be wrapped separately, or two together, not touching each other, neatly, in square pieces of clean unprinted newspaper (not packed) in one-third bushel crates, or, better still, in four-pound straight-sided splint baskets without handles. If baskets are used, put the fruit in on edge. The contrast in color of the brilliant red of the fruit with the white paper, when this is partially removed, will be found very pleasing and attractive.

THE COOK'S CORNER

Send in your favorite recipes for publication in this column. Inquiries pertaining to cooking are solicited, and will be replied to, as soon as possible after receipt of same. Our Cook Book sent free for two new yearly subscriptions at \$1.00 each. Address, Household Editor, this paper.

TOMATO SOUP

One qt tomatoes, qt water, 1 qt milk, Butter, salt and pepper to taste. Cook the tomatoes thoroughly in the water. When they are done add a large teaspoon of soda; thicken with a tablespoon of cornstarch; add the hot milk and seasoning.

CREAM COOKIES

One cup sugar, 1 cup sour cream, 1 egg, 1 teaspoon soda, nutmeg, flour to roll.

SOFT SUGAR COOKIES

One and a half cups sugar, 1 cup butter, 3 eggs, 1/2 cup sour cream, 1 teaspoon soda; mix so that you can roll out; bake quick.

HERMITS

One cup molasses, 1 cup sugar, 1 cup shortening, 1 cup sour milk, 1 cup chopped fruit, 1 egg, spice to taste, 2 teaspoons of soda. Flour to roll.

GREEN CORN SUP

Six ears green corn, 1 pt milk, 1 tablespoon butter, 1 tablespoon flour, 1 teaspoon sugar; pepper and salt to

taste. With a sharp knife scrape the thinnest possible shaving from each row of kernels, then with back of the knife scrape out the pulp. The hulls by this method will remain on the cob, break the cobs and put them on to boil in enough cold water to cover them. Boil 30 minutes and strain. After straining put the corn water on to boil again, and add the corn pulp; cook 15 minutes; add the salt, sugar, pepper and boiling milk. Cook together the flour and butter, stir into the soup; boil 5 minutes, and serve.—Mary A. Mills, Que.



Let us write You a Personal Letter

Are you roofing any buildings this Fall?

If you are, write to us about it. We are building experts. We know more, perhaps, about houses and farm buildings than any other firm in America. We know a great many things that you should know, if you're building anything—building pointers of great value—things it will pay you to know.

Let us write you a personal letter about any building problems you may have. We will give you, absolutely free, the full benefit of our years' of farm-building experience. If you're bothered with leaky roofs—write to us. If you're troubled with drafty buildings, write to us. We're makers of

PAROID Ready Roofing

The Roofing That Keeps Your Buildings Dry.

We're specialists on these things. We will tell you how you can remedy and avoid them.

Write us yourself. Don't put it off. Do it now. We'll give you the best advice on any building subject that is puzzling you.

Our Free Book

"PRACTICAL FARM BUILDINGS" is a book you should always have on hand.

You'll find it an invaluable building reference book. Every practical farmer should have this practical farmer's book. Send for it. It's yours for 2c, to pay the postage.

Write to us—and let us write to you.

Address Dept

F.W. BIRD & SON, East Walpole, Mass.

BABY'S OWN SOAP

The Pleasures of the Tub

—are intensified by the use of Baby's Own Soap. It cleanses, cools, refreshes and leaves the skin soft and fragrant.

The reason is to be found in the absolute purity of the vegetable oils and the natural flower perfumes, and the great care in the making.

Do not accept substitutes. Ask your dealer for Baby's Own Soap—best for Baby—best for you.

Albert Soaps Ltd.

MANUFACTURERS
Montreal, - - Canada



GRAND TRUNK RAILWAY SYSTEM

\$10 FARM LABORERS' EXCURSIONS \$10
GOING. Additional Returning.

TO
Manitoba, Saskatchewan and Alberta

CHICAGO AND ST. PAUL, MINNEAPOLIS OR DULUTH

Aug. 18 and Sept. 1 from Toronto, North Bay and Intermediate stations, and all stations west thereof in Ontario.

Aug. 20-27—Sept. 2-14 from Toronto and East, and East of Orillia in Ontario.

THE ONLY DOUBLE TRACK ROUTE TO THE WEST.
THROUGH ST. CLAIR TUNNEL BY ELECTRICITY.
NO SMOKE OR DIRT.

Tickets will also be issued via Toronto and C. P. R. on following dates under certain conditions:

AUGUST 14, 18, 20, 22, 27. SEPT. 1, 2, 8, 9, 11, 14.

For information as to territories, conditions, etc., apply to any Grand Trunk Ticket Agent.

The Sewing Room

Patterns 10 cents 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 Pattern Department.

BLOUSE OR SHIRT WAIST, 3728



Simple blouses are among the most fashionable just now, there being a very great tendency towards restriction in the use of trimming. This one is made in a distinctly novel fashion, and is eminently attractive.

Material required for medium size is 3½ yds 21, 3½ yds 27, or 3 yds 21, 3½ inches wide with 2½ yds of ruffling.

The pattern is cut in sizes for a 32, 34, 36, 38, and 40 inch bust, and will be mailed on receipt of 10 cents.

OVER BLOUSE OR JUMPER 5649



Seldom has any fashion taken so firm a hold upon feminine fancy as the one of the over-waist. Both the fronts and the backs are tucked at the shoulders and the closing is made invisible at the back. The fronts are held together by straps on which the little bows are arranged and the sleeves are in bell, or kimono shape.

Material required for the medium size is 2½ yds 21, 1½ yds 32, or 1½ yds 44 in wide with 5 yds of velvet to make as illustrated.

The pattern is cut in sizes for a 32, 34, 36, 38, and 40 inch bust, and will be mailed on receipt of 10 cents.

MISS' EMPIRE PRINCESS DRESS 5668



The princess Empire dress is the late development of that altogether attractive fashion. The waist consists of the front and the backs and is gathered at the upper edge where it is finished with a trimming band and also is arranged in tuck shirings at the lower edge.

Material required for the 16 year size is 7½ yds 27, 7½ yds 32 or 4½ yds 44 in wide with 3½ yds banding.

The pattern is cut in sizes for girls of 14 and 16 years, and will be mailed on receipt of 10 cents.

SEVEN GORED TUCKED SKIRT 5635



Tucks make really ideal trimming for the light weight goods, and here is a skirt that shows wide ones above the hem, with tiny vertical ones at the seams.

The skirt is made in seven gores and there are two tucks of predetermined length laid at each seam. Material required for the medium size is 11½ yds 21 or 27, or 6 14 yds 44 inches wide. The pattern is cut in sizes for a 32, 34, 36, 38, and 40 inch waist, and will be mailed on receipt of 10 cents.

Have a small horse shoe magnet fastened to the end of a tape or ribbon of sufficient length so that it can be dropped on the floor to pick up scissors and needles.

Asked and Answered

Readers are asked to send any questions they desire to this column. The editor will aim to reply as quickly and as fully as space will permit. Address Household Editor, Canadian Dairymen and Farming World, Peterboro, Ont.

The under crust of my cherry and berry pies are always soaked with juice. Would you tell me some simple way of correcting this?—*Jessie Burns, Welland Co., Ont.*

This is a very usual defect with this kind of pie. It is wiser to make them in a deep dish and omit the lower crust of paste—in the same manner as deep apple pie. Use a funnel always with these kind of pies.

The egg frosting on the top of my pies sometimes refuses to be cut, and sticks to the knife. Why is this? Is it because my oven is too slow?—*Bertha Reid, Hastings Co., Ont.*

There is a chance that the eggs were not beaten long enough. If the knife used to cut the pie is dipped in hot water it will prevent the frosting sticking to it.

Custards and jellies made with gelatine absorb much that is not healthful to eat. Keep them covered while in the refrigerator.



FARM LABORERS' EXCURSIONS

to Harvest Fields of Manitoba, Saskatchewan and Alberta. Well-paid work for over 25,000 men.

\$10

one-way second class to Winnipeg. Free tickets from Winnipeg to points where harvesters are needed, east of Moose Jaw, and west of Moose Jaw to Alberta at one cent per mile.

RETURN TICKET TO ONTARIO STARTING POINT FOR ADDITIONAL \$18.00, AFTER WORKING AT LEAST ONE MONTH

Apply to ticket agents for full conditions

GOING DATES

NORTHWEST OF TORONTO from territory

AUG. 14, 18
SEPT. 1, 8

From stations on Toronto-North Bay line, west to but not including Toronto-Sarnia line.

SOUTHWEST OF TORONTO

AUG. 18, 19
SEPT. 1, 9

From stations on Toronto-Sarnia line, and south thereof in Ontario.

EAST OF TORONTO

AUG. 20, 22, 27
SEPT. 2, 11, 14

From stations East of Toronto-North Bay line, to and including Shabot Lake and Kingston.

Tickets issued to women, but not at half-fare for children.

SPECIAL TRAINS FROM ALL C. P. R. STATIONS ON AUGUST 14, 18 and 20. Apply to nearest C.P.R. ticket agent for latest going conditions, train times, etc., or write

C. B. FOSTER, District Passenger Agent, TORONTO

HOMESEEKERS'
Excursions afford best accommodation, with Tourist Sleepers. Leave SEPT. 1, 15, 29. Ask agent about them.

Be Prepared for Emergencies.

If you live in a small village or country district, you will appreciate the value of a telephone.

Haven't there been times when you would have given a good deal to communicate with a friend?

Or, perhaps you needed the services of a doctor, in a hurry, but had no way of communicating with him, at once.

The minutes seemed like hours, didn't they, when you'd had to suffer while the doctor was being sent for?

Have one of our telephones placed in your house and so be prepared to summon the doctor at a moment's notice.

A short delay in getting a doctor may mean life or death, so why take chances, why not be prepared for any emergency?

Suppose a fire should occur or burglars break in and your wife and children were alone, what protection would they have if there was no telephone in the house?

But a telephone is something you can't take chances with. You must have one that you can absolutely depend upon.

Send us your address and we will tell you all about a reliable telephone that is easily installed at a small cost.

Northern Electric & M'fg. Co., Ltd.
Montreal and Winnipeg. No. 383

Use address nearest you.

See Our Exhibit in the Process and Implement Building at the Toronto Fair

HOLSTEIN FRIESIAN NEWS

The Canadian Dairyman and Farming World is the official organ of The Canadian Holstein-Friesian Association, all of whose members are readers of the paper. Members of the Association are invited to send items of interest to Holstein breeders for publication in this column.

DOCTORS FAVOR HOLSTEINS

Mr. P. Clark of the Silver Spring Dairy Farm, at Deschênes, Quebec, who has a very select milk and cream trade in the city of Ottawa, and who until this year has kept nothing but pure bred Jersey cattle, is replacing a large portion of his Jersey herd with Holstein cattle. He does not intend to go out of Jerseys altogether, at present, at least, but he is installing a new herd full of Holsteins.

Speaking to a representative of The Dairyman and Farming World, who saw him in Ottawa recently, Mr. Clark, said that of late there has been a growing demand on the part of many physicians in Ottawa for Holstein milk. These physicians claim that in some cases of disease at least Jersey milk is too rich and that Holstein milk answers their purpose better. Another reason given by Mr. Clark for the change is the fact that although many of the Jersey cattle that he kept were pure bred and cost him large sums of money, he found it difficult, in fact almost impossible, to sell bull calves to the farmers in his section. These farmers, however, are willing to buy Holstein stock and he believes that he will be able to dispose of his surplus Holstein stock to advantage.

THE RECORD OF PERFORMANCE ENDORSED.

Mr. R. P. Hicks, of Newtonbrook, the well-known breeder of Holstein-Friesian cattle, believes that the breeders of dairy cattle will take full advantage of the Record of Performance. It will be of great value to the breeders of the country. Mr. Hicks has several cows entered in the test, at least two of which are likely to give over 17,000 lbs. of milk in the year, they having given over 15,000 lbs. of milk in ten months.

"At first I was opposed to the test," said Mr. Hicks to our representative who visited his place recently, "but I now believe it is being managed on a better basis than at first proposed. The inspectors, Messrs. D. Drummond, and G. W. Clemons, of St. George, understand their work, and are helping to make the test a success. My objections to the tests at first were based upon the fact that the farmers were expected to take their own samples. Very few farmers would be particular enough to do this correctly. Not long ago when one of the officials from the Ontario Agricultural College was at my neighbor's place conducting a seven-day official test, a dairyman, who wanted to have the milk of his cows tested, brought over a composite sample of their milk. The sample tested 7 per cent. butter fat. The test was so unusual the supervisor went over to his place and took a sample of the cow's milk himself. Upon testing this sample he found that the test was only normal. This shows that the first sample could not have been taken correctly."

"Now that the officials of the Department of Agriculture are endeavoring to visit every herd entered in the test eight times during the year, the result of their inspection is likely to be more valuable than when they used to visit the herds only three or four times during the year as at first proposed. The officials now drop in on a breeder unexpectedly. I have had them come in on me just before I was starting milking. Even had I wanted to I could not have done anything that would have added a pound or two to the milk produced by my cows in the test. Should these officials find on a couple of occasions that the milk of the cows entered in the tests when they weighed it weighed less than the records of the cows as kept by the owner, they would soon get suspicious of him, and he would see his finish, as far as entering any more cows in the Record of Performance was concerned." "I believe that before long," continued Mr. Hicks, "many more Holstein breeders will enter cows in the Record of Performance than has done so as yet."

NOW KEEPS PURE BREDS

Mr. Hicks described the case of one farmer in his section, whose name he men-

tioned, who within the past year has been doing some hard thinking on the subject of relative profits between good and poor milking cows. "This man," said Mr. Hicks, "had been producing cream for 35 years, and selling it in Toronto, where he had a splendid trade. He was in the habit of buying cows when they were fresh and of selling them when they were through milking. He therefore endeavored to secure cows that would sell at a good price for beef when he was through with them. He never tasted or weighed the milk of his cows to see how they were doing. One day he noticed that a cow in his herd was giving a very large quantity

of milk, much larger than any of the other cows. He weighed this cow's milk, and was surprised to find that it weighed 60 lbs. The animal was a Holstein, and the experience started him figuring. He compared the milk given him by this cow with the milk given him by the others in his herd, and found that it would pay him better to keep dairy cows if they would give him anything like the same quantity that his Holstein did than it would to keep the animals for milk and feeding purposes combined, even if the dairy cows had to be sold at a sacrifice when they were through milking. By comparing the price of milk and beef he

found that the greater quantity of milk given by dairy cows as compared with dual purpose cows, more than offset any loss that might be incurred when they were exhausted milkers, and had to be sacrificed to the butcher.

"Having made this discovery this man began looking round to see if he could get any more cows like the one that had given him such a surprise. He finally bought one or two more Holsteins and bred from cows with large records, and now he has quite a nice herd of pure bred Holsteins. Before long," concluded Mr. Hicks, "this man will have one of the best herds of Holstein cattle in this section."



HEAD OFFICE: TORONTO.

BRANCHES IN ONTARIO:

Arthur	Ottawa
Ajijima	Ottawa
Ayton	Owen Sound
Beeton	Port Hope
Blind River	Paisley
Bridgburg	Proscott
Brownsville	Kipley
Burlington	Ridgeway
Clifford	Rockwood
Collingwood	Rodney
Drayton	St. Catharines
Durham	St. Mary's
Dutton	Sault Ste. Marie
Elmira	Sarnia
Elora	Schomberg
East Toronto	Springfield
Fergus	Stony Creek
Fort William	Stratford
Glencoe	Sturgeon Falls
Georgetown	Sudbury
Guelph	Tatamouche
Hamilton	Thamesford
East Toronto	Tilsonburg
Harriston	Toronto
Hepworth	Avenor Road
Ingersoll	King and
Kincardine	Spadina
Kenora	Queen and
Lakefield	Broadview
Leamington	Yonge and
Lion's Head	Bloor Sts.
Massoy	Tottenham
Mount Forest	Tween
Newcastle	Windsor
North Bay	Winona
Norwich	Woodstock
Ontario	Waterloo
	Webbwood

BANKING CONVENIENCES FOR FARMERS

MOST of the Branches of the Traders Bank of Canada are located in small towns throughout Ontario, so as to be convenient to the farmers. We want your business and we offer every accommodation that a progressive bank can give a progressive farmer.

A SAVINGS ACCOUNT in the Traders Bank provides at once an absolutely safe and convenient place to keep your money — a powerful incentive to save more money — and a way of making your money work for you day and night.

Capital and Surplus of \$6,350,000 guarantee the safety of your money. You can deposit it at your convenience in sums of \$1 or upward, and withdraw it at any time without notice. No formality or delay about it.

The desire to increase a growing bank account and the habit of at once depositing money received — drawing it only as required — helps wonderfully in saving and brings a man out at the end of the year many dollars ahead.

Interest at the rate of 3% per annum, compounded every three months, is paid on all Savings Deposits and keeps your balance growing.

Many fathers start a Savings Account for each child in its infancy and add to it regularly. When the child is grown, the fund — increased by Compound Interest — will provide an education or a good start in life. And the small deposits will scarcely have been missed.

Others have each boy open his own account and add to it the money he makes in various ways. YOUR son could not have a better training in the value and use of money. We welcome such accounts.

Our JOINT DEPOSIT ACCOUNT is a great convenience to those who live out of town. It is opened in the name of two members of a family, either of whom may make deposits or withdraw cash on the one signature. No need to go to town on busy days — your wife can do the banking for you. In case of death the money goes to the survivor without any process of law.

If you live far out of town do your BANKING BY MAIL. The Manager of our nearest Branch will gladly explain how easy it is. Write him.

Our BANK MONEY ORDERS for sending sums of money up to \$50 to any point in Canada, are safe, convenient and not expensive. We sell drafts for larger amounts.

If you want ready money we will advance it on very reasonable terms. If you want advice on financial matters we will gladly give it.

We want your account. The staff of our nearest Branch will treat you most courteously and give the closest attention to your interests.

INCORPORATED 1855.

MAKE The **TRADERS BANK** YOUR BANK of Canada

Capital & Surplus
\$6,350,000

80 Branches
in Canada

COUNTRY NOTES AND PRICES

ST. JOHN'S CO., N. B.
RAYVIEW—The heavy rains of the past few weeks have made the pastures very good. Hay was not a very good yield owing to the six weeks' drought. Oats have the promise of a good yield. Potatoes are an extra good crop as are also beans. Peas were fairly good. The root crops are very good. Eggs are selling at 22c; butter, 25c—W. M.

TEMISCOUATE CO., QUE.
FRASERVILLE—Hay is a medium crop, but under the average on low grounds. A lot of wheat will be imported. Prices range from \$10 to \$12 a ton. Oats promise well. Wheat presents a good appearance. Barley has a good appearance and is one of our best crops. It will mature earlier than last year. Potatoes are large but medium in quantity. Pastures are very poor. On the whole the crop promises very good and good prices are expected. Fresh eggs sell from 22c to 25c a dozen. Butter shows a decline from 24c and 25c a lb to 23c and 25c. Pork 9c to 10c a lb, live selling at 14c and 15c; beef, 5c to 10c live, and retailing at 10c to 15c. Mutton shows a decline, retailing at 15c to 18c a lb, and \$3 to \$3.50 a cwt, live—R. C. E.

DUNDAS CO., ONT.
WINCHESTER—Pastures are very bare owing to the continued dry weather. There is a very heavy shrinkage in the quantity of milk in consequence. Hay was a very light crop but was saved in good condition. Grain shows an average crop of good quality, excepting late oats which were pretty badly struck. Harvest is nearly over. The straw was saved in exceptionally fine condition. Corn is a fine crop and is earing up well; it needs rain badly. Some fields on mucky land were scorched with frost on Monday night. Potatoes are almost a failure from drought and blight. Roots are a medium crop. Early apples are abundant, but late fall and winter varieties are not over one third of last year's crop—J. P. F.

NORTHUMBERLAND CO., ONT.
CORAL—Hay crop was good and well saved. Fall wheat was about an average crop. Rye will be an average crop. There is scarcely any spring wheat sown and where there was a piece it was very poor indeed. Barley crop Oats will be a light yield. Roots crops are looking fine since the rain. Corn will be a fine crop. There are plenty of early apples but scarcely any winter fruit. There was no plums and very few cherries. Trimming is in full swing and if we get favorable weather this week most farmers will be through with the harvest—F. D. G.

PETERBORO CO., ONT.
LASWADE—Harvesting is nearly all completed, and some have already threshed. Grain is said to turn out well. Some are already cutting heavier hay, and the weather has been excellent for this purpose. The vegetables will probably be a little short owing to the heavy frosts. Potatoes are a good size but will give a smaller yield than last year owing to a drought in June. Apples are a fair crop. They are much smaller in size than last year—C. E. D.

VICTORIA CO., ONT.
IRONDALE—The harvest in some cases is completed. There are some, however, who have not finished. Wheat has been no threshing done. Wheat is good; oats are a heavy crop; barley is good in most places; potatoes are not what people expected, very few in the hills and they are small—J. P. H.

HALBURTON CO., ONT.
HALBURTON—Last week's rain did some damage to the heavier hay of which there is considerable in this county. The harvest is about all gathered, with the exception of the buckwheat and peas. The frost on the night of the 23rd did a good deal of damage to some localities, cutting the corn and killing the vines and buckwheat, and not forgetting the potatoes. There have been several cattle killers here through there. They have been offering \$2.25 to \$2.75 but so far they have not brought many. Several car loads have passed through from the north—A. S. J.

WATERLOO CO., ONT.
WATERLOO—The weather conditions have been very unfavorable for the oat harvest. Heavy understorms every two

or three days delayed cutting and hauling, but within the last few days the greater part of the crop has been housed. Hay has been a good crop and the clover catch is very good. Wheat was good and yields a fair sample. Barley has been somewhat of a failure in general owing to wet weather during seeding time. Muck and turnips look very promising and corn will yield an exceptionally large amount of fodder. Quite a number of silos have been built this summer. So less than six barns have been struck and burned down by lightning but through the kindness of the insurance companies they have been enabled to rebuild within three or four weeks—C. H. R.

WELLINGTON CO., ONT.
FERGUS—Farmers are in the middle of harvest. There is little or no spring wheat grown. What there is is not as good as last year. Rye is not grown at all. There are a few acres of peas, which are an average crop. Oats is the principal straw and the majority of the land's look well. The late sown oats are inclined to rust. Barley was very good. It is all harvested. The straw is breaking up badly, especially in the late sown crops. We want a week of fine weather to get in the harvest. Fall threshing is not up to the farmers north of here, besides breaking a number of windows, etc.—W. B.

SIMCOE CO., ONT.
STAYNER—Owing to favorable weather last spring, the clover and fall wheat are good. Hay was heavier than last year. Rain was plentiful some to soak the straw a good length. Barley and oats are very good, but peas are light. Root crops are looking well—D. M. E.

LINCOLN CO., ONT.
HOMER—A good crop of early apples is nearly over. We have a heavy crop of fall ones, though some are showing signs of codling moth. All winter varieties are light with the exception of Greenacres. The pear crop is good. Plums are light to medium. Lombards, which is the staple variety of this district, are very light; early peaches have been heavy. St. John's light, and Crawford's almost a failure. Smack and Elberta are good. Grapes are a good crop and free from mildew and rust—W. S. E.

HALDIMAND CO., ONT.
CAYUGA—Harvesting is over and threshing is in full swing. Fall wheat is a good crop, but was damaged by rain, nearly all being badly sprouted. Owing to the dry season in June and July spring grain ripened considerably. Oats are short in the straw and are yielding poorly. Peas are nearly a total failure; the aphid did a lot of damage to them. With the exception of old meadows hay was a good crop, and was gathered in good condition. Clover is good. Alfalfa, of which an increasing acreage is being sown each year, is splendid. Pastures are doing well. Potatoes are a fair crop. Not much corn or roots grown. Creamery patrons received about 24c for July butter. Eggs are 19c; live hogs \$6.50; new wheat, 75c to 80c. About the usual amount of rye, wheat will be sown—W. T.

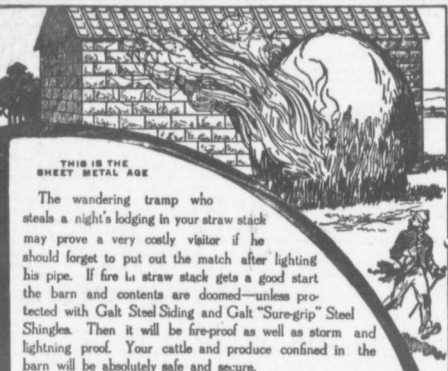
OXFORD CO., ONT.
EMBO—Harvest is now finished, after some oats being in stock for nearly three weeks. The straw is badly spoiled but the grain is good. Much grain has been sprouted. They are turning out very well to fall wheat, but are very dirty threshing. The winter acreage is being prepared for the fall wheat, which is sown in July or August or land manured last winter and on which spring grain was sown. The stubble is now being plowed in. There is so much rain it is being prepared with much less labor than a year ago—D. M. E.

CHATHAM—RENT CO., ONT.
CHATHAM—On the orchards, early, medium and fall apples are a good crop. The younger orchards have scarcely any apples except Ben Davis and Greening. Along the river the older orchards have a light crop of Baldwin, Canada Red, Bellflower, Roy and Golden Wonder. All fruit is fine. Apples and Greening. All fruit is quite free from scab but there is a lot of codling moth—B.

BRUCE CO., ONT.
FORMOSA—Harvest was finished about August 25th. Hay was a splendid crop, about 1 1/2 tons to the acre. Fall wheat is a good crop, but is not so good as the early barley; very good, 40 to 50 bushels; early oats, good; 50 bushels; late oats are hurt with rust, 30 to 40 bushels; spring wheat is not much sown, only a little and that wild good. It will yield 30 bushels of a cwt to the acre. There are not many silos so not much corn is

grown. Roots, particularly mangels, will be a splendid crop. Potatoes are in good condition. A very large number

of stock were sold last winter to buy feed, and consequently not much is kept just now—P. K.



THIS IS THE SHEET METAL AGE

The wandering tramp who steals a night's lodging in your straw stack may prove a very costly visitor if he should forget to put out the match after lighting his pipe. If fire to straw stack gets a good start the barn and contents are doomed—unless protected with Galt Steel Siding and Galt "Sure-grip" Steel Shingles. Then it will be fire-proof as well as storm and lightning proof. Your cattle and produce confined in the barn will be absolutely safe and secure.

It's certainly true economy to buy Galt Steel Siding. It costs but little and will last a life time. Secures for you the most favorable insurance rate.

Choice of cold rolled, painted or galvanized steel, in a multiplicity of handoms, original designs. Free illustrated catalogue on request.

THE GALT ART METAL CO., Limited, GALT, ONTARIO.

Galt Steel Siding

WRITE TODAY FOR

Our FREE Prospectus

IT TELLS ABOUT THE WONDERFUL PROFITS BEING MADE EVERY DAY

It tells how You can make big money in Minnesota Iron Mines

Farmers, merchants, clerks and office people are putting their spare money into Minnesota Iron Mines and are making big dividends on their savings. Our company makes this possible for the small investor.

No one need hesitate, because he has only a few dollars to spare. His few dollars will entitle him to share in the big profits that are almost a certainty.

One company in Northern Minnesota owned by its stockholders \$1,500,000 in dividends this year. Our lands promise as much for you as such harvests as if that promise is realized your investment with us will return you a rich harvest.

Ten dollars—the price of a share—puts you on the same footing in this company as the President and every other stockholder and will return you exactly the same rate of interest.

This company is incorporated for \$150,000.00 and owns land in the very heart of the richest ore belt in Minnesota. Its purpose is to acquire and develop iron lands for you.

Back of your investment, and as a guarantee against loss, is the land owned by the company. Most of these companies only lease the land and they mine. We own our lands.

A short distance North of our property a prominent ore company has sunk a shaft and is now mining. In every direction drills have been put down to find iron ore. Within 80 rods of our land

drills have blocked out forty million tons of iron ore. The above ore company referred to has offered to supply us with money and take half the profits. We prefer, however, to develop it ourselves and divide the profits among those who invest with us and help develop this valuable land. Consequently, we believe this will be an excellent opportunity for you to receive good dividends on your investment.

This is the chance of a life-time for you to safely put a few dollars to work in a way that promises phenomenal returns. The tales of the wealthy Minnesota Iron Mines are putting into the pockets of the people who have been far-sighted enough and invested in and helped to develop them. Like many other stories—but the facts are that the truth of all told, would stagger belief. One dollar invested has jumped to \$40 and so on. True not every one is so lucky—while most of those who have not been so fortunate have been the ones who were too impatient to wait and sold out just before the fortune came.

If you want to know more about our company and what it offers you in the way of a safe speculative investment, write today for our free illustrated prospectus—full of facts and figures that will open your eyes as to how some men got to be Iron Kings and how the same opportunities are open to you. Write today.

IRON PRODUCING LANDS CO.,
 822 Bank of Commerce Bldg., Minneapolis, Minn.

MARKET REVIEW AND FORECAST

Toronto, August 31st, 1908. - There appears to be little more activity in some lines in shipping out of the west...

WHEAT

The wheat situation shows little material change from a week ago. The North-west Grain Dealers' Association...

The only new feature in the situation is the talk of a big deal being manipulated in Chicago in September...

WELL DRILLING MACHINES

Over 20 sizes and styles, for drilling either deep or shallow wells in any formation...

WILLIAMS BROS., Etchem, N. Y.

FARMS, HOUSES AND LOTS FOR SALE

BLEWETT & MIDDLETON, 421 George St., Peterboro.

FOR SALE AND WANT ADVERTISING

TWO CENTS A WORD READ BY 15,000 PEOPLE WEEKLY

THIS DEPARTMENT is one of the most valuable in the Paper. At a cost of only Two cents a word...

THE ADDRESS must be printed as part of advertisement, and each initial or number counts as one word.

FARMS FOR SALE

FOR SALE-468 ACRES, all cultivated, clay land, main road, school, churches, blacksmith shop...

MISCELLANEOUS ADVERTISEMENTS

WANTED-Persons to grow mushrooms for us during fall and winter months.

RARE CHANCE-For sale, small herd pure bred Rhorthorns and choice grades...

that farmers are not marketing their wheat as fast as was expected some weeks ago.

COARSE GRAINS

There is an easier feeling in oats owing to larger offerings, though prices are lower.

FEEDS

The bran market continues strong under short supplies with prices unchanged from last week.

SEEDS

It is early yet to speak definitely as to the outlook for seed prices.

HAY AND STRAW

The hay situation shows little change. Some shipments of Canadian hay made six months ago...

POTATOES AND BEANS

Deliveries of potatoes are increasing here, and the quality is fairly good.

EGGS AND POULTRY

Egg prices rule about the same. Hens are larger. Dealers paid 17% last week...

fowls at 10c to 11c, and ducks at 5c to 10c. Prices, dressed, are 2c a lb higher.

FRUIT

There is considerable business doing in early apple buyers are not so eager as last year to contract for winter fruit.

DAIRY PRODUCTS

There has been a quieter market in cheese during the week...

The future of the butter market is causing some concern in the trade. Last year at this time butter was bought for storing at 25c...

LIVE STOCK

Receipts of live stock during the week were larger than usual.

cables of August 27th quote cattle steady at 19 1/2c to 19 3/4c a lb, dressed weight.

Who well-labeled butchers' cattle will bring \$5 a cwt, but there were none of this class offering on Thursday.

Receipts of veal calves have ruled light during the week and prices are firm.

Receipts of sheep and lambs during the week have been large.

There were 1687 hogs at the city market on Thursday. Price remained unchanged at \$5.50 for selects and f.o.b. for lights, fed and watered.

The disastrous fire at the Union Stock Yards, West Toronto Junction, on Thursday...

UNION STOCK YARDS HORSE EXCHANGE

Business is still quiet in horses. At the Horse Exchange Union Stock Yards, West Toronto, business during the week was quiet.

THIS WEEK'S HOG PRICES

The William Davies Co., of Toronto, will pay \$6.40 f.o.b. at country points this week for hogs.

ABSORBINE

Cures Strained Puffy Ankles, Lymphaticitis, Bruises and Ailays Pain on Feet and Joints...

ABSORBINE, J.R. for man, Doan's Kidney Pills, Cures Strains, Doan's Backache Kidney Pills, Doan's Catarrh Kidney Pills...

GOSSIP

RIVERVIEW STOCK FARM.

Riverview Stock Farm, the property of Mr. H. Bartlett, of Kimbo, Ont. (formerly one of the firm of D. Bartlett & Sons, Smithville, Ont.), is a prominent breeder of Dorset sheep and Shorthorn cattle. The flock of sheep, 80 in number, is largely composed of yearling ewes and ewe lambs, bred by an imp. ram from Mr. Hamble's flock. Mr. Bartlett imported this ram two years ago and has proved himself a valuable sire as can be seen by anyone who visits the sheep pens at Toronto fair, and inspects Mr. Bartlett's exhibit. All of his exhibits are for sale and can be bought worth the money. Riverview lies between Smithville and Grassano, on the T. H. and E. Ry., and is a few miles from Grimsby, O. T. H.

JOHN GARDHOUSE & SONS

Anyone interested in good Shire Horses or Shorthorn Cattle, should see the exhibit of John Gardhouse & Sons, Highfield, Ont., at the Canadian National Exhibi-

tion, Toronto. This firm has been long and favorably known as importers and breeders of high class stock. Among the Shires that they are exhibiting are four imp. stallions, 3 and 4 four years old, as well as a number of mares and fillies which combine size and quality. They are all for sale. Representatives from most of the noted families are to be found among their Shorthorns.

HOW TO GET WORK DONE.

In these days there is no more serious problem facing the farmer than the ever-present question: "How shall I get my work done without the help necessary?" The great claims of our Northwest, the continual attraction of the cities, the high scale of wages, all these things have gradually drawn away our farm help. And worst of all, the resultant heavy work on the farmer and the farmer's family has too often made the boys dissatisfied with the farm and driven them into the city.

No wonder then that business firms are

appreciating the great field for labor saving machinery, and are continually bringing out new developments along this line. At the present exhibitions there will surely be nothing of greater interest to practical farmers than this type of machine, and with the winter approaching with its heavy chores we imagine interest will particularly center around the various devices for handling feed, and for cleaning out the stable. An exhibit, therefore, of a great deal of interest will be that of George H. Matherly, Co. of Guelph, who this year are showing two new hoisting gears for litter carriers, and a new swing-truck crane which makes it possible to distribute the manure practically anywhere in the yard. With their track inside of the barn any part of the stable can be reached as the track can be bent to any course, and is fitted to work with various switches. A little time spent looking at their display will be worth while, and their representatives will take pleasure in explaining their goods.

There is no part of the farm building which is attracting so much attention as is the roofing. There are so many brands of roofing, that it is almost impossible for the farmer to select the one best fitted for his use. If years of experience and actual test count for anything then the roofing manufactured by the Branford Roofing Company of Brantford, Ont., is one of the best in Canada. A representative of this publication recently visited the works of this company and was much surprised at the extensive plans necessary to manufacture the various brands necessary to supply the orders. In their new, illustrated booklet which has just been published, are shown the buildings of some of the largest manufacturing establishments and institutions, which are covered with Branford Roofing. This should be a strong enough recommendation as to the merits of the goods sent out by this company. See their large advertisement on another page.

IHC. CORN MACHINES



DOUBLE THE VALUE OF THE CORN CROP

VERY shortly the 1908 corn crop will be coming along on hundreds of thousands of farms.

It will be this year, as it is every year, the biggest crop of all—sheaf of wheat, oats, hay and cotton. It will run into billions of bushels.

Up-to-date machines are used to plant and cultivate it. No large corn grower thinks of doing that work by hand any more.

Most corn raisers treat the fodder as a thing of little value. This is a great loss, for the fodder when cut while the ears are glazing, and then thoroughly shredded, has almost the same feeding value as the ear.

How will you handle your part of it? Will you cut it and shock it by hand just as people did it a generation ago?

And will you afterwards husk it by hand and throw the dry fodder out to the cattle as if it were of little feeding value? Don't do it. It means a loss no farmer can afford.

The last few years have made great changes in methods of harvesting and handling this giant crop.

Corn harvesting machines are just as useful and necessary as wheat harvesting machines.

They save a world of hand labor, they save expense, and they enable corn growers to harvest their crops when the corn is in just the right condition, and keep the fodder from turning into a tasteless, worthless woody fibre.

With a Deering or McCormick corn binder, you can drive straight along, cutting and binding the corn as fast as your team can walk.

The only hand work will be setting up the shocks, the same as when ears is shocked after the twine binder. You do not even have to gather the bundles; the binders will deposit them in piles all ready to be set up.

When the corn is harvested, a Deering or McCormick husker and shredder is almost indispensable.

Your corn will be husked in record-breaking time and at the same time, the fodder—stalks, blades and husks—will be finely shredded so that every particle of it will be eaten.

Nearly 40% of the value of the corn crop is in the fodder. Shredding enables you to get it all. With the extra value you get out of the fodder, with the saving of time and labor and by being able to harvest all your corn when it is in just the right condition, there is no question but these corn machines will practically double the profits of your corn crop.

International local agents will be glad to give all particulars relative to these famous corn harvesting and shredding machines. Call on them or write to nearest branch house for catalogs.

CANADIAN BRANCHES: Calgary, Hamilton, London, Montreal, Ottawa, Regina, St. John's, Winnipeg.

INTERNATIONAL HARVESTER COMPANY OF AMERICA
(Incorporated)

Chicago, - - - U. S. A.



VIRGINIA FARMS

\$10 and Up Per Acre

"IN THE GREEN FIELDS OF VIRGINIA"
You can grow better crops and raise finer stock at less expense than elsewhere. "Close to large eastern markets. Excellent church, school, and social advantages. Abundance of water and grass; stock from Virginia cheap and good." For information and shipping facilities make this section very attractive to home-sellers and investors. You can buy a complete FARM FOR \$500 with comfortable, new three-room cottage, and 25 acres for vegetables, fruit, and poultry.

Write for our beautiful pamphlets, lists of farms, and excursion rates.
P. H. LEBLANC, Agent, 218 St. Louis St., NEW NORFOLK, VA.
NEW NORFOLK, VA.

Tuttle's Elixir

Greatest maker of sound horses in the world. Tested many years, never fails if cure is possible, \$1.00 reward if it does. For lameness, curbs, splints, spavin, ringbone, swelling, etc.

Tuttle's Family Elixir
Remedy for household use. Ask for Tuttle's American Worm and Condition Feeders and Best Stomach "Veterinary Experience," expert horseman's guide free. Symptoms and treatment for all common ailments. Write for it. Postage 2c. TUTTLE'S ELIXIR Co., 121 Beverly St., Boston, Mass. Mailed in U.S.A. Patent No. 218,342. Secured by all letters only temporary relief, if any.

Breeders' Directory

CARDS under this head inserted at the rate of \$6.00 a line a year, not accepted under two lines, nor for less than six months.

SHEEP	CATTLE
ABRAM BASTON, Appleby, Ont., Leicester sheep. Show ring and breeding stock for sale. O-7-25-09	A. J. WATSON, Castlederg, Ont., breeder of Scotch Short Horns. 9 young bulls for sale. 9-2-15
SAMUEL CUMMORE, Hurondale, Ont., importer and breeder of Dorset sheep. B-10-15	A. P. POLLARD, Shadelsand Stock Farm, Canton, Ont., breeder of Shorthorns and Berkshire Swine. Young stock always for sale. Rural phone. 6-9-1
SWINE	BERTRAM HOSKIN (McPherson Farm), The Gully, Ont., breeder of Holstein Cattle, Tamworth Swine. High-class young stock for sale. Long distance phone. 6-1-1
P. O. COLLINS, Hovesville, Ont., breeder of Yorkshire Swine. Stock young stock for sale. 9-2-08	JAS. ROBERTSON & SONS, Willow Bank Farm, Milton, Ont., breeders of Shorthorn Cattle, Dorset Sheep and Berkshire Swine. 9-2-15
CHAS. CURRIE, Morrison, Ont., breeder of choice Tamworth Swine. Stock for sale. B-15-14-09	L. O. CLIFFORD, "The Maples," Oshawa, Ont., breeder of Herefords. Stock for sale. Long distance phone. 5-15-15
JOS. FRATERSTONE & SON, Streetsville, Ont. Large Yorkshire hogs for sale. B-31-09	MISCELLANEOUS
LORNE FOSTER, "Glenholton Stock Farm," 1714 St. V. St., Gt. G. B., Ont., breeder of Yorkshire Swine. Young stock for sale. 9-2-15	H. BARTLETT, Kimbo P.O., Ont., Lincoln Co., Hires, Stock Farm, Shorthorn Cattle and Dorset Sheep. 6-9-1
D. DOUGLAS & SONS, Mitchell, Ont., breeders of Tamworth Swine and Berkshire Swine. Pekin Ducks and R. C. W. Geese. Correspondence invited. 9-2-15	JAS. BOWMAN, "Elm Park," Guelph, Ont., importer and breeder of Aberdeen Angus Cattle, Clarrie Home and Suffolk Sheep. Correspondence invited. 9-2-15
SNOWDEN, Bowman, Ont., breeder of Large English Berkshires, B. Bucks, Light Brahmas, W. and B. Leghorns, Hens, Ducks, W. Holland Turkeys. 6-11-1	

STONE HOUSE STOCK FARM Importer and Breeder of Clydesdale horses and Ayrshire cattle. Stock of all ages for sale, including choice young bulls. Enquiries promptly answered and satisfaction guaranteed. Heston Gordon, Herwick, Quebec. 9-2-23



UNION STOCK YARDS

HORSE EXCHANGE

WEST TORONTO - - - CANADA

Auction Sales of Horses, Carriages and Harness every Monday and Wednesday. Private Sales every day. Come and see this new Horse Exchange. It will interest you. Also the Quarter-mile Track for showing and exercising. ACCOMMODATION FOR 1,000 HORSES

HERBERT SMITH
(Late Owner) General Manager

Why Are Many Ontario Farms Suffering from Loss of Fertility?

This question ought to be answered easily enough by any farmer with the average amount of reasoning power, but the trouble is too many farmers do not stop to think.

Now every intelligent farmer knows that his crops remove certain essential plant food substances from the soil, so that every bushel of grain, every ton of hay, and every pound of beef, mutton or pork sold off the farm permanently removes so much of the soil's fertility. It becomes evident then, that some means must be taken to restore the essential elements of fertility in order to maintain the crop-producing power of the soil.

The three essentials of which a soil becomes depleted in the ordinary process of cropping are **Potash, Phosphoric Acid, and Nitrogen.** These may be applied to the soil in the form of **COMMERCIAL FERTILIZERS.**

POTASH

in the highly concentrated forms of **Muriate of Potash** and **Sulphate of Potash** may be obtained from all leading Fertilizer Dealers or Seedsmen.

Besides increasing the yield, Potash improves the quality of all crops and promotes maturity.

EXPERIMENT ON HAY, 1908

Conducted by Mr. E. Emile, Oakville.

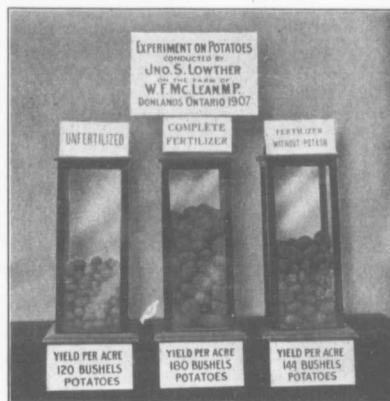


	PLOT 1	PLOT 2	PLOT 3	
Fertilizer per Acre	—	130	—	Sulphate of Potash
	—	300	300	Acid Phosphate
	—	120	120	Nitrate of Soda
Yield per Acre in pounds	2232	4224	3204	

This experiment shows an increase of 1020 lbs. directly due to the application of POTASH

EXPERIMENT ON POTATOES, 1907

Conducted by Mr. J.S. Lother, on the farm of W. F. McLean, Esq., M.P., Donlands, Ont.



	PLOT 1	PLOT 2	PLOT 3	
Fertilizer per Acre	—	100	400	Sulphate of Potash
	—	400	120	Acid Phosphate
	—	120	120	Nitrate of Soda
Yield per Acre in bushels	120	180	144	

This experiment shows an increase of 36 bushels directly due to the application of POTASH.

The accompanying photographs of experiments on Hay and Potatoes show the benefit of using a well balanced fertilizer containing POTASH. The omission of POTASH from the fertilizer on Plot 3 resulted in each case in a serious diminution in yield.

For further particulars and literature visit our exhibit at the CANADIAN NATIONAL EXHIBITION or write direct to

The Dominion Agricultural Offices of The Potash Syndicate

1102 - 1105 TEMPLE BUILDING, TORONTO, ONTARIO

YOUR CHOICE OF THREE TYPES OF SEPARATORS

EACH ONE A HIGH-QUALITY, EFFICIENT MACHINE



IF your requirements call for the highest quality Cream Separator in the world the **Improved Frictionless Empire** is your machine. No other machine runs as easily. Because our patents prevent others using the Frictionless Ball Neck Bearing and the Three Ball Bottom Bearing—admitted by experts to be the two greatest friction-eliminating devices ever put on a Separator.

The Improved Frictionless Empire

Skimming Devices are few in number, easily cleaned as an enamel cup. Guaranteed to skim as close as any Separator you can name. Easily the most mechanically perfect and durable.

NOT even the **Frictionless Empire**—or any other Separator constructed—can beat the **Empire Star** for close skimming. Its Multiple-Cone Skimming Devices get ALL the cream. And they can be thoroughly cleaned in a very few minutes. While the **Empire Star** is not equipped with the Frictionless Ball Bearings, as in the **Frictionless Empire**, still the

New Empire Star



runs as easily as any Cream Separator you can find, excepting the **Frictionless Empire**. Certainly there is no Separator that sells at the same price that has so much "quality" put into it. **Empire Star** will prove satisfactory to you—we guarantee it.



"DISC" Machines, while not the equal of "Cone" Separators, are more common and more widely known. So if you are familiar with them, and your mind is made up on a Disc Machine, we can **SAVE** you money—and at the same time give you a **BETTER** Separator. There are fewer "Closed" Bearings on the

Centre Feed Empire Disc

—the bowl is one-fifth lighter—and the machine runs far easier than any disc separator made. We would be foolish to make these claims if we couldn't back them up. We just ask you to read our Dairy Book and see the **Empire Disc** at our agents in your locality. You'll then have convincing proof of the truth of our statements.

THE EMPIRE CREAM SEPARATOR COMPANY OF CANADA

LIMITED

WESTERN OFFICE, WINNIPEG, MAN.

FREE DAIRY BOOK

This book besides containing complete descriptions of the different Empire machines, is simply overflowing with money making pointers for dairymen. Be sure and write for a copy.

TORONTO, ONT.

FAIRBANKS-MORSE GASOLINE ENGINES

ARE THE RECOGNIZED STANDARD FOR FARM OR DAIRY



Fairbanks-Morse Jack-of-all-Trades Engine.

THOUSANDS OF THESE ENGINES

are in daily use by the farmers throughout Canada

A FAIRBANKS-MORSE GASOLINE ENGINE

Is a boon to the average farmer

IT PROVIDES HIM WITH

A power plant equally as good for his purpose as the large power plants of our great Industrial Establishments.

IT FURNISHES HIM

with something with which he can place his farm or dairy on a paying basis (i.e.)

CHEAP POWER

These engines are Easy to start, whether in cold or warm weather, Reliable in operation, Simple, anybody can run them. Economical in the use of Fuel. Portable, they can easily be moved from one point to another. Write to-day for New Illustrated Catalogue.

THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO ST. JOHN, N.B. WINNIPEG CALGARY VANCOUVER