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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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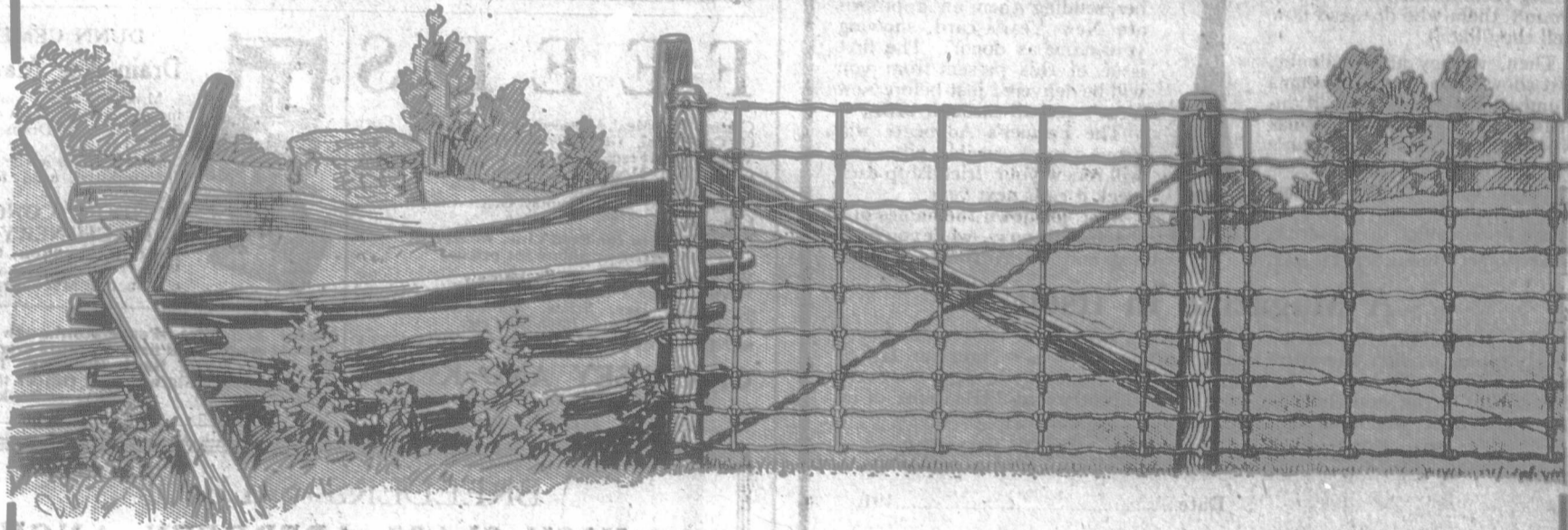
AGRICULTURE, STOCK, DAIRY, POULTRY, HORTICULTURE, VETERINARY, HOME CIRCLE.

VOL. LII.

LONDON, ONTARIO, DECEMBER 27, 1917.

No. 1318

Let FROST FENCE Replace Your Rail Fences



EVEN yet, one sees a great many old rail fences throughout the country. These old-style "snake" fences right at the present time use up hundreds and hundreds of acres of ground, which might otherwise be put to good use.

JUST examine carefully the above picture, and do you not wonder how it is possible that these rail fences are still throughout the country, when neat, land-saving and substantial wire fences can be erected for such a reasonable amount. If, on your farm, you have any fields not fenced in the improved way, will you not consider seriously the question of putting up a nice wire fence?

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FROST FENCE is all completely made in our own mills. We are responsible for it from beginning to end, and when we tell you that there is quality in the wire and the workmanship we are entirely responsible.

You will find a made-up fence just as neat in appearance as shown in the above illustration, and the lasting qualities are there also, in fact, FROST FENCE will stand wear and tear that would rip other makes to pieces.

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FROST STEEL AND WIRE COMPANY, LIMITED

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To Our Subscribers:

HOW

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If you will tell your friends and neighbors about it—those acquaintances of yours who are not subscribers to The Farmer's Advocate, it will be to your profit.

For each new subscription you send us we will immediately extend your own subscription six months—two new subscribers entitle you to a full year's subscription.

It just means finding out what neighbors of yours do not get The Farmer's Advocate—then telling them about all the folks around them who do—and how well they like it.

Then, if they are in doubt, just show them your Christmas Number—tell them we will include this year's Christmas Number and also next year's issue in their subscription.

Those who are not readers really should be—all they want is the opportunity to subscribe.

Try to get some orders TO-DAY.

Send some farmer friend The Farmer's Advocate as a New Year's Gift.

For each new subscription you extend your friends as a gift, we will add another six months to your own subscription—this gives you the opportunity to remember one or two friends by presenting them with The Farmer's Advocate. It benefits you as well as them.

We will begin their subscription with the Christmas Number, sending them an appropriate New Year's card, showing your name as donor. The first issue of this present from you will be delivered just before New Year's and all through 1918.

The Farmer's Advocate will prove a most sensible gift—and will renew your friendship each week it calls next year.

Just jot down the names of a few friends now—while you have them and The Advocate in mind.

A Magazine In Itself

The Home Magazine section of The Farmer's Advocate is devoted to such timely topics as life, literature and education—it is a section for father, mother and the "kiddies." In its pages will be found little chats on every department of the household—a serial story, poetry and little items of interest that every one living on a farm enjoys.

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Date.....191

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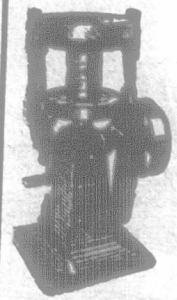
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THE ADAMS FURNITURE CO., Limited Toronto, Ontario

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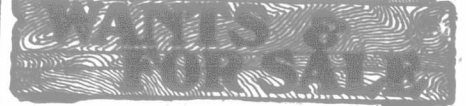
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We guarantee every Gilson Silo Filler to cut and elevate more ensilage with the same power than any other blower cutter.

Will Silo Filling Time find you ready? Write for catalogue to-day.

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The Farmer's Advocate and Home Magazine

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1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1875

LII.

LONDON, ONTARIO, DECEMBER 27, 1917.

1318

EDITORIAL.

Dampness means disease in house or stable.

"Keep on keeping on" is a good slogan for the dairyman.

Canada expects equality of effort in all parts of the Dominion.

A Happy New Year to all busy readers of "The Farmer's Advocate."

Work toward better stock by the shortest route—higher class sires.

The silly and sinister methods of some campaigners are sickening to the thinking elector.

Evidence accumulates that the top-notch quality heavy drafter is the best type of horse for the farmer to breed.

Farmers like all others must plan to make 1918 their best year. None can stand still. Progression or retrogression is inevitable.

The milking machine might help you out on your farm. Read in this issue what a number of our correspondents say of its value.

The farm wood-lot is giving a practical demonstration of its value right now. What about greater efforts for reforestation on rough land?

When keeping "more" stock be sure it is also "better" stock. Nothing would be gained by an increase in numbers at the expense of quality.

The live-stock farmer works just as hard in winter as in summer. His effort is an all-the-year-round one, and his returns should be commensurate.

In place of complaining about it, let us each and every one set to work to overcome the labor shortage by a more general use of labor-saving machinery and devices.

Slowly but surely is the fact that "man's living comes out of the ground" being driven home the world over, and it is to be hoped that with it will come also a full realization of the fact that "Happiness comes out of honesty."

The Dominion Shorthorn Breeders' Association has a habit of doing big things and getting results. Securing Prof. G. E. Day for Secretary-Treasurer and publicity man is one of the best moves the Association ever made, and bigger results than ever may be looked for.

It is a trait of human nature to take delight in criticizing. We all do it. And yet criticism should be made with care and only with the purpose of improvement. Criticize to construct, not to destroy, and there is always plenty of room for constructive effort.

The Departments of Agriculture could carry many a good point home to farmers with greater effect if some of their bulletins and leaflets could be put in general circulation more promptly after results of investigational work are obtained. A full report of a recent hog-production meeting was put out by the Ontario Department and a copy in our hands nine days after the meeting occurred. This was quick work and the Department is deserving of credit. If they could extend this promptness to all valuable bulletins it would work a great deal of good.

Farming in 1918.

The farm, always of first importance, was never before such a factor in the affairs of Canada and the Empire as it has been since the Great War began, and in 1918 it must fill a bigger place than ever. It is more than likely that before the close of the coming year the crisis of the conflict will have been passed. All hope so. No small part of that crisis will be in connection with the food supply. Millions of former producers are now consumers and destroyers in the armies or Armageddon. They must be fed. The people at home who support them must be fed. The food must be produced on the farms. Farmers realize this and consumers are beginning to appreciate the efforts of the men who have stood behind the plow as their brothers have stood behind the guns, both doing their part to defeat the enemies of democracy. A great big and glorious effort is necessary for the coming year. Those who have preached increased production since the war started are just as tired of the sound of their own voices as are some producers of listening to them, and yet they keep on in the hope that they may be able to help some one over the hard places to bigger results from his efforts. The necessity is well understood. The winter should be spent in planning ways and means of getting the most out of the land next summer. The farmer is ready to receive suggestions regarding crops and stock most necessary and how to make the best of the general situation. Information is always gladly received by most people who would not swallow advice. From now until spring farmers will plan their work for the summer. Then they will work their plan. Anything which will help to produce crops and stock—food products in large supply and economically—will be a service to the people generally. If we all work together much good will be accomplished. There is some good in every effort. Let us reach the maximum in 1918. The Farmer's Advocate will put forth a stronger effort than ever before to be of greatest possible assistance. Use these columns for the discussion of practical farm problems.

Prompt Publication of Bulletins and Reports.

We have many times pointed out the advantage it would be to agriculture, both from the viewpoint of the man on the land and also from that of the professional agriculturist who carries on the investigational work, if all reports and bulletins published by the Departments of Agriculture could reach the hands of those interested promptly. Very often publication and distribution are delayed and much important work stales before it reaches the public, or is distributed at an inopportune time, and is thereby received by the public at a great disadvantage. It is quite a common occurrence to get important reports anywhere from one to two years after the work reported therein is actually done, and in the past many a bulletin has reached the farm at anything but a suitable season. True, there are difficulties in the way of prompt printing of Government publications, but these can be overcome to some extent. As stated in a paragraph in this issue, the Ontario Department of Agriculture held a special conference on the bacon hog, at the Parliament Buildings, Toronto, on November 6. Nine days later we had in our hands a full report of the meeting neatly printed in bulletin form and ready for immediate distribution. The bulletin or pamphlet contains over thirty pages of type, and is as large as some bulletins which take months and even years to get through. We must compliment the Department of Agriculture on the facility with which they rushed the bacon-hog bulletin along. It was distributed early in the bacon-hog campaign—the time when most good could be done. This is a fine start. Other leaflets on the same topic have been put out promptly, and this would be a good precedent to follow

with all future agricultural bulletins and reports of immediate value. Interest wanes when material stales or is put out at an untimely season. The Departments have made one important step in their increased use of the agricultural press as a means of getting important facts to the people promptly, and while some have criticised their work, the fact remains that it is important to let the people know what the Department is doing at a time when the facts will do those people most good. Reports out promptly and bulletins in season is a good motto for a beginning of 1918, and to be continued year after year. Much satisfactory work is being done and the people are anxious to benefit by it at the earliest possible date after results are obtained.

Milk Prices and Hog Production.

A Farmer's Advocate subscriber from a leading dairy district in Western Ontario, in the course of a conversation in this office a few days ago, drew attention to the danger to the bacon-hog industry arising out of the difference in price producers were receiving for whole milk for city consumption and for condensing plants where there is no by-product, and for milk going to cheese factories and creameries where valuable by-products remain to be fed on the farms. We are passing on his ideas, and there does seem to be some foundation for his arguments. The past summer milk to cheese factories has averaged around \$1.75 to \$1.85 per cwt. With an average test of 3.5 per cent. fat, milk to creameries would average, at 45 cents for butter-fat for the summer, around \$1.60 per cwt. Milk sold to condenseries would likely run around \$2.10 to \$2.15 for the season, but the worst danger to the hog industry now is the demand for city milk, which in some instances is bought at as high as \$3.00 per cwt. Farmers are short of labor, and keeping pigs means a little extra work. If they can get considerably more for their milk to sell it whole and feed nothing, many will sell. Some producers have complained that the price of cheese has not levelled up with the price of whole milk for city or condenser trade, and rumors of changing from factory to a whole-milk trade may lead to action which might ultimately work no particular good to the farming industry. Creamerymen are not enthusiastic just now with oleo coming in, and keen competition for the whole milk. In dairy districts the bigger the percentage of milk going to the city whole-milk trade and to the condenser, the fewer pigs there will be finished. The cheese factory and the creamery leave valuable by-products for growing pigs. Skim-milk is worth at least 40 cents per cwt. In fact, it is difficult to put a value on it in cash, as it is almost invaluable in growing pigs and calves. Wheat at present prices for other feed is surely worth 20 cents per cwt. Add the value of these by-products to the price obtained for the milk at the factories and the returns average up very close to the price paid by condensers. Also, it is better for the farm to have the by-products fed on the place. However, there is less work when selling the whole milk and that is a factor, and there is a little more cash in it. This point is worthy of consideration. Butter is high in price, but not too high compared with prices obtained for milk and cream. Cheese is also high to the consumer, but the producer sees more money in selling whole milk. Expert factory workmen are likely to be scarce next summer. The demand for condensed milk will be practically unlimited while the war lasts. But it is necessary to produce hogs. It is necessary to retain cheese factories and creameries for after-the-war conditions. It is necessary to feed as much as possible on the farms. In view of these facts, a levelling up of prices to ensure cheese factories and creameries staying in the business would be a good thing for all concerned.

It is not always a mild winter when the human weather-vane in the neighborhood has prophesied.

The Farmer's Advocate and Home Magazine.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

Agents for "The Farmer's Advocate and Home Journal,"
Winnipeg, Man.

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, agate. Contract rates furnished on application.
4. THE FARMER'S ADVOCATE is sent to subscribers until an explicit order is received for its discontinuance. All payments of arrearsages must be made as required by law.
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12. WE INVITE FARMERS to write us on any agricultural topic. We are always pleased to receive practical articles. For such as we consider valuable we will pay ten cents per inch printed matter. Criticisms of Articles, Suggestions How to Improve "The Farmer's Advocate and Home Magazine," Descriptions of New Grains, Roots or Vegetables not generally known, Particulars of Experiments Tried, or Improved Methods of Cultivation, are each and all welcome. Contributions sent us must not be furnished other papers until after they have appeared in our columns.
13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.
Address—THE FARMER'S ADVOCATE, or
THE WILLIAM WELD COMPANY (Limited),
London, Canada

Cheese and Butter Makers Necessary.

Last week we published a short note from Prof. H. H. Dean, of the Ontario Agricultural College, Guelph, in which the importance of ensuring enough expert help to properly manufacture milk into its well-known products, butter and cheese, next summer and from then on until the war is over and afterward was pointed out. In a letter appearing in the same issue, from one of our regular correspondents, mention is made of the fact that an expert cheesemaker in the locality from which the article was written had been refused exemption, and the writer, a practical farmer, was at a loss to know what the dairymen of his district would do with their milk if these expert makers are all taken. Prof. Dean's article offers one suggestion that all those who can, avail themselves of the special dairy course to be held at Guelph early next month. A large class will help some, and we feel sure that those who have the final say in exemption matters will see the importance of leaving a fair percentage of the expert cheese and butter-makers now on the job. They do a necessary work. They manufacture a raw farm product into a more finished state in which it will keep. They save food.

Nature's Diary.

A. B. KLUGH, M. A.

The Hun of the Woods.

All our flesh-eating mammals, with one exception, kill only when they are hungry. The exception is the Weasel. The Weasel is the Hun of the woods, it is imbued with the spirit of kulture—ruthlessness. It kills for the sake of killing. Though the blood and brains of a single fowl furnish a Weasel with all the food it requires it has been known to kill forty full-grown fowls in a night and in another instance to slaughter fifty chickens. If it finds a nest of Chipmunks it murders the entire family, and after merely tasting the blood of one of its victims, sets forth seeking something else to kill.

Seton says "The Weasels have the unloveliest disposition of all our wild animals. Outside of their strength and courage, we find little in them to admire. Most other animals have a well-marked home-region and friends, but the ordinary life of a Weasel is that of a wandering demon of carnage."

The characterization of the Weasel given by one of the very greatest of writers on North American animals, Dr. E. C. Coues is worth quoting:

"A glance at the physiognomy of the Weasel would suffice to betray its character. The teeth are almost

of the highest known raptorial character; the jaws are worked by enormous masses of muscle covering the sides of the skull. The forehead is low, and the nose sharp; the eyes are small, penetrating, cunning, and glitter with an angry, green light. There is something peculiar, moreover, in the way that this fierce face surmounts a body extraordinarily wiry, lithe and muscular.

The Weasel preys on every kind of beast and bird that it can master and this means everything from the turkey and rabbit down to the shrew and the smallest birds. While many of the victims of the Weasel are beneficial or harmless animals a fairly large proportion are mice and rats and we must "give the devil his due" in admitting that the Weasel is undoubtedly of value as an agent of destruction of these pests. The slender, lithe body of the Weasel renders it admirably adapted for exploring the burrows and galleries of these rodents and it has been repeatedly noticed that when a Weasel takes up its abode about premises infested by rats and mice that they are soon exterminated. For such a service performed in his barns the farmer is duly grateful, but the price that he often has to pay when the Weasel turns its attention to the poultry is entirely too steep.

In lightning-like rapidity of action the Weasel stands pre-eminent among our animals. I have never seen one still for a single instant. I recall trying to kill one with a stick as it ran along a rail fence. Time and time again I thought a well-aimed blow would land on it, but when the stick descended—the Weasel wasn't there. It was like fencing with chain-lightning. Again I remember my attempt to stamp on a weasel that had come to my feet, attracted by a squeaking sound I was making to call up some birds, and while it did not retreat for some minutes it dodged my best efforts with ease.

The Weasel is equally at home on the ground, under ground, under the snow, or in the trees and is in addition a good swimmer. Its dexterity in running about the branches of trees is almost as great as that of a Red Squirrel. I witnessed a performance which exhibited its quickness in climbing and jumping when a Weasel pursued a Chipmunk which lived in the vicinity of my cottage. Up an apple tree, out to the end of a limb, down to the ground in a single jump, round and round they went, ever keeping to the same route. At first they went so fast as to look like mere streaks and it was not until the pace slowed a bit that I could make out what was taking place. Finally I got the Weasel with a charge of shot just as it was about to jump, and the Chipmunk was so exhausted that it allowed me to pick it up.

The Varying Hare, with its great speed, can easily out-distance the Weasel, but it never seems to go straight away and keep going. Instead it goes at full speed for a short distance, then sits down and looks and listens for its pursuer, and as far as I know the chase always ends in the same way—the death of the Hare.

We have in Canada several species of Weasels, the commonest being the Short-tailed Weasel, *Putorius cicognani*, which is found from the Atlantic to the Pacific and as far north as the 50th parallel of latitude in the east and the 60th in the west. This species is about twelve inches in length, the tail being about one-quarter of the total length, and having its terminal third black. In summer its color is dark brown above, and white, tinged with yellow beneath. In winter it becomes pure white above and yellowish white below, the terminal third of the tail still remaining black. It has been suggested that this black tip of the tail is of service to the Weasel, particularly in winter, as birds of prey, who are its chief enemies, may strike at this conspicuous black spot and miss the Weasel. This species, as well as other Weasels, is, in its winter pelage, known as Ermine.

The Weasels seem to have no fixed home, but to haunt a locality until the hunting becomes poor by reason of their inordinate lust for killing, and then to move on to new hunting-grounds.

If.

If you can keep your head when all about you
Are losing theirs and blaming it on you;
If you can trust yourself when all men doubt you,
But make allowance for their doubting, too;
If you can wait and not be tired by waiting,
Or being lied about don't deal in lies,
Or being hated don't give way to hating,
And yet don't look too good, nor talk too wise;

If you can dream and not make dreams your master,
If you can think—and not make thoughts your aim;
If you can meet Triumph and Disaster
And treat those two imposters just the same.
If you can bear to hear the truth you've spoken
Twisted by knaves to make a trap for fools,
Or watch the things you gave your life to, broken,
And stoop and build 'em up with worn-out tools.

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;
If you can force your heart and nerve and sinew
To serve your turn long after they are gone,
And so hold on when there is nothing in you
Except the will which says to them, "Hold on!"

If you can talk with crowds and keep your virtue,
Or walk with kings—nor lose the common touch.
If neither foes nor loving friends can hurt you,
If all men count with you, but none too much;
If you can fill the unforgiving minute
With sixty seconds' worth of distance run.
Yours is the earth and everything that's in it,
And—which is more—you'll be a man, my son!

—RUDYARD KIPLING

Hardship Makes Strength.

BY SANDY FRASER.

Yesterday wis snappin' could an' I didna' feel muckle like gaein' tae the bush to chop wood, sae I says tae the boy, "Jim", says I, "Ye might tak' yer axe an' go tae the back field an' cut doon that elm tree that's standing oot by itself there. When ye hae it doon ye can cut the tops up intae sleigh-lengths."

I thocht that wad keep him goin' for the best part o' the afternoon, an' then the weather got a wee bit milder I'd gae back tae the woods mysel'. When I dinna like tae expose mysel' mair than I can help since I had the congestion a couple o' years back. Thinks I tae mysel', "the hoose is the best place for me, the day." But there wis na such luck as that waitin' for me. I wis juist walkin' in frae the barn when I heard Jim shoutin' at me. "Say", he calls, "ye'll hae to bring the saw an' help me cut that tree doon. It's tougher'n the mischief, an' I canna, get a chip oot o' it."

Sae it wis up tae me tae get the cross-cut saw an' gae back tae where the tree wis. It wis standin' beside an auld lime-kiln that had been in use maybe fifty or sixty years back. It had taken pretty good root in the hard ground about the lime-kiln, an' all the winds an' storms had done tae it wis to mak' it tak' a better hold. It wis a tough lookin' customer a richt, but we went at it. I sawed away till my back wis that sore that I had tae gae doon on one knee tae gie mysel' a better chance. It wis the toughest thing in elm that I ever pulled a saw across, an' I've cut doon several in my day, I can say that. At last it began tae bend over a wee bit an' wi' a few mair strokes o' the saw doon she went. But a' the same it wisna clean off. The last inch didna' break like a common tree would. It juist bent, an' Jim had tae finish it off wi' the axe.

"Don't that beat a'?" says he, "Ye could tie knots in that tree if ye liked. What makes it sae tough dae ye think, Mr. Fraser?"

"Hardship," I replied, "naething mair nor less. That tree has been standin' oot here in the clearin' for the last fifty years or langer, an' whatever the wind an' the weather could dae to it has been done. Frae the time it wis a foot high it had to rough it, but the mair the wind blew the further it sent its roots intae the ground an' the tougher its body an' branches became. There's a pointer there for you Jim," say I, "The mair knocks ye get an' the mair hardship ye endure the better mon ye'll be. Dae ye believe that?"

"Oh I dinna ken", says Jim, "maybe ye're richt. If ye are I ought to be a pretty guid mon afore nicht, gin I spend the rest o' the day on this job wi' the wind tryin' tae blaw the trousers off me. All the same I think I'll tak' my hardship in the summer-time, if it's a' the same tae you, Mr. Fraser."

Pretty soon after this I went back tae the hoose, for tae be honest aboot it I didna like tae risk takin' ower muckle o' my own medicine. I hae na doot that moderation is a guid thing even when it comes tae hardship. It's a richt tae mak' yersel' hardy an' a' that, but ye want tae be careful ye dinna overdae it. I had a friend once that thocht that the less clothes he wore in the winter time the less likely he wad be tae catch cauld. He's dead noo, pur chap. On the ither hand, I canna' get awa' from it that the auld elm tree has a lesson in it for a guid many people, an' especially for the generation that is growin' up at the present time. If I ken onything aboot how things are goin' at the beginnin' o' this Twentieth Century I think there is a tendency tae mak' things as easy an' comfortable for ourselves an' for oor particular friends as we possibly can wi' the means at oor disposal. I heard a mon say once, "If I had the money that that auld chap workin' in the field over there has, I'd see mysel' in jail before I'd break my back the way he does." This mon didna' ken that it wis the toil an' hardship that the auld fellow had seen in the course o' his life that kept him as weel an' contented as he wis, an' made his last days as happy an' useful as they were.

However, the majority o' people look on work as a hardship, an' na doot it is, in a way. But it's the kind o' hardship that mak's men an' women. It's the kind that brings compensation wi' it. By using oor muscle we get strength and by exercising oor mind we develop the ability tae think. Either kind o' wark is hard enough, na doot aboot that, but it's the only way tae keep frae rustin' oot an' gettin' intae the scrap-pile. I wis in toon the ither mornin' an' as I wis walkin' along the street I met a bunch o' wee laddies yellin' an' hurrahin' like mad. "What's the matter?" says I tae one o' them. "Oh", he replied, "there's no school to-day. Somebody's got the smallpox." It wis the same auld story, an' juist aboot the way I used tae feel mysel' at the same age, an' in the same circumstances. Gaein' tae school wis a hardship an' we dodged it as often as we could. But oor parents an' teachers didna' stand for muckle o' that, an' we dinna' grudge thankin' them for it noo. It's the wee trials an' difficulties o' oor school-days that have helped tae mak' us as good men an' women as we are, tae say naething o' what oor book-learnin' may hae done for us. Not much maybe, this last, but it wad hae been mair if we had been less afraid o' the hardship o' keepin' up this pairt o' oor education after we left school.

The chap that gets through life without much trouble or difficulty hasn't usually onything worth while tae show for his time. I believe that the boy that gets intae scraps, an' then gets weel punished, is further ahead than the chap that kept oot o' trouble a'thegither. He's had experience an' the discipline o' the punishment that the ither fellow kens naething aboot. Ye'll maybe think that this is gaein' pretty far, but if I ken onything aboot it, that's what we're in this warld for, tae live an' learn through oor mistak's an' their con-

length.

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sequences. It's hard doctrine but it cam' doon tae us frae a generation that pit it intae practice an' showed the guid results that could come frae it. These auld ancestors o' ours had hardship in plenty, we ken that. They got it in the auld land before they left, an' they found it waitin' for them here. And if it wasn't that helped tae mak' them strong men, physically, morally an' mentally I'd like tae ken what it was. They got the wind frae all corners, like the auld elm tree by the lime-kiln, that ye could bend but couldna' break.

THE HORSE.

Diseases of the Feet—V.

Corns—Thrush.

Corns are a common cause of lameness in horses. They are often present without causing lameness, but are liable to become troublesome at any time; hence a horse with a corn should be considered unsound, although he may be going sound. A corn is usually situated in the inner quarter of the sole, between the bar and the wall of the heel. It is caused by a bruise which wounds the blood vessels of the part, and causes an extravasation of blood between the sensitive and insensitive soles. Bruises which cause corns may be caused by the shoe when the bearing is too great near the heel, or by the horse treading upon objects which are small enough to insinuate themselves between the shoe and the bar of the foot. In some cases lameness is not caused, while in others it is, and its degree will depend upon the severity of the bruise and the amount of blood extravasated. In some cases pus is formed, when lameness is acute. It is a peculiar fact, that when a corn is once formed there is a great tendency for its perpetuation without apparent cause, and notwithstanding the greatest care.

Symptoms.—As stated, a corn may be present without causing any symptoms that will lead a man to suspect its presence, unless the sole be pared somewhat deeply over its seat. While corns usually appear in the inner quarter their presence in the outer quarter is not unknown. When the outer surface of the horn sole is pared away, little red streaks will be noticed and a little deeper paring will reveal some dried blood. The surface over which this condition exists varies greatly in different subjects. When lameness is present its intensity will depend upon the severity of the bruise, and upon the nature of the ground upon which the animal is travelling. As with many lamenesses, especially those upon which concussion acts directly, the lameness from corn is more marked when the horse is travelling on a hard surface. There is no peculiarity of lameness that will lead the observer to diagnose corn rather than other foot lameness. When the foot is examined, it will be observed that when pressure is exerted upon the seat of the corn (with a pincers, tester or other instrument) it will cause the animal to flinch. If there be suppuration (the formation of pus) pressure by the thumb upon the heel will cause pain, and if the sole be not opened to allow escape of the pus it will soon work up between the sensitive and insensitive walls, and escape at the coronet, thus causing quittor.

Treatment.—Remove the shoe, pare the sole well down, and, if pus be present it will escape; if not, the sore and inflamed part will be exposed. Then apply poultices of hot linseed meal for two or three days and nights, to allay the inflammation, when lameness will disappear. The wall of the foot at the quarter should now be rasped down so that no weight will rest upon the heel of the shoe above the seat of corn, and a bar shoe giving good frog pressure put on. If pus has been present, or the corn pared until fresh blood was drawn, the hole in the sole should be plugged with tar and tow before the shoe is put on, in order that gravel or other foreign matter cannot enter the opening. The shoe should be removed and re-set every three or four weeks, and pressure kept off the quarter. By this treatment a perfect cure may be effected, but there is a great tendency for the reappearance of the corn in a quarter where one has existed.

Thrush.

Thrush consists in a discharge of a foetid matter from the cleft of the frog, arising from a diseased condition of the secretory surface of the sensitive frog. In neglected cases the whole frog becomes involved, the horny frog becoming detached over its whole surface. Thrush is caused by irritating substances generated during decomposition of urine and faeces, which become insinuated in the cleft of the frog, and are allowed to remain there; by allowing horses to stand in liquid or semi-liquid manure, or other filthy substances, and is sometimes noticed in horses that are grazed on damp land. The usual causes of thrush are: allowing horses to stand in damp, dirty places, and neglect in cleaning foreign substances out of the cleft regularly. In some cases thrush appears without appreciable cause. There appears to be a congenital predisposition to thrush in some horses. The liability to thrush is one reason why a groom should always have a foot hook on hand, and thoroughly cleanse the sole of the foot and the cleft of the frog every time he grooms the horse, and, even if the horse be not regularly groomed, the soles of the feet should be regularly cleaned.

Treatment.—Preventive treatment consists in looking well to the cleanliness of the animal's surroundings, and attending regularly to the cleaning of the feet. Curative treatment consists in removing the cause by placing the animal in a thoroughly dry, clean stall, cleaning the cleft and removing any partially detached portions of the horny frog. A little calomel or sulphate

of zinc should be introduced into the cleft, and worked down to the bottom with a foot-hook, or other blunt instrument every two or three days, and it is good practice to put a little batting in the cleft to prevent the escape of the drug, and the entrance of foreign matter. This treatment soon arrests the discharge and dries up the parts, and, if attention be paid to the foot, a growth of new horn soon appears. Another treatment that has given good results is the introduction into the cleft of a little formalin instead of the powders mentioned.

WHIP.

The Suffolk Punch in England.

Breeders of Suffolk horses in England have had a splendid year in 1917, and are looking forward with confidence to an even better one in 1918. This is the one conclusion to be drawn from an interesting statement on the subject which has been issued by the Suffolk Horse Society. This shows that the expansion of the trade for Suffolk horses has been an outstanding feature of the year in matters agricultural. For years the breed has been steadily going ahead, but never has there been anything comparable with the rapidity with which the Suffolk Punch has advanced in estimation during the past twelve months. The demand for Suffolk horses, principally for breeding purposes, has by no means been confined to the Eastern counties, considerable as it has been in this part of the country. From various parts of England agriculturists have been on the look-out for them, and never before have so many strangers journeyed into Suffolk in quest of them. An increasing trade has also sprung up for Ireland.

All this increasing popularity of the breed is shown in the remarkable prices which buyers have been prepared to give at this season's Michaelmas sales, at which Suffolk horses have been selling at three, and even four times more than they were in pre-war days. The best average price at these sales was made at the Mendlesham sale of the stud of the late W. Traylen, when 22 averaged £145, the top price being 300 guineas for a six-year-old mare, Matchett. This sale afforded striking testimony



Two Beauties.

to the contention that there is money in the breeding of Suffolk horses. This mare, Matchett, was purchased five years ago for £60, and now sold for £315, while three of her progeny—a three-year-old filly, £203 15s.; a two-year-old filly, £147; a yearling horse colt, £63; and a horse foal, £48 6s.—brought her return up to a total of £777 1s. Another mare, also bought five years ago for £60, made, with her progeny of three, £701 8s.; while a third mare, bought four years ago for £75, made, with her progeny of five—one being a horse foal out of her eldest daughter,—a total of £312 4s. For the £195 expended on these three mares there was a return of £2,096 3s—over and above the purchase price. In addition to this the owner had the work of the horses for the four or five years.

The auction sales from studs have been remarkable from the fact that at no sale this year has the average been under £100. The best average of the year was the £145 at the Mendlesham sale just noticed. The next best was at the dispersion of the small stud at Palgrave, belonging to the Rev. E. L. Savory, when nine animals averaged £143 each.

This sound and clean-limbed breed has also become very popular as a good war horse in Flanders and France—both as a "gunner" and for transport—and we are told that, in this connection, "the Suffolk horse has impressed all who have had anything to do with him, and the glowing tributes of both officers and men as to his strength and powers of endurance under very trying conditions have, coupled with his remarkable freedom from sickness and disease, gone a long way to enhance the reputation he has made for himself on the other side of the English Channel. He has succeeded where other types have failed." In connection with the work of the Suffolk Punch in the actual war-zone, we are also told that proof of his "being a great worker and able to

do well on small rations is furnished by the testimony of some agriculturists in Northern France, who, according to the statements of returned officers, were so enamored of the Punch that they were anxious to obtain them in exchange for their Percherons."

Altogether it is an interesting story that the Suffolk Horse Society has to tell of the breed during the year. No doubt equally interesting stories could be told by the other societies looking after the interests of other British horse breeds, and it seems a pity that they do not follow the Suffolk example and let us know what their special breeds are doing. They would lose nothing by the publicity.

ALBION.

LIVE STOCK.

Dates of Live Stock Meetings.

MONDAY.

- Feb. 4, 2.00 P.M.—Canadian Thoroughbred Horse Society Directors Meeting.
- " 4, 2.00 " —Canadian Swine Breeders' Association, Directors Meeting.
- " 4, 3.00 " —Canadian Thoroughbred Horse Society, Annual Meeting.
- " 4, 4.00 " —Canadian Pony Society, Directors Meeting.
- " 4, 8.00 " —Canadian Jersey Cattle Club, Directors Meeting.
- " 4, 8.00 " —Dominion Shorthorn Breeders' Association, Directors Meeting.
- " 4, 8.00 " —Canadian Swine Breeders' Association, Annual Meeting.
- " 4, 8.00 " —Canadian Pony Society, Annual Meeting.

TUESDAY.

- Feb. 5, 9.00 A.M.—Ontario Swine Breeders' Association, Directors Meeting.
- " 5, 9.30 " —Canadian Trotting Association, Directors Meeting.
- " 5, 10.00 " —Ontario Swine Breeders' Association, Annual Meeting.
- " 5, 10.00 " —Dominion Shorthorn Breeders' Association, Annual Meeting, Temple Building.
- " 5, 11.00 " —Canadian Jersey Cattle Club, Annual Meeting.
- " 5, 11.00 " —Canadian Standard-bred Horse Society, Directors Meeting.
- " 5, 1.00 P.M.—Ontario Berkshire Club.
- " 5, 2.00 " —Ontario Yorkshire Club.
- " 5, 2.00 " —Canadian Trotting Association, Annual Meeting.
- " 5, 4.00 " —Canadian Sheep Breeders' Association, Directors Meeting.
- " 5, 8.00 " —Canadian Sheep Breeders' Association Annual Meeting.
- " 5, 8.00 " —Canadian Standard-bred Horse Society, Annual Meeting.

WEDNESDAY.

- Feb. 6, 9.00 A.M.—Ontario Sheep Breeders' Association, Directors Meeting.
- " 6, 10.00 " —Ontario Sheep Breeders' Association, Annual Meeting.
- " 6, 10.00 " —Canadian Ayrshire Breeders' Association, Directors Meeting.
- " 6, 2.00 P.M.—Canadian Kennel Club, Directors Meeting.
- " 6, 2.00 " —Clydesdale Horse Association of Canada, Directors Meeting.
- " 6, 4.00 " —Canadian Hackney Horse Society, Directors Meeting.
- " 6, Evening—Ayrshire Breeders' Banquet.
- " 6, 8.00 " —Canadian Hackney Horse Society, Annual Meeting.
- " 6, 8.00 " —Canadian Kennel Club, Annual Meeting.

THURSDAY.

- Feb. 7, 9.30 A.M.—Canadian Shire Horse Association, Directors Meeting.
- " 7, 10.00 " —Canadian Shire Horse Association, Annual Meeting.
- " 7, 10.00 " —Canadian Ayrshire Breeders' Association, Annual Meeting.
- " 7, 10.30 " —Clydesdale Horse Association of Canada, Annual Meeting.
- " 7, 2.00 P.M.—Canadian Hereford Association, Directors Meeting.
- " 7, 3.00 " —Canadian Hereford Association, Annual Meeting.
- " 7, 7.30 " —Ontario Horse Breeders, Directors Meeting.
- " 7, 8.00 " —Ontario Horse Breeders, Annual Meeting.

FRIDAY.

- Feb. 8, 9.00 A.M.—Dominion Cattle Breeders' Association, Directors Meeting.
- " 8, 10.00 " —Dominion Cattle Breeders' Association, Annual Meeting.
- " 8, 1.00 P.M.—Eastern Canada Live Stock Union.

All these meetings will be held at the Carls Rite Hotel with the exception of the Shorthorn annual meeting.

Type and Quality More Important Than Breed.

There is a definite type fixed for beef and dairy cattle, for draft horses, for mutton sheep and for bacon hogs, and all animals must conform to those types regardless of breed. The butcher cares not whether it is an Angus, a Hereford or a Shorthorn carcass, so long as the fleshing is deep and the expensive cuts are thick and heavy. The side of bacon must be such that it will cure into something acceptable to the trade, and whether it comes from a black, white or red pig is a secondary matter. A good deal of this breed controversy is piffle, and if the average breeder would make his choice and then be as much of a stickler for strain and type as he generally is for breed he is pretty sure to make a success. By strain we mean those families within the breed which have made good and speak for themselves, while type is that combination of characters which render an animal most efficient in its particular field. A Holstein, an Ayrshire or a Jersey which is off type and not productive is a poor thing no matter how well bred, and so is an Angus, a Hereford, or a Shorthorn. From good grades to good pure-breds is a wise step; from good grades to poor pure-breds is not. In the latter case a farmer who has been producing something of actual and definite market value engages in a business which not only makes his own labor of less value to himself and country but he turns out inferior breeding stock sure to have a detrimental effect at large. We have no complaint to record against the pure-bred; it is the corner-stone of the industry, but in such times as the present men go to extremes, forgetting type and those things upon which breed popularity is and must be based. A good pedigree is worth money, but it must be discounted when attached to a poor individual. We need good-doing meat animals, and the breeding stock must give evidence of being able to produce such regardless of ancestry.

Excessive prices were never known to do a breed any particular good. It simply means the conservation, for breeding purposes, of all males and females, which can be recorded, regardless of their quality. When values range high the less extensive breeder and the farmer with grades content themselves with a herd header below their usual standard in order to keep within the price limit beyond which they seldom go. When confronted with the difficulty of obtaining a sire do not quibble over a few dollars and lower your standard. Your competitor may invest that extra \$50 or \$100, which you are unwilling to pay, and get it back many times while your sales decrease owing to the growing inferiority of your herd. The type and quality must be maintained even at enhanced prices. Select your breed and allow your personal likings to be gratified to a considerable extent. It would be unwise for the average man to invest heavily in any breed which he does not like, simply because he thinks it the most profitable. The most successful breeders cannot see anything attractive about animals which do not belong to the particular kind with which they work. They are wrapped up in their breed, so to speak, and are more successful on account of their admiration for it. Have a high standard or ideal and make your herd, of whatever breed you choose, attain to it.

Directors of Canadian Sheep and Swine Breeders' Associations.

In electing the directors of the Canadian Sheep and the Canadian Swine Breeders' Associations for the Provinces outside of Ontario, the vote was taken by mail and counted in the office of the Secretary of the Association, R. W. Wade, at the Parliament Buildings, Toronto. The returns are now in and the following are the directors to the Canadian Sheep Breeders' Association for 1918: Maritime Provinces, W. B. Bishop, 85 St. Germain St., St. John, N. B.; Quebec, A. Sylvestre, Clairvaux de Beauport, A. Denis, St. Norbert, Ste. and J. Bryson, Beauport, A. Gagnon, A. E. McKay, Macdonald, St. John's, N. S.; Saskatchewan, H. H. Skelton, Indian Head, Alberta, H. F. A. Evans, Box 387, Lacombe, British Columbia, S. E. Leitch, Vancouver.

Directors of the Canadian Swine Breeders' Association for the Provinces: J. E. Roach, St. John, N. B.; Quebec, M. J. Gosselin, St. Germain, A. Gagnon, Beauport, M. G. Gosselin, W. H. English, Guelph, Ontario; S. A. J. Leitch, Indian Head, Alberta; H. H. Skelton, Indian Head, Alberta; S. E. Leitch, Vancouver.

Admission of Store Cattle to England Delayed.

The Live Stock Journal of November 23 contained the following regarding the admission of store cattle into England. "Last week, in the Commons, Captain H. Fitzherbert Wright, M. P., asked the President of the Board of Agriculture 'whether it is the intention of the Government to remove the present restrictions upon the importation into the United Kingdom of live cattle, store or otherwise; if so, is the necessary legislation to be introduced during the present session; and will he, before introducing such legislation, in view of the risk to our pedigree herds entailed by such removal, consult with the representatives of the various breed societies and give them an opportunity of making such representations as they may think fit?'"

"Sir Richard Winfrey replied: 'It is not the Government's intention to remove the present restrictions upon the importation of live cattle into this country. In the case of Canada no legislation will be introduced unless and until the importation of live cattle born and reared in that country is found to be both practicable and consistent with our domestic policy after the war. Before any legislation is proposed the Board would naturally take steps to obtain the views of breed societies upon this subject, and to impose whatever measures might be thought necessary to ensure that no appreciable risk of the introduction of disease should be run.'"

Grading Up The Herd.

EDITOR "THE FARMER'S ADVOCATE": Having read with interest several articles in your paper on the subject "Pure-breds vs. Grades," to-night after a day at the chores and about the stable I am going to give you a few of my ideas on that subject. Some people seem to think that a pure-bred animal



Maxwalton Commander.
Grand champion Shorthorn bull at the International, 1917. Exhibited by F. A. Gillespie & Son, North Muskogee, Okla.

is of more value and of better quality than a grade. A pure-bred is certainly worth more than a grade of the same quality.

With certain breeds of horses the breeder can "grade up" by breeding to registered stallions till the offspring has sufficient top crosses of pure blood to make it eligible for registration. A man may improve the breeding of his cows from year to year by "grading up," but it is not possible to get enough pure-bred crosses to warrant the offspring a place in the records of the breed worked with. Why should this be? I cannot understand why it would not be a good plan for the farmer, and, at the same time, it would hold out some inducement for him to grade up and this would improve considerably upon the quality of the cattle, which is of such importance at a time like the present. Rules could be laid down as thought advisable.

I have a herd of grade Shorthorn cattle, principally of my own raising, which I have been grading up for the past four or five years, and it would seem a great mistake to me to go back to careless, inferior breeding. I now have a better calf out of my best cow from a registered Shorthorn bull which has recently been sold to an American buyer for over \$1,500. The calf is a grade but not a scrub. She is still sucking the cow, and I consider this method has paid better than any other way when the question of shortage and high cost of labor is taken into consideration. There not being any inducement for the grading up it is a great temptation to yield the calves and make other use of the milk which gives quicker returns.

Some people have an idea that the term "scrub" applies to all animals which are not eligible for registration, but I claim there are scrubs in all classes, whether it be pure breeds or not. I cannot understand why some breeders will cling to the old method of using a scrub sire. If a man cannot afford to buy a good sire, neither

can he afford to breed his cows to a scrub. Let a number of farmers co-operate and purchase a sire which will be growing into money and at the same time be providing the farmers who are shareholders with first-class calves, which means better cows. Or, if this plan fails, breed the cows to a neighbor's good bull even if you have to pay a large service fee. Where a great many farmers make a "blunder" is by just breeding their pure-breds to bulls "with papers," disregarding quality or strain, and this will land them with pure-bred herds of scrubs before they are aware of the fact; but, if the breeder will "grade up" he will succeed in getting a herd of higher standard than he expects to. The main thing is to "stay with it."

I believe a good grade cow is worth more to the farmer and his country than an inferior pure-bred. But if a man will not take the necessary care of his breeding and the top crosses he makes he will never accomplish much. I believe it is each farmer's duty to do his bit by breeding each cow to a good bull of the same breed and avoiding mongrels.

YORK CO., ONT. GRADE SHORTHORN BREEDER.
[Note.—Grading up by the use of better bulls is highly commendable practice. Use nothing but the best. But after once thoroughly familiar with the breed and its management it is not a difficult undertaking to pick up one or two choice pure-bred females and gradually by careful mating replace the grades with pure-breds—better individuals and with pedigrees to back them up.—Editor.]

THE FARM.

The Annual Meeting of the Experimental Union.

The Annual Meeting of the Ontario Agricultural and Experimental Union is to be held at the Ontario Agricultural College on Tuesday and Wednesday, the 8th and 9th of January, 1918, starting at 9.30 on the forenoon of the 8th. Even in spite of the great scarcity of labor throughout the country it is interesting to note that there were fully one thousand more co-operative experiments throughout the Province in 1917 than in the year previous. This was likely due to the fact that the farmers were anxious to secure pure seed of the best foundation stock for crop production, and also that they may keep in touch with the best methods of farming operations. At the Annual Meeting results of co-operative experiments will be presented such as Varieties of Farm Crops, Mixed Grains for Grain Production and for Fodder, Quantities of Seed per Acre, Farnyard Manures and Commercial Fertilizers, the Eradication of Weeds, the testing of Cattle for Tuberculosis, Re-foresting of waste Places, etc.

In addition to the reports on co-operative experiments the following subjects are to be discussed at the Meeting: "Ontario's Agriculture in the Present Crisis," "Root Seed Production in Canada," "Seed Potatoes from Northern Ontario," "Sources of Seed Supply for Ontario," "Agricultural Survey," "Co-operation in Wool Marketing," "Underdrainage and Tile Making," "Practical Suggestions in the Production of Food Materials for the Coming Year." All interested in Agriculture are invited to the Meeting. Cheap railway rates have been arranged on the Certificate plan. For fuller information and a copy of the program apply to Dr. C. A. Zavitz, Agricultural College, Guelph, Ontario.

Dominion Grange Elects Officers.

The Annual meeting of the Dominion Grange was held in Toronto, Friday, December 21, with J. C. Dickson of Moorefield, Master, presiding. Secretary A. G. Burton of Port Stanley, reported twenty subordinate Granges chiefly in Elgin, Essex, Simcoe, Wellington and Ontario Counties.

The officers elected were as follows: Master, J. C. Dickson, Moorefield; Overseer, H. Bertram, Midhurst; Secretary-Treasurer, Neil Burton, Port Stanley; Assistant Secretary, Miss Hattie Robinson, St. Thomas; Chaplain, Wm. McCrae, Guelph; Lecturer, A. Gifford, Meaford; Steward, W. Oke, Whitby; Assistant Steward, Henry Glendinning, Manilla; Stewardess, Miss Alice Palmer, Middlemarch; Gatekeeper, W. J. Goodfellow; Ceres, Miss Phelps, Whitby; Pomona, Miss Lena Hill, St. Thomas; Flora, Miss Thompson, Palmerston; Executive Committee, W. A. Wardell, St. Thomas; Judson Austin, Simcoe; Wm. McCrae, Guelph, Auditor, John Pritchard, Gorrrie.

In The Substantial Class.

EDITOR "THE FARMER'S ADVOCATE": We are so immensely pleased with your Christmas Number that I am writing this note to express our high appreciation of your work in issuing such an excellent number at a time when everything in the way of production is so heavily handicapped.

These are days when the quality of the printing paper calls for comment: yours would be in the substantial class at any time. The men in the printing office deserve commendation for the excellence and style of the letterpress. And the men in the editorial departments gave the other stuff that was worth setting up well, so as to reach your subscribers in such form as to lead them to believe really and truly that farming and farm literature were, at last, really coming to their own.

Heartiest congratulations then on the outstanding excellence of your Christmas Number in every respect, and best thanks from one subscriber, for giving us so much that is the very best at one time. May The Farmer's Advocate prosper!

Ontario Co., Ont. B. W. MacKAY.

The United Farmers of Ontario Hold Their Fourth Convention

The fourth annual convention of the United Farmers of Ontario was held in the Labor Temple, Toronto, December 19 to 21 inclusive. It was by far the largest convention since the organization of the central body three years ago. Upwards of five hundred delegates were in attendance and the increasing interest in the farmer's movement was apparent at every session. The United Farmers as an organization seems to be steadily growing. An increase of one-third in membership numbers was announced and the organization now has some twelve thousand members scattered in every county in the province. Through the trading company with which the U. F. O. is affiliated nearly \$1,000,000 worth of business has been done during the last ten months. The United Farmers have a big work ahead of them and will do well to keep in mind the importance of having strong executives and building up an organization of big men who are capable of handling a gigantic enterprise to the advantage of all those engaged in the business of farming.

Political Helplessness of Farmers.

In presenting his third annual address, R. H. Halbert, of Melancthon, President of the U. F. O., said in part:

"While the year has been a very laborious and trying one owing to the scarcity of farm help, yet we are thankful for the bountiful harvest that we may be able to assist in keeping the food basket of the Empire replenished that the boys who are so nobly fighting our battles in this terrible war may have enough and to spare. While we feel that we have been handicapped in a great many ways in our struggle to do our best for the Empire in this her time of need and while things look dark at present, still we know that the darkest hour is just before the dawn. For untold generations, we have followed sublimely in the ways marked out for us. Such privileges as we have received have been ours by courtesy and not as our right.

"I misjudge the intelligence and motive power of this audience if the dawn of a brighter day is not in sight for the agriculturist, the day when agriculture will not only be the backbone of the Empire at election times, but when agriculturists representing not only the backbone but also the brains of the Empire will sit in greater numbers in our Legislative halls, and we, through them will have a say in getting British fair play in the making of the laws that are placed upon the statute books.

"The farmers of Canada possess, though I am sorry to say they do not control the biggest business asset of the Dominion, yet we have sat in the back seats until we have become isolated, while transportation, finance, manufacture and food distribution have become so thoroughly organized that they now represent one of the most powerful commercial factors in present day commerce. Against such an organization how may the individual farmer expect to successfully compete? It is not generally understood that our agricultural export trade exceeds in value that of all other industries combined. Agriculture is the hope of the nations. It is the hope of warring Europe. It is the hope of humanity, of civilization, of all that we as Anglo-Saxons have learned to cherish. It is the hope of human liberty. Farmers are the peace-makers of humanity—they are the great peace-makers who will heal the scars of war. The very existence of man-kind is in their keeping. They began the art of civilization when they gathered the seeds of the earth, guarded them through the long winter season, cleared the fields for the planting and harvesting again. Future civilization is also in their hands. The knowledge of the art of agriculture is not only the most valuable possession for the future as it has been in the past, but it is undoubtedly so for the present.

"The day is not far distant when the men who command the earth will receive the recognition which they deserve. In this monstrous war, greater than any the world has ever witnessed, more disastrous in its waste of human life and wealth and more loathsome in its disregard of truth, virtue and the cherished monuments of Christianity, in this ungodly sacrifice of struggling humanity, towards which nations from the four quarters of the globe have been drawn with irresistible force, the ultimate decision, the final blow that will make this world safe for democracy rests with the farmers, the producers of the world's food.

"For three long years, millions of men have been engaged with guns and ammunition, fighting in this war. Thousands of men from the farms of Canada have heard the call from Europe and have gone with the gun and bayonet. Other thousands have remained at home and worked as they have never done before that the Allies may have something with which to pursue the ghost of famine. One day we are exhorted to produce for the sake of the starving women and children of Belgium and the next we are told that we will have to give our sons to fight in the trenches in France. We are between the devil and the deep sea. There is no business that calls for such varied knowledge and skill as the work on the farm, and while it may be true that a man owes everything to his country, it is very discouraging and well nigh criminal to see the farm depleted day by day of its experienced workmen with no compensating returns to the land where we are told the war is to be fought out. If ever there was a time for the farmers to put forth strong action, it is now. The farmers will not get fair play from any Government until they unite at the polls. United we can control, divided we are helpless.

"Our organization has, during the past year, been most outrageously ignored by the powers that be. As your President, I have felt very keenly, and no doubt you all have, some of the slaps in the face which our

In Union is Strength.
United we stand—divided we fall.

* * * * *

The industry that gives you bread deserves your loyal support.

* * * * *

The farmer who does not respect his industry is a traitor to it.

* * * * *

Co-operation, not competition, is the life of trade.

* * * * *

Equal opportunity to all, special privilege to none.

* * * * *

A Club is the first stage of co-operation.

* * * * *

Your Club is just what you make it.

* * * * *

The farmers feed them all.

* * * * *

Co-operation is a merger of individual efforts.

organization has received, especially when we are told by some of the men who are enjoying a fat living on our money that we, 12,000 members of our organization, are too small and insignificant to be recognized. Still a few millionaires in Toronto can name the men and have them appointed to the Cabinet. Government by the people has become a myth. The real rulers of Canada and the Canadian parliaments are the Lords and the Knighted members of combines, manufacturers' associations, and transportation companies. Through their system of ruling, there has grown up a band of autocrats who bend Parliaments and legislation to their own despotic will and in their own selfish interests. The result is that to-day we are loaded down with a whole menagerie of white elephants causing a loss of millions annually in the operation of our basic industry of agriculture for the benefit of the combines. Farmers are the only class that will not break the chains of party bondage for their own benefit and they compose the only class whose industry is taxed for the benefit of the special privileged interests. So long as we remain so, the interests will control.

"The making of Governments is a serious business, specially for the farmer and should be taken seriously by every farmer. The tremendous burden of additional taxation which will be required to carry our war debt should compel every farmer to vote in his own interests. But just as soon as the farmers make a move to escape from the party slave-pens, the politicians get busy and wave the party flag and shout patriotism. As long as they can keep us from thinking and acting for ourselves, it does not make much difference which pen we are kept in.

"Suppose the Government of Canada made an appeal to the manufacturers in the following terms: 'The fate of the Empire depends on the supply of munitions, we want you to make an abundant supply, work longer hours and harder, get your women and children to help you, put forth every effort to make the output as large as possible. We do not know what prices you will get, that will depend on the demand and the whims of speculators. We cannot say what freight rates will be charged you. We cannot guarantee you against losses. You will still be charged the highest rate of duty and war tax on your machinery and tools, also on your raw material. You will get no Government aid of any kind. We will, however, have a lot of Government Officials (who know less about the business than you do), to give you lectures, send you bulletins and other kinds of instruction, the cost of which will be charged to you. This is a Patriotic duty. Go to it!'

"How do you think the manufacturers would take to it? Yet that is just the kind of dope that is handed out to farmers to-day and has been for years, and we have to pay for it. A little gravy is all right if you have some mashed potatoes to put it over but we don't relish it when it is the sole dish in a one-course dinner.

"No Government has ever concerned itself seriously with a close study of the economic conditions of Canada's basic industry. They have been satisfied with giving us advice it until has become obnoxious. They tell us to raise more hogs that they may create a few more hog barons while we may not get paid for the feed they eat. In order to lessen the cost of the production of the bacon, we are told to get our wives and daughters to feed them and then they brand our wives who have no sons to go to the front 'Pro-German'.

"I often think of that old patriotic song that we so often sing, 'Rule Britannia.' How long will we go to the polls carrying in our hands the hammer that would break down the tariff walls. The gunpowder that would explode the combines, that would burst the combines. The key that would unlock the shackles that have been locked upon our industry. That would put the land on the basis of Australia and in our own possession. Again I say, how long? Or will we continue to give our franchise as a lever to block our own progress upon the path of patriotism? Will we sacrifice our industry to the god of patriotism and like the sow that has been washed, return to wallowing in mud and mire of political corruption? God forbid. God has given

us a soil, climate and natural advantages unequalled anywhere. Increase the opportunities of the farmer by scourging the money changers from their markets and they will save the world that is now being crucified by greed and the lust for power.

"What agriculture needs to-day is not hot air and advice from a lot of armchair agricultural experts, but emancipation from a Kaiserism which is almost as tyrannical as the Kaiserism of Germany, a slavery almost as exacting as the Prussianism of Europe. The soil of France is being dyed red with the blood of Canadian boys, that autocracy may be overthrown. Will the seeds of autocracy be sown in Ontario?"

Membership Fees.

As is understood by readers who are in touch with the movement, the United Farmers of Ontario is not the business organization but is an organization to carry on propaganda and educational work in the rural communities, but it works in very close connection with the United Farmers' Co-operative Company, Limited, which is the real business or financial branch of the great work. Accordingly, the financial statement of the U. F. O. does not show figures representing any great amount of money. However, the organization according to the auditor, William McCrae, of Guelph, is in a strong financial condition comparatively speaking, and has a balance on hand of \$2,022.99.

Following the President's address, a somewhat lengthy discussion took place regarding increasing the amount of the fees which members should pay to the central association. In the past the central organization has received fifty cents as the membership fee from each member of the Clubs affiliated with the central. Some members thought that this fee should be higher in order that the organization have more funds with which to carry on the work. Others believed that it would be rather difficult to go back to their local Clubs and persuade farmers that the fee should be raised. After considerable discussion in which the ridiculousness of a farmer anxious to promote organization work in his own business objecting to a fee of \$1.00 or \$2.00 or even \$5.00 was brought out it was decided to take the matter home to the Clubs and lay over any change in membership fees until another year. Some speakers, and we believe they were entirely correct, stated that the farmer who balked at paying more than fifty cents for the promotion of his own organization was of very little use to that organization. Other delegates thought that the U. F. O. was of less value just now and it would be difficult to go back to their home Counties and Clubs and get extra fees from the men on the back concessions, and the fee remains the same for another year, and, by the way, is altogether too small. We entirely agree with John Kennedy, Second Vice-President of the United Grain Growers, Limited, who said later in the Convention that farmers ought to be ashamed to raise any objection to a membership fee of one dollar, two dollars, or even five dollars or more, if such fee were necessary to properly carry on the organization to fight the battles of the man on the land.

Progress During the Year.

The report of the Secretary, J. J. Morrison, drew attention to the development of class consciousness and agricultural individuality. Farmers have reached the limit of docile subservience and while the present report of the work accomplished in the period from March 1, 1917 to December 19, covers only the inactive period of the year progress was shown. The increasing burdens of the war have affected the agricultural industry to such an extent that the rural population are working to the limit of endurance. 1917 has been a strenuous year for farmers but many lessons have been learned. In times of stress co-operation makes progress. During the summer seventy-eight public meetings were held in thirty different counties of Ontario; of these twenty-five were local conventions addressed by John Kennedy, Second Vice-President of the United Grain Growers, Limited. R. McKenzie, Secretary of the Canadian Council of Agriculture, C. N. Baker, Vice-President, and P. P. Woolbridge, Secretary-Treasurer of the United Farmers of Alberta, J. A. Orchard, a Director of the Grain Growers Association of Saskatchewan, and by local men. This work will mean progress and will be continued next year. At the time of the last annual meeting the Secretary's report showed 200 organizations and 8,000 members; now there are 315 organizations, a gain of 115, and 12,000 members, a gain of 4,000. Forty-three counties have been tapped in the work but the fringe is scarcely touched as there are approximately 250,000 farmers in Ontario, so that only one-twentieth have been reached. Mr. Morrison urged that rural women join the organization as the women of the Western Provinces have lent their efforts to the work of the Grain Growers Association. One Club in Victoria County has been promoted and operated by women and is doing well. The glad hand of fellowship was extended to the Junior Farmers' Improvement Association, a Provincial organization which has taken shape through the efforts of the District Representatives of the Ontario Department of Agriculture in the various counties. Mr. Morrison drew attention to the work which was accomplished in successfully opposing the attempt of the railway corporations to increase freight rates fifteen per cent, and took the credit to the United Farmers for saving nearly \$10,000,000 annually to the public. The United Farmers also opposed price fixing on farm products while prices of all that farmers had to buy remained unfixed. An effort was put forth also to secure free exchange between telephone lines. The

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weakness lay in the fact that only 10,000 organized farmers of the United Farmers of Ontario were seeking what should have been demanded by 250,000 who look on and neither assist nor contribute to the cause.

The greatest need in the opinion of Mr. Morrison was a direct line of communication with the members. He believed that no great organization without an official organ could hope for success. Unity of purpose is the propelling factor in organization, and in his opinion without an official organ the organization becomes a mob driven by the cross winds of ignorance and bigotry. A new era in agricultural organization is becoming established and the dream of the optimist is sure to be verified, according to the Secretary.

Organization of Young Men.

Joseph A. Snider, Provincial Secretary of the Junior Farmers' Improvement Association, gave a short address on "organization of the young men of our industry", in which he eulogized the work of the District Representatives and explained the method of organizing the Junior Farmers. Having benefited from the Short Course work as carried on by the District Representatives of the Ontario Department of Agriculture, Mr. Snider was more willing to give due credit to departmental organizations instituted for the prime purpose of helping to improve conditions in the rural districts than were some of the older speakers who were particularly bitter against all officials of agricultural colleges and Departments of Agriculture. There seemed to be in the meeting a feeling that all men appointed by the Government, Provincial or Dominion, were attempting in some way or other to undermine the work of the farmers' organization. Mr. Snider's address, followed by a paper by Percy Mulholland on the "Dignity of Our Calling," should have some effect in depicting the views of younger men.

Increased Production and Labor.

W. A. Amos was assigned the subject of increased production and labor, and while many good things were brought out in his excellent address he had no solution to offer for the labor problem. Our vast armies, as well as the civilians of the Allied countries, must be fed. Early in the war no special attention was paid to production. At that time Lloyd-George contended that the silver bullet would win the war. Then the call was suddenly changed and munitions were speeded up. Soon after another change was made and every influence possible was brought to bear to exhort the producers to greater efforts. In the mud of the last three springs and particularly the last, every man on a hundred acres tried to put in at least ten acres more crop. Farmers have done their utmost but still if we are to have liberty, truth and righteousness on the earth we must have food. We have been living too high and if the Government is sincere in asking for increased production, then they should demonstrate that they are going to make the proper use of what is produced. We must have conservation and elimination of waste, and the producer must be protected by a price for his product commensurate with the cost of production. "No farmer," said Mr. Amos, "is foolish enough to produce for mere patriotism." He asked that everyone should do his bit. "Our kinsmen and our Allies are fighting for us and the least we can do is to fight famine for them. Some customs must be set aside, and the efforts of the soldiers and the women of Europe must be supplemented. We must make a patriotic endeavor even if the profiteer does exploit." Mr. Amos gave some very interesting figures showing the waste of barley, still being made into beer, which barley should be used to feed hogs for the armies and the civilian population of the Allied countries. Referring to the labor question, these were his words: "We haven't got any labor". Efforts made by citizens of our towns and cities demonstrate that they do not know very much about the labor situation. Farming is a hazardous occupation and requires competent men. We must do all we can alone or in co-operation with our neighbors, rather than usher in inexperienced help. Mr. Amos had no solution for the labor problem, but believed that the farmer should lift his business out of other men's hands and control it himself.

Development of Rural Opinion.

W. L. Smith gave a short address on the formation and development of rural opinion. Farmers are more numerous than those engaged in other work, according to Mr. Smith, and should have more influence than any other class. But the urban population has increased rapidly and the rural population decreased, and in the larger centres there is a maximum of organization, while in the rural districts the lack of organization is apparent. He believed that farmers possessed more knowledge and ability for clear thinking than could be found in the cities, but they lack the power to control public affairs. He deplored the passing out of the debating societies of years ago, which enabled people to think on their feet, to debate in public and bring proper influence to bear. He believed also that the principal hope was in the Junior Farmers' Improvement Association, but advised his hearers to avoid as they would a pestilence the influence of any departmental official in the running of their organization work. Government officials pauperize the people in Mr. Smith's opinion, and do the work farmers should do for themselves. He suggested that the Secretary and Directors should prepare a program for winter meetings so that all Clubs would be discussing the same things at the same time. We are living in strenuous and dangerous times. The nation is borrowing heavily. The time is coming when borrowed money must be paid back, and the burden will fall upon the farmers and their children unless organization secures for the farmer his just rights. In Mr.

Smith's opinion farmers are the great steady influence in this country.

J. N. Kernighan followed Mr. Smith. He believed that the greatest need was a consolidation of rural opinion. It is necessary to have organization to get the proper expression of this opinion and unless the United Farmers of Ontario can consolidate public opinion they have no reason for existing as a body. Mr. Kernighan stated that the city press will not give rural opinion a chance to express itself and cited cases of failure of four Directors of the organization to get letters published in Toronto papers. He favored an official organ, perhaps a daily, for the United Farmers. In discussion it was brought out that one of the greatest needs at the present time is fair representation of the farming industry in Parliament.

The Canadian Council of Agriculture.

R. McKenzie, of Winnipeg, and Secretary of the Canadian Council of Agriculture, outlined the work of that institution tracing its development from the very beginning of association work in the West. The work of the Canadian Council is to gather data and information which has a bearing on agriculture; for instance, this last year pamphlets have been sent out in great numbers, including 75,000 copies of "The Farmers' Platform". The work of the Canadian Council of Agriculture is to crystallize public opinion. Mr. McKenzie quoted figures to show that agriculture in Canada has been decadent and that while in 1881, 154 out of every 1,000 of Canada's population were engaged in agriculture, thirty years later this number had decreased to 130 per thousand; while the numbers per thousand engaged in trade and transportation had doubled and trebled. He deplored the fact that farmers had signified their unwillingness to pay a membership fee of \$1.00 to their organization, pointing out that the boot-blacks of Winnipeg paid \$8.00 per year in support of their organization.

Farmers' Roads.

Ontario farmers and their roads was the subject allotted to E. Elliott, County Clerk of Peterboro. In Mr. Elliott's opinion it is the duty of the Government to build and repair roads most used by farmers. In his opinion not two per cent. of farmers attend the city market and only about one-tenth of the travelling done by farmers is done on the County Road. These special County Roads which come under the County Roads System are used by citizens of the towns and cities and ninety per cent. of their pleasure is derived on these roads without direct financial support. He believed that it is the duty of farmers to go to the Government and insist that the citizens pay their automobile licenses to be used on the main roads which they use. The Country Road System he branded as a yoke on the farmers and a benefit to urbanites and contended that all special effort on country roads should be put on those roads used most by farmers and necessary to get their goods to and from the nearest railway station.

Supporting his argument, A. A. Powers, contended that we should have roads for the people to take stuff to market and not be burdened with concrete roads for tourists' travel.

The farmer's market is his railway station, said James Pearson. He pointed out that in California every dollar collected in automobile licenses goes back on the public highway. Government money should be spent on the farmers' roads and the automobile licenses should get to maintain the thoroughfares which they use.

Producer and Consumer.

E. H. Stonehouse, President of the Milk Producers' Association, in a pithy address dealt with "The Rural Producer and the Urban Consumer". In his opinion farmers are the heart of the country, and while urban people believe that farmers have been unjustly favored, in the interests of both producer and consumer, which are identical, farmers have a right to claim exemption at this time because the armies and the people must be fed and farmers are doing a national service. Labor is the big shortage and even though farmers are working fourteen hours per day production is falling off. They have done their utmost and never asked one undue advantage, but with the rural population falling off from thirty, fifty and even seventy per cent. and immigration cut off, and keeping in mind that those who have come from the Old Land have enlisted and the drain of our own Canadian boys into the army, farmers can scarcely maintain production. As a body they are as loyal as any class in the Dominion and as a body they request and demand as a national service that skilled men be left on the farms. Every skilled producer added to the ranks of the consumers takes away the support of six or eight men in the trenches. "And," said Mr. Stonehouse, "if one man should die in the trenches, another should (figuratively speaking) die in his effort on the farm." He advocated an intelligent system of registration, placing every man where he could do most good. Non-essential industries should be closed. He believed that the consumer did not and would not understand the situation until he was forced. The average consumer first attempts to economize on necessities, while he keeps up his pleasures. We must concentrate on the things worth while. Closing his address in a strong appeal for closer organization, he asked that farmers be loyal to their association, that they cut out party politics which he named the root of all evil, and he hoped that the better spirit which was now manifesting itself among farmers would hasten the day when the farmer would occupy his proper place in the community.

R. W. E. Burnaby, of Jefferson, dealt briefly with the subject of Price Fixing of Farm Products Only. Mr. Burnaby believed that the Food Controller was

doing the best he could under the circumstances, but complained that sometimes it did appear as if the farmer was not getting a fair deal. It seemed to him like a long time from the date on which the Food Controller set the price on wheat before he fixed the price on bran and shorts. In Mr. Burnaby's opinion the law of supply and demand could be depended upon were it not manipulated by unscrupulous dealers, and then no control would be necessary. He believed that the price of wheat had been set, not to help the farmer but because men between the farmer and the consumer wanted it so. If any price fixing is done he believed that it should be a minimum price that the farmer should get for his product. He accused the Government of hampering rather than encouraging production, and while they would not guarantee the farmers a price they would pay munitions manufacturers at a rate that would enable them to take the farmer's labor away from the land and pay each man ten dollars per day or per night. Prices were assured the pork packers by the British Government and why was it impossible to set a price for the farmer? The Food Controller had taken good care that the middleman, the railroads and the manufacturers do not lose anything by price setting. "Who sets the price on binders," said Mr. Burnaby. Not the Food Controller but the manufacturers whose agents quote the same price for the different makes. Yet the price of wheat is set to the farmer.

Mr. Burnaby believed the middleman is absolutely necessary but that the United Farmers' Co-operative Company should be that middleman.

If we are ever to get what we desire we must elect proper representatives to Parliament and not be the lot of hide-bound Tories and Grits that farmers of the past have been. Mr. Burnaby showed very clearly how the tariff was a detriment to the producer and consumer as well.

Pitfalls of Farmers' Business Organizations.

John Kennedy, Second Vice-President of the United Grain Growers, Limited, discussed some of the pitfalls of farmers' business organizations. In plain language, he told those present that if they were ever to get anywhere they must not hesitate to give their loyal support to their organization, financially and in every other particular. He believed that the United Farmers of Ontario would do well to have ladies present at their annual meeting and to encourage them to work very closely with the organization.

The first essential to success is executive ability and young men with practical experience in business methods. A man cannot grow up between the plow handles and then launch into commercial business on a large scale and make it an immediate success. The best men must be selected; men who can get contracts and close them. The executive must have confidence in themselves and not stop at a few hundred dollars in hiring the right men to run the business. He urged also greatly increased paid-up capital that will establish a line of credit and advised that only high-class goods be handled.

Resolutions.

Among the resolutions adopted was one urging the Federal Minister of Agriculture to allow the permanent immunization of hogs against cholera by serum treatment. The delegates were also asked to bring to the attention of their Clubs the necessity of increasing the membership fee. The Farmers Platform was again approved and the Dominion Government was asked as a means of increasing production to remove the duty from agricultural machinery, implements and clover seed. The Convention also favored the prohibition of the use of any grain in making alcoholic beverages during the war, and the Railway Commission will be asked to have fertilizers in bulk put in the same class as crushed rock for carriage as freight. The Dominion Government was asked to investigate the cost of cheese-making and to take steps with the Imperial Government to have the price arranged in accordance with the cost of production. The Presidents of the U. F. O. and the United Farmers' Co-operative Company, with Secretary Morrison, and two others to be named by them, were appointed a committee to consider the advisability of establishing an official organ.

Officers.

President, R. H. Halbert, Melancthon; Vice-President, E. C. Drury, Barrie. Directors: W. A. Amos, Perth Co.; Peter Porter, Brant Co.; H. V. Hoover, Hastings, Co.; A. J. McRae, Glengarry Co.; T. H. Adams, Essex Co., and R. J. McMillan, Huron Co.

The Company.

In the meeting of the United Farmers' Co-operative Company Limited, President B. C. Tucker's statement showed that when the year was complete the business would pass the million dollar-mark. It is interesting to compare this with the first year of the organization in which \$226,000 was the amount of business; the next year this increased to \$410,385; and the past year this latter figure is more than doubled.

L. C. Blachford, Manager of the Company, pointed out that the United Farmers organized for the purpose of bringing farmers together for the promotion of their mutual interests, and that the organization provides the medium through which business is done, while the Company provides in a large part, the sinews of war by which the work of organization is promoted.

The resolution adopted by the U. F. O. in connection with the establishment of an official organ was also adopted by the Company.

Directors of the Company.

R. W. E. Burnaby, Jefferson; E. C. Drury, Barrie; Wm. McRae, Guelph; A. A. Powers, Orono; R. H. Halbert, Melancthon; E. A. Van Allen, Aultsville; B. C. Tucker, Harold; Elmer Lick, Oshawa; C. W. Gurney, Paris.

Automobiles, Farm Machinery and Farm Motors.

More Timely Suggestions.

We had a visitor the other day who discussed with us rather fluently the different automobile departments that are being conducted by various publications and the subjects threshed out in them from time to time. He said that he was very interested in them because he had owned a car of some make or other since 1911. His chief complaint against many magazines and journals was based upon the fact that much of the information provided was too technical and in consequence, as he very aptly put it, "over his head."

"Keep on pounding in the timely stuff," was his advice "and always write it in popular style. I have read a great many stories about automobiles but have been compelled to give them up because they dealt with complex electrical matters or difficult mechanical propositions. What I want is the plain unvarnished truth served up so that I can understand it."

We thought that we had told practically the whole story in relation to the care of cars and winter service but we found out after talking with our interviewer, that we had neglected certain details which, if not important to our mind, were at least very vital with him. For instance, we have given you suggestions regarding the use of alcohol but we know now that we failed to state that the alcohol in the solution with which you filled your radiator evaporates very quickly. It is there-

fore necessary to add a pint of pure alcohol at intervals in order to make up for the evaporation and to keep your solution at standard. We are also conscious of the fact that while we told you to change the oil in the crank case at regular periods, we did not emphasize the necessity for this operation. We do so now and with apologies. As we have stated on many previous occasions the ordinary commercial gasoline marketed at the present time contains considerable kerosene or coal oil. This crude fuel does not burn until a high temperature has been reached in the cylinders and so in consequence, some of it gets down past the pistons and into the crank case where it destroys some of the qualities of the oil. The ordinary lubricant prevents wear and kills noise but gasoline and kerosene are not in any such classification. If you are making long trips with your automobile very little of the kerosene will get past the pistons, but if you are making many short trips the case is different. Every time your motor cools off it must be heated up again to a point where the kerosene and gasoline will burn or otherwise the low grade portion of the gas will be blown into the crank case. Kerosene is not the only thing that does not burn in a cold motor. You must remember that a certain amount of condensation takes place and this also affects the lubricant around the crank, or in the crank case.

Our articles have dwelt at some length upon the care

of the battery but we find that many people do not even now know the amount of care that should be exercised. The battery requires more frequent inspections in the cold months than it does in the warm months. The evaporation in winter is certainly not as great as in the summer but the starting of a cold motor puts a greater load upon the battery than the starting of a hot one. The result is that the battery develops a greater internal heat and, of course, much more evaporation takes place. If, in the inspection of your battery, you find a green substance on the terminals, this will indicate that there is a poor connection. It will become necessary for you to disconnect the terminals and wash them with a heavy solution of baking soda. It is also well to subsequently apply a coating of vaseline to the surface of the terminals.

There are some owners who only use their cars during four or five of the summer months. These motorists should remember that a machine that is laid away for a long time frequently develops rust on the cylinder walls. To prevent any such happening it is advisable to remove the spark plugs and squirt in some lard oil on the tops of the pistons. By turning over the motor you can now distribute this oil along the walls of the cylinders and thus effectively prevent rust.

This is our final article upon the care of cars in winter time. If there is any point that we have overlooked we shall be pleased indeed, to take it up individually.

AUTO.

Canada's Young Farmers and Future Leaders.

The County Short Course.

There was a time when comparatively few farmers or farmers' sons had an opportunity of acquiring scientific knowledge on agricultural problems. Their information was gained under the exacting, and oftentimes harsh, school-master experience. They knew that certain things had to be done in order to reap a harvest from the soil, and that better results were obtained in the dairy and feed lot with some feeds than with others, but they were unable to delve into the whys of these things on their individual farms. And so they labored on in the dark with more or less success, but in many cases without that enjoyment in the work due to knowledge of the fundamental principles underlying plant and animal life. The agricultural colleges are the natural source of information for the solution of farm problems and they have done a great work. New and better varieties of grains and seeds have been created, crop yields have been increased by selection and plant breeding, improved systems of feeding have been worked out, the chemistry of soil and plants has been studied, heavy laying strains of poultry have been built up, types of buildings have been experimented with, and every problem of the dairy from stable to finished product has been studied. Time has been given to the study of fruits, bacteriology, weed seeds, etc., and the deductions have been scattered broadcast by means of the press, lecturers, and students of the college. However, only a small majority of the farm boys could spare the time to take a complete course, and getting the knowledge second hand failed to inspire the youths of the land to acquire needed information for the carrying on of their occupation in the most efficient manner. This is no fault of the colleges nor yet can the boys be blamed. There are oftentimes almost insurmountable difficulties lying between the farm and the college halls. Of late years these difficulties of acquiring an agricultural education have been partially overcome. The agricultural college is in a sense brought to the farmers' doors, through the agency of its graduates.

A District Representative has been established in most counties of Ontario, and among his many duties is the holding of a four to six-weeks agricultural course in some part of his county during the winter season. This work has been going on for several years and thousands of young men have seized the opportunity to further their knowledge of agriculture by attending these courses regularly. Seldom is a course held in the same locality two years in succession. By going to a different locality each winter, some representatives have conducted a course within reach of every young man in the county.

We know of young men who ridiculed their chums for rising earlier than usual on the cold winter mornings in order that they might finish their chores and be in time for the morning lectures. They would sooner take an extra nap and then sit dozing by the kitchen stove, after the morning chores were finished, than drive several miles in the cold and then listen to lectures and discussions on farm topics all day. But, now the laugh is the other way. The young men who made a sacrifice to learn the why and wherefore of farming are becoming leaders in their communities; they are debating and speaking on public questions; they conduct crop and feeding competitions; some have won honor in stock judging competitions, others have been selected as official judges at fall fairs. They are making a success of their work, and their opinions are sought after by even the older heads in the community. The short course may not be responsible for all the advancement, but it has in most cases awakened a new interest in farm work. It has led many young men to decide in favor of the farm. We have yet to hear a young man say that he regretted having attended the course; most of them are planning to attend again if a course is held in their neighborhood. In many counties short courses and special agricultural meetings will be held this winter. Are you planning to attend?

By attending a short course the student can acquire a working knowledge of the principles of agriculture. A series of lectures are given by the District Representa-

tives, assisted by specialists, on such subjects as crop production and rotations, farm operations, principles of breeding, feeds and feeding, compiling rations, dairy practices, poultry, horticulture, weeds, weed seeds, insects, under-drainage, etc. Demonstrations are held and the students are given practice in stock judging, milk testing, grain judging, weed identification, public speaking, etc. If a man applies himself it is surprising the amount of useful information that can be acquired in a short time, and that without having to leave the community. The course is held at a time when work on the farm is least pressing. The hours for lectures are such as to enable the student to assist with the chores night and morning. If a short course is held within eight or ten miles of your home, you miss an opportunity if you fail to attend. Consult your District Representative regarding the place of meeting and course of lectures to be given in your county.

Feed Consumed by a Litter of Pigs.

EDITOR "THE FARMER'S ADVOCATE":

On April 29 last my sow farrowed a litter of ten pigs. The following is an account of the meal fed and the selling price. The hogs were fed some mangels, the weight of which I am unable to give. They also received a quantity of skim-milk twice a day. The feed bill is as follows: 4,495 pounds mixed chop at \$2.50 per cwt.; 500 pounds of shorts at \$2.25, and 200 pounds of shorts at \$2.40 per cwt., making a total cost for grain of \$128.36. On October 31 I sold nine of the hogs at \$15.50 per cwt. They weighed 1,780 pounds. The other pig was killed on November 15 and dressed 170 pounds. Dressed pork was selling at \$24 per cwt.; thus the total receipts were \$316.70, leaving a profit over the cost of grain of \$188.34. Taking mangels, skim-milk and labor into consideration, I consider there would be about \$100 net profit.

Halton Co., Ont.

W. J.

THE DAIRY.

Oxford County Holstein Breeders' Club Had a Good Sale.

The Oxford District Holstein Breeders' Club again had a very successful sale, when sixty-one head were auctioned off for a total of \$12,055, which would make the average close to \$200. This Club holds two sales a year and has gained the reputation of always consigning high-quality stock and has thereby won the confidence of the public which resulted in a large crowd of Holstein breeders turning out at this sale. Bidding was brisk for practically every animal, the sixty-one head going under the hammer in a little over three hours. Daisy De Kol, consigned by Walburn Rivers, Ingersoll, and purchased by C. P. Wilcox, of Chatham, was the highest-priced animal at the sale. Four hundred and twenty dollars were paid for her. Sir, Segis Walker Korndyke, consigned by W. E. Thomson, was the highest priced bull. He was purchased by Wm. Pullen, of Woodstock for \$365. The sale was conducted by auctioneers Moore and Dean.

Among the consigners were: M. H. Haley, A. E. Dunn, M. L. Haley, J. G. Currie & Son, W. E. Thomson, G. Oliver, T. J. Lammiman & Sons, C. N. Hilliker, F. I. Heene, A. T. Walker, B. D. Smith, T. G. Grevy,

G. R. McCombs, R. W. Newton, Walburn Rivers, F. Rowe, M. McDowell, W. C. Prouse, McGhee Bros., A. Groves, W. B. Poole, O. Wallace. Following is a list of the animals selling for \$100 or over, together with the names and addresses of the purchasers:	
Daisy Fayne 2nd, Geo. de Montmorency, Woodstock.....	\$350
Miss B. B. de Boer, W. C. Houck, Chippewa.....	230
Baron Korndyke Segis, A. Dunn, Ingersoll.....	315
Gretqui Keyes Lyons, W. B. Poole, Ingersoll.....	400
Faforit Tehee Walker, F. B. Shaver, Copetown.....	215
Korndyke Baron Segis, R. G. Boxall, Mossley.....	175
Baroness Johanna Fayne, G. E. Brown, Copetown.....	155
Lady Fayne Beets, N. R. McArthur, Thamesford.....	205
Grace Fayne Homewood, M. J. Bain, Thamesford.....	275
Lady Grace Fayne, G. E. Brown.....	235
King Midnight Ormsby, J. W. Innes, Woodstock.....	245
May Posch Calamity, Jas. Liddle, Copetown.....	180
Sir Segis Walker Korndyke, W. Pullen, Woodstock.....	365
Bonnie De Kol Posch 2nd, G. T. Hewitt, Bright.....	195
Mercena De Kol Segis, A. S. Downham, Thamesford.....	195
Sir Zorra Walker, G. Bishop, Norwich.....	145
Victoria De Kol Beauty, J. J. Fox, Guelph.....	225
Princess Netherland De Kol, Jas. Liddle.....	155
Bessie's Claressa, W. J. Fraser, Streetsville.....	250
Irene Dewdrop De Kol, Jas. Liddle.....	200
Winnie Dewdrop Keyes, T. H. Dent, Woodstock.....	200
Jennie Posch Countess, W. J. Fraser.....	220
Pauline Countess, W. Bolton, St. Marys.....	195
Tidy Jean Colantha, G. Hart & Son, Woodstock.....	130
Rebecky Winnie Colantha, G. Forrester, Mitchell.....	115
Pearl Butter Baroness, P. Jaques, Hickson.....	145
Cherry Butter Baroness, H. Matthews, Putnam.....	180

Josie De Kol Butter Baroness, W. Bolton.....	135
Millicent Walker, T. Wilcox, Smithville.....	280
Aunt Mary, T. Wilcox.....	200
Winnifred Walker, T. Wilcox.....	230
Daisy Queen Calton, Jas. Liddle.....	205
Excelsior Lady De Kol, L. Wilson & Son, Caledonia.....	220
Adelaide Springbank Schuiling, G. P. Adams, Bronte.....	175
Maple Grove Beauty Colantha, G. Hart & Son.....	195
Daisy De Kol, C. P. Wilcox, Chatham.....	420
Pioneer Mechthilde A. Hartog, J. E. Casler, Norwich.....	195
Colantha Mercena De Kol, J. W. Innes, Woodstock.....	165
Dutchland Mercena, G. Hart & Son.....	165
Charlotte Ormsby Segis, W. C. Houck.....	200
Centre View Walker Segis, C. Hoyle, Woodstock.....	130
Centre View Ormsby Lad, F. Hilliker, Norwich.....	150
Netherland Aaggie Bell, G. de Montmorency.....	210
Dixie Belle De Kol, Jas. Liddle.....	190
Finderne Valdesso Ormsby Fayne, A. Duff, Corinth.....	270
Sir Randolph, M. Armstrong, Tillsonburg.....	150
Jennie Calamity Posch, J. A. Bryden, Galt.....	275
Queen Posch Wayne De Kol, J. P. Griffin, Burlington.....	215
Alice De Kol Mercena, A. S. Downham.....	180
Aileen Daisy Pietertje, Walter Wilson, Salford.....	255
Sir Ormsby Hartog Mercedes, T. J. Lammiman & Son, Curries.....	225
Heimke Ina Triton, Biggar Bros., Oakville.....	205
Heimke Canary Faforit, Jas. Liddle.....	195
Ina Mercedes Pontiac, J. J. Fox, Guelph.....	160
Heimke Pontiac, J. J. Fox.....	165
Canary Ina Clothilde, Sheriff McGhee, Woodstock.....	225

What Dairymen Think of the Mechanical Milker.

If there is one job about the farm which is despised more than another by hired help, and even the dairyman's family, it is "milking". It is a chore which must be attended to twice a day for three hundred and sixty-five days of the year, and on the majority of farms 't is done before and after the regular day's work. Milk is nature's best food. It is essential to the welfare of the race, and yet increasing the herd has resulted in the boy or girl becoming dissatisfied with the farm life, and hired help refuse to be tied to a cow's tail. Consequently, dairymen were face to face with a difficult problem, in fact, many are yet and are forced to decrease the herd to a number they can milk themselves. Where dairying is specialized in and thirty or forty cows are kept, it requires quite a force of help to do the milking, and should one member be absent it throws extra work on the others and prolongs the chores far into the night. It is not so bad on the average farm where only six or eight cows are kept. One person can milk that number in about an hour. It is generally recognized that the good dairy cow is the most efficient machine through which to market farm crops, and many more cows would undoubtedly be kept were it not for the time taken milking night and morning, Sunday and Monday.

Milking by machinery has been under consideration for many years and about two hundred patents for mechanical milkers have been issued. The first machines turned out were prohibitive in price for the average man, besides not doing the work as it should be done. It was necessary to manufacture a machine that would draw the milk from the teats without in any way injuring the teats or udder; it had to be made so that the parts could easily be cleaned, and the price had to be within reach of the average dairyman. It is hard to make a machine that will imitate a calf or hand milker. By use of rubber teat cups, a combination of suction and pressure on the teats and lower part of the udder has been secured and the experience of many users is that cows are milked as satisfactorily by the mechanical milker as by the average man, without any more danger of udder trouble resulting, and that where twelve or fifteen cows are kept it will pay to have a machine.

The labor shortage has led many dairymen to consider installing a mechanical milker. Already there are many satisfied users. It is but natural that a machine of the nature of a milker would prove unsatisfactory in some instances. But, failure to make good is as often the fault of the operator as it is of the machine. Simplicity of construction, durability of parts, efficiency of milking, and ease of keeping clean, are some of the points to be considered in a mechanical milker. It seems reasonable that milk drawn from the teats and conveyed to a covered pail through tubes should be more free from contamination, due to stable dust and odors, than milk drawn by hand into an open pail. The chief danger is in the tubing not being thoroughly cleaned. The porosity of rubber makes it difficult to keep clean; hot water does not dislodge minute spores clinging to parts of the cups or tubing, and live steam injures rubber. The most satisfactory method is to rinse the tubing in clean water and then submerge the parts in a good sterilizing solution. Several solutions are in use, but chloride of lime has proven the most effective. Care must be taken that the solution is not too strong, as it may injure the parts. If it is too weak it does not destroy germs. One pound of chloride of lime dissolved in ten gallons of water and the clear solution used retains germicidal properties for about two weeks. The parts must be completely covered by the solution between milkings and it is necessary to change the solution every ten days or two weeks. It is also essential that the teat cups be taken apart frequently and scrubbed. The quality of milk obtained

depends primarily upon the care which is exercised in manipulating and cleaning the machine. Poor quality of machine-drawn milk is an indication that the operator is falling down on the job of cleaning the parts. If a man is not prepared to go to a little trouble in looking after the parts and keeping them in a proper solution, he had better not bother with a machine. He will not be satisfied and his experience may keep other men from purchasing something which will enable them to increase their herds, and at the same time decrease the labor connected with milking. The mechanical milker is proving to be efficient; most cows take kindly to it, and milking can be done in about half the time. It is a machine made up of a number of what might be considered delicate parts and is not fool-proof. The following paragraphs give the opinions of prominent dairymen regarding the mechanical milker. Some are perfectly satisfied; others are not. Read what they say:

Milking Machine Pleases Hired Help.

Dr. C. A. Cline of Middlesex County, has a herd of forty cows and has used a milking machine for two seasons. He is satisfied with the work that it does. At the time the machine was installed he had grave doubts as to whether or not some of his cows would take kindly to the mechanical milker. However, when the machine was put in operation his fears were dispelled as no difficulty whatever was experienced in getting the cows accustomed to its use. When changing from hand to machine milking, the heifers in the herd showed a slight increase in milk yield and the mature cows held their own. Dr. Cline estimates a saving of fifty per cent. in time by using the machine, and this is a great consideration especially during the rush of seeding and harvest, when help is never any too plentiful. So far no udder trouble which can be attributed to the use of the machine has been noticed. The cows are all stripped by hand to make sure that the milk is all drawn. Very little milk is secured by stripping from the average cow, although with some which do not give an even flow from all quarters there is a considerable quantity. It is found that the machine does its best work when the cows are fresh, and that it is advisable to milk by hand when the cows are nearing the end of the lactation period.

The quality of milk is believed to be better when machine-drawn than when milked by such hired help as is available. The tubing is kept in a solution of chloride of lime between milkings. The herd of forty cows are milked and the utensils cleaned in one and one-half hours. So far very little repairs have been required; in fact, new rubbers for the cups are all that have been needed so far. The rubbers need renewing about every six months. After two seasons' use, the machine appears as good as when it was first installed, except for the depreciation in the rubber parts. Dr. Cline considers that a herd of twenty cows should warrant the purchasing of a machine. Hired help appreciate the milker, and the Doctor finds he has less trouble in keeping help since he secured the machine.

Prefers Hand Milking with Cows on Test.

T. H. Dent & Son of Oxford County, had a milker in use continually for two years, but two years ago they discarded it and have not used it since. Mr. Dent says: "We found that the cows on official test did not give as much milk as with hand-milking, and they had a tendency to dry off sooner with machine

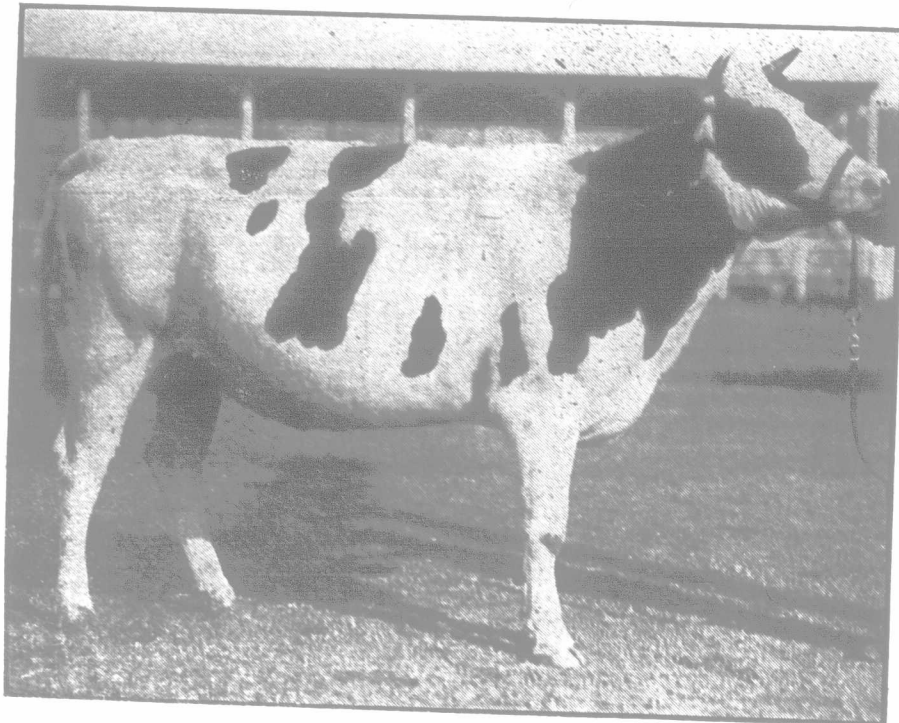
milking than by hand. The machine apparently gave satisfaction and we had absolutely no udder trouble caused by the milker. However, we desired to get all the milk possible from the cows when making yearly records, and we found that the only way to get that was by hand milking. We do not condemn the mechanical milker, and in many cases it is of great value as a time and labor saver."

Better Work with Machine than with Average Help.

Some dairymen are very enthusiastic over the mechanical milker, but others, while not condemning the machine, find that they have more satisfactory results by hand milking. J. Butler, a Middlesex County farmer, has a herd of fifty cows, part of which are pure-bred and part grade. He has been using the same make of machine as Messrs. Dent & Son for about a year, and it has given very satisfactory results. However, he is not running his cows on a test. Three units are used and a two-and-a-half horse power gasoline engine furnishes plenty of power. Mr. Butler claims that the machine does better work than is done by the average person whom he could hire at the present time, but it does not do better work than a good hand milker. Owing to greater uniformity of milking, production increased if anything. The udders are massaged just before the teat cups are removed and the cows are stripped at every milking, although they seldom give much milk. Mr. Butler claims that it takes practice for a man to be able to operate the machine quickly and efficiently. Care must be taken to get the teat cups on straight in order to get fast milking. If put on a little sideways the point of the teat is liable to touch on the side of the cup, thus interfering with a full milk flow. He claims that it is possible for one man to look after two units and strip the cows. After a year's use, there is no udder trouble; in fact, not a lump can be found on the cows' teats while before using the machine some of the cows appeared to be losing their quarters. This is claimed to have been due to the work of inexperienced hand milkers. It has not been found very difficult to keep the machine clean. After finishing milking, water is drawn through the cups and tubing and the rubber parts immersed in a chloride of lime solution. The pail and other parts of the machine are scalded. The milk is sold to a condenser and no complaint has been heard regarding the quality. Mr. Butler claims that it requires common sense to run a machine satisfactorily. He has had to adjust the pulsator a little in order to obtain good results. Repairs in the year amounted to \$1.80. The most pieces of the teat cups are practically the only things which give out. It requires in the neighborhood of six dollars per month to supply power to operate the machine to milk a herd which would average between forty and fifty cows for the year.

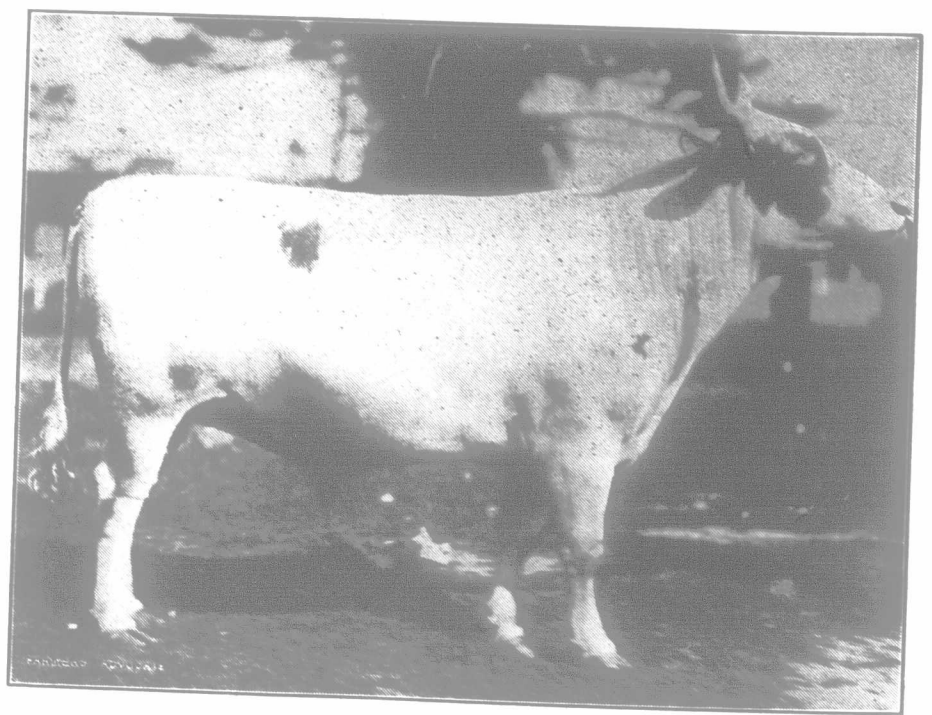
Machine Most Valuable When Cows are Fresh.

R. M. Holtby of Ontario County, writes: "We have used a milking machine for three years and a half and in spite of the fact that prominent farmers have turned this particular make down for several reasons, the main one of which was that the cows went wrong in their udders, we are still using it and have never had any trouble with cows going wrong in the quarters. We always strip after the machine so that if a cow does not give down her milk freely, the milk will all be removed and there will be no bad effects. Some cows continue to hold up a portion of their milk, while others are milked as dry by the machine as the average milker will leave them. We find that heifers usually respond to mechanical milking the best. Our experience has been that there is very little expense for repairs; power is the main item. I would rather have a three-unit



Sadie Vale Posch

First in two-year-old class at Toronto and London, for A. E. Hulet, Norwich, Ont.



Humeshaugh Invincible Peter

Junior and Grand Champion Ayrshire bull at London, for A. S. Turner & Son, Ryckman's Corners, Ont.

milker than the help of a good man at milking time, and if the cows were all fresh than two men. As the cows near the end of the milking period, the machine gradually saves less time, as it takes the same amount of time to wash the machine and also to put on and take off the teat cups on a cow giving a small quantity of milk as with one giving a large flow. In other words, the more milk a cow gives the more a machine will be appreciated. Where help is scarce we believe it would pay with even less than ten cows.

"We do not find our help objecting to milking the same as they did before we installed the machine, and any boy or girl, or inexperienced person, can soon learn to operate the milker, leaving a more experienced man to do the stripping. I have had no experience with any other make of mechanical milker, but I know of several people who are enthusiastic over their particular kind."

All do not give Satisfaction.

One man may have unqualified success with a certain make of machine, while another man would find it anything but a success. There may be slight differences between two machines of the same make, which would account for one being a success and the other a failure. Some men can handle machinery better than others, and it is necessary to adjust the mechanism of mechanical milkers so as to get the right amount of pressure or vacuum, which will extract all the milk without injuring the teats. Some dairymen complain that the machine will draw blood from the teats; this cannot help but be injurious and the forerunner of udder trouble. However, the same make of machine in the hands of another dairyman does not cause these difficulties. McVicar Bros., of Elgin County had the same kind of machine installed as Mr. Holby has been using for the past three and a half years, but the machine did not give them very good satisfaction. They have a herd of twenty-two cows and they found that the milk flow kept up fairly well if stripping was done after the machine. When the machine worked satisfactorily considerable time was saved in milking, but they found that it required a lot of time to keep the machine reasonably clean. Then, too, they had difficulty in getting the teat cups to work on certain cows. They were all right with a short-teated cow, but were anything but satisfactory when put on cows with large teats. After the machine had been in use for some time several of the cows contracted garget, and the cause was laid on the work of the machine. It was claimed that the pressure or vacuum was so great that the blood was drawn right to the surface of the teats and they became somewhat inflamed. Two or three hours after milking they would go back to nearly normal again. However, they lost the quarters of several valuable cows and rather than have this continue they went back to hand milking entirely. An outfit which cost several hundreds of dollars is now practically scrap. The piping still runs along over the stalls, but the vacuum pump and units are piled up in one corner of the dairy. Besides injuring the cows, Messrs. McVicar claim that the running expenses were high, as it required a six-horse-power engine to operate the pump. While they followed directions regarding the operating and cleaning of the machine, they had more or less trouble with the quality of the milk. The night's milk would sometimes be off flavor before they could deliver it in the morning, and milk kept from Saturday night or Sunday morning until Monday was decidedly off flavor and had an odor. After the milk was drawn it was handled the same as when milking by hand, and under the latter method there was no trouble with the quality of milk. It may be that this particular machine was not adjusted rightly, but any alterations made did not have a beneficial effect. The fact remains that after giving the machine a trial extending over a period of a year and a half, Messrs. McVicar are now milking their herd by hand and claim that they have no udder trouble whatever, and are able to market high-quality milk.

Milking Machine Permits of Increasing the Herd.

J. E. Brethour, a Brant County farmer keeps a herd of fifty milk cows and several years ago tried a mechanical milker but was not satisfied with the work it did and had it taken out. The teat cups were a failure as they would not stay on the teats. The machine also had different sized cups for different sized teats which Mr. Brethour considers is not a desirable thing. He claims that the universal teat cup is the only one that he would buy. Ten months ago a different make of machine was installed and it has given satisfaction ever since. There was no decrease in milk flow when changing from hand to the mechanical milker, and no udder trouble has been noticed that can be attributed to the use of the machine. Mr. Brethour has been able to increase his herd since he has not had to depend on hand milkers, as by use of the machine fifty per cent. of time is saved. With mature cows, it is necessary to strip, but the machine milks the average heifer practically dry. The quality of milk is better than when hand drawn.

The tubes are thoroughly rinsed with cold water after each milking and immersed in a solution of chloride of lime. The entire tubing is taken apart once or twice weekly and thoroughly cleaned. Three units are used and the fifty cows are milked in two hours by a man and a boy. The depreciation is reckoned at about twenty per cent. annually. It does not cost much to operate the machine as one gallon of gasoline daily furnishes the power. Mr. Brethour considers that a mechanical milker might possibly pay with twelve cows, but he would consider fifteen as the minimum, as the time required getting the machine ready and washing up after milking would be just as much as for a large herd. A good deal of the success depends upon the man in charge. A careless operator will make a failure of the

machine. Mr. Brethour says, "the milking machine permits the keeping of a larger herd of dairy cows, and overcomes many objections that farm help have to dairying. It is also cheaper than hand milking, especially in a large herd, when if reasonable care is taken in cleaning the machine better and cleaner milk is the result."

Care and Cleanliness Essential to Success.

In regard to the practicability of the milking machine and its efficiency, D. C. Flitt & Son of Wentworth County, write as follows: "We have used a mechanical milker for two years and as we have never tried any other make, can only speak for the one we have in use. Our experience is that we have never had a cow lose a quarter; in fact, we have had no udder trouble of any kind since using the machine. Our herd consists of about thirty milkers and the work is done in about one hour and a half. Every cow is stripped after the machine is removed. It matters not if we only get one ounce of milk, she is stripped just the same, and we feel that if this is always done there will be no tendency for the cows to dry up earlier than they should. With a machine there is a danger of lowering the standard or quality of milk, but this trouble only applies to the farmer who does not keep his machine clean. Our machine has never missed a day since we commenced using it without being thoroughly washed, which only takes about ten minutes, after which it is put away in a solution which keeps it perfectly sanitary. Our advice to any farmer, who is short of help and trying to run a dairy of fifteen or more cows, is to buy a milking machine, providing he is prepared to keep the machine perfectly clean and furnish brains to run it. Unless prepared to do this, don't waste your money. When we hear people say that a boy or girl twelve or fourteen years of age can run a machine, we don't wonder that they get disgusted and scrap the outfit. The machine has no brains; the man who runs it must supply them.

"All cows will not let down their milk when the same sized teat cups are used. This is one thing in particular that must have special attention by the man looking after the machine."

Mechanical Milker not Expensive to Operate.

Owing to scarcity of help, W. W. Ballantyne & Son of Perth County, were obliged to install a mechanical milker last March. So far they are well pleased with it. The following is their experience with the machine to date: "The cost was an important item with us so after investigating a number of machines we decided to install the one in which the first cost was considerably less than some of the others, and we have found the cost of operating fairly light. At first we used a gasoline engine as power, costing us about ten cents per day for milking and separating. Later we installed an electric plant and now use a one-half horse power motor, which furnishes power at less than half the above amount. So far we have had no repairs, but the rubber mouthpieces of the teat cups need replacing. However, this is not a big item of expense.

"During the past summer we milked seventeen cows and two men could do the milking quite easily in forty-five minutes. If milked by hand it would take the men in the neighborhood of one hour and a half. We use three single units; one man handles the machine, and the other strips. We find that cows milk much the same with the machine as by hand; that is to say, those that milk out clean by hand will do the same with the machine, and vice versa. We have had no udder trouble that could be attributed to the machine, nor do we think that the cows dry off any sooner than when milked by hand, but regarding this point we would like a little more experience before stating definitely. As our cows are pure-bred and more or less nervous, we expected trouble in accustoming them to the machine but we had none whatever. Some cows would stop eating and bawl for the machine as soon as the engine was started. Of course, the operator must study his cows and humor them a little. In this I think lies a good deal of importance as to whether the machine is a success or not. A man of a mechanical turn will certainly do better with the milker than one who is not handy with machinery.

"If a man is entirely alone with ten cows to milk, we think a machine would pay, and where there is more help more cows may be kept than before. The machine saves time, does not decrease the milk yield nor lower the quality, but it must be kept clean. The pails and covers are washed every milking; the tubes and teat cups are taken apart twice a week in the summer and every six or seven days in the winter and thoroughly washed with washing soda and warm water. When not in use they are always submerged in a solution of chloride of lime, which is renewed every time the tubes are washed. Before and after milking the tubes are rinsed by drawing a quantity of water through them. We sell cream for delivery as sweet cream, and since using the machine have had no complaint about the quality."

Many Men Have Many Minds.

There are differences of opinion as to the efficiency of the mechanical milker. Above is the opinion of users of five different makes of machines, among which are the "Lister", "B. L. K.", "Sharples", "Empire", and "Hiiman". Some dairymen like one make of machine and some another, which is the case with every machine or implement used. While the work performed is the same, it is done in a slightly different way. One man has a preference for one make, while his neighbor chooses a different one. A number of types of mechanical milkers apparently do good work, although there may be individual machines turned out of all types which have a slight deficiency or are not adjusted rightly which causes them to prove unsatisfactory. The

operator is sometimes to blame. There are men who lack the knack of running machinery. With any machine consisting of a number of parts or where the mechanism is in any way complicated, the operator should be able to detect when everything is not running as it should and be able to make small repairs or slight adjustments. To be a successful operator of a mechanical milker, a man must know his machine, know his cows, know how to keep the machine in a sanitary condition and then put that knowledge into practice.

Unsatisfactory Possibilities and Beneficial Features

At the Experimental Farm, Ottawa, a number of milking machines have been experimented with and studied. The following paragraphs by Geo. W. Muir, Assistant Dominion Animal Husbandman, points out unsatisfactory possibilities and beneficial features of the mechanical milker: We have again come to the time of the year when all live stock is stabled for the winter with the consequent increased chores, and owing to the scarcity of labor almost every farmer and especially the dairy farmer is handicapped in his campaign of increased production by want of sufficient help to properly handle his herd. It being almost impossible to hire farm hands at anything like a profitable wage (from the farmer's point of view) increasing attention is being turned to mechanical contrivances that will cut down the labor problem. It is in this connection that we would again call attention to the use of milking machines.

While they are not yet as exact or efficient as some of our intricate industrial machines such as looms, etc., nor can they be expected to become so since all cows are not of one stamp or grade such as is the case with the cotton or wool used in the loom, nevertheless most milking machines of the present day can be relied upon to do good work if properly handled. This is the point upon which most farmers who have installed a mechanical milker and found it a failure have fallen down. They have in many cases taken it for granted that the machine was supplied with the reasoning power and adaptability which they lacked themselves and working upon that assumption attached them to the cows in any old way quite regardless of the amount of pressure or vacuum being applied, or of the fit of the teat in the teat cup, and other equally important factors, then expected the machine to milk the cows thoroughly without doing any damage. Such an attitude does not tend to best results. On the other hand if the operator is a careful man and somewhat of a mechanic, studies the machine and also his individual cows and adapts the one to suit the other giving the machine the proper attention at the proper time, then good work should result.

Provided that a good and steady power is obtainable the point at which the mechanical milker is most liable to give trouble is in not milking clean and possibly doing damage to the teats of the animals, particularly if the teats are abnormal in size or shape. Another point that might be objected to is the fact that with some machines it is impossible to keep individual cow's records. Regarding the first point, it is as well to say that no machine will milk all cows absolutely clean and it is always well to practice stripping after all of the machines. This can easily be done during the time that the machine is milking the succeeding cow or cows, and even though it is necessary still the machine may be considered efficient for it draws the bulk of the milk very quickly. Damage to the teats or udder, if present will usually be found to be due to too high vacuum or pressure, too rapid pulsation, or careless attachment of the cups to the teats all of which can be remedied by an intelligent operator. While weighing of each individual cow's milk is or should be of importance to every farmer it is probably of less importance to the class of farmer who would use a milking machine and therefore could be dropped during the present scarcity of labor.

After such a resume of the unsatisfactory possibilities of the mechanical milker we come to a discussion of the beneficial features. In the hands of a capable and active man the mechanical milker can be depended upon to reduce time necessary to do the milking at least 50 per cent. and the larger the herd and more convenient the stable the greater the reduction. It relieves the farmer of the heavy drudgery of milking and enables him to milk many more cows than it is physically possible for him to milk by hand. With reasonable care the machines can be expected to last upwards of ten years. Subject to the same conditions the repairs are not excessive considering the nature of the machine. The first cost is not so high but what they are now considered profitable under present labor conditions for herds of from twelve to fifteen or more cows though, naturally, the most economical installation would be with the larger herds. They only require from 1/4 to 3 h. p. engines or motors, depending upon the make of the machine and the number of units being used and this power can always be used to advantage for other purposes such as running separators, pumping water, pulping roots and grinding grain. It is impossible for us to give the actual cost of power as we have it in the form of electricity which is not available to the large majority of farmers.

One of the important factors to be considered is the proper care of the machine as regards washing. Unless this is properly attended to a poor quality of milk will result. Briefly the procedure should be as follows: Immediately after milking draw cold water through the teat cups and rubber milk tubes into the cans, then draw through a quantity of very hot water and finally brush out the teat cups with the brushes provided. Now detach teat cups and completely immerse in a fairly strong solution of chloride of lime. This solution should be kept in a metal or earthenware container and be changed every week. Once a week the teat cups and connecting

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tubesshould be taken apart and given a thorough scrubbing. Under no circumstances should any part of the machine which comes in contact with the milk be allowed to remain in the stable between milkings.

The general consensus of opinion among dairymen and men at experimental stations appears to be that manufacturers of mechanical milkers have gotten the mechanism to a point where the milk can be extracted without in any way injuring the udder of the cows, provided reasonable care is taken in keeping the machine so adjusted as to give the proper amount of pressure or vacuum. With most makes the mechanism is reasonably simple. Of the eight dairymen whose opinions regarding mechanical milkers are expressed in this article, six would not care to be without the milker under the present labor scarcity. One who is not at present using his machine found that it did not injure the cows, but that higher records could be made by hand milking. Of course, it depends on the quality of milkers one is able to secure. It is generally conceded by users of machines that while they are not preferable to good milkers, they are superior to the average milker a dairyman is able to hire, and that they enable the producer to keep a greater number of cows. Two hundred and forty-three members of a cow-testing association in Wisconsin use mechanical milkers, and of this number only thirteen are dissatisfied with the work. This goes to prove that the milker is practical and that its use does not necessarily deteriorate the quality of the milk. There are a number of makes of mechanical milkers on the market which are proving satisfactory. Some dairymen prefer one make and some another. We doubt if it can be said that there is any best machine; it appears to be a case of pay your money and take your choice. One thing is certain, the mechanical milker is here to stay.

Holstein Sale at Dunbarton.

On December 12, the herd of high-quality Holstein cattle, the property of Col. Marshall, Dunbarton, were disposed of by auction at fairly good prices. The highest priced animal was Prince Bonheur Abbekerk, a two-year-old bull which went to the bid of J. Todd, of Agincourt for \$500. The highest priced female was Winnie Mercena Fayne, going to Mr. Anning, Brown's Corners, for \$380. The twenty-one animals sold including a number of heifers and calves averaged \$175.35. The following is a list of the animals selling for \$100 or over, together with the names and addresses of the purchasers:

Edgemont Ormsby Segis, R. W. E. Burnaby, Jefferson.....	\$280
Valentine Dutchland Colantha, J. Nixon, Cobourg	200
Perfection's Toronto Queen, R. W. E. Burnaby.....	340
Winnie Mercena Fayne, Mr. Anning, Brown's Corners.....	380
Ormsby Segis Siepkje, Mr. Finlayson, Agincourt....	125
Lakeview Valentine, J. Nixon.....	105
Emma De Kol Pauline, J. Nixon.....	175
Belle Hengerveld Fayne, F. H. Benedict, Cobourg	275
Heifer, J. Nixon.....	175
Dione Mercena Korndyke, Mr. Finlayson.....	140
Prince Bonheur Abbekerk, J. Todd, Agincourt.....	500
Madeline Segis Siepkje, Mr. Nuttall, Pickering....	172.50
Helena Perfection's Siepkje, J. Nixon.....	172.50
Perfection's Siepkje Fayne, W. Turner, Pickering.	100
Beulah Ononis Fayne, Galloway Bros., West Hill.	165

Elgin County Holstein Breeders' Sale.

The second consignment sale of the Elgin County Pure-bred Holstein Breeders' Club was held in St. Thomas, December 18. While fairly high prices were paid for some individuals and some brought all they were worth, it was, in some respects, a bargain day for those wishing to lay the foundation of a pure-bred herd or to add to the present herd. There were a number of real bargains. The crowd was not large, and bidding was drabby at times. A few of the animals would, no doubt, have sold higher had they been better fitted, but, taking the entire offering into consideration, they were well brought out. Most of the mature animals were big-framed individuals and showed indications of being capable of heavy production. Many of the cows and heifers were in calf to such sires as King Segis De Kol Calamity, Sarcastic Wayne De Kol, Fayne Segis Norman and Finderne King May Fayne, all of which have splendid backing. The forty-eight females, including a number of young heifers, averaged around \$155.80. The highest priced animal of the sale, Emma Wayne Houwtje, was consigned by D. Caughell and purchased by R. W. Bedford, Chatham. Only three bulls were in the offering, and they averaged \$140. Among the consignors to the sale were G. S. Butler, F. Carr, E. G. Gilbert, G. I. Willis, H. C. Holtby, L. Lipsitt, N. McGugan, D. Caughell, J. Orchard, G. Locke, R. Sanders, E. Siple and H. A. Copeland. These breeders brought out stock which should satisfy the purchasers and warrant their return to a future sale. The following are the names of the animals sold, together with the names of the purchaser and the price paid:

Teake Ormsby Hartog, J. Campbell, London Jct.....	\$165.00
Teake Ormsby De Kol, F. Sinden, Belmont.....	155.00
Lady Teake Korndyke, W. H. Cohoon, St. Thomas.....	180.00
Miss Teake Korndyke, E. Crummer, Blenheim.....	180.00
Korndyke Ormsby Teake, T. E. Bedgood, Thorndale.....	105.00

Teake Ormsby Fern, F. Sinden.....	190.00
Beauty Ormsby Korndyke, C. Holborn, Shedden..	105.00
Princess Dorliska Ormsby, A. D. Turner, Shedden.....	180.00
Korndyke Belle Zeeman, J. McMillan, Glanworth.....	200.00
Louise Abbekerk, W. H. Cohoon.....	260.00
Louise Ormsby, J. Campbell.....	145.00
Bessie Beets Hartog, T. E. Bedgood.....	125.00
Primrose Madolyn De Kol, F. Sinden.....	155.00
Salla Mercedes, L. McKenzie, Pt. Stanley.....	110.00
Clothilde Dorliska May, R. W. Bedford, Chatham.....	125.00
Dorliska Wayne, J. Garton, Springfield.....	165.00
Calamity Brookbank Hengerveld, R. W. Bedford.	160.00
Verstella Wayne 2nd, J. McMillan.....	165.00
Ida Colantha Dorliska, R. W. Bedford.....	190.00
Maria Colantha, C. Millson, Wilton Grove.....	165.00
Emma Wayne Houwtje, R. W. Bedford.....	325.00
Minnie Colantha Mercedes, J. McMillan.....	175.00
Lizzie Korndyke, R. F. Armstrong, Tillsonburg.	160.00
Delaware Beauty 2nd, R. W. Bedford.....	130.00
Grace Fayne Ormsby, J. Sanderson, St. Thomas.	120.00
Sir Mechthilde's Beauty Posch, S. Dawes, Springfield.....	140.00
Miss Aaggie De Kol, F. W. Miller, Lawrence Sta	105.00
Jennie Brook Princess, W. A. Hepburn, Union.....	105.00
Brownie, E. Crummer.....	155.00
Mildred Lady, J. Campbell.....	140.00
Rose De Kol Tilla, R. W. Bedford.....	132.50
Alice Ormsby, J. Garton.....	205.00
Ella May Pontiac, C. C. Pettit, St. Thomas.....	135.00
Mercena Ormsby, C. C. Pettit.....	120.00
Ormsby Beauty Lass, R. Willis, Lambeth.....	125.00
Sunnybrook Mary Segis, E. Crummer.....	255.00
Bull calf, W. J. Thompson, Pt. Dover.....	120.00
Segis King Fayne, R. H. Fletcher, Middlemarch.	195.00
Lady Peg, W. H. Cohoon.....	220.00
Laura Echo Segis, J. McMillan.....	300.00
Lady Colantha Fairmount, T. E. Bedgood.....	145.00
Maysies Pietertje, Van Zant Bros., Elora.....	135.00
Fayne King Veeman, F. W. Miller.....	105.00
Duchess Ormsby Calamity, L. Begg, St. Thomas.	160.00
Axie Veeman Calamity, N. McGuggan, Shedden..	155.00
Pauline Countess De Kol, J. Carmichael, Ilderton.....	105.00
Dina Howtje Netherland, F. W. Miller.....	130.00

POULTRY.

Tuberculosis: Its Nature, Symptoms and Methods of Eradication.

Tuberculosis is a disease which is present in a great many flocks, and is causing a heavy yearly loss. In Bulletin 255, of the Ontario Agricultural College, Prof. D. H. Jones, of the Bacteriological Department, gives concrete information relative to the cause of the disease, its nature, symptoms and methods of control and eradication. Not only is there a loss from birds dying off, but disease is liable to cut down the egg production. Tuberculosis of fowls is produced by a small microscopic organism which gains entrance to the system of the bird and multiplies in various parts of the body system. Information relative to the disease, as given in the Bulletin, is to the effect that the organism on entering the body feeds on the body juices and develops and multiplies. In so doing it produces a toxin or poison which acts on the tissue cells surrounding them, causing a local disturbance, which finally results in degeneration and death of the tissue cells so affected, and forms a mass known as a tubercle. From these the bacteria pass in the blood to other parts of the body. These tubercles are usually pale yellow in color, sometimes cheesy, sometimes gritty, and sometimes puslike in texture. They vary in size from smaller than a pin-head to as large as an egg. These tubercles are most commonly found on the liver, spleen, intestines and mesentery, although they may also be found on other parts of the anatomy.

With a live fowl it is difficult to detect the disease in its early stages. As the disease develops, emaciation, paleness, listlessness, lameness, and reduction of egg laying are some of the marked symptoms. It is comparatively easy to detect the disease in a bird which has died, or has been killed, by the tubercles which appear on the various parts. However, there are other diseases which cause conditions of the liver, lungs and intestines similar to those of tuberculosis; therefore to be certain a bacteriological examination of the affected parts is necessary. The liver is the most commonly affected organ. The liver of a tubercular bird is usually softer, is larger and more easily torn than that of a healthy bird, and pale, yellow lumps or tubercles are found on its surface. When such a condition is found, on performing a post-mortem examination, it is a pretty sure indication that the bird has been tubercular. The small lumps forming on the spleen also make it irregular in shape and frequently enlarged.

Even when the greatest precautions are taken, it sometimes happens that infection gets into the flock. An apparently healthy bird may have the disease and be a spreader and a source of contamination. The following gives the methods of control and eradication as outlined in the Bulletin:

"Care should be taken in buying new stock that birds are obtained only from flocks known to be free of the disease. When once the disease gets established in a flock it is difficult to eradicate except by the most drastic measures. The quickest and most effective method is to kill off all birds that have run with those proven to have the disease and to disinfect the entire premises as thoroughly as possible. New stock should

be obtained from healthy sources, but should not be placed on the runs which had been used by the diseased flock, for a year or more. The houses, providing they have been thoroughly disinfected, may, of course, be used. The first thing to do in putting the poultry premises in sanitary condition is to scrape the roosts, walls, ceilings, floors and nest boxes of the houses thoroughly clean with a hoe or other convenient implement. Accumulated manure may be mixed with lime, spread on the land and plowed under. Loose litter, pieces of boards or other valueless material should be completely burned. When this has been done the entire inside of the houses may be washed down with some good disinfectant, such as carbolic acid, one part in twenty of water, zenoleum, lysol, chloro-naphtholeum, or other disinfectants, in the strengths indicated by the manufacturers. Any of these may be put on with a spray pump. In place of these, quicklime in the form of whitewash may be used, prepared as follows: Slake the quicklime by adding water in the proportion of one and one-half pints of water to each quart of lime, or by weight, sixty parts of water to one hundred parts of lime. The resulting dry powder is hydrate of lime. For use mix one quart of this with four quarts of water. This must be freshly prepared in small lots and used immediately. It is best applied by means of a spray pump, although it may be put on with a brush or broom. If a spray pump is used, the slaked lime should be put through a fine sieve or strainer in order to prevent clogging of the nozzle. It is important that every crack and crevice and every particle of surface be covered with the disinfectant. After disinfection, clean boards may be placed beneath the roosts to catch the droppings, thus facilitating the work of future cleaning. Slaked lime placed on these boards will absorb the moisture from the droppings besides adding to their fertilizing value. Disinfection of the houses should be carried out at intervals as long as any diseased birds remain in the flock.

"To disinfect the runs is a difficult matter, because it is impossible to have the disinfectant come into contact with each minute particle of soil. The best that can be done is to completely cover the ground with freshly-slaked lime and plow under. Sow some quick-growing crop for green manure, lime and plow under again. By this method the soil can eventually be well disinfected. The fact must be kept in mind, however, that any tubercular fowls may be continually re-infecting the soil by voiding the tubercle bacilli with their droppings; consequently, it would be impossible to keep the soil free from infection so long as diseased fowls were kept on that ground."

HORTICULTURE.

Fighting Enemies of the Orchard.

In order to keep the orchard healthy so as to produce No. 1 quality of fruit, there is a continual fight with insects and fungous diseases. No sooner is one pest brought under control than a new one makes its appearance. To a certain extent this is due to failure to maintain a balance of nature. The decrease in the number of birds has had a lot to do with the prevalence of insects in the orchard. New plants have also been imported, accompanied, in many cases, by scale insects or other pests which did not do much harm in their native land owing to the presence of parasites. But, when parasites do not accompany the importation the new insects increase rapidly; therefore the orchardist must ever be on the lookout for enemies which would rob him of his profits. A large staff is continually at work in the Dominion as well as in other countries studying the life history of the enemies of all farm and orchard crops, in an endeavor to find an efficient and practicable method of controlling them. An outline of the work is given in the 1917 report by the Dominion Entomologist, G. Gordon Hewitt. A series of spraying experiments have been conducted in Nova Scotia in about thirty orchards for the testing out of different spray materials for the control of insects, and the report states: "As a result of the large experiment it was demonstrated that arsenate of lime is a safe poison to use with lime-sulphur than arsenate of lead, and that weaker solutions of lime-sulphur are desirable." In Ontario considerable work has been done in investigating the work of plant lice affecting the apple. The green apple aphid is a troublesome plant louse which gives orchardists and nurserymen considerable trouble. The value of tobacco decoction and commercial nicotine extracts mixed with lime-sulphur and applied when the buds were about to burst was again demonstrated as an effective means of controlling apple aphids. Mr. Hewitt reports that "the most important investigation on fruit trees carried on during the year in British Columbia was the study of the life history and control of pear thrips, which has proved so disastrous to the fruit crop for a number of years in the Saanich Peninsula, Vancouver Island." The main facts relating to the life history of pear thrips under British Columbia conditions were obtained, and the practical results of the spraying experiment exceeded all expectations as unusually large crops of fruit were obtained in well-cared-for orchards which had almost ceased to bear on account of this insect. The most satisfactory spraying solutions were nicotine sulphate (Black Leaf 40), in combination with whale oil soap or Miscible oil. The codling moth is reported as being a troublesome pest in certain parts of the Pacific Province in spite of every precaution taken to prevent its introduction. However, it is believed to be possible for fruit growers to successfully control it. Fruitmen should not relax their fight against orchard pests.

DECEMBER

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A New Year's Eve Thought.

Through the ether clear, from the solemn sky
The New Year beckons, and makes reply:
"I bring you, friends, what the years have brought
Since ever men toiled, aspired, or thought—
Days for labor, and nights for rest;
And I bring you love, a heaven-born guest;
Space to work in, and work to do,
And faith in that which is pure and true.
Hold me in honor and greet me dear,
And sooth you'll find me a Happy Year."
—MARGARET E. SANGSTER.

"F" Company,

BY CLAYTON DUFF.

Along the iron road of war
A bright battalion wends
Beneath the sun, beneath the stars—
My Company of Friends.

The armies of the world go down
In dim, grey legions led,
But these are marked mid the host
As though they walked in red.

No Captain leads, no watchword's passed,
No muster call is heard,
But every morn I cry them "Hail!"
With dawning wind and bird.

And every night when silence falls
Around the evening lamp,
Within my sheltered thoughts I light
The watch-fire of their camp.

They may not know the ranks they keep;
Their ways lie far apart;
They never meet except within
The bivouac of my heart.

Yet in my love their lives are bound,
They march beneath my star—
My little company of friends
Upon the road to war.
—In University Magazine.

Through the Eyes of a Canadian Woman in England.

NOVEMBER.—The "saddest month of all the year" has come round again, and the November of 1917 has many more claims to that doleful title than the fact of its falling leaves and sunless days. Our gallant men on the western front have been fighting against fearful odds, such as mud to the knees and constant rainy weather; England has again been raided by the deadly Hun; Russia is still disorganized, and now Italy is having her dark hour. In spite of all this the optimist (and what should we do without him?) presents the silver lining to the cloud, and dwells upon the splendid gains of our men in Flanders; the marvellous manner in which our air defences met the German raiders, thirty of them on a recent attempt to attack, and prevented all of them from reaching London except two which did no material damage; the fact that the Russian navy have been at work destroying German ships; and that Italy's losses are greatly exaggerated by the enemy, for it is said they only retired in order to assure themselves of a more strategic position, and will before long, with the help of the Allied troops who are being rushed to their assistance, be able to withstand the invasion. In the meantime our legislators are preparing for the approaching winter by a systematic rationing of all foodstuffs, and we are in a better position than we were this time last year. The allotment scheme proved most successful, and there is no scarcity of potatoes or other vegetables. So let us join the optimist and say, as our fighting men do, "Are we downhearted?" "NO!"

The Canadians, who have already given such signal proofs of valor in France, have again distinguished themselves. They were the first to break the formidable rush into Passchendaele and occupy positions there. We are told that they were obliged upon entering it, to form a sort of square so as to face on all sides at once the Germans who seemed to spring up from all parts. Furious hand-to-hand encounters took place near a church. Three times the Germans, with bull-dog tenacity, returned to the struggle, for they had been given orders to take that church and hold it to the death, and large numbers fell in the attempt. Then our men had to fight from house to house, and were compelled to shell the residence of the mayor. The Prussian major who had been in command there had made himself very comfortable in it, and was living in a dugout twenty metres below ground, consisting of three rooms panelled with wood. When they discovered this nest, a cup of coffee was still steaming on his marbled table, addressing case was lying open, a map was laid out, and everything in confusion testified to the haste with which he had fled. In running up the sixty steps leading from this retreat, the major had dropped his iron cross, and one of the Canadians picked it up. Nearly nine hours after our men had captured Gondberg, a little hamlet nearby, they came upon a "pill-box" which contained a surprise. When its iron door swung back there walked into the rain two Prussian colonels and the officers of their staff. They were waiting there, hoping for a counter-attack which would drive back the Canadians and set them free; but that did not happen and they were caught like rats in a trap. Gloomily and with angry faces these battalion commanders held up their hands and announced that they surrendered. The taking of Passchendaele will make an exciting story to tell in days to come. We are filled with pride that our men have made such a name for themselves, but the pity of it is that so many of them, in doing so, have been called upon to make the supreme sacrifice. An English soldier was speaking to me of them only this morning and concluded with these words. "We know what soldiers the Canadians are, for we have fought side by side with them!"

SINCE last writing there have been changes in my ward in the hospital, and some of the patients have gone on to convalescent homes. I was sorry to say good-bye to them, for they were a cheerful lot—even "the corporal," who, I regret to say, was disliked by the other men. (Tommy never wants a "superior" in the ward with him). They used to say in his presence, "We love our corporal, nurse," in most sarcastic tones. Finally the day came for the corporal's departure. He went down to the kit-room to pick out his belongings, and while he was out I happened to enter the ward. To my surprise I found all the men who were up and about working with nervous haste polishing their shoes. Even one pale lad in bed was rubbing away at his, and they were all so engrossed that they did not notice me until I enquired, "Why the excitement about shoes? Are you all going to a party?" and I had to laugh heartily when one of them, the ringleader, in broad cockney, replied: "Our corporal's going away nurse, and this is his boot polish!" In a few days some of these same men are to be sent to the convalescent home where the corporal went, and they will, I suppose, continue to make life a burden to him.
It is a real pleasure to see these wounded men improving day by day, and I was so thankful when I went in this morning to hear the poor lad, whose eyes have been bandaged so long (he was burned with mustard gas, and may never recover his

sight) humming a tune. Now we have a dear Canadian boy who has trench fever. He is enjoying the clean, white bed. He had not been in a bed for weeks, but was compelled to snatch what sleep he could in a shell-hole. He has told me all about his home in Alberta, to which he hopes he may have the good fortune to return some day, "when the war is over." There are many castles being built in the air for that happy time.

I have had some very interesting conversations lately with air-men, and enjoyed a visit a day or two ago from a young relative from Prince Edward Island, who has been flying in France for the past seven months. He was almost too modest to be of value as copy, and did not tell me a fact which I have since learned, that he had brought down in that time seven Hun machines. Like all flyingmen he made constant use of terms belonging exclusively to that branch of the service, and I was obliged to ask him to explain as he went along. He flies a Scout machine, one of the smallest and most fragile as well as one of the fastest in use, and some of his experiences were wonderful to relate. Another acquaintance who is in the R. N. A. S. and who spent some months during the past summer in sea-plane work on the Atlantic coast, and has since been flying out of the big British base in France, has had equally wonderful experiences. His machine is the direct opposite of the machine mentioned, and is of the huge bomb-carrying type, its mighty cargo being sixteen eighty-five-pound bombs which can be dropped with a movement of the hand. He and his squadron have more than once, when on their way to bomb a German base, met an enemy squadron coming towards them for the same purpose. These men both assured me that we have the Hun "beaten to a frazzle" as far as air-warfare was concerned.

I have already mentioned the difficulties of travel here at the present time. Thousands of locomotives, vans and all kinds of rolling stock have been sent to France and the East, leaving this country greatly handicapped. Warehouses and yards are so piled up with freight that one never knows when goods shipped will reach their destination. Freight, or "goods trains" as they are termed here, have, of course, to give way to those carrying munitions and other war materials. War and the requirements of war take precedence over all other traffic; only a quarter of the trains are running now which were on the time-table in former days. The authorities and newspapers have been agitating for some time a cessation of the popular week-end travel, and many patriotic people have denied themselves the use of trains at any time except in cases of absolute necessity. Leave for the troops in England is now strictly forbidden if it calls for travel on the railways on Saturday, Sunday or Monday. Very few A-1 men are now left in railway employ, and in hundreds of cases men on the retired list, have again taken up this occupation in order to do their bit.

I must close this letter with a quotation from one of the lectures of Professor Cramb, Professor of Modern History in an English college—who died in 1913—which I have been reading lately: "If the dire event of a war with Germany—if it is a dire event—should ever occur, then shall be seen upon this earth of ours a conflict which, beyond all others, will recall that description of the great Greek wars:
"Heroes in battle with heroes,
And above them the wrathful gods."
And one can imagine the ancient mighty deity of all the Teutonic kindred, throned

above the clouds, looking serenely down upon that conflict, upon his favorite children, the English and the Germans, locked in a death-struggle, smiling upon the heroism of that struggle, the heroism of the children of Odin the War-god!"
SIBYL.

The Teacher.

BY "THE OWL."

Paper III.

THE Teacher (and be sure to spell the word with a capital "T") sits at her desk, looking at all the little bobbing heads, light and dark, as they bend over the work in hand. There is a temporary lull, for it is writing, practice lesson, and the whole school is at work making the continuous ovals and whirling-gigs that are the regulation dose for procuring proper arm-movement.
For just a few moments she is snatching a needed rest. It is nearly four o'clock, and all day long she has been "hard at it," smiling, or frowning, or raising her brows in surprise at the queerly-expressed opinions that betrayed something of the ideas that are taking form beneath the thatches of tidy and untidy hair. For our teacher is alive; she is ever on the alert for Ideas, knowing that Ideas count for so much more than the mere remembering of facts.
Yet—well it is no easy task to manage forty stirring children of all moods and in all stages of development—and she is tired—and a bit discouraged.
She is "only the teacher" in one little rural school, she thinks, "and results seem to come so slowly. What's the use? Why could it not have fallen to her lot to do some really worth-while work in the world?"
Ah for some good genius, just at this point, to give her vision to see—really see—all the teachers in all the schools, all the little bobbing heads in all the thousands upon thousands of schools in all the world—white boys and girls, black, yellow and red. Give her just one glimpse of the whole and then surely this one little teacher in one little rural school must catch her breath with the realization of her power. Surely then she must see that she is a part of a vast teaching machine that is moulding the whole future of the world.
"But that is setting the mothers and fathers aside," you say.
But no. The fathers and mothers have been, to a great extent, moulded by the teachers of a former day, and the teacher of to-day is with them moulding the mothers and fathers of the future. Cut out all education—leave only the mothering and fathering—and you will see what is meant.
Powerful? Yes, of tremendous power, this teaching machine—this vast machine stretching about all the earth, which turns out, not fabrics of wool and cotton, not hard, cold things of brass and steel and iron, but lives, aspirations, thought—the thought that is the father of Act, the inspiration that weaves dreams of gossamer that take form in glowing word, and gleaming color and music fit for heaven, to the delighting and moving of earth's peoples.
"Thought is the father of Act."—Think about that, teacher—think about it. Wise folk tell us that it was in the schools of Germany that the sinister powers of that brilliantly clever land brewed the brew that has brought upon this beautiful world the most horrible horror that it has ever known. I believe President Wilson was right when he refused to confound the people and the Government of Germany as one, perceiving that the people have been but dupes of their Prussian military masters. I believe that it was a few minds—ambitious, callous, selfish, anxious only for more power and more gain, that, during the long years, in-

Roasts.

Ordinary roasts of veal (stuffed where the bone is taken out) beef or pork, may be made very attractive by garnishing prettily with bits of parsley or holly. Serve on a hot platter with mashed potatoes or potatoes which have been pared and baked with the roast, all around. If mashed potatoes are used heap them in a neat border, dot with bits of butter and sprinkle with paprika or pepper.

Bread Sauce.

Serve with the chicken or hare. Cook 2 cups milk with $\frac{1}{2}$ cup fine breadcrumbs and 1 onion stuck with 6 cloves, for half an hour in the double boiler. Remove the onion and add 3 tablespoons butter and pepper and salt to season. Now take $\frac{1}{2}$ cup coarse breadcrumbs and brown them in a little butter. Put the sauce in a hot bowl, sprinkle the browned crumbs over the top, and serve.

Baked Parsnips.

Clean parsnips, split them in two and parboil, then drain, rub with butter and bake in the oven until browned. Carrots may be cooked in the same way. If preferred, these vegetables may be boiled, sliced, and covered with a hot cream sauce.

Canned Berry Pudding.

Butter a pudding dish, lay in a layer of bread, cut in thin slices and buttered, then a layer of canned berries of any kind, also a sprinkling of sugar if needed. Continue the layers until the dish is nearly full. Bake about half an hour in a moderate oven. Serve hot, covered with whipped cream or a meringue of beaten egg-whites. With each serving put a little hard sauce made of butter and sugar beaten together.

Fruit Pudding.

Beat the yolks of 4 eggs. Add 1 pint soft breadcrumbs, 1 cup sugar, grated rind of a lemon, 1 teaspoon salt, 1 cup seeded raisins. Mix all well, then add 1 quart rich milk. Bake in a very moderate oven until firm in the centre. When the pudding has cooled somewhat beat the whites of the 4 eggs dry, then beat in $\frac{1}{2}$ cup sugar and spread or pipe over the top. Dredge with granulated sugar and cook in a very moderate oven about 15 minutes.

Pumpkin Pie Tarts.

Make pumpkin pie pastry and filling as usual, but cook as tarts. Before serving cover each with whipped cream, slightly sweetened, with a grating of nutmeg over the top.

Doughnuts.

Mix a yeast cake and a half through $\frac{1}{4}$ cup lukewarm water, then stir in enough flour to make a dough. Knead the little ball of dough until smooth, then drop it into a bowl of lukewarm water. In a mixing bowl beat 2 eggs light. Add $\frac{1}{4}$ cup grated maple sugar (or light brown sugar), $\frac{1}{2}$ teaspoon grated nutmeg, 1 teaspoon salt, 1 cup scalded-and-cooled milk, one-third cup melted shortening, and the ball of sponge without any of the water. Mix all, then stir in flour to make a soft dough. Knead until smooth, then set to rise in a buttered bowl. When doubled in bulk, turn on to a lightly floured board and roll into a sheet $\frac{1}{2}$ inch thick. Cut in strips nearly an inch wide, and make into rings or "twisters." When again light, fry in deep fat, which must not be too hot, until light brown. Bread flour, not pastry flour, should be used for these doughnuts.

Celery-and-Apple Salad.

Pare, quarter and core choice apples, cut them in small cubes, and squeeze over them the juice of a large lemon to keep them white. A pint of apples will be enough for an ordinary family. Add an equal measure of crisp celery, sliced. Mix all together with enough good salad dressing to moisten. Serve on lettuce or celery tops. Nice with cold tongue or ham for supper.

Cranberry-and-Celery Salad.

Cut large cranberries in bits with a sharp knife and mix with an equal quantity of crisp celery cut in bits. Mix with a dressing made as follows: For 1 pint mix 1 scant half teaspoon salt, $\frac{1}{4}$ teaspoon paprika, 4 tablespoons olive oil, 1 or 2 tablespoons vinegar. Mix all well together. Serve on lettuce or celery leaves, or in bright green apples hollowed out to make cups.

Fig Cake.

Take one-third cup butter, 1 cup sugar, 2 eggs, $\frac{1}{2}$ cup milk, $\frac{1}{2}$ teaspoon soda, 1 slightly rounding teaspoon cream tartar, $1\frac{1}{2}$ cups flour. Mix as usual. Bake in two layers and put together with fig filling. Sift confectioner's sugar over the top, or cover with whipped cream flavored with orange or lemon extract. Decorate with bits of fig which have been cooked in thin syrup of sugar and water.

Devil's Food Cake.

Take $\frac{1}{2}$ cup butter, $1\frac{1}{2}$ cups sugar, 4 squares chocolate, 4 teaspoons boiling water, 2 tablespoons sugar, 3 beaten eggs, $\frac{1}{2}$ cup milk, $1\frac{1}{4}$ cups flour, 3 level teaspoons baking-powder. Beat the butter to a cream and beat in the $1\frac{1}{2}$ cups sugar. Melt the chocolate, add the boiling water and the extra sugar, and stir and cook to a smooth paste (a little more water may be needed), then beat into the first mixture. Add the eggs, then, alternately, the milk and flour sifted with the baking powder. Bake in one sheet or in layers, putting whipped cream on top and between. This is a very good cake in spite of its name, and may be made to look quite festive by sticking a sprig of holly on top.

Making Holiday Candy at Home.

We hear much these days about saving. Then why not "save" on Christmas candy by making it at home? Try these.

Honey Drops.

Pour two tablespoonfuls of strained honey into a cupful of boiling water and add two cupfuls of sugar and two tablespoonfuls of butter. Boil slowly until syrup dropping from a fork taken out of the hot liquid leaves a fine thread behind it. Pour the boiling syrup over the whites of two eggs that have been beaten to a stiff froth and add a teaspoonful of almond extract. Now beat until it is cold and just as stiff as you can handle and drop in spoonfuls on a buttered pan or a sheet of paraffin paper. A nutmeat pressed into the top of each drop makes the candy even nicer.

Beet Puffs.

Cut one medium-sized beet into thin slices, cover with half a cupful of water and cook until tender. Drain and to the liquid add two cupfuls of sugar. When this has boiled for four minutes add half a cupful of the cooked beet cut into small pieces. Cook to 240 degrees. Remove from the fire and let stand until it ceases to steam. Beat the salted whites of two eggs to a stiff froth and pour the mixture over it, beating thoroughly. Because this mixture is foamy and sets quickly it must be handled rapidly. Take a small portion at a time in a teaspoon, and, with a pecan nut, push the mixture from the spoon on to waxed paper, leaving the nut meat imbedded in the puff.

Maple Pralines.

Break one pound of soft maple sugar in pieces and add three-fourths cupful of milk and one teaspoonful butter. Bring to the boiling point, and let boil until a soft ball may be formed when mixture is tried in cold water. Remove from fire, add two-thirds cupful of English walnut meats cut in small pieces, and beat until creamy. Drop from tip of spoon in piles (working quickly) on a buttered paper or board covered with paraffin paper.

Fig Favorites.

Select the best quality of figs and steam until soft, then make an incision in each lengthwise and stuff with chopped nut meats. Close and place on a buttered pan. Boil together two cupfuls of sugar, one-half cupful of water, and one-fourth teaspoonful of cream of tartar. Boil until it will make a hard ball when dropped into cold water, flavor with a little vanilla, and then pour over the stuffed figs. When nearly cold mark off into squares. Stuffed dates can be used in place of the figs if liked.

Walnut Bonbons.

Place in a saucepan one cupful of granulated sugar, one-half cupful of golden syrup and one-half cupful of water, and a pinch of cream of tartar. Boil until it makes a firm ball when tested in cold water, then add one-half teaspoonful of vanilla and one-half cupful of English walnut meats chopped fine. Pour over the beaten white of one egg, and beat up until light. When it

begins to harden drop on halved English walnuts and press a half nut on the top of each bonbon.

Stuffed Dates.

Wash dates, split open, take out the stones and fill the cavities with nuts. Roll in powdered or granulated sugar.

Sea Foam.

Three cups brown sugar, $\frac{1}{2}$ cup water, 1 tablespoon vinegar; boil until threads fly well from fork; then pour the mixture over the well beaten whites of two eggs; flavor, then beat and beat until stiff. Drop from spoon on to buttered platter. Let stand over night before eating—if you can wait.

Butter Scotch.

Two pounds New Orleans sugar, 2 pints water. Boil, adding 2 tablespoons butter. Add lemon juice or any extract liked to flavor. Drop into water to test crispness, and when ready pour into buttered pans.

Candied Popcorn.

Boil good molasses for 25 or 30 minutes. Dip the popped corn into this and press into balls.

Dipped Nuts or Fruit.

Cook together 3 cups granulated sugar, $\frac{1}{4}$ cup water, $\frac{1}{4}$ teaspoon cream of tartar until it taffies in cold water. Take off the fire and add a few drops of lemon extract or other flavoring. Dip the nuts or fruit rapidly, placing each at once on a greased tin.

Velvet Molasses Candy.

Mix together 3 cups sugar, 1 cup boiling water, 3 tablespoons vinegar, and 1 cup molasses. Place on the stove, and as soon as it begins to boil add $\frac{1}{2}$ teaspoon cream of tartar. When mixture becomes brittle when a little of it is tested in cold water, add $\frac{1}{4}$ teaspoon soda and $\frac{1}{2}$ cup melted butter, mix and pour out on a buttered pan. Take in bits when half cold, and pull as for ordinary molasses candy. This candy may be flavored with 1 teaspoon vanilla, or $\frac{1}{2}$ teaspoon lemon or raspberry extract.

Any Mother to Any Son.

BY CONSTANCE GREEN.

So, lay him down to rest,
His hard fight won;
Nothing can harm him now,
Earth's course is run.

For when he reached his bourne,
Drew his last breath,
Life claimed him, so that he
Never knew Death.

God stretched His mighty arm
Out of His heaven,
Took this tired child of His,
Raised him up, shriven;

Plunged him in Lethe's stream,
Purging away
War's bitter memories
In the cool spray.

Stripped off earth's swaddling bands
Setting him free,
So that he might fulfill
His destiny.

How dare I then repine?
Calm and dry eyed
Through my allotted span
Shall I abide.

Till on my waiting ear
Sweetly shall fall,
Piercing Death's blurring mists,
Life's trumpet call.
—London Chronicle.

Smiles.

Missed a Few.—Beatrice—"Is it true that sailors have a girl in every port?"
Midshipman Harold—"Well, I'd hardly say that—there were several places we didn't touch on our cruise."—"Judge."

Member of Committee (interviewing lady candidate for training for farm work): "And are you fond of animals—horses and cows?" Candidate: "Well, no—not very." Member of Committee: "But I'm afraid that's rather necessary." Candidate (brightly resolute): "Oh, but I should try not to think about them."

A Story of the Star.

It was scarcely daylight as Jonah swiftly made his way along the broad road that led by the Inn. The man was middle-aged, tall and strongly built; he wore a loose, flowing cape and carried a shepherd's staff. The face was singularly attractive. Kindliness looked forth from the dark eyes, and the heavy beard could not conceal the tender, benignant expression of the mouth. At a glance an observer would have said: "This is a man who has lived near to Nature and to God"—which was true. Jonah, closely related to Micah, the prophet, was an Israelite, burdened with his people's woes, who daily—hourly—looked for the coming of the long-promised Messiah. His days were spent caring for his sheep, for he was a shepherd and was now on his way to his flock.

Although the man walked rapidly there was a noticeable anxiety in the quick glances he gave from side to side, which showed that he was looking for what he longed—yet was reluctant—to meet. As he came nearer to the Inn, a stone's throw from the road, there darted forth from the barn near the house a boy of twelve, tall for his age, his dark, handsome face glowing with excitement, his form trembling with expectancy.

"Father!" he cried, flinging to one side his bundle and a wondrously carved shepherd's staff, then throwing his arms about the man's neck. "Oh, father, I thought thou wouldst never come! See, I have been ready for hours"—and he pointed to his bundle—"I have not slept at all; since midnight I have been kneeling by my window, looking at the sky, searching for the Star; why does it not come?" He looked up eagerly into his father's face. Before the question could be answered he again began talking excitedly: "If it appears to-night, out on the hills, we shall quickly see it; there will be nothing to hide it. I shall be watching from the moment the first star glimmers. This is the day to which I have looked forward all my life. Oh, I am so happy!"

Suddenly, realizing his father's silence, the boy drew back. Then Jonah spoke reluctantly, with evident pain: "My son, thou canst not go."

"Not go!" echoed the bewildered boy. "Thou hast promised for years that when I was twelve I should go with thee to the hills to watch the flocks. Am I not twelve, tall and strong? Have I not been faithful to the mistress of the Inn where I have worked? Already the day's labor is done; the cattle are fed, the barn is swept and cleaned. Nay, father, thou canst not mean what thou hast said."

Tears springing to his eyes, close to his breast the shepherd drew the boy. "My Peter, since thy mother went to God when thou wast a little lad of three, have I not cherished thee as the apple of mine eye?" The boy bent his head. "Nothing has come before thee but my God and my duty; tell me thou believest this?" Again the boy bent his head. "Our faithful Miriam has aged and is still weakened from the long sickness, so that I have dreaded to leave her with none but hired help to care for her. That I would have done to let thee go, my child. But at sundown word came that Isaac, who had promised to do thy tasks, was stricken with fever, unto death. All night have I gone from house to house, seeking some one to fill thy place—for it is the tax season and the Inn's work must be done—but no one could I find. What more is left that I can do, my son?" and tenderly he stroked the boy's cheek.

For a moment's space there was silence; then in a stifled voice Peter spoke, as he fell upon his knees:

"Thou art right as always, my father; I cannot go."

With infinite tenderness Jonah laid his hand upon the boy's head: "The God of our fathers bless thee and make thee a shepherd of His flock."

Peter was scarcely conscious of his father's embrace, nor did he hear the low "Would that I could stay and thou couldst go." He stood motionless until Jonah's form was lost in the distance. Mechanically he picked up the bundle he had put together so joyfully. Instinctively he reached for his staff; as he touched it the remembrance of the hours he had taken from sleep and toiled to make it beautiful and worthy of his great journey in some way comforted him. Holding the precious staff close to his breast, on which the slow tears dropped, he climbed the narrow stairs and threw himself upon his bed. Swiftly the days passed, for Peter

worked steadily. Ah, blessed gift! It was meant; it had filment. For been coming bers, and n From early long day, endless nur others for a

As twilight called Peter room in the other travel away."

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worked steadily from dawn to sunset. Ah, blessed work! God's most helpful gift! It weakens the sting of disappointment; it holds the promise of glad fulfillment. For nearly a week lodgers had been coming to the Inn in greater numbers, and now was due the last tax day. From early sunrise, throughout the live-long day, travelers came in seemingly endless number; some for a meal and others for a night's rest.

"As twilight began to fall the mistress called Peter, saying: 'We cannot make room in the Inn for even one more. If other travelers come they must be turned away.'

The boy had just finished his last task in the barn. He had thrown down fresh straw for each animal, patted this one on the head, smoothed that one's side, and knew that every manger was sweet and clean.

As he stood leaning against the barn, down the road he saw a couple moving slowly toward the Inn. "Poor folks!" he said pityingly; "where will they sleep to-night?"

Nearer they came. The woman, young and beautiful, seemed scarcely able to drag one foot after the other. The man, his arm thrown around the woman's shoulder, tenderly supported her, seeming almost to carry her.

Peter hurriedly began to speak—and stopped short, his heart beating, his throat throbbing. The woman had raised her head, and, looking in his face, had smiled. To the day of his death Peter never forgot that smile. All motherhood was there, quick sympathy, deep tenderness and love. In that smile he seemed to feel his dead mother's arms about him, to hear her voice whispering in his ear: "I know it all, my son. Grief endureth but a while, joy cometh in the morning."

"I cannot tell them they must go," the boy murmured to himself. Then without a word or look he turned and ran quickly down the road.

It was hours later that the mistress called him in and plied him fast with questions.

"What is it makes this man and woman so different from the other travelers? When I said, 'There is no room in the Inn,' they meekly bowed their heads and turned to go. Why did I not let them go? What made me tell them they could lie in the manger?"

"They are in the manger!" Peter exclaimed quickly.

Such happiness thrilled through him that he trembled, unknowing he had done his best for her. Not knowing why, he had spread the empty manger with the softest hay. He recalled how back and forth he went, making the lowly bed as best he could—and She was lying there.

It was close upon midnight, but Peter could not rest; his heart and brain were in a tumult. So he went forth to look up into the broad, fathomless sky, searching as ever for the Star. Again and again he walked around the low-lying barn. "Oh, if he could but have given her his bed!" But that the mistress had utterly forbade. Then whispering to himself he said: "Once more I'll go and see that all is well, and then lie down and sleep."

As he passed the closed door suddenly he stopped. "What was that sound?" Again it came—a low cry, an infant's cry. Wondering and amazed he fled to his room and soon was in a troubled sleep.

How long he slept he knew not. It seemed but a moment when he woke. His room was flooded with a soft, shimmering light. He sprang to the open window. As far as the eye could see was the same silvery radiance. Involuntarily he looked to the hills where his father and the other shepherds were seated on the ground, their flocks about them. Here the shining glory was so intensified that his eyes were almost blinded.

As with bated breath he looked he saw that this ineffable radiance surrounded angelic beings of indescribable beauty and majesty. Each glorified one irradiated an atmosphere of peace and helpfulness so uplifting that the boy's very soul seemed to sing with happiness. In tones whose triumphant joy reached and penetrated Peter's heart the angels spoke to the affrighted shepherds:

"Behold, we bring you glad tidings of great joy. In Bethlehem of Judea is born this day a King who shall redeem His people."

In voiceless ecstasy Peter fell upon his knees. When suddenly there was with the angels a multitude of the Heavenly

host praising God, and saying: "On earth peace, good will toward men."

Floating, swaying, they filled the sky, each Heavenly visitant bearing a message to the enraptured boy. Faith and Hope, with arms entwined, smiled on him as they passed. "The joy of gratitude," breathed one; "The bliss of sharing," whispered another; and one spoke, whose face shone with such white radiance that the child veiled his eyes: "I am Service; my holiest name is Love. I am thine own Angel, Peter, and will never leave thee."

As suddenly as they came the Heavenly host were gone. "But what is that golden gleam far, far on the horizon?"

Breathless, the boy leaned from the window. The light slowly focused, and behold! it was a Star, wonderful in magnitude, resplendent in glory, gleaming with a splendor no tongue can picture. On, on it moved unflinching.

Trembling in every limb Peter watched the Star as it swiftly pursued its course. As he looked a cry broke from his lips, for lo! the Star was motionless and poised above the manger where She was lying. Down from it streamed a wondrous glory, a golden stairway, as it were, by which to climb to God. Then a great light illumined the boy's face, his eyes shone, his breath came fitfully, exultation filled his being; for now Peter knew.

With low, whispering words he ran swiftly and noiselessly down the stairs. He comprehended the meaning of the Divine fulgence that surrounded the manger, and he knelt in rapt adoration. Pressing his lips again and again to the closed doors he stretched forth his arms, crying rapturously:

"Father! The King, the King is here!"
—From Pictorial Review.

The Children's War.

BY KATHARINE TYNAN.

This is the Children's War; because
The victory's to the young and clean!
Up to the Dragon's ravening jaws
March dear Eighteen and Seventeen.

Fresh from the Chrisom waters pure
Dear lads, so eager to attain
To the bright visions that allure
The Knight's ordeal, the red pain.

The light is yet upon their curls;
The dream is yet within their eyes;
Their cheeks are silken as a girl's;
And little Knights of Paradise.

O men with many scars and stains,
Stand back, abase your souls and pray!
For now to Nineteen are the gains
And golden Twenty wins the day.

Brown heads with curls all rippled over,
Young bodies slender as a flame;
They leap to darkness like a lover—
To Twenty-one is fall'n the game.

It is the Boys' War. Praise be given
To Percival and Galahad,
Who have won earth and taken Heaven
By violence! Weep not, but be glad!
—The Spectator.

Next!—The story of the rival boot-makers, which appeared recently, is matched by a correspondent of an English paper with another story, equally old but equally worth repeating. It concerns two rival sausage-makers. Again, they lived on opposite sides of a certain street, and, one day, one of them placed over his shop the legend:

"We sell sausages to the gentry and nobility of the country."

The next day, over the way, appeared the sign:

"We sell sausages to the gentry and nobility of the whole country."

Not to be outdone, the rival put up what he evidently regarded as a final statement, namely:

"We sell sausages to the King."

Next day there appeared over the door of the first sausage-maker the simple expression of loyalty:

"God save the King."—Christian Science Monitor.

Our Serial Story

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY.

By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.

Chapter VIII.

Jim Dodge had been hoeing potatoes all day. It was hard, monotonous work, and he secretly detested it. But the hunting season was far away, and the growing potatoes were grievously beset by weeds; so he had cut and thrust with his sharp-bladed hoe from early morning till the sun burned the crest of the great high-shouldered hill which appeared to close in the valley like a rampart, off Grenoble way. As a matter of fact, the brawling stream which gave Brookville its name successfully skirted the hill by a narrow margin which likewise afforded space for the state road.

But the young man was not considering either the geographical contours of the country at large or the refreshed and renovated potato field, with its serried ranks of low-growing plants, as he tramped heavily crosslots toward the house. At noon, when he came in to dinner, in response to the wide-flung summons of the tin horn which hung by the back door, he had found the two women of his household in a pleasurable state of excitement.

"We've got our share, Jim!" proclaimed Mrs. Dodge, a bright red spot glowing on either thin cheek. "See! here's the check; it came in the mail this morning."

And she spread a crackling bit of paper under her son's eyes.

"I was some surprised to get it so soon," she added. "Folks ain't generally in any hurry to part with their money. But they do say Miss Orr paid right down for the place—never even asked 'em for any sort of terms; and th' land knows they have been glad to given them to her, to anybody that had bought the place these dozen years back. Likely she didn't know that."

Jim scowled at the check. "How much did she pay for the place?" he demanded. "It must have been a lot more than it was worth, judging from this."

"I don't know," Mrs. Dodge replied. "And I dunno as I care particularly, as long's we've got our share of it."

She was swaying back and forth in a squeaky old rocking-chair, the check clasped in both thin hands.

"Shall we bank it, children; or draw it all out in cash? Fanny needs new clothes; so do you, Jim. And I've got to have a new carpet, or something, for the parlor. Those skins of wild animals you brought in are all right, Jim, if one can't get anything better. I suppose we ought to be prudent and saving, but I declare we haven't had any money to speak of, for so long—"

Mrs. Dodge's faded eyes were glowing with joy; she spread the check upon her lap and gazed at it smilingly.

"I declare it's the biggest surprise I've had in all my life!"

"Let's spend every cent of it," proposed Fanny recklessly. "We didn't know we were going to have it. We can scrub along afterward the same as we always have. Let's divide it into four parts: one for the house—to fix it up—and one for each of us, to spend any way we like. What do you say, Jim?"

"I shouldn't wonder if Mrs. Deacon Whittle would furnish up her best parlor something elegant," surmised Mrs. Dodge. "She's always said she was goin' to have gilt paper and marble tops and electric blue plush upholstered furniture. I guess that'll be the last fair we'll ever have in that house. She wouldn't have everybody trampin' over her flowered Body-Brussels. I suppose we might buy some plush furniture; but I don't know as I'd care for electric blue. What do you think, son?"

Jim Dodge sat sprawled out in his chair before the half-set table. At this picture of magnificence, about to be realized in the abode of Deacon Amos Whittle, he gave vent to an inarticulate growl.

"What's the matter with you, Jim?" shrilled his mother, whose perpetually jangled nerves were capable of strange dissonances. "Anybody'd suppose you wasn't pleased at having the old Bolton place sold at last, and a little bit of all that's been owing to us since before your poor father died, paid off. My! If

we was to have all that was coming to us by rights, with the interest money—"

"I'm hungry and tired, mother, and I want my dinner," said Jim brusquely. "That check won't hoe the potatoes; so I guess I'll have to do it, same as usual."

"For pity sake, Fanny!" cried his mother, "did you put the vegetables over to boil?" I ain't thought of anything since this check came."

It appeared that Fanny had been less forgetful.

After his belated dinner, Jim had gone back to his potatoes, leaving his mother and sister deep in discussion over the comparative virtues of Nottingham lace and plain muslin, made up with ruffles, for parlor curtains.

"I really believe I'd rather spend more on the house than on clo'es at my age," he heard his mother saying, happily, as he strode away.

All during the afternoon, to the clink of myriad small stones against the busy blade of his hoe, Jim thought about Lydia Orr. He could not help seeing that it was to Lydia he owed the prospect of a much needed suit of clothes. It would be Lydia who hung curtains, of whatever sort, in their shabby best room. And no other than Lydia was to furnish Mrs. Whittle's empty parlor. She had already given the minister a new long-tailed coat, as Jim chose to characterize the ministerial black. His cheeks burned under the slanting rays of the afternoon sun with something deeper than an added coat of tan. Why should Lydia Orr—that slip of a girl, with the eyes of a baby, or a saint—do all this? Jim found himself unable to believe that she really wanted the Bolton place. Why, the house was an uninhabitable ruin! It would cost thousands of dollars to rebuild it.

He set his jaw savagely as he recalled his late conversation with Deacon Whittle. "The cheating old skinflint," as he mentally termed that worthy pillar of the church, had, he was sure, bamboozled the girl into buying a well-nigh worthless property, at a scandalous price. It was a shame! He, Jim Dodge, even now burned with the shame of it. He pondered briefly the possibilities of taking from his mother the check, which represented the pro rata share of the Dodge estate, and returning it to Lydia Orr. Reluctantly he abandoned this quixotic scheme. The swindle—for as such he chose to view it—had already been accomplished. Other people would not return their checks. On the contrary, there would be new and fertile schemes set on foot to part the unworlly stranger and her money.

He flung down his hoe in disgust and straightened his arching shoulders. The whole sordid transaction put him in mind of the greedy onslaught of a horde of hungry ants on a beautiful, defenseless flower, its torn corolla exuding sweetness. . . . And there must be some sort of reason behind it. Why had Lydia Orr come to Brookville?

And here, unwittingly, Jim's blind conjectures followed those of Wesley Elliot. He had told Lydia Orr he meant to call upon her. That he had not yet accomplished his purpose had been due to the watchfulness of Mrs. Solomon Black. On the two occasions when he had rung Mrs. Black's front door-bell, that lady herself had appeared in response to its summons. On both occasions she had informed Mr. Dodge tartly that Miss Orr wasn't at home.

On the occasion of his second disappointment he had offered to await the young lady's home-coming.

"There ain't no use of that, Jim", Mrs. Black had assured him. "Miss Orr's gone t' Boston to stay two days."

Then she had unlatched her close-shut lips to add: "She goes there frequent, on business."

Her eyes appeared to inform him further that Miss Orr's business, of whatever nature, was none of his business and never would be.

"That old girl is down on me for some reason or other," he told himself ruefully, as he walked away for the second time. But he was none the less resolved to pursue his hopefully nascent friendship with Lydia Orr.

He was thinking of her vaguely as he walked toward the house which had been his father's, and where he and Fanny had been born. It was little and low and old, as he viewed it indifferently in the fading light of the sunset sky. Its walls had needed painting so long, that for years nobody had even mentioned the subject. Its picturesquely mossy roof leaked. But a leaky roof was a

Roasts.

Ordinary roasts of veal (stuffed where the bone is taken out) beef or pork, may be made very attractive by garnishing prettily with bits of parsley or holly. Serve on a hot platter with mashed potatoes or potatoes which have been pared and baked with the roast, all around. If mashed potatoes are used heap them in a neat border, dot with bits of butter and sprinkle with paprika or pepper.

Bread Sauce.

Serve with the chicken or hare. Cook 2 cups milk with $\frac{1}{2}$ cup fine breadcrumbs and 1 onion stuck with 6 cloves, for half an hour in the double boiler. Remove the onion and add 3 tablespoons butter and pepper and salt to season. Now take $\frac{1}{2}$ cup coarse breadcrumbs and brown them in a little butter. Put the sauce in a hot bowl, sprinkle the browned crumbs over the top, and serve.

Baked Parsnips.

Clean parsnips, split them in two and parboil, then drain, rub with butter and bake in the oven until browned. Carrots may be cooked in the same way. If preferred, these vegetables may be boiled, sliced, and covered with a hot cream sauce.

Canned Berry Pudding.

Butter a pudding dish, lay in a layer of bread, cut in thin slices and buttered, then a layer of canned berries of any kind, also a sprinkling of sugar if needed. Continue the layers until the dish is nearly full. Bake about half an hour in a moderate oven. Serve hot, covered with whipped cream or a meringue of beaten egg-whites. With each serving put a little hard sauce made of butter and sugar beaten together.

Fruit Pudding.

Beat the yolks of 4 eggs. Add 1 pint soft breadcrumbs, 1 cup sugar, grated rind of a lemon, 1 teaspoon salt, 1 cup seeded raisins. Mix all well, then add 1 quart rich milk. Bake in a very moderate oven until firm in the centre. When the pudding has cooled somewhat beat the whites of the 4 eggs dry, then beat in $\frac{1}{2}$ cup sugar and spread or pipe over the top. Dredge with granulated sugar and cook in a very moderate oven about 15 minutes.

Pumpkin Pie Tarts.

Make pumpkin pie pastry and filling as usual, but cook as tarts. Before serving cover each with whipped cream, slightly sweetened, with a grating of nutmeg over the top.

Doughnuts.

Mix a yeast cake and a half through $\frac{1}{4}$ cup lukewarm water, then stir in enough flour to make a dough. Knead the little ball of dough until smooth, then drop it into a bowl of lukewarm water. In a mixing bowl beat 2 eggs light. Add $\frac{3}{4}$ cup grated maple sugar (or light brown sugar), $\frac{1}{2}$ teaspoon grated nutmeg, 1 teaspoon salt, 1 cup scalded-and-cooled milk, one-third cup melted shortening, and the ball of sponge without any of the water. Mix all, then stir in flour to make a soft dough. Knead until smooth, then set to rise in a buttered bowl. When doubled in bulk, turn on to a lightly floured board and roll into a sheet $\frac{1}{2}$ inch thick. Cut in strips nearly an inch wide, and make into rings or "twisters." When again light, fry in deep fat, which must not be too hot, until light brown. Bread flour, not pastry flour, should be used for these doughnuts.

Celery-and-Apple Salad.

Pare, quarter and core choice apples, cut them in small cubes, and squeeze over them the juice of a large lemon to keep them white. A pint of apples will be enough for an ordinary family. Add an equal measure of crisp celery, sliced. Mix all together with enough good salad dressing to moisten. Serve on lettuce or celery tops. Nice with cold tongue or ham for supper.

Cranberry-and-Celery Salad.

Cut large cranberries in bits with a sharp knife and mix with an equal quantity of crisp celery cut in bits. Mix with a dressing made as follows: For 1 pint mix 1 scant half teaspoon salt, $\frac{1}{4}$ teaspoon paprika, 4 tablespoons olive oil, 1 or 2 tablespoons vinegar. Mix all well together. Serve on lettuce or celery leaves, or in bright green apples hollowed out to make cups.

Fig Cake.

Take one-third cup butter, 1 cup sugar, 2 eggs, $\frac{1}{2}$ cup milk, $\frac{1}{2}$ teaspoon soda, 1 slightly rounding teaspoon cream tartar, $1\frac{1}{2}$ cups flour. Mix as usual. Bake in two layers and put together with fig filling. Sift confectioner's sugar over the top, or cover with whipped cream flavored with orange or lemon extract. Decorate with bits of fig which have been cooked in thin syrup of sugar and water.

Devil's Food Cake.

Take $\frac{1}{4}$ cup butter, $1\frac{1}{2}$ cups sugar, 4 squares chocolate, 4 teaspoons boiling water, 2 tablespoons sugar, 3 beaten eggs, $\frac{1}{2}$ cup milk, $1\frac{1}{2}$ cups flour, 3 level teaspoons baking-powder. Beat the butter to a cream and beat in the $1\frac{1}{2}$ cups sugar. Melt the chocolate, add the boiling water and the extra sugar, and stir and cook to a smooth paste (a little more water may be needed), then beat into the first mixture. Add the eggs, then, alternately, the milk and flour sifted with the baking powder. Bake in one sheet or in layers, putting whipped cream on top and between. This is a very good cake in spite of its name, and may be made to look quite festive by sticking a sprig of holly on top.

Making Holiday Candy at Home.

We hear much these days about saving. Then why not "save" on Christmas candy by making it at home? Try these.

Honey Drops.

Pour two tablespoonfuls of strained honey into a cupful of boiling water and add two cupfuls of sugar and two tablespoonfuls of butter. Boil slowly until syrup dropping from a fork taken out of the hot liquid leaves a fine thread behind it. Pour the boiling syrup over the whites of two eggs that have been beaten to a stiff froth and add a teaspoonful of almond extract. Now beat until it is cold and just as stiff as you can handle and drop in spoonfuls on a buttered pan or a sheet of paraffin paper. A nutmeat pressed into the top of each drop makes the candy even nicer.

Beet Puffs.

Cut one medium-sized beet into thin slices, cover with half a cupful of water and cook until tender. Drain and to the liquid add two cupfuls of sugar. When this has boiled for four minutes add half a cupful of the cooked beet cut into small pieces. Cook to 240 degrees. Remove from the fire and let stand until it ceases to steam. Beat the salted whites of two eggs to a stiff froth and pour the mixture over it, beating thoroughly. Because this mixture is foamy and sets quickly it must be handled rapidly. Take a small portion at a time in a teaspoon, and, with a pecan nut, push the mixture from the spoon on to waxed paper, leaving the nut meat imbedded in the puff.

Maple Pralines.

Break one pound of soft maple sugar in pieces and add three-fourths cupful of milk and one teaspoonful butter. Bring to the boiling point, and let boil until a soft ball may be formed when mixture is tried in cold water. Remove from fire, add two-thirds cupful of English walnut meats cut in small pieces, and beat until creamy. Drop from tip of spoon in piles (working quickly) on a buttered paper or board covered with paraffin paper.

Fig Favorites.

Select the best quality of figs and steam until soft, then make an incision in each lengthwise and stuff with chopped nut meats. Close and place on a buttered pan. Boil together two cupfuls of sugar, one-half cupful of water, and one-fourth teaspoonful of cream of tartar. Boil until it will make a hard ball when dropped into cold water, flavor with a little vanilla, and then pour over the stuffed figs. When nearly cold mark off into squares. Stuffed dates can be used in place of the figs if liked.

Walnut Bonbons.

Place in a saucepan one cupful of granulated sugar, one-half cupful of golden syrup and one-half cupful of water, and a pinch of cream of tartar. Boil until it makes a firm ball when tested in cold water, then add one-half teaspoonful of vanilla and one-half cupful of English walnut meats chopped fine. Pour over the beaten white of one egg, and beat up until light. When it

begins to harden drop on halved English walnuts and press a half nut on the top of each bonbon.

Stuffed Dates.

Wash dates, split open, take out the stones and fill the cavities with nuts. Roll in powdered or granulated sugar.

Sea Foam.

Three cups brown sugar, $\frac{1}{2}$ cup water, 1 tablespoon vinegar; boil until threads fly well from fork; then pour the mixture over the well beaten whites of two eggs; flavor, then beat and beat until stiff. Drop from spoon on to buttered platter. Let stand over night before eating—if you can wait.

Butter Scotch.

Two pounds New Orleans sugar, 2 pints water. Boil, adding 2 tablespoons butter. Add lemon juice or any extract liked to flavor. Drop into water to test crispness, and when ready pour into buttered pans.

Candied Popcorn.

Boil good molasses for 25 or 30 minutes. Dip the popped corn into this and press into balls.

Dipped Nuts or Fruit.

Cook together 3 cups granulated sugar, $\frac{3}{4}$ cup water, $\frac{1}{4}$ teaspoon cream of tartar until it taffies in cold water. Take off the fire and add a few drops of lemon extract or other flavoring. Dip the nuts or fruit rapidly, placing each at once on a greased tin.

Velvet Molasses Candy.

Mix together 3 cups sugar, 1 cup boiling water, 3 tablespoons vinegar, and 1 cup molasses. Place on the stove, and as soon as it begins to boil add $\frac{1}{2}$ teaspoon cream of tartar. When mixture becomes brittle when a little of it is tested in cold water, add $\frac{1}{2}$ teaspoon soda and $\frac{1}{2}$ cup melted butter, mix and pour out on a buttered pan. Take in bits when half cold, and pull as for ordinary molasses candy. This candy may be flavored with 1 teaspoon vanilla, or $\frac{1}{2}$ teaspoon lemon or raspberry extract.

Any Mother to Any Son.

BY CONSTANCE GREEN.

So, lay him down to rest,
His hard fight won;
Nothing can harm him now,
Earth's course is run.

For when he reached his bourne,
Drew his last breath,
Life claimed him, so that he
Never knew Death.

God stretched His mighty arm
Out of His heaven,
Took this tired child of His,
Raised him up, shriven;

Plunged him in Lethe's stream,
Purging away
War's bitter memories
In the cool spray.

Stripped off earth's swaddling bands
Setting him free,
So that he might fulfill
His destiny.

How dare I then repine?
Calm and dry eyed
Through my allotted span
Shall I abide.

Till on my waiting ear
Sweetly shall fall,
Piercing Death's blurring mists,
Life's trumpet call.

—London Chronicle.

Smiles.

Missed a Few.—Beatrice—"Is it true that sailors have a girl in every port?"
Midshipman Harold.—"Well, I'd hardly say that—there were several places we didn't touch on our cruise."—"Judge."

Member of Committee (interviewing lady candidate for training for farm work): "And are you fond of animals—horses and cows?"
Candidate: "Well, no—not very."
Member of Committee: "But I'm afraid that's rather necessary."
Candidate (brightly resolute): "Oh, but I should try not to think about them."

A Story of the Star.

It was scarcely daylight as Jonah swiftly made his way along the broad road that led by the Inn. The man was middle-aged, tall and strongly built; he wore a loose, flowing cape and carried a shepherd's staff. The face was singularly attractive. Kindliness looked forth from the dark eyes, and the heavy beard could not conceal the tender, benignant expression of the mouth. At a glance an observer would have said: "This is a man who has lived near to Nature and to God"—which was true. Jonah, closely related to Micah, the prophet, was an Israelite, burdened with his people's woes, who daily—hourly—looked for the coming of the long-promised Messiah. His days were spent caring for his sheep, for he was a shepherd and was now on his way to his flock.

Although the man walked rapidly there was a noticeable anxiety in the quick glances he gave from side to side, which showed that he was looking for what he longed—yet was reluctant—to meet. As he came nearer to the Inn, a stone's throw from the road, there darted forth from the barn near the house a boy of twelve, tall for his age, his dark, handsome face glowing with excitement, his form trembling with expectancy.

"Father!" he cried, flinging to one side his bundle and a wondrously carved shepherd's staff, then throwing his arms about the man's neck. "Oh, father, I thought thou wouldst never come! See, I have been ready for hours"—and he pointed to his bundle—"I have not slept at all; since midnight I have been kneeling by my window, looking at the sky, searching for the Star; why does it not come?" He looked up eagerly into his father's face. Before the question could be answered he again began talking excitedly: "If it appears to-night, out on the hills, we shall quickly see it; there will be nothing to hide it. I shall be watching from the moment the first star glimmers. This is the day to which I have looked forward all my life. Oh, I am so happy!"

Suddenly, realizing his father's silence, the boy drew back. Then Jonah spoke reluctantly, with evident pain: "My son, thou canst not go."

"Not go!" echoed the bewildered boy. "Thou hast promised for years that when I was twelve I should go with thee to the hills to watch the flocks. Am I not twelve, tall and strong? Have I not been faithful to the mistress of the Inn where I have worked? Already the day's labor is done; the cattle are fed, the barn is swept and cleaned. Nay, father, thou canst not mean what thou hast said."

Tears springing to his eyes, close to his breast the shepherd drew the boy. "My Peter, since thy mother went to God when thou wast a little lad of three, have I not cherished thee as the apple of mine eye?" The boy bent his head. "Nothing has come before thee but my God and my duty; tell me thou believest this?" Again the boy bent his head. "Our faithful Miriam has aged and is still weakened from the long sickness, so that I have dreaded to leave her with none but hired help to care for her. That I would have done to let thee go, my child. But at sundown word came that Isaac, who had promised to do thy tasks, was stricken with fever, unto death. All night have I gone from house to house, seeking some one to fill thy place—for it is the tax season and the Inn's work must be done—but no one could I find. What more is left that I can do, my son?" and tenderly he stroked the boy's cheek.

For a moment's space there was silence; then in a stifled voice Peter spoke, as he fell upon his knees:

"Thou art right as always, my father; I cannot go."

With infinite tenderness Jonah laid his hand upon the boy's head: "The God of our fathers bless thee and make thee a shepherd of His flock."

Peter was scarcely conscious of his father's embrace, nor did he hear the low "Would that I could stay and thou couldst go." He stood motionless until Jonah's form was lost in the distance. Mechanically he picked up the bundle he had put together so joyfully. Instinctively he reached for his staff; as he touched it the remembrance of the hours he had taken from sleep and toiled to make it beautiful and worthy of his great journey in some way comforted him. Holding the precious staff close to his breast, on which the slow tears dropped, he climbed the narrow stairs and threw himself upon his bed. Swiftly the days passed, for Peter

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worked steadily from dawn to sunset. Ah, blessed work! God's most helpful gift! It weakens the sting of disappointment; it holds the promise of glad fulfillment. For nearly a week lodgers had been coming to the Inn in greater numbers, and now was due the last tax day. From early sunrise, throughout the live-long day, travelers came in seemingly endless number; some for a meal and others for a night's rest.

As twilight began to fall the mistress called Peter, saying: "We cannot make room in the Inn for even one more. If other travelers come they must be turned away."

The boy had just finished his last task in the barn. He had thrown down fresh straw for each animal, patted this one on the head, smoothed that one's side, and knew that every manger was sweet and clean.

As he stood leaning against the barn, down the road he saw a couple moving slowly toward the Inn. "Poor folks!" he said pityingly: "where will they sleep to-night?"

Nearer they came. The woman, young and beautiful, seemed scarcely able to drag one foot after the other. The man, his arm thrown around the woman's shoulder, tenderly supported her, seeming almost to carry her.

Peter hurriedly began to speak—and stopped short, his heart beating, his throat throbbing. The woman had raised her head, and, looking in his face, had smiled. To the day of his death Peter never forgot that smile. All motherhood was there, quick sympathy, deep tenderness and love. In that smile he seemed to feel his dead mother's arms about him, to hear her voice whispering in his ear: "I know it all, my son. Grief endureth but a while, joy cometh in the morning."

"I cannot tell them they must go," the boy murmured to himself. Then without a word or look he turned and ran quickly down the road.

It was hours later that the mistress called him in and plied him fast with questions.

"What is it makes this man and woman so different from the other travelers? When I said, 'There is no room in the Inn,' they meekly bowed their heads and turned to go. Why did I not let them go? What made me tell them they could lie in the manger?"

"They are in the manger!" Peter exclaimed quickly.

Such happiness thrilled through him that he trembled, unknowing he had done his best for her. Not knowing why, he had spread the empty manger with the softest hay. He recalled how back and forth he went, making the lowly bed as best he could—and she was lying there.

It was close upon midnight, but Peter could not rest; his heart and brain were in a tumult. So he went forth to look up into the broad, fathomless sky, searching as ever for the Star. Again and again he walked around the low-lying barn. "Oh, if he could but have given her his bed!" But that the mistress had utterly forbade. Then whispering to himself he said: "Once more I'll go and see that all is well, and then lie down and sleep."

As he passed the closed door suddenly he stopped. "What was that sound?" Again it came—a low cry, an infant's cry. Wondering and amazed he fled to his room and soon was in a troubled sleep.

How long he slept he knew not. It seemed but a moment when he woke. His room was flooded with a soft, shimmering light. He sprang to the open window. As far as the eye could see was the same silvery radiance. Involuntarily he looked to the hills where his father and the other shepherds were seated on the ground, their flocks about them. Here the shining glory was so intensified that his eyes were almost blinded.

As with bated breath he looked he saw that this ineffable radiance surrounded angelic beings of indescribable beauty and majesty. Each glorified one irradiated an atmosphere of peace and helpfulness so uplifting that the boy's very soul seemed to sing with happiness. In tones whose triumphant joy reached and penetrated Peter's heart the angels spoke to the affrighted shepherds:

"Behold, we bring you glad tidings of great joy. In Bethlehem of Judea is born this day a King who shall redeem His people."

In voiceless ecstasy Peter fell upon his knees. When suddenly there was with the angels a multitude of the Heavenly

host praising God, and saying: "On earth peace, good will toward men."

Floating, swaying, they filled the sky; each Heavenly visitant bearing a message to the enraptured boy. Faith and Hope, with arms entwined, smiled on him as they passed. "The joy of gratitude," breathed one; "The bliss of sharing," whispered another; and one spoke, whose face shone with such white radiance that the child veiled his eyes: "I am Service; my holiest name is Love. I am thine own Angel, Peter, and will never leave thee."

As suddenly as they came the Heavenly host were gone.

"But what is that golden gleam far, far on the horizon?"

Breathless, the boy leaned from the window. The light slowly focused, and behold! it was a Star, wonderful in magnitude, resplendent in glory, gleaming with a splendor no tongue can picture. On, on it moved unflinching.

Trembling in every limb Peter watched the Star as it swiftly pursued its course. As he looked a cry broke from his lips, for lo! the Star was motionless and poised above the manger where she was lying. Down from it streamed a wondrous glory, a golden stairway, as it were, by which to climb to God. Then a great light illumined the boy's face, his eyes shone, his breath came fitfully, exultation filled his being; for now Peter knew.

With low, whispering words he ran swiftly and noiselessly down the stairs. He comprehended the meaning of the Divine effulgence that surrounded the manger, and he knelt in rapt adoration. Pressing his lips again and again to the closed doors he stretched forth his arms, crying rapturously:

"Father! The King, the King is here!"
—From Pictorial Review.

The Children's War.

BY KATHARINE TYNAN.

This is the Children's War; because
The victory's to the young and clean!
Up to the Dragon's ravening jaws
March dear Eighteen and Seventeen.

Fresh from the Chrisom waters pure
Dear lads, so eager to attain
To the bright visions that allure
The Knight's ordeal, the red pain.

The light is yet upon their curls;
The dream is yet within their eyes;
Their cheeks are silken as a girl's;
And little Knights of Paradise.

O men with many scars and stains,
Stand back, abase your souls and pray!
For now to Nineteen are the gains
And golden Twenty wins the day.

Brown heads with curls all rippled over,
Young bodies slender as a flame;
They leap to darkness like a lover—
To Twenty-one is fall'n the game.

It is the Boys' War. Praise be given
To Percivale and Galahad,
Who have won earth and taken Heaven
By violence! Weep not, but be glad!
—The Spectator.

Next!—The story of the rival boot-makers, which appeared recently, is matched by a correspondent of an English paper with another story, equally old but equally worth repeating. It concerns two rival sausage-makers. Again, they lived on opposite sides of a certain street, and, one day, one of them placed over his shop the legend:

"We sell sausages to the gentry and nobility of the country."

The next day, over the way, appeared the sign:

"We sell sausages to the gentry and nobility of the whole country."

Not to be outdone, the rival put up what he evidently regarded as a final statement, namely:

"We sell sausages to the King."

Next day there appeared over the door of the first sausage-maker the simple expression of loyalty:

"God save the King."—Christian Science Monitor.

Our Serial Story

An Alabaster Box.

BY MARY E. WILKINS FREEMAN AND FLORENCE MORSE KINGSLEY.
By arrangement with McClelland, Goodchild & Stewart, Publishers, Toronto, Ont.

Chapter VIII.

Jim Dodge had been hoeing potatoes all day. It was hard, monotonous work, and he secretly detested it. But the hunting season was far away, and the growing potatoes were grievously beset by weeds; so he had cut and thrust with his sharp-bladed hoe from early morning till the sun burned the crest of the great high-shouldered hill which appeared to close in the valley like a rampart, off Grenoble way. As a matter of fact, the brawling stream which gave Brookville its name successfully skirted the hill by a narrow margin which likewise afforded space for the state road.

But the young man was not considering either the geographical contours of the country at large or the refreshed and renovated potato field, with its serried ranks of low-growing plants, as he tramped heavily crosslots toward the house. At noon, when he came in to dinner, in response to the wide-flung summons of the tin horn which hung by the back door, he had found the two women of his household in a pleasurable state of excitement.

"We've got our share, Jim!" proclaimed Mrs. Dodge, a bright red spot glowing on either thin cheek. "See! here's the check; it came in the mail this morning."

And she spread a crackling bit of paper under her son's eyes.

"I was some surprised to get it so soon," she added. "Folks ain't generally in any hurry to part with their money. But they do say Miss Orr paid right down for the place—never even asked 'em for any sort of terms; and th' land knows they have been glad to give them to her, to—anybody that had bought the place these dozen years back. Likely she didn't know that."

Jim scowled at the check.

"How much did she pay for the place?" he demanded. "It must have been a lot more than it was worth, judging from this."

"I don't know," Mrs. Dodge replied. "And I dunno as I care particularly, as long's we've got our share of it."

She was swaying back and forth in a squeaky old rocking-chair, the check clasped in both thin hands.

"Shall we bank it, children; or draw it all out in cash? Fanny needs new clothes; so do you, Jim. And I've got to have a new carpet, or something, for the parlor. Those skins of wild animals you brought in are all right, Jim, if one can't get anything better. I suppose we ought to be prudent and saving, but I declare we haven't had any money to speak of, for so long—"

Mrs. Dodge's faded eyes were glowing with joy; she spread the check upon her lap and gazed at it smilingly.

"I declare it's the biggest surprise I've had in all my life!"

"Let's spend every cent of it," proposed Fanny recklessly. "We didn't know we were going to have it. We can scrub along afterward the same as we always have. Let's divide it into four parts: one for the house—to fix it up—and one for each of us, to spend any way we like. What do you say, Jim?"

"I shouldn't wonder if Mrs. Deacon Whittle would furnish up her best parlor something elegant," surmised Mrs. Dodge. "She's always said she was goin' to have gilt paper and marble tops and electric blue plush upholstered furniture. I guess that'll be the last fair we'll ever have in that house. She wouldn't have everybody trampin' over her flowered Body-Bussels. I suppose we might buy some plush furniture; but I don't know as I'd care for electric blue. What do you think, son?"

Jim Dodge sat sprawled out in his chair before the half-set table. At this picture of magnificence, about to be realized in the abode of Deacon Amos Whittle, he gave vent to an inarticulate growl.

"What's the matter with you, Jim?" shrilled his mother, whose perpetually jangled nerves were capable of strange dissonances. "Anybody'd suppose you wasn't pleased at having the old Bolton place sold at last, and a little bit of all that's been owing to us since before your poor father died, paid off. My! If

we was to have all that was coming to us by rights, with the interest money—"

"I'm hungry and tired, mother, and I want my dinner," said Jim brusquely. "That check won't hoe the potatoes; so I guess I'll have to do it, same as usual."

"For pity sake, Fanny!" cried his mother, "did you put the vegetables over to boil?" I ain't thought of anything since this check came."

It appeared that Fanny had been less forgetful.

After his belated dinner, Jim had gone back to his potatoes, leaving his mother and sister deep in discussion over the comparative virtues of Nottingham lace and plain muslin, made up with ruffles, for parlor curtains.

"I really believe I'd rather spend more on the house than on clo'es at my age," he heard his mother saying, happily, as he strode away.

All during the afternoon, to the clink of myriad small stones against the busy blade of his hoe, Jim thought about Lydia Orr. He could not help seeing that it was to Lydia he owed the prospect of a much needed suit of clothes. It would be Lydia who hung curtains, of whatever sort, in their shabby best room. And no other than Lydia was to furnish Mrs. Whittle's empty parlor. She had already given the minister a new long-tailed coat, as Jim chose to characterize the ministerial black. His cheeks burned under the slanting rays of the afternoon sun with something deeper than an added coat of tan. Why should Lydia Orr—that slip of a girl, with the eyes of a baby, or a saint—do all this? Jim found himself unable to believe that she really wanted the Bolton place. Why, the house was an uninhabitable ruin! It would cost thousands of dollars to rebuild it.

He set his jaw savagely as he recalled his late conversation with Deacon Whittle. "The cheating old skinflint," as he mentally termed that worthy pillar of the church, had, he was sure, bamboozled the girl into buying a well-nigh worthless property at a scandalous price. It was a shame! He, Jim Dodge, even now burned with the shame of it. He pondered briefly the possibilities of taking from his mother the check, which represented the pro rata share of the Dodge estate, and returning it to Lydia Orr. Reluctantly he abandoned this quixotic scheme. The swindle—for as such he chose to view it—had already been accomplished. Other people would not return their checks. On the contrary, there would be new and fertile schemes set on foot to part the unworlly stranger and her money.

He flung down his hoe in disgust and straightened his arching shoulders. The whole sordid transaction put him in mind of the greedy onslaught of a horde of hungry ants on a beautiful, defenseless flower, its torn corolla exuding sweetness.

And there must be some sort of reason behind it. Why had Lydia Orr come to Brookville?

And here, unwittingly, Jim's blind conjectures followed those of Wesley Elliot. He had told Lydia Orr he meant to call upon her. That he had not yet accomplished his purpose had been due to the watchfulness of Mrs. Solomon Black. On the two occasions when he had rung Mrs. Black's front door-bell, that lady herself had appeared in response to its summons. On both occasions she had informed Mr. Dodge tartly that Miss Orr wasn't at home.

On the occasion of his second disappointment he had offered to await the young lady's home-coming.

"There ain't no use of that, Jim", Mrs. Black had assured him. "Miss Orr's gone t' Boston to stay two 'days."

Then she had unlatched her close-shut lips to add: "She goes there frequent, on business."

Her eyes appeared to inform him further that Miss Orr's business, of whatever nature, was none of his business and never would be.

"That old girl is down on me for some reason or other," he told himself ruefully, as he walked away for the second time. But he was none the less resolved to pursue his hopefully nascent friendship with Lydia Orr.

He was thinking of her vaguely as he walked toward the house which had been his father's, and where he and Fanny had been born. It was little and low and old, as he viewed it indifferently in the fading light of the sunset sky. Its walls had needed painting so long, that for years nobody had even mentioned the subject. Its picturesquely mossy roof leaked. But a leaky roof was a

commonplace in Brookville. It was customary to set rusty tin pans, their holes stopped with rags, under such spots as actually let in water; the emptying of the pans being a regular household "chore". Somehow, he found himself disliking to enter; his mother and Fanny would be talking about the disposition of Lydia Orr's money. To his relief he found his sister alone in the kitchen, which served as a general living room. The small square table neatly spread for two stood against the wall; Fanny was standing by the window, her face close to the pane, and apparently intent upon the prospect without, which comprised a grassy stretch of yard flanked by a dull rampart of over-grown lilac bushes.

"Where's mother?" inquired Jim, as he hung his hat on the accustomed nail.

"She went down to the village", said Fanny, turning her back on the window with suspicious hate. "There was a meeting of the sewing society at Mrs. Daggett's."

"Good Lord!" exclaimed Jim. "What an opportunity!"

"Opportunity?" echoed Fanny vaguely.

"Yes; for talking it over. Can't you imagine the clack of tongues; the 'I says to her, and she told me,' and 'what do you think?'"

"Don't be sarcastic and disagreeable, Jim", advised Fanny, with some heat. "When you think of it, it is a wonder—that girl coming here the way she did; buying out the fair, just as everybody was discouraged over it. And now—"

"How do you explain it, Fan?" asked her brother.

"Explain it? I can't explain it. Nobody seems to know anything about her, except that she's from Boston and seems to have heaps of money."

Jim was wiping his hands on the roller-towel behind the door.

"I had a chance to annex a little more of Miss Orr's money to-day," he observed firmly. "But I haven't made up my mind yet whether to do it, or not."

Fanny laughed and shrugged her shoulders.

"If you don't, somebody else will", she replied. "It was Deacon Whittle, wasn't it? He stopped at the house this afternoon and wanted to know where to find you."

"They're going right to work on the old place, and there's plenty to do for everybody, including yours truly, at four dollars a day."

"What sort of work?" inquired Fanny. "All sorts: pulling down and building up; cleaning away and replanting. The place is a jungle, you know. But four dollars a day! It's like taking candy from a baby."

"It sounds like a great deal", said the girl. "But why shouldn't you do it?"

Jim laughed. "Why, indeed? I might earn enough to put a shingle or two on our own roof. It looks like honest money; but—"

Fanny was busy putting the finishing touches to the supper table.

"Mother's going to stop for tea at Mrs. Daggett's and go to prayer meeting afterward," she said. "We may as well eat."

The two sat down, facing each other.

"What did you mean, Jim?" asked Fanny, as she passed the bread plate to her brother. "You said, 'It looks like honest money; but—'"

"I guess I'm a fool," he grumbled; "but there's something about the whole business I don't like. Have some of this apple sauce, Fan?"

The girl passed her plate for a spoonful of thick compound, and in return shoved the home-dried beef toward her brother.

"I don't see anything queer about it," she replied dully. "I suppose a person with money might come to Brookville and want to buy a house. The old Bolton place used to be beautiful, mother says. I suppose it can be again. And if she chooses to spend her money that way—"

"That's just the point I can't see: why on earth should she want to saddle herself with a proposition like that?"

Fanny's mute lips trembled. She was thinking she knew very well why Lydia Orr had chosen to come to Brookville: in some way unknown to Fanny, Miss Orr had chanced to meet the incomparable Wesley Elliott, and had straightway set her affections upon him. Fanny had been thinking it over, ever since the night of the social at Mrs. Solomon Black's. Up to the moment when Wesley—she couldn't help calling him Wesley still—had left her, on pretense of fetching a chair, she had instantly divined that it was a

pretense, and of course he had not returned. Her cheeks tingled hotly as she recalled the way in which Joyce Fulsom had remarked the plate of melting ice cream on the top shelf of Mrs. Black's what-not:

"I guess Mr. Elliott forgot his cream," the girl had said, with a spark of malice. "I saw him out in the yard awhile ago talking to that Miss Orr."

Fanny had humiliated herself still further by pretending she didn't know it was the minister who had left his ice cream to dissolve in a pink and brown puddle of sweetness. Whereat Joyce Fulsom had giggled disagreeably.

"Better keep your eye on him, Fan", he had advised.

Of course she couldn't speak of this to Jim; but it was all plain enough to her.

"I'm going down to the village for awhile, Fan", her brother said, as he arose from the table. But he did not, as was his custom, invite her to accompany him.

After Jim had gone, Fanny washed the dishes with mechanical swiftness. Her mother had asked her if she would come to prayer meeting, and walk home with her afterwards. Not that Mrs. Dodge was timid; the neighborhood of Brookville had never been haunted after nightfall by anything more dangerous than whippoorwills and frogs. A plaintive chorus of night sounds greeted the girl, as she stepped out into the darkness. How sweet the honey-suckle and late roses smelled under the dew! Fanny walked slowly across the yard to the old summer-house, where the minister had asked her to call him Wesley, and sat down. It was very dark under the thick-growing vines, and after awhile tranquility of a sort stole over the girl's spirit. She gazed out into the dim spaces beyond the summerhouse and thought, with a curious detachment, of all that had happened. It was as if she had grown old and was looking back calmly to a girlhood long since past. She could almost smile at the recollection of herself stifling her sobs in her pillow, lest Jim should hear.

"Why should I care for him?" she asked herself wonderingly; and could not tell.

Then all at once she found herself weeping softly, her head on the rickety table.

Jim Dodge, too intently absorbed in his own confused thoughts to pay much attention to Fanny, had walked resolutely in the direction of Mrs. Solomon Black's house; from which he reflected, the minister would be obliged to absent himself for at least an hour. He hoped Mrs. Black had not induced Lydia to go to the prayer meeting with her. Why anyone should voluntarily go to prayer meeting passed his comprehension. Jim had once attended what was known as a "protracted meeting," for the sole purpose of pleasing his mother, who all at once had appeared tearfully anxious about his "soul." He had not enjoyed the experience.

"Are you saved, my dear young brother?" Deacon Whittle had inquired of him, in his sniffling, whining, peculiarly objectionable tone.

"From what, Deacon?" Jim had blandly inquired. "You in for it, too?"

Whereat the Deacon had piously shaken his head and referred him to the "mourner's pew," with the hope that he might even yet be plucked as a brand from the burning.

Lydia had not gone to the prayer meeting. She was sitting on the piazza, quite alone. She arose when her determined visitor boldly walked up the steps.

"Oh, it is you!" said she.

An unreasonable feeling of elation arose in the young man's breast.

"Did you think I wasn't coming?" he inquired, with all the egotism of which he had been justly accused.

He did not wait for her reply; but proceeded with considerable humor to describe his previous unsuccessful attempts to see her.

"I suppose," he added, "Mrs. Solomon Black has kindly warned you against me?"

She could not deny it; so smiled instead.

"Well," said the young man, "I give you my word I'm not a villain; I neither drink, steal, nor gamble. But I'm not a saint, after the prescribed Brookville pattern."

He appeared rather proud of the fact, she thought. Aloud she said, with pardonable curiosity:

"What is the Brookville pattern? I ought to know, since I am to live here."

At this he dropped his bantering tone.

"I wanted to talk to you about that," he said gravely.

"You mean—?"

"About your buying the old Bolton place and paying such a preposterous price for it, and all the rest, including the minister's back-pay."

She remained silent, playing with the ribbon of her sash.

"I have a sort of inward conviction that you're not doing it because you think Brookville is such a pleasant place to live in", he went on, keenly observant of the sudden color fluttering in her cheeks, revealed by the light of Mrs. Solomon Black's parlor lamp which stood on a stand just inside the carefully screened window. "It looks," he finished, "as if you—well; it may be a queer thing for me to say; but I'll tell you frankly that when mother showed me the check she got to-day I felt that it was—charity."

She shook her head.

"Oh, no," she said quickly. "You are quite, quite in the wrong."

"But you can't make me believe that with all your money—pardon me for mentioning what everybody in the village is talking about— You'll have to convince me that the old Boston place has oil under it, or coal or diamonds, before I—"

"Why should you need to be convinced of anything so unlikely? she asked, with gentle coldness.

He reddened angrily.

"Of course it's none of my business," he conceded.

"I didn't mean that. But, naturally, I could have no idea of coal or oil—"

"Well; I won't work for you at any four dollars a day," he said loudly. "I thought I'd like to tell you."

"I don't want you to," she said. "Didn't Deacon Whittle give you my message?"

He got hurriedly to his feet with a muttered exclamation.

"Please sit down, Mr. Dodge," she bade him tranquilly. "I've been wanting to see you all day. But there are so few telephones in Brookville it is difficult to get word to people."

He eyed her with stubborn resentment.

"What I meant to say was four dollars a day is too much! Don't you know anything about the value of money, Miss Orr? Somebody ought to have common honesty enough to inform you that there are plenty of men in Brookville who would be thankful to work for two dollars a day. I would, for one; and I won't take a cent more."

She was frowning a little over these statements. The stalwart young man in shabby clothes who sat facing her under the light of Mrs. Solomon Black's well-trimmed lamp appeared to puzzle her.

"But why shouldn't you want to earn all you can?" she propounded at last. "Isn't there anything you need to use money for?"

"Oh, just a few things," he admitted grudgingly. "I suppose you've noticed that I'm not exactly the glass of fashion and the mold of form."

He was instantly ashamed of himself for the crude personality.

"You must think I'm a fool!" burst from him, under the sting of his self-inflicted lash.

She smiled and shook her head.

"I'm not at all the sort of person you appear to think me," she said. Her grave blue eyes looked straight into his. "But don't let's waste time trying to be clever: I want to ask you if are willing, for a fair salary, to take charge of the outdoor improvements at Bolton House."

She colored swiftly at sight of the quizzical lift of his brows.

"I've decided to call my place 'Bolton House' for several reasons," she went on rapidly: "for one thing, everybody has always called it the Bolton place, so it will be easier for the workmen and everybody to know what place is meant. Besides, I—"

"Yes; but the name of Bolton has an ill-omened sound in Brookville ears," he objected. "You've no idea how people here hate that man."

"It all happened so long ago, I should think they might forgive him by now," she offered, after a pause.

"I wouldn't call my house after a thief", he said strongly. "There are hundreds of prettier names. Why not—Pine Court, for example?"

"You haven't told me yet if you will accept the position I spoke of."

He passed his hand over his clean-shaven chin, a trick he had inherited from his father, and surveyed her steadily from under meditative brows.

"In the first place, I'm not a landscape gardener, Miss Orr," he stated. "That's

the sort of man you want. You can get one in Boston, who'll group your evergreens, open vistas, build pergolas and all that sort of thing."

"You appear to know exactly what I want," she laughed.

"Perhaps I do," he defied her.

"But, seriously, I don't want and won't have a landscape-gardener from Boston—with due deference to your well-formed opinions, Mr. Dodge. I intend to mess around myself, and change my mind every other day about all sorts of things. I want to work things out, not on paper in cold black and white; but in terms of growing things—wild things out of the woods. You understand, I'm sure."

The dawning light in his eyes told her that he did.

"But I've had no experience," he hesitated. "Besides, I've considerable farm-work of my own to do. I've been hoeing potatoes all day. Tomorrow I shall have to go into the cornfield, or lose my crop. Time, tide and weeds wait for no man."

"I supposed you were a hunter," she said. "I thought—"

He laughed unpleasantly.

"Oh, I see," he interrupted rudely: "you supposed, in other words, that I was an idle chap, addicted to wandering about the woods, a gun on my shoulder, a cur—quite as much of a ne'er-do-well as myself—at my heels. Of course Deacon Whittle and Mrs. Solomon Black have told you all about it. And since you've set about reforming Brookville, you thought you'd begin with me. Well, I'm obliged to you; but—"

The girl arose trembling to her feet. "You are not kind!" she cried. "You are not kind!"

They stood for an instant, gazing into each other's eyes during one of those flashes of time which sometimes count for years.

"Forgive me," he muttered huskily. "I'm a brute at best; but I had no business to speak to you as I did."

"But why did you say—what made you ever think I'd set about reforming—that is what you said—reforming—Brookville? I never thought of such a thing! How could I?"

He hung his head, abashed by the lightning in her mild eyes.

She clasped her small, fair hands and bent toward him.

"And you said you wanted to be—friends. I hoped—"

"I do," he said gruffly. "I've told you I'm ashamed of myself."

She drew back, sighing deeply.

"I don't want you to feel—ashamed," she said in a sweet, tired voice. "But I wish—"

"Tell me!" he urged, when she did not finish her sentence.

"Do you think everybody is going to misunderstand me, as you have?" she asked, somewhat piteously. "Is it so strange and unheard of a thing for a woman to want a home and—and friends? Isn't it allowable for a person who has money to want to pay fair wages? Why should I scrimp and haggle and screw, when I want most of all to be generous?"

"Because," he told her seriously, "scrimping, haggling and screwing have been the fashion for so long, the other thing rouses mean suspicions by its very novelty. It's too good to be true; that's all."

"You mean people will suspect—they'll think there's something—"

She stood before him, her hands fallen at her sides, her eyes downcast.

"I confess I couldn't believe that there wasn't an ulterior motive", he said honestly. "That's where I was less noble than you."

She flashed a sudden strange look at him.

"There is," she breathed. "I'm going to be honest—with you. I have—an ulterior motive."

"Will you tell me what it is?"

Her lips formed the single word of denial.

He gazed at her in silence for a moment.

"I'm going to accept the post you just offered me, Miss Orr, at any salary you think I'm worth," he said gravely.

"Thank you," she murmured.

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outpourin' of grace, right here in Brookville; and we can't get it no other way." And the minister's cultured voice in reply:

"I shall give your suggestion the most careful consideration, Mrs. Black, between now and the autumn season."

"Great Scott!" exclaimed Jim Dodge; "this is no place for me! Good night, Miss Orr!"

She laid her hand in his.

"You can trust me", he said briefly, and became on the instant a flitting shadow among the lilac bushes, lightly vaulting over the fence and mingling with the darker shadows beyond.

To be continued.)

The Substitute.

(After Alfred Tennyson)

Come into the kitchen, Maud,
For our bad black cook has flown.
Come into the kitchen, Maud
I am here at the range alone.
And the smell of burnt bacon is wafted
abroad,
And the smoke in my eyes has blown.

There has fallen a storage egg
From my hand to the waiting plate.
Oh, take it from me, I beg,
'Twas out of a last year's crate.
The toast seems to say, "Don't drop it
here"—
The coffee-pot moans, "It's fate!"
The saucepan shrinks from my hand in
fear,
And the puffed oats mutter, "We wait".

Are you coming, my own, my sweet?
Oh, come and be cook instead!
Pray hasten your laggard feet—
Why, why did you linger in bed?
These eggs are not fit to beat,
They were laid in a century dead.
If you count upon me to fix something to
eat
We'll feast upon prunes and bread.
—Judge.

Smiles.

Whenever the Rev. Solon Jefferson called on Aunt Candace, it was her custom to set a plate of gingerbread before him and then ply him with what she called "ligious 'spoundin's."

"Wha' fo' does de Lawd send epidemics onto de land?" she asked him, one day.

"When folks get so bad dey must be removed, some of 'em, Sist' Candace, den de Lawd permits de coming ob an epidemic," said Mr. Jefferson, and took a large bite of gingerbread.

"Uh-h!" said Aunt Candace. "Ef dat's so, howcome de good people gets removed along wid de bad ones?"

"De good ones are summoned fo' witnesses," said the Reverend Solon, fortified in spirit and clarified in mind by the gingerbread, although slightly embarrassed in his utterance. "De Lawd gibs ebry man a fair trial."

"Apart from my music," says Mr. Paderewski, "I have no hobbies except whist, billiards, and a fancy for farm stock. The last interest once led to an amusing experience when I was staying in England. I had just purchased some prize pigs in Essex, and the transaction had been advertised widely in the newspapers. Well, I was looking into the pigsty of a farm when the farmer came up, and scenting a possible customer, entered into conversation with me. After showing me his pigs, and being most anxious, apparently, to sell me some, and to impress me with his importance as a breeder, he conducted me to a sty I had not seen, and showed me a very fine lot of pigs. 'Do you see those?' he said confidentially. 'I've sold them to Mr. Paderewski, the great pig-dealer from abroad!'"

A Chance Shot.

To the turkey that is tame epicures the country over prefer the turkey that is wild. However, clergymen are notoriously not epicurean in their tastes, and a certain Methodist preacher in Baltimore had once definitely expressed a preference for the domestic bird. Accordingly, when one day last winter he accepted an invitation to dine with a member of his congregation, that member, in ordering the dinner of the colored servant, laid stress upon this point.

"Now remember, Ezekiel," he com-

manded, "Doctor Fourthly likes domestic turkey. You will, therefore, discontinue your usual practice, and get, not a wild but a tame one."

"Yassir," nodded the darkey.

"Understand?" repeated the host-to-be.

"A domestic turkey."

Again the negro assented, and though the family funds were at a low ebb, the dinner of his providing proved most elaborate. How so little money went so far was a mystery, until the host began to carve the turkey.

Then a thimbleful of shot rolled out upon the platter.

"Ezekiel," said the host severely, "I thought, I told you to get a domestic turkey."

"Yassir," said Ezekiel. "That there's a domestic turkey. Ah knows it."

"But," objected the host, "look at the shot in it."

Ezekiel grinned sheepishly.

"Yassir," he stammered. "Ah—Ah sees 'em, sir; but them thar shot wasn't meant fer the turkey, sir; they was meant for me."—Saturday Evening Post.

Pat was busy working with his coat off. There were two Englishmen laboring on the same job, so they decided to have a joke with the Irishman. They painted a donkey's head on the back of pat's coat, and watched to see him put it on. Pat, of course, saw the donkey's head on his coat, and turning to the Englishmen said, "Which of yez wiped your face on my coat."

A young man in charge of a newly platted realty tract, upon which the only building was the office of the company, upon seeing the first person to enter the door, hastily took down the telephone receiver and commenced: "Yes, sir, I think we can agree on those terms. Thirty lots in one parcel and twenty in another. Yes, sir, the price is satisfactory, \$30,000 at the transfer and the remainder in sixty days. Did you say I could meet you in the morning at 9 o'clock and receive your check for \$10,000 as the initial payment? Very well, sir." Hanging up the receiver, this busy person turned to the man who had entered the office. "Is there anything I can do for you, sir?" "Naw, not a thing", returned the visitor. "I have just come to connect up yer telephone, that's all."

A new recruit was on sentry duty for the first time at night, when he saw some one approaching.

"Who comes there?" he challenged, sharply.

"The officer of the day," said the other.

"Then," was the sentry's unexpected inquiry, "what are you doin' out at night?"—Selected.

Questions and Answers.

1st—Questions asked by bona-fide subscribers to "The Farmer's Advocate" are answered in this department free.

2nd—Questions should be clearly stated and plainly written on one side of the paper only, and must be accompanied by the full name and address of the writer.

3rd—In veterinary questions, the symptoms especially must be fully and clearly stated, otherwise satisfactory replies cannot be given.

4th—When a reply by mail is required to urgent veterinary or legal enquiries, \$1.00 must be enclosed.

Miscellaneous

Colt With a Cough—Rye for Poultry.

1. I have a six-months-old colt which coughs frequently. It is more noticeable when she has her head down. What can I do for her?

2. I have a fifteen-year-old mare which is very thin and shows symptoms as if she were affected with worms. She has a hacking cough but does not show any signs of heaves. What remedy do you advise?

3. Is rye injurious to poultry? Can it be fed whole or chopped?

C. L. H.

Ans.—1. From the symptoms given we cannot definitely diagnose the case. We are led to believe that the colt has a slight cold which affects the throat, thus causing the cough. Keep the colt out of a draft and feed it fairly well on clean feed; the dust may aggravate the cough. It is well to take measures to check the cold, as it may develop into distemper or heaves.

2. It is possible that the teeth are in poor condition and the mare cannot properly masticate her food. Have the

teeth examined and attended to if necessary. While no signs of heaves are shown the trouble may develop into heaves if not checked. Give good clean feed and do not work after a heavy meal. It is a good plan to dampen the hay and even the oats with a little lime water. If the mare is affected with worms take 1½ ounces each of sulphate of iron and sulphate of copper and 1 ounce of calomel; mix and make into 12 powders. Give a powder night and morning in damp feed. After the last powder has been given withhold feed for ten hours, and then if the mare is not in foal administer a purgative of 8 drams aloes and 2 drams ginger.

3. Birds do not eat rye readily, and it does not produce good results.

Peace River Prospects.

I am farming as a renter in old Ontario and have decided to hit the trail for the Peace River district. Now would you mind giving me the following information:

1. About how far from your place would we have to go to locate a homestead?
2. Would it be a safe proposition to bring up a car of settlers' effects in January or February?
3. What accommodation could I get for 3 horses, 2 cows (due in March), furniture, etc.?
4. What should I bring up in the form of implements, etc.?
5. Can we get temporary accommodation with a homesteader (shelter only) myself, wife and five children, 3 oldest boys 15, 13, 11?
6. What is the least ready cash a man with family would need to carry him over his first year, when he brings up his own stock, implements, etc.?
7. What are the chances for a man and his two oldest boys both of whom can handle a team, to get work to help tide him over?
8. What would it cost to build a log house and would it be necessary to hire help to put it up?
9. What is the available wood and water supply?
10. What is the nearest railroad point to ship a car to available homestead land.

Ans.—I have been thinking over the questions presented and whilst it is very difficult to answer all of them in definite terms I would suggest as follows:

- 1.—You might choose a homestead anywhere from four to forty miles from our home, depending upon how particular you were, and I might say it pays to be pretty careful in selection of land on which one expects to spend his future. Any quarters open near us would be pretty scrubby, low, rough or otherwise undesirable.
2. I do not think it would be wise to bring a car of settler's effects in the winter unless one were previously located and knew just where he was going. There would be a considerable period of feeding ahead and much miscellaneous expense. There is much stock on the Prairie and now feed this winter is relatively scarce and dear.
3. It would not be easy to secure satisfactory accommodation for your stock in midwinter though it might be found. Likely you would find yourself in some vacated premises where you would be confronted with a watering problem.
4. If you can dispose of stock and implements to advantage, by all means do so and come in light. Horses might suffer in acclimatization and many of your implements would be unsuitable. For example, you would need a brush-breaker plow, in all probability. An ordinary stubble plow would be of little use for two or three years and then only partially. Your binder would not be needed for a while nor ordinary types of spring or stiff-tooth cultivators. A mower, rake, disk and drag harrows would be all right, also wagons and sleighs.
5. By looking around—"rustling" as we would say here—you could likely secure shelter for your family at small expense in the way you suggest.
- 6 and 7. All depends. One of the most successful settlers in our neighborhood reached the Prairie in the early years with the clothes on his back and a half interest in thirty-five cents. But he was an experienced "rustler" and went to work for his neighbors until in a position to finance a team of oxen. Then he broke for himself and others and went ahead step by step. In a few years he had his

quarter all broken and has to-day a set of buildings such as one might see in Ontario. He was one in a thousand but his history is suggestive. If you were to come in light, with your resources mostly or all in the form of cash, you could obtain employment at almost any season, certainly in summer, at wages not less than forty dollars a month and probably much higher. Experience in working out would acquaint you with the methods of the country as to clearing and breaking land and in other ways. This would save many costly mistakes. Husband your funds and buy nothing until thrice sure you need it. The most thrifty newcomers are inclined to buy themselves poor on the start. Put some money where you can't get your fingers on it for a while, so as to be prepared for emergencies.

8. A small log house with matched floor and shingle roof, a few windows and a door could be erected for about two hundred dollars, if you got out the logs yourself and assisted with the construction. It is advisable to have a good axe man to hew the inside and to dove-tail the corners, though neither hewing nor dove-tailing is absolutely necessary.

9. The prevailing fuel is good, dry poplar, which is next thing to hard maple. In some localities coal of good quality can be obtained for two or three dollars a ton from settlers who mine it from seams on the river bank. It is very satisfactory and economical for the coldest weather. It cannot, however, be fed through the hopper of a base burner. Water is obtained from lakes, streams, sloughs, springs and wells of depth varying from a few feet to a hundred and fifty, the latter being drilled and generally very satisfactory. Most of the water is good, though often carrying considerable soda, seldom or never the alkali of the lower plains.

Our nearest railroad station is the town of Grande Prairie, thirty miles eastward. If seeking a location in other parts of the Peace River region you might ship to Spirit River, Peace River, etc. It is a big country and you would do well to come alone and secure a location before breaking up your present home. May or autumn would be a good time to look for land.

W. D. A.
Grand Prairie District, Alberta.

Conservation and Utilization of Farm Manure.

All investigations go to show that farm manure has its greatest value when fresh, that the liquid portion is richer than the solid material and that the former is more readily lost through drainage and leaching. Hence it is that every precaution is taken here to ensure a minimum loss of plant food constituents in the manure and is the chief reason for applying manure to the land, where practicable, as quickly as possible after it is produced.

At the Central Farm, Ottawa, the liquid manure is absorbed by means of litter, usually cut straw, and as each load of mixed liquid and solid manure is gathered it is taken directly to the field and is spread on the land either by hand or by means of the manure spreader, as convenient. This method is carried on consistently throughout the year although during occasional winter seasons this system may be disorganized for a time due to the depth of snow or other causes. The contour of the land at this farm which varies from fairly level to gently rolling lends itself admirably to the foregoing plan of procedure.

The manure is always applied systematically in definite cropping systems or crop rotations. The amount and frequency of application vary according to the duration of the rotation, but, without exception, in the regular farm rotations, six tons per acre of fresh manure is allotted to each year of the rotation. For instance, in a three-year system, of hoed, grain and hay crops, eighteen tons are applied for the hoed crop. In four-year rotations twenty-ton is the quantity used. For a five-year rotation the amount is thirty tons of which fifteen tons are applied for the hoed crops and the balance is spread in lighter dressings for the clover and timothy hay areas.

Where manure is applied for cultivated or hoed crops the importance of incorporating the manure thoroughly with the

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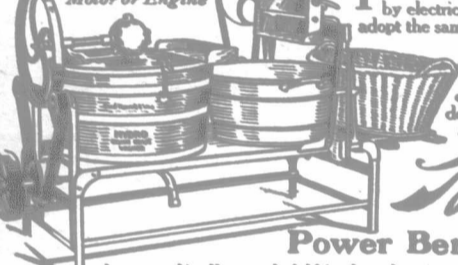
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soil as near to the surface as practicable is closely observed.—Experimental Farms Note.

Urban Increase and Rural Decrease.

The rapid growth of urban populations need not be an evil, if the urban development is properly directed and controlled, and if the urban conditions are made as healthy as the rural conditions. Neither growth of cities nor depletion of rural population is necessarily an unhealthy tendency. If the movement from the country to the town is the result of desires for greater opportunities and educational facilities and for obtaining better sanitary and social conditions, who can say that a movement so inspired is an evil? If every city and town were as healthy as the rural districts, as they could be under proper conditions of development, why deplore the natural tendency of population to migrate to the most profitable industries, so long as they remain the most profitable? We may deplore rural depopulation, but it will be futile to fight against it so long as manufacturing produces a better return to labor and capital than agriculture, and so long as there are urban opportunities for human betterment superior to those in rural districts. Indeed, we cannot have national prosperity unless human activity is applied to the most profitable fields of production—whether they be growing food, or making clothes, or building ships. One of the men who failed to make a farm pay in Northern Ontario is to-day managing a large and successful motor industry in Canada, and there are hundreds of others who have gone through the same experience. Indirectly, that man, in making cheap motors, is a great agricultural producer; if he had remained on the soil he would have practically been a non-producer, as he would be wasting his efforts on an unprofitable business.

But, what is wrong is not that that man and thousands of others have left the soil, but that the opportunities for making profitable use of their skill were not present in the country. What is wrong is that wasteful and inefficient methods have driven the most intelligent and energetic men into the towns, and, as a consequence, the absence of these men has perpetuated the wastefulness and inefficiency. What is wrong is not that people go to the cities and towns to find social opportunity, but that they are not able to get that opportunity on the farm. What is causing deterioration of mind and body in urban communities is not the growth of cities and towns, but the necessary over-crowding and bad sanitation which accompanies that growth as the result of laxity of government. What makes rural depopulation in Canada most serious to the rural districts themselves is the quality, rather than the quantity, of those who leave the land, and the fact that the capital and energy which have been spent to artificially promote settlement have been so largely wasted.

As a rural area becomes thinner in population the causes of migration become accentuated, social opportunities and facilities for co-operation and distribution are further lessened, and there is a consequent further lowering of the profits of production. It is usually the best of the rural population that is drawn to the city for these reasons and, where the land is of poor quality, the residue becomes more and more impaired in physique, intelligence and morals as the process of depopulation continues. The small wage of the agricultural laborer in England, which was first a cause of the best men leaving the rural districts, has become an effect of the lowered efficiency of those who have remained. May not the alleged lack of business capacity of the farmers in some of the older provinces of Canada be an effect of the low profits of the industry, before it becomes a cause? Parallel with low profits to the producer is the anomaly of high costs to the consumer. The high cost of living is a premium paid for lack of efficient development and organization of production.

It is difficult to determine to what extent Canada as a whole has suffered from movement of population. In so far as it has been encouraged by injurious speculation, by the sale of farms at high prices for purposes of sub-division, or by the opportunities of making easy money in land-gambling, it has been wholly injurious. In so far as it is the result of settlement

of land which was unsuited for agriculture and could not be put to economic use it has also been injurious. On the other hand, in so far as it may have increased production in the city at the expense of diminished production in the country, it may not have been entirely an evil; on the contrary, it may have been a benefit if it has meant the transfer of labor from an unprofitable to a profitable industry. Within proper limits the development of manufacturing is as important as the development of agriculture, and over-production in agriculture has to be guarded against as well as under-production. There must be a proper equilibrium maintained between the two kinds of industry. Unfortunately for the country at present the production of food has not been commensurate with the demand; because the equilibrium between the rural and the urban industries and populations has not been properly maintained.

While, however, it is wrong to jump to the conclusion that the movement of population from rural to urban districts is necessarily injurious to a country, there is no gainsaying that a large proportion of this movement in Canada has resulted from a play of forces which has left us weaker and poorer as a nation. If, by Government subsidy or other artificial means, we were to succeed in temporarily increasing rural settlement in the future, without revising our methods of planning and arranging agricultural holdings so as to improve farm revenues and obtain opportunities for better social conditions, and if we were not, at the same time, to place difficulties in the way of land-gambling, we would not succeed in arresting such injurious results as follow from the migratory tendencies of the population.

Sir Horace Plunkett has stated that the city on the American continent has been developing at the expense of the country. Would it not be more correct to say that neither the city nor the country has developed properly because of their neglect of each other? Both have suffered, because of lack of recognition of their interdependence.—Thomas Adams in Rural Planning and Development, published by Commission of Conservation.

Fortunes Made From Pedigree Stock.

EDITOR "THE FARMER'S ADVOCATE":

The farming year of 1917 in Britain has been memorable for the huge turnover of pounds sterling in pedigree cattle. Taking Shorthorn cattle alone, in England and Scotland, in 1917, some 6,497 head were offered and realized £512,826 14s. 6d. The sale which produced the highest price and highest average was that held at Collynie, Aberdeenshire, where Mr. Wm. Duthie sold 24 bull calves for £655 16s. 3d. each, one of them fetching 2,700 guineas, this being the highest price ever paid for a bull calf of any breed under the age of twelve months. That day Mr. Duthie received £19,015 10s. for 35 youngsters he offered for sale. Two Yorkshire breeders, Captain C. H. Tolliffe and Mrs. Scurfield held a joint sale and realized £13,987 for 74 head; the Brothers Perkins, Monmouthshire breeders made £13,088 for 92 head; but at the sale of the late Lord Lucas' herd of dairy Shorthorns 92 cattle brought in £17,257. Some Lancashire breeders named Messrs. G. B. Nelson & Sons realized £7,667, when they sold 87 head, and Mr. R. Cock, Fleetwood, made £5,550 for his 52 cattle while Sir John Thursby also in Lancashire was paid £9,434 for 41 head. One Irish breeder realized £7,767 for 59 cattle and a Northamptonshire Company which breeds Shorthorns at Edgcote, realized £9,652 for 36 young cattle, one of which made 2,000 guineas and was bought for the Argentine.

In British-bred Holstein-Friesian cattle even more extraordinary figures have been made. Some 1,002 head were offered in 1917 and realized £103,579 17s. 6d. For 79 head she offered Wickham Market, Mary, Duchess of Hamilton, was paid £15,414, one cow selling to Mrs. Putman, Aylesbury, for 1,650 guineas. When Mr. John Bromet sold his 52 Holsteins he received £12,301 16s., and A. & G. Brown were paid £12,726 for 59 cattle. A Scots breeder got £8,259 for 48 head of big milkers.

In other breeds prices have ruled very high all round. Lord Rosebery sold two Aberdeen-Angus cows at an

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average of £598 10s. each. These Scots cattle have made more money in 1917 than in any year since the American boom in the early eighties.

Never have such prices been paid for sheep as those ruling in 1917. Sir Alfred Mond made a record at Ashford, Kent, when he gave 300 guineas for a ram bred at Sevenoaks. Robert Mond that day sold seven rams at an average of five shillings short of £100 apiece.

Pigs have not been behind in the race for "records". They have averaged £24 7s. 2d. apiece at some sales and one, a Gloster spotted pig made 60 guineas, Lord Rhondda paying 40 guineas for a sow at Lord Fitzhardinge's sale.

ALBION.

Beekeepers' Meeting.

The second week in December the Ontario Beekeepers' Association held their thirty-eighth annual Convention in Toronto. There was a fairly good attendance and many subjects of vital interest to beekeepers were discussed by men who have made a success of handling bees.

Gossip.

The Spring Valley Herd.

There has probably never been a time in the history of Shorthorns in Canada when the demand for really high-class breeding animals has been so great as during the past twelve months. To supply this increased demand many breeders have diminished their herds more than they had anticipated doing, with the result that they now find it difficult to get stock to replace those they have sold.

The majority of the young bulls of serviceable age that are now in the stables are by this sire and among them are several that were winners in strong company at both Toronto and Ottawa.

Questions and Answers. Miscellaneous.

Lord's Day Observance. Is it against the law to sell gasoline on Sunday? SUBSCRIBER. Ontario. Ans.—Yes.

The Ballot. A is Deputy Returning Officer at an election. B goes to vote. Does A have to give B his ballot if he does not demand it?

2. If B does not take his ballot when the officer offers it to him, and afterwards comes back and asks for it, does the officer have to give it to him? SUBSCRIBER.

Ans.—1. No. 2. No.

Veterinary.

Black-Leg.

1. Would it be wise to vaccinate lambs to render them immune from black-leg?

2. How should scours in lambs be treated? A. A. W.

1. Black-leg is considered a specific disease of cattle. We have never heard of sheep being affected, but if they are liable, no doubt immunitive treatment would be advisable.

2. If possible the cause should be ascertained and removed. It is no doubt due to either the food or water. The addition to the drinking water of 1/4 of its bulk of lime water tends to check and prevent it.

Goitre.

A large growth appears and then disappears for a variable time, then reappears, in my dog's throat.

Ans.—This is goitre. The trouble may be checked by rubbing the throat well once daily with an ointment made of 2 drams each of iodine and iodide of potassium mixed with 2 oz. vaseline. V. Partial Dislocation of the Patella.

1. Colt got its stifle hurt last winter. Now it snaps every three or four steps, and the hoof is contracted and worn down on the outside.

2. My Airdale Terrier's feet get sore in the winter, but seem to be all right in the summer. They get sore between the toes. F. I. R.

Ans.—1. Get a blister of 2 drams each of biniodide of mercury and cantharides mixed with 2 oz. vaseline. Clip the hair off the front and inside of the joint. Tie so that he cannot bite the part. Rub the blister well in. In 24 hours rub well again and in 24 hours longer apply sweet oil. Turn into a box stall and oil every day.

2. This is due to congenital weakness of the feet and extreme sensibility to cold. This is very exceptional in Airdales which, in most cases can withstand cold better than most breeds.

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Write for our new easy payment, free trial, plan.—We will send you a complete grinding outfit without a payment of any kind to test out on your own farm. Just try it—you'll wonder how you got along without it. You'll be surprised how quickly it will pay for itself.

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At Guelph Winter Fair and Toronto Fat Stock Show, 1915 and 1916, the grand-champions were Aberdeen-Angus. At Chicago International, out of 15 grand championships and 15 reserves, the Aberdeen-Angus have won 10 grand championships and 9 reserves. Out of 15 grand championships for carcasses, Aberdeen-Angus have won 12 times. Out of 15 grand championships for Carcass Contest, Aberdeen-Angus won 14 times.

For free information, write:

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Aberdeen-Angus Association,
BRANDON, MANITOBA

Jas. D. McGregor, President, Brandon, Manitoba

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ABERDEEN-ANGUS

Bulls of serviceable age and females not akin.

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Cows with calves at foot. Bulls of serviceable age and females all ages.

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Alloway Lodge Stock Farm

Angus—Southdowns—Collies

SHOW FLOCKS

Rams and ewes. Heifers in calf to Queen's Edward.

1st Prize, Indiana State Fair.

Robt. McEwen, R. R. 4, London, Ont.

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A grand lot of calves for sale; ages in the neighborhood of 7 months. Victor of Glencairn at head of herd.

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Aberdeen Farm has for sale a nice bunch of young stuff of both sexes. Come and see us and supply your wants.

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Aberdeen-Angus

Alonzo Matthews, Manager, Forest, Ontario

H. Fraleigh, Proprietor, Forest, Ontario

Dr. Bell's Veterinary Medical Wonder. 10,000 \$1.00 bottle FREE to horsemen who give the Wonder a trial. Guaranteed for Colic, Inflammation of Lungs, Bowels, Kidneys; Fevers and Distempers, etc. Send 25c. for mailing, packing, etc. Agents wanted. Write address plainly.

Dr. Bell, V. S., Kingston, Ont.

Questions and Answers.

Miscellaneous.

Agistment of Cattle.

I turned 9 head of cattle out to pasture, the man was to fence his farm off so cattle could not run all over, as there is over 2,000 acres of land in the commons. He did not fence his land off and cattle ran at large over the large tract of land. He had a man looking after them. The owner of the land said he was to be responsible for them; but the man he hired said he was not. When I went to get some of my cattle, they were never fenced in at all, and I hunted for over a day and could only find 3 of them. Then I went back again and hunted about another day for the rest and in finding them they had been dogged when they would come out to cleared land and sent into the bush, and the cattle did not grow as they should have done. I have witness that the cattle did not pasture on his farm a week all summer. Can I collect pay for time looking for cattle? Can he collect pay for pasture? I have as good a right to turn cattle in there to pasture as any one else as it is commons. He agreed to fence the lot but I will pay the man for looking after the cattle.

Ontario.

Ans.—We do not see that he is in a position to collect. On the other hand it appears to us that you are legally entitled to damages from him for breach of the agreement between you.

Poultry Standard.

Can you give me any information regarding where I can secure a poultry standard? H. A. W.

Ans.—The "American Standard of Perfection" can be secured through this office for \$2.00, postpaid.

Lump on Leg—Condition Powders.

1. I have a mare coming six in the spring and she has a lump about the size of a hen egg on the outside of the front leg at the knee. It does not bother her, but I would like to have it removed.

2. What is a good condition powder for a horse? M. H.

Ans.—1. You might try an absorbent such as a mixture of 4 drams each of iodine and iodide of potassium and 4 ounces each of alcohol and glycerine. Apply daily with smart friction. Rubbing may help to remove it. If the swelling is on the skin, it should be possible to remove it; if on the bone, it would be much more difficult and if of long standing we doubt if it can be removed. A blister might give results, but you do not state definitely just where the lump is located. The blister is made by mixing 2 drams each of biniodide of mercury and cantharides with 2 ounces of vaseline and applying it to the swelling.

2. Equal parts of sulphate of iron, gentian, ginger and nux vomica, mixed together, make a very good tonic. Give a teaspoonful three times daily. In conditioning a horse careful feeding and judicious exercise are necessary.

Division of Estate—Government Road

1. A is an executor of a will which directs that (at no definite time) the property be divided equally between two legates, one of whom is a minor and had to be maintained for a number of years by her sister at a price agreed upon by herself (sister) and executor. Now A wishes to make a legal division of the property, but the trouble is this: That whereas the property at decease of the testator was worth say \$10,000.00, it now with accumulation of interest on the balance amounts to \$11,000.00, but would have been \$12,000.00 were it not for the fact that the money so spent and the interest on same to date cover \$1,000.00. Would it be right to increase the amount to be divided namely, \$11,000 to \$12,000, giving the sister \$6,000 and the minor \$5,000, charging her with the sum expended to even matters up, and, if so, would it be legal to compute the interest at five per cent. simple or compound interest?

2. Can the government that has taken charge of a road, part of which was a gravel road (a forced one) compel the owners of property, adjacent thereto, and where the road is only 50 feet wide, to remove their fences so as to make the road 60 feet in width, the same as all government roads?

Ontario. ENQUIRER.

Ans.—1. Your idea is substantially correct, and 5 per cent per annum would be right as being the legal rate of interest, but it ought not to be compounded.

2. We think so.

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Conserve time, money and your horse's strength by using **RED TIP CALKS**
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Imported and Canadian-Bred Clydesdales

I am offering a number of imported in-foal mares by such sires as Baron's Pride, Everlasting, Pride of Blacon, etc. Our six Canadian-bred mares are from one to four years, and all have been prominent winners at Toronto and elsewhere. These are by Marathon imp.; Lord Scott imp., etc. We also have one two-year-old stallion by Gallant Carruchan, and one yearling by Lord Scott imp. Prices right.

L. J. C. BULL, BRAMPTON, ONTARIO

Dundrum Clydesdales

Several choice imported and Canadian-bred mares, safe in foal. Also several prize-winning fillies and stallions, and a few show geldings, 2 and 3 years of age.

W. A. McNIVEN, R. R. No. 4, HAMILTON, ONTARIO

CLYDESDALES AND SHORTHORNS

I have on hand a number of real choice young mares and fillies. Eight excellent young bulls, from 9 to 12 months, of Right Sort and Royal Blood breeding; also a number of females. Inspection invited.

J. B. CALDER, R. R. No. 3, GLANFORD STATION, ONTARIO

OUR LATEST IMPORTATION OF CLYDESDALES

arrived at our barns late in November. A number of them since have been prominent winners at both Guelph and Ottawa. But we have others (both stallions and mares) that were never out. The majority of the stallions weigh around the ton, and better quality and breeding were never in the stables. Come and see them. We like to show them. SMITH & RICHARDSON, COLUMBUS, ONT.

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OFFER EXCEPTIONAL VALUES IN

ABERDEEN-ANGUS CATTLE SHROPSHIRE SHEEP
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Visitors welcome. Correspondence solicited. (Please Mention Farmer's Advocate)

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Herd Bulls:—HIGH IDEAL, Junior Champion, Toronto and London; CLAYTON DONALD own brother to Perfection Fairfax (The World's Greatest Hereford Sire). Offering:—A few cows with calves and re-bred to Clayton Donald. A limited number of yearling heifers and calves, and several choice young bulls. Also a few Shropshire ram lambs. Correspondence invited.

W. H. & J. S. HUNTER, ORANGEVILLE, ONT.

BROOKDALE FARM HERFORDS

Herd headed by Bonnie Ingleside 7th, the Canadian-bred champion bull at Toronto, 1914-1915. We are offering several young bulls that were Toronto and Ottawa winners this year, all sired by the herd bull, as well as a few females in calf to him. Come and see our herd or write us for anything in Herefords.

W. READHEAD, BROOKDALE FARM, MILTON, ONT.

GLENGOW SHORTHORNS

We have a choice offering in young bulls, fit for service. They are all of pure Scotch breeding, and are thick, mellow fellows, bred in the purple.

WM. SMITH, COLUMBUS, ONTARIO. Myrtle, C.P.R., Brooklin, G.T.R., Oshawa, C.N.R.

PLEASANT VALLEY FARMS

Herd headed by (Imp.) Newton Grand Champion and Belmont Beau. We have for sale a goodly number of real good young bulls that will suit the most exacting; also females. Inspection invited.

Geo. Amos & Sons C.P.R., 11 miles east of Guelph Moffat, Ontario

Robert Miller, Stouffville, Ont.

still has a few Shorthorn bulls, fit for service, and some females that are as good as can be found for the man that wants to start right in Scotch Shorthorns. They will be sold for a low price, considering the quality, and the freight will be paid.

Write for anything in Shorthorns and Shropshires. One hour from Toronto.

IRVINEDALE SHORTHORNS

Herd headed by Marquis Supreme 116022. For sale at present, 9 granddaughters of (Imp.) Right Sort, and a good lot they are; also 2 bulls (roans), 15 months old, by Gainford Select.

JOHN WATT & SON, R. R. No. 3, Elora, Ont. G.T.R. & C.P.R.

BURNFOOT STOCK FARM

We have a choice collection of dual-purpose Shorthorns that are of fine beef form as well as good milk and butter-fat producers, as proven by their official records in the R.O.P. We have a few bull calves of quality and breeding, which commend them for use in the best of dual-purpose Shorthorn herds. Will be pleased to have you visit the herd or address your enquiries to S. A. MOORE, Clledonia, Ont.

HIGH-CLASS SHORTHORN BULLS

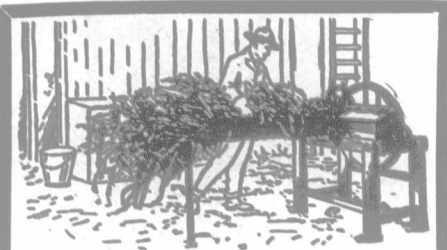
We have a number of choice young bulls on hand, ready for service. Some are straight Scotch and others are bred for milk production. Also offering the four-year-old Duchess-bred bull, Duchess Hur for sale or exchange.

GEO. MORDEN & SON, OAKVILLE, ONTARIO.

FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents Orange Blossoms, Kiblean beauties, Matchless, Mysies, Misses, Clementina's, etc., and is headed by the Watt-Stamford bull, Victor Stamford = 95959 = a Toronto winner. Present offering, two young bulls (show animals) also several heifers and cows.

GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C.P.R., L.-D. Phone



Government Says Keep More Cattle This Winter

The Ontario Government advises all farmers to keep one or two extra head of cattle this winter. You can do this most economically by cutting your own feed, as cut feed always goes farther.

Peter Hamilton Feed Cutters will exactly meet your requirements, as they do the work quickly, easily and satisfactorily. Hand and power outfits in a wide range of sizes and prices.

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THE MARTIN DITCHER AND GRADER DIGS YOUR DITCHES GRADES YOUR ROADS EASILY QUICKLY CHEAPLY REVERSIBLE ADJUSTABLE



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Why throw away your money to middlemen. We will furnish you, f. o. b. Watford, Ont., this beautiful set of strong and easy-running sleighs; usual price, \$35.00, for \$25.00. Fully guaranteed, made of the best of material, white oak runners, six or seven feet long—your choice; two inches wide. Spring steel shoeing; well painted; made to last a lifetime. Ask your neighbor about them. For 20 years the Hastings sleigh is known to be the best made, strongest, and easiest running sleigh in the market; you run no risk. Send us a P. O. money-order or your cheque. Address: HASTINGS SLEIGH COMPANY WATFORD, ONT. Robt. Taylor, Manager

A Better Separator For Less Money VIKING Cream Separators of Quality

ANNUAL SALE The Provincial auction sale of PURE BRED STOCK

beef breeds) under the auspices of The Ontario Live Stock Department and the management of the Guelph Fat Stock Club will be held in the Winter Fair Building, Guelph, on Wednesday, 6th March, 1918

Mardella Shorthorns Dual-purpose bulls, 20 young cows and heifers—bred, some calves by side. Size type, quality; some full of Scotch. The great massive Duke—dam gave 13,599 lbs. milk, 474 lbs. butter-fat—at the head. Thomas Graham, Port Perry, R.3, Ont.

Glenfoyle Dual-Purpose Shorthorns Herd bull College Duke 4th, 95430, big, thick young cows and heifers for sale; 8 young bulls, some herd headers. Also a yearling Clyde stallion. STEWART M. GRAHAM, LINDSAY, ONT.

Plaster Hill Shorthorns Two 2-year-old bulls, one yearling bull, one bull calf. Heavy-milking families. F. Martindale & Son, Caledonia, R.R. 3, Ont.

Questions and Answers. Miscellaneous.

Feeding Pigs—Line Fence.

1. My pigs are fed on equal parts of barley and oat chop. When five and a half months old they lost their appetite and commenced to cripple. They turned black around the ears. They were kept in a stable with a stone wall on two sides of the pen. What is the cause of the trouble?

2. A and B own lots side by side. The line is fenced except through the bush. A does not pasture the bush but does the rest of the farm. If B builds his share of the line can he compel A to build his? W. E. C.

Ans.—1. The trouble may be due to an improperly-balanced ration and to confinement in a damp pen. Over-feeding might cause indigestion and loss of appetite. Barley and oat chop are two very good grains for pigs, but it is advisable to feed a few roots along with this and to give the pigs plenty of exercise. In the summer they may run in a paddock and should be permitted to exercise in the yard during the winter. Where they have not the opportunity for this outdoor exercise greater care is required in the feeding. While some hog feeders have very good results when the animals are kept in a building with a stone foundation and cement floor, others have all kinds of trouble. A little earth thrown in the pen occasionally is a good thing, and charcoal, sulphur, wood ashes and a little salt can be used occasionally.

2. A line fence must be kept up by the owners of the farms adjoining. It is customary for the owners to decide on the portion of fence which is to be known as theirs, and they are responsible for the building and upkeep of it. A fence is usually as necessary through the bush as it is in the clearing. If A and B cannot agree as to which is their portion of the fence the local fenceviewers might be called in to decide.

Gossip.

Beaver Hill Aberdeen-Angus.

With the exception of the new herd sire, "Vigilant of Larkin Farms," there is very little new to report regarding the splendid Beaver Hill herd of Aberdeen-Angus cattle owned by Alex. McKinney, of Erin, Ont. Vigilant of Larkin Farms, the sire referred to, is one of the best sons of Prince Bravo (imp.) to go out from Larkin Farms this year, and his dam, Victoria of Chapleton 2nd (imp.), is one of the very best breeding cows in the Queenston herd. There are a number of daughters of the former herd sire, Glenmar Lad, that are now being bred to the new herd sire, and combining, as they do, all of Mr. McKinney's best families the result from their mating with Vigilant of Larkin Farms should produce some of the most satisfactory results ever obtained in the herd.

In young bulls there is at present also a strong offering. There are over a half dozen in all; ranging in ages from 9 to 13 months, and all are got by Glenmar Lad. Every calf is well grown, and among them are several that have promise of making real strong show material for another year. The three 4-months bulls that are still with their dams are by the same sire, and also worthy of note if any of our readers needs do not demand a bull for immediate service.

In Oxfords the present offering is very limited. All the shearlings, both rams and ewes, have been sold and a few ewe lambs are now the only things that can be spared. They, however, are a good lot and will, no doubt, go out quickly. Full information regarding the herds and flock will gladly be furnished by Mr. McKinney at all times.

Little Johnny, who had been studying history but a short time, thought he would give his grandfather a try-out on the subject, and asked:

"Say, Gramp, what great war broke out in 1850?" The old gentleman laid down his paper and looked thoughtfully at the boy for a moment, and then a sudden light dawned upon him. "Why," he said, "that was the year I married your grandmother." — Harper's Magazine.

Dual Purpose Shorthorns

Herd Headed By DOMINATOR No. 106224

whose grandam on his mother's side has an R.O.P. record of 13,535 lbs. milk, testing 3.90; and whose dam has an R.O.P. record of 10,689 lbs. milk, testing 3.88. The cows in our herd are large and strictly dual-purpose in type and performance, many of them have high milk records. A few cows, heifers and young bulls for sale, three of the latter are out of cows in the herd which have given between 10,000 and 11,000 lbs. of milk each in one lactation period.

Weldwood Farm Farmer's Advocate, London, Ontario

PURE SCOTCH SHORTHORN BULLS

Our present offering of young bulls, sired by our herd sire, Broadhooks Star, a son of the great Newton Ringleader, Imp., are the best lot of bulls we ever had on the farm. Come and see them, or write for particulars. We also have females of the richest breeding and highest individuality. GORDON SMITH Woodslee Sta., M.C.R., Essex County. SOUTH WOODSLEE, ONT.

Imported SCOTCH SHORTHORNS Our present offering includes 100 imported females and 12 young imported bulls, representing the most desirable lines of breeding. If interested come and see them. Burlington Jct., G.T.R. is only half mile from farm. J. A. & H. M. PETTIT, FREEMAN, ONTARIO.

SHORTHORN BULLS

of my own breeding, around a year old, best families and good colors, are for sale. Also a few young imported bulls. Myrtle, C.P.R., Brooklin, G.T.R., Brooklin, C.N.R. Will A. Dryden, Brooklin, Ontario Co.

FIFTY IMPORTED SHORTHORNS

I have fifty head of choice Scotch bred cattle now on the water, which will land at Quebec early in November. These were selected from many of the best herds in the old land. Write for these. Write for particulars. GEO. ISAAC, COBOURG, ONTARIO.

SALEM SHORTHORNS

Herd headed by Gainford Marquis, (Imp.) undefeated in England and Canada. Sire of the winning group at Canadian National, 1914, 1915, 1916. Can supply cattle, both sexes, at all times. J. A. WATT, ELORA, ONT.

Blairgowrie Shorthorns and Shropshires

20 imported cattle, cows and heifers; all have calves at foot or are in calf to British service. Bulls for breeders wanting herd headers. Also home-bred bulls and females. Prices right. Rams and ewes in any numbers. JOHN MILLER, Myrtle Station, C. P. R., G. T. R. ASHBURN, ONTARIO.

SHORTHORNS

I can spare a couple of cows, imported or Canadian-bred, with calves at foot and in calf again to Imp. Dalesman. I can also give one the choice of fifteen bulls, from five months to two years old. About half are imp. They are priced to sell. Write, or come and see me. A. G. FARROW, Oakville, Ont.

SPRING VALLEY SHORTHORNS

Herd headed by the two great breeding bulls, Newton Ringleader (Imp.) 73783, and Nonpareil Ramsden 83422. Can supply a few of either sex. KYLE BROS., DRUMBO, ONT. PHONE AND TELEGRAPH, VIA AYR

PURE SCOTCH SHORTHORNS

of exceptional merit. The young things we are offering this year are something extra, especially the bulls. Come and see them if you want something choice. GEO. GIER & SON, WALDEMAR, ONT.

OAKLAND SHORTHORNS

This herd, numbering nearly 60 head, is of our own raising, and of the dual-purpose, prolific kind that satisfies the buyers. Present offering is 7 bulls, from 8 to 18 months, and females of any age, priced worth the money. All registered. Crown Jewel 42nd at head of herd. JOHN ELDER & SONS, HENSALL, ONT.

SHORTHORNS--T. L. Mercer, Markdale, Ont.

ROSEWOOD CHAMPION, by Nonpareil Archer, Imp., at the head of the herd. I have almost 100 Shorthorns in my stables at present. Marr Missies, Campbell-bred Clarets, Nonpareils, Minas, Rosemarys, etc.—the best of breeding and the best of cattle; bulls or females; also have a few Herefords

SEVENTY-THREE HEAD OF SHORTHORNS

Ten young bulls of serviceable age, Nonpareil Ramsden = 101081 =, and Royal Red Blood = 77521 =, at the head of the herd. The ten young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams which will bear inspection. Our cows and heifers will please, and you'll like the bulls. JAMES McPHERSON & SONS, DUNDALK, ONTARIO.

GERRIE BROS' SHORTHORNS

Herd headed by Gainford Matchless, one of the very best sons of the great Gainford Marquis. Our breeding cows are Missies, English Ladies Duchess of Glosters, etc. Present offering of young bulls are by our former herd sire, Master Missie, Junior Champion at Brandon last summer. GERRIE BROS. ELORA, ONT.

MEADOW LAWN SHORTHORNS

Herd headed by Escana Ringleader, one of the great sons of Right Sort, Imp. We are offering right good bulls of extra quality, ready for immediate service, and others coming on. Write your wants or come and see them. Intending purchasers will be met at Elora any time. F. W. Ewing, R. R. No. 1, Elora, Ont.

THE MANOR STOCK FARM---SHORTHORNS

Present Offering—A choice young red bull, fit for service in any herd. Write or come and see. JOHN T. GIBSON, DENFIELD, ONTARIO

NICHOLSON'S SHORTHORNS

Herd headed by "Best Boy" = 85552 =, and "Browndale Winner" = 106217 =. Bulls and females for sale. Visitors always welcome to this herd of long-established reputation. R. & S. NICHOLSON, PARKHILL, R. NO. 2, ONTARIO.

THE HAWTHORNE SHORTHORNS

5 young bulls, and several females bred to the herd sire, Royal Choice "79864," a Toronto winner. Both milk and beef strains. A few Leicester rams and Yorkshire sows. Everything priced to sell. "THE HAWTHORNES"—ALLAN B. MANN, R. R. 4, PETERBORO, ONT. G.T.R., C.P.R.

WELLAND DISTRICT SHORTHORN BREEDERS' CLUB

are still offering young bulls of serviceable age, and a few breeding females. CHAS. GAINER, Secretary, Box 607, Welland, Ont. A. E. HOWELL, President, Fenwick, Ont.

BIG MONEY IN TRAPPING THIS YEAR

FREE

Hallam's Trappers' Guide—66 pages; illustrated; English or French; tells how and where to trap; what bait and traps to use; is full of useful information.

Hallam's Trappers' Supply Catalog—92 pages; illustrated; rifles, traps, animal bait, headlamps, fish nets, trappers' and sportsmen's supplies, at low prices.

Hallam's Raw Fur News—Gives latest prices and advance information on the raw fur market.

Write to-day for above. Address, using number given below.

Ship your RAW FURS

to John Hallam Limited

331 Hallam Building, Toronto

LIFT YOUR CORNS OFF WITH FINGERS

Tells How to Loosen a Tender Corn or Callus so it Lifts Out Without Pain.

A noted Cincinnati chemist discovered a new ether compound and called it Freezone, and it now can be had in tiny bottles as hereshown for a few cents from any drug store.



You simply apply a few drops of Freezone upon a tender corn or painful callus and instantly the soreness disappears, then shortly you will find the corn or callus so loose that you can just lift it off with the fingers.

No pain, not a bit of soreness, either when applying Freezone or afterward, and it doesn't even irritate the skin.

Hard corns, soft corns, or corns between the toes, also toughened calluses, just shrivel up and lift off so easy. It is wonderful! Seems magical! It works like a charm! Your druggist has Freezone. Ask him!

Cream Wanted

Ship your cream to us. We pay all express charges. We supply cans. We remit daily. We guarantee highest market price.

Ontario Creameries, Limited
London, Ontario

CREAM

We are open to buy cream both for churning and for table use. **ASK ANY SHIPPER** about our service and prompt returns. **Ask for Prices**

The figures of yesterday may be **TOO LOW** for to-morrow. We furnish cans.

The Toronto Creamery Co., Limited
Church Street, Toronto

Gossip.

Shorthorns at Spruce Glen.

There is, in these columns, very little need for a lengthy description of the Spruce Glen herd of pure-bred Shorthorns owned by Jas. McPherson, of Dundalk, Ont. With twenty-five years of continuous breeding, the herd has become one of the largest and best known in Ontario, and we believe every purchaser of Spruce Glen Shorthorns in all that time has met with nothing but fair and honest treatment from the hands of Messrs. McPherson & Sons. We know of many cases where animals going out from this herd at very moderate prices have, on several occasions, brought creditable honors to their purchasers shortly afterward in the show-ring, and it is from these that the Advocate representative has heard so many complimentary remarks regarding this firm and their dealings. At present their herd numbers 175 head, and the families represented are largely Minas, Emilys, Bruce Fames, and Florences. Many of the breeding cows are excellent milkers, and while very little hand milking has been done in the herd, there are several that look every bit as good as 40 and 50-lb.-a-day cows, and all are kept only in good, thriving condition. The present offering of a dozen young bulls of serviceable age are all from dams that are still in the herd and are got by the present herd sire, "Royal Red Blood," a high-class son of Blood Royal (imp.), and the Bessie-bred bull, "Earl Derby 2nd." Most of the young bulls mentioned are good reds or roans, and there are several among them that are just the right stamp for first-class sires. All are, we understand, priced reasonably and inspection is cordially invited, visitors being welcome at all times. A line to Mr. McPherson will bring full information. Address Spruce Glen Farm, Dundalk, Ont., and mention "The Advocate."

Berkshires and Shorthorns at Elmhurst.

Readers of these columns who are more directly interested in the breeding of Shorthorn cattle and Berkshire swine are all familiar with the noted Elmhurst herds owned by H. M. Vanderlip of R. R. No. 1, Brantford, Ont. Elmhurst Berkshires, backed by the Elmhurst guarantee, gained favor in the early days of Berkshires in Canada, and from the first year of the foundation of the herd every shipment has gone out to every man on approval. Those who were not satisfied with the order when received, were asked to return it, express collect, and this plan, as well as the quality of the pigs sent out, share equally in placing Mr. Vanderlip in the high position he holds among the breeders of to-day. At the time of our visit recently there were, as usual, another splendid offering in stock in the pens. Several young sows had just farrowed, and a number were also well along in pig to the service of the great, old imported sire Sudden Torredor, which is still retained as the chief sire in service. The young litters too, are by this boar, and should be sufficient guarantee of their future. The young sows of breeding age, as well as young boars fit for service, are not too plentiful but the offering in quality was never stronger, and to insure immediate delivery on pigs of this age it would be well to order early.

In Shorthorns the present offering is also limited. There is no over-supply of either bulls or females. The first crop of calves is now coming on from the new Missie-Lavender sire purchased last year from the Johnson herd at Ashburn. Many breeders will remember him as Lavender Victor 83341, a thick, well-made roan got by the good breeding sire, Missie Champion, and out of the noted breeding cow Collynie Lavender. The youngsters just now arriving from the sire have exceptional promise, but as they are all from the Lady Ythan, Eliza and Lavender cows that make up the small but select breeding herd at Elmhurst, they have every license to be worth while. One needs, however, only one look at these calves to know that Mr. Vanderlip has, in selecting Lavender Victor to follow up the services of his former sire, Royal Warrant (imp.), made no mistake and may await the results with confidence. For full information regarding both the Berkshires and Shorthorns address H. M. Vanderlip, Elmhurst Farm, R. R. No. 1, Brantford, and mention Farmer's Advocate.



Manor Farm Holsteins

Announcing the First Offering in Females

My stables are getting too crowded and I must make room. No matter whether they are the mature cows I have been trying to retain, or even daughters of my own herd sires, freshening with their first calves, some will have to go, to make room for the youngsters now coming. The prices asked on a limited number of cows should clear, and clear them quick. If you are in the market don't delay.

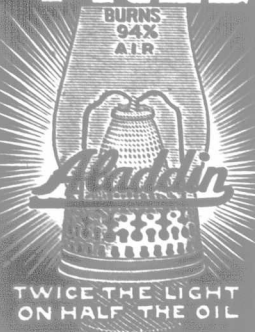
I also have sons of both my junior and senior sires, King Korndyke Sadie Vale, and King Segis Pontiac Posch.

GORDON S. GOODERHAM, CLARKSON, ONTARIO

New COAL OIL LIGHT FREE
BEATS ELECTRIC or GASOLINE

Here's your opportunity to get the wonderful new Aladdin Coal Oil Mantle light FREE. Write quick for particulars. This great free offer will be withdrawn as soon as some distributor starts work in your neighborhood. You only need show the Aladdin to a few friends and neighbors; they will want one. We give you yours free for this help. Takes very little time, and no investment. Costs nothing to try it.

Burns 70 Hours on One Gallon
common coal oil, no odor, smoke or noise, simple, no pumping up, no pressure, won't explode. Tests by Government and thirty-five leading universities show the Aladdin gives three times as much light as best round wick flame lamps. Won Gold Medal at Panama Exposition. Over three million people already enjoying this powerful, white, steady light, nearest to sunlight. Guaranteed. And think of it—you can get it without paying out a cent. All charges prepaid. Ask for our 10-day Free Trial Offer and learn how to get our free AGENTS WANTED MANTLE LAMP COMPANY, 231 Aladdin Building, MONTREAL. Largest Coal Oil Mantle Lamp House in the World.



HIGHLAND LAKE FARMS

Herd sire, AVONDALE PONTIAC ECHO, (under lease), a son of MAY ECHO SYLVIA, the world's record cow. Only one other 41-lb. bull in Canada. We have young bulls for sale whose two nearest dams (both Canadian champions) average as high as 35.62 lb butter in seven days; another whose two nearest dams are both 100-lb. cows; and one ready for service, from a 41-lb. sire and an 18,000-lb. two-year-old dam. SEND FOR OUR BOOK OF BULLS. A few females for sale. Satisfaction guaranteed.

R. W. E. BURNABY (Farm at Stop, 55, Yonge St. Radial) JEFFERSON, ONT.

Hospital for Insane, Hamilton, Ont.

Present offerings are 4 grandsons of Dutchland Colantha Sir Mona, and high-testing, large-producing R. of P. dams of Korndyke and Aaggie DeKol breeding. Born during April and May, 1917. Apply to Superintendent.

Roycroft Farm Holstein-Friesians

Our 30-lb. bulls have all been sold, but we still have several sons of Pontiac Korndyke of Het Loo, that are just nearing serviceable age. Get one of these for your next herd sire, have a brother of Het Loo Pietertje, the world's greatest junior two-year-old at the head of your herd. We also have a 9 months, 27.78-lb. son of King Segis Alcartra; and one other, same age, by Dutchland Colantha Sir Mona. See them at once or write early.

W. L. Shaw, Roycroft Farm (Take Yonge Street Radial Cars from N. Toronto) Newmarket, Ont.

SUMMER HILL HOLSTEINS

The only herd in America that has two stock bulls that the dam of each has milked over 116 lbs. a day, and their average butter records are over 35 lbs. a week. We have 50 heifers and young bulls to offer by these sires, and out of dams just as well bred. We invite personal inspection.

D. C. FLATT & SON, R. R. 2, HAMILTON, ONT. PHONE 7165

MAPLE SOIL STOCK FARM HOLSTEINS
Fine quality, typey, heavy-producing Holsteins—forty head to choose from. The females are sired by Idaline's Paul Veeman and King Segis Pietertje, and are in calf to FINDERNE King May Fayne. Two bull calves, about ready for service, sired by the latter bull, and out of heavy-producing cows, for immediate sale. Females in milk have made high records, and sires used have the backing and are proving good. Correspondence solicited, visitors welcome. H. G. HOLTBY, GLANWORTH, ONT.

25 HOLSTEIN FEMALES

The first I have ever offered. I am away overstocked and am offering females for the first time. I have over eighty head. Come and make your selection—one or twenty-five. The best-bred lot of cattle in Ontario. I also have five young bulls.

A. A. FAREWELL 30 miles east of Toronto—C.P.R., C.N.R., G.T.R. OSHAWA, ONT.

Bone Spavin

No matter how old the blemish, how lame the horse, or how many doctors have tried and failed, use Fleming's

Fleming's Spavin and Ringbone Paste

Use it under our guarantee—your money refunded if it doesn't make the horse go sound. Most cases cured by a single 45-minute application—occasionally two required. Cures Bone Spavin, Ringbone and Sidebone, new and old cases alike. Write for detailed information and a free copy of

Fleming's Vest-Pocket Veterinary Adviser

Ninety-six pages, durably bound, indexed and illustrated. Covers over one hundred veterinary subjects. Read this book before you treat any kind of lameness in horses.

FLEMING BROS., Chemists
75 Church Street Toronto, Ont.

Harab-Davies Fertilizers

Yield Big Results

Write for booklet
THE ONTARIO FERTILIZERS, LTD.
WEST TORONTO

Sunnyhill Offering:

Holstein bulls and heifers.
Shropshire ram lambs.
Yorkshire pigs, both sexes, all ages.

WRITE TO
WM. MANNING & SONS
WOODVILLE, ONT.

For Milk, Butter, Cheese, Veal Holstein Cows Stand Supreme

If you try just one animal you will very soon want more.

WRITE THE
HOLSTEIN-FRIESIAN ASSOCIATION
W. A. Clemons, Sec'y, - St. George, Ont.

Holstein Bulls

of serviceable age and younger; from dams with records of 30 lbs. down.

Write for prices.
R. M. HOLTBY, R. R. 4, Port Perry, Ont.

KING SEGIS PONTIAC DUPLICATOR
A ½ brother to the \$50,000 bull is the sire of our young bulls offered at present. Two of these are ready for service. Write us also for females.
R. W. Walker & Sons, Manchester Station, G.T.R., Port Perry, Ontario

AYRSHIRE COWS

are easy feeders—and thrive well.

WRITE W.F. STEPHEN, Secretary
CANADIAN AYRSHIRE BREEDERS' ASS'N
Box 531, Huntingdon, Que.

Fernbrook Ayrshires

Young bulls for sale (out of R.O.P. dams) from one to fifteen months old; tracing closely to the world's champions, Garclough May Mischief and Jean Armour.

COLLIER BROS., Beachville, Ont.
(OXFORD COUNTY)

LAKESIDE AYRSHIRES

A choice selection of young bulls for sale from Record of Performance dams imported and Canadian bred.

SIRES: Auchenbrain Sea Foam (Imp) 35758 many times grand champion (Imp) 51137, a son of the noted Hobland Perfect Piece.

Write for catalogue.

Geo. H. Montgomery, Proprietor, Dominion Express Building, Montreal. D. McArthur, Manager, Philipsburg, Que.

JAS. B. ROSS, MEADOWVALE, ONTARIO
for high-producing show-yard AYRSHIRES
Herd headed by Snow King 47376, first-prize two-year bull at Toronto, 1917. Write me also for anything in Yorkshires.

Meadowvale P. O., Streetsville Station.

SUNNYSIDE AYRSHIRES

We have at present the strongest lot of young bulls we ever offered—one by Hobland Masterpiece, one by Sunnyside Matchless, and the others by our present herd sire, Sunnyside Masterpiece.

Jno. W. Logan, Howick Station, Que.

Kelso Farm R. O. P. Ayrshires. Herd headed by Palmerston Speculation Imp. We never had a stronger line-up of R. O. P. producers than we have at present. Our 1917-1918 young bulls are sure to please. **D. A. Macfarlane, Cars Crossing, G. T. R., Athelstan N. Y. C.; Kelso, Que.**

D. M. WATT

For imported or Canadian-bred Ayrshires, bulls or females, get my prices. My importations win wherever shown. Write me for one animal or a carload. **St. Louis Station, Que.**

Gossip.

The Oakland Herd of Shorthorns.

Sixteen-hundred-pound, dual-purpose, Shorthorn cows that produce upwards of 50 and 60 pounds of milk per day are not very plentiful in pure-bred herds in any country, and when speaking of the Oakland herd, owned by Jno. Elder & Sons, of Hensall, Ont., it is not our intention to say that Mr. Elder owns a large number of matrons that measure up to this standard, but, as we have said in other years, there are several big, deep cows among the Oakland breeding females that come very close to this ideal. The more noticeable of these are direct descendants of the noted Oakland herd foundation cow Lady Waterloo (imp.), whose offspring have all been far above the ordinary for milk production. From these dams Mr. Elder has almost a score of young breeding cows and heifers all got by the former herd sire, Scotch Grey, whose success in this herd was, perhaps, equal to that of any other Canadian Shorthorn sire. His year-old daughters, about eight in number, are as good a lot of thick, typey heifers as we have seen from any one sire this year. They, as all the cows in fact, are in calf to the present herd sire, Crown Jewel 42nd. This bull is by the well-known, good-breeding sire Best Boy, while his dam is one of the choicest breeding cows in the Nicholson herd, and was got by the old-time favorite Spicy Count. It will be remembered that at the 1916 London sale, only one other bull equalled the price paid by Mr. Elder for Crown Jewel 42nd. At the time of our visit to the farm in November his first calves in the herd were six in number and all were heifers. There are, however, six young bulls advertised at present, all of which are of serviceable age and got by Scotch Grey. These, like the heifers in the herd by this sire, are a choice lot, and nearly all are reds or roans, with the latter color predominating. Those who are now in need of a new sire can find plenty of herd sire material here. Look up the advertisement elsewhere in this issue and write Mr. Elder at once for further particulars.

A Quality lot of Well-bred Shorthorns.

When visiting the farm of 750 good Ontario acres, owned by Thos. Mercer, of Markdale, Ont., it is not the size of the farm that attracts one's attention most; neither is it the splendid herd of 100 pure-bred Shorthorns, but rather the combination of these together with the general neatness of the farm, the buildings, and the surroundings. A striking feature of Mr. Mercer's farm is the system which he has established, comprising almost every known modern convenience. There are many interesting things about the place; the hydro, the light tractor, the individual thresher, etc., all of which would be of interest but, for the present, space is limited and it is to the Shorthorns we wish to draw your attention. At present the two bulls, Rosewood Champion, 72772, and Christmas Gift are the chief sires in service. The former is got by the great bull, Nonpareil Archer Imp., while on his dam's side every cow in the pedigree is a straight Collynie Rosewood. Being easily one of the best-bred bulls in Canada to-day, and a thick, straight fellow himself, it is little wonder that his offspring now in the stable are the most promising things ever raised on the farm. Christmas Gift, the second sire in service, is a strongly bred Duchess, descended from the great Duchess 42nd. Imp., by Village Archer, and sired by the good breeding bull, Broadhooks Golden Fame (imp.). Two stronger bred bulls seldom see service in one herd. With regard to the females, the Clarets are eight in number; Village Girls and Minas number well on to a dozen, with Rosemarys and Marr Missies being well up in the two figures. Such families as Mysies, Butterflies, Broadhooks, etc., all come in for two and three each, making in all one of the strongest-bred lot of Scotch females we have seen in one herd for some time. There are also a number of big, deep, well-bred Hereford cows at the upper farm, along with ten young bulls of the same breed, and among these are a number of strong herd-sire material. The cows are all young and well along in calf to good sires. Several of these cows have size and smoothness that will command considerable attention in any show-ring in Canada next year. Correspondence is solicited at all times.

EDWARDSBURG GLUTEN FEED

**23%
PROTEIN
GUARANTEED**

The Feed for More Milk

This Gluten Feed enables you to feed the cows a properly balanced ration, containing all the Protein they will eat and digest and turn into milk.

We have a book about it. Write for a copy—and learn how many farmers and dairymen are feeding for more milk—and making it pay.

—Fatten Hogs on Edwardsburg Oil Cake. O66

THE CANADA STARCH CO., LIMITED - - - TORONTO
WORKS AT CARDINAL, BRANTFORD, FORT WILLIAM



HAS 1917 BROUGHT SUCCESS?

Now that the year is drawing to a close have you figured out the profits of your farm? **ARE YOU SATISFIED?** If you feel that you should be doing better—should be getting bigger returns for all your work—why not consider the possibilities of Western Canada?

Write for any or all of our free booklets, "Homeseekers & Settlers Guide," "Peace River Guide," and "British Columbia Settlers Guide," to General Passenger Dept., Montreal, Que., or Toronto, Ont.

CANADIAN NORTHERN RAILWAY

SILVER STREAM FARM HOLSTEINS

The home of high-class R.O.P. and R.O.M. tested Holsteins
King Lyons Colantha and King Lyons Hengerveld head the herd. No stock for sale at present.
J. Mogk & Son, R. R. No. 1, Tavistock, Ontario

CLOVER BAR HOLSTEINS

We are now offering a number of young bulls, sired by our senior herd-header, Francy 3rd's Hartog 2nd, the noted son of the famous old Francy 3rd and Canary Mercedes Hartog; also a few females, all choice individuals.
P. SMITH, Proprietor, R. R. 3, STRATFORD, ONT.

DUMFRIES FARM HOLSTEINS

Present Offering—A few bull calves.
S. G. & ERLE KITCHEN ST. GEORGE, ONT.

A HOLSTEIN HERD YOU SHOULD KNOW

WM. STOCK & SONS, TAVISTOCK, ONT.

Home of the great **Baroness Madoline, 34.48 lbs. in 7 days, 1,043.35 lbs. in 335 days.** Write at once for a list of the good record bulls they are now offering, and plan now to spend a day this winter at the farm. *It will be a day worth while and here there is always a welcome.* Mention the Advocate.

WALNUT GROVE STOCK FARM

Holstein-Friesian Cattle, Tamworth Swine. We are offering a choice lot of 5 months' sows and boars and also have several nice young litters. Must clear a number quick to make room. We are also offering **White Wyandotte Cockerels** at \$3 each. Satisfaction guaranteed. **C. R. JAMES, R. R. No. 1, Richmond Hill, Ont.** Take Yonge Street Radial car from Toronto—stop Thornhill.

Humeshaugh Ayrshires and Yorkshires

Three young bulls, fit for service; sons of Hillside Peter Pan and R. O. P. dams. These were winners at Toronto and London. A few young sows and boars of good quality and priced right.

Alex. Hume & Co., Campbellford, Ont., R.R. No. 1

Gladden Hill Ayrshires Winners wherever shown—Herd headed by Fairview Milkmaid; sire, Hobland Stumpies Heir, Imp; dam, Milkmaid 7th, a 166.96-lb. R. O. P. cow with 729 lbs. of fat; average test 4.36 per cent. We have three 12-month bulls that were winners at Toronto and London. All are by herd sire. Come and see our females. We also have two three-year-old Clydesdale stallions, one by Surname Imp. and one by Cairndale Imp. Good quality and sure breeders. Will sell one. Price reasonable.

Laurie Bros., C.P.R., G.T.R., C.N.R., Shipping Stations, Agincourt, Ontario.

SPRING BANK R.O.P. AYRSHIRES

Herd Sires: **Netherton King Theodore Imp., and Humeshaugh Invincible.** Grand Champion London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year three-year and the mature classes. Let us tell you about the daughters of Netherton King Theodore. We have sons of both bulls for sale—all have R.O.P. dams. Visitors met at Hamilton by appointment.

A. S. Turner & Son (3 miles from Hamilton) Ryckman's Corners, Ont.

HILLHOUSE AYRSHIRES—F. H. Harris, Mt. Elgin, Ont.

Headed by Burnside Lucky Master Swell, a combination of blood so hard to equal, being of the Masterpiece and Lucky Girl families, a combination which means quality, production and constitution. Ninety head to select from. Special offering—20 yearling heifers and 3 bulls. Inspection invited.

THE DON JERSEY HERD—

OFFERS:—Several young bulls, all of serviceable age, and all from R. O. P. dams. These are priced right. Interested parties should write or see these at once. We also have females of breeding age.

D. DUNCAN & SON, Todmorden P.O., Duncan Station, C.N.O.

RAW Skunk, Red Fox, Coon
and all other kinds wanted. We pay all express and postage, and remit money same day for shipment. Write for Price List and Tags, free.

FURS C. H. ROGERS
Desk 10
Walkerton, Ontario

TWENTY-FIVE YEARS BREEDING
Registered
Jerseys and Berkshires
We have bred over one half the world's Jersey Champions for large yearly production at the pail. We bred and have in service the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

HOOD FARM, LOWELL, MASS.
Linseed Oil Cake
"Maple Leaf" Brand
The best supplementary feed for live stock and the "Veterinarian," the best book on the treatment of diseases in Cattle. This book sent free with a trial ton order of Oil Cake. Write to-day for lowest prices. Canada Linseed Oil Mills, Limited Toronto and Montreal

SHROPSHIRE
30 Yearling Rams—12 Yearling Ewes.
W. H. PUGH, MYRTLE STATION, R. R. 1
Farm 2 miles from Claremont

Cloverdale Shropshires and Berkshires—40 shearing rams, 70 shearing ewes, an exceptionally choice lot; true to type and well grown; nearly all sired by the show ram, Nock 16 Imp. In Berkshires, the usual strong offering, including sows just bred. C. J. LANG, Burkton, Ont.

WILLOW BANK DORSETS
We have a few choice ewe lambs left; also 10 yearling and 4 two shearing ewes not registered, some lambing this month. Will sell this bunch cheap for quick sale.
Jas. Robertson & Sons, Hornby, Ont.

LABELS Live-stock Labels for cattle, sheep and hogs, manufactured by the Ketchum Manufacturing Co.
501 Ottawa, Ont. Write for samples and prices

Tower Farm Oxfords
Champion Oxford flock of Canada. Choice Oxfords of all ages for sale. Prices reasonable.
E. BARBOUR & SONS, R.R. 2, Hillsburg, Ont.

TWO GRAND YOUNG Berkshire Boars
The kind you have been looking for; big of bone, smooth, long and deep, easy keepers and bacon type. Sired by imp. Sudden Torredor, and from a splendid dam. These boars are now fit for service and will be priced right.
Tawadina Farm, West Hill, Ontario
Maj. J. F. Laah, Prop.; J. W. Sangster, Mgr.

PEDIGREED TAMWORTHS
Several sows, 2 years old, in pig. Also younger stock. Write:
Herolds Farms, Beamsville, Ont.

Morrison Tamworths and Shorthorns—Bred from the prize-winning herds of England. Tamworths, both sexes; boars from 2 to 12 months. Shorthorn bulls from 5 to 10 months old, reds and roans—dandies.
CHAS. CURRIE, Morrison, Ont.

Meadow Brook Yorkshires
Fifty young pigs from five litters, weaned and ready to wean. Pairs not akin. Also a large choice of young sows near breeding age—priced to sell.
G. W. MINERS R. R. No. 3, Exeter, Ont.

CHOICE YORKSHIRES
All ages and both sexes, at right prices. A few bred sows and several young litters an extra special. All varieties, Turkeys, Geese and Ducks, S.-C. White Leghorns. T. A. KING, Milton, Ont.

BERKSHIRE PIGS, all ages and sexes, headed by Successor's Double II., bred by Hood Farm, Lowell, Mass., U.S.A. **SHORTHORN CATTLE**, dual-purpose strains, headed by Golden Duke (Imported), bred by Lord Lucas, West Park, England. Address:—J. B. Pearson, Manager, Credit Grange Farm, Meadowvale, Ont.

BEAVER MEDIUM CHESTER WHITES won over 75% of the prize money at Toronto this year with three herds showing. Write us for bred sows or young boars. We guarantee satisfaction. We also have Percherons.
Wm. Roberts & Sons, Peterboro, Ontario

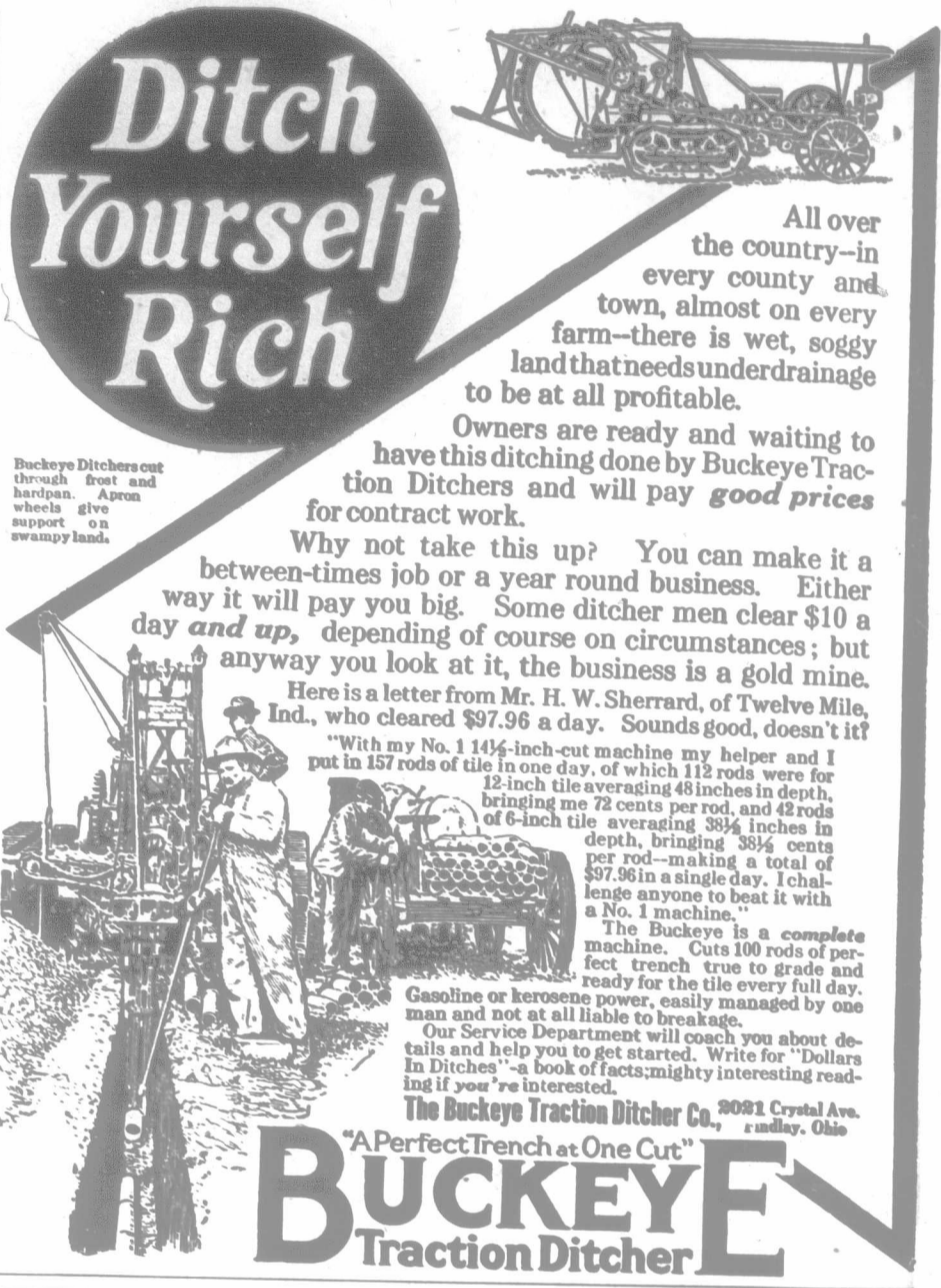
Sunnyside Chester Whites and Dorsets. In Chester whites we have both sexes, any age, bred from our champions of many years. In Dorsets we have ram and ewe lambs by our Toronto and Ottawa champion, and out of Toronto, London, and Guelph winners. W. E. Wright & Son, Glanworth, Ont.

TAMWORTHS
Young sows bred for spring farrow and a nice lot of young boars for sale. Write:
John W. Todd, R. R. No. 1, Corinth, Ont.

Gossip.
Irvinedale Shorthorn Sales.
Since writing "The Farmer's Advocate" last, John Watt & Son, Elora, Ont., have made several good sales from their Irvinedale herd, which they report as follows:
"To Robert Cummings, Elora, Ont., we have sold one cow and three heifers, a Matchless, a Merry Maid and two Stamfords. Mr. Cummings is starting in the Shorthorn business and made a good selection. To Messrs. Carrol & Lightle, of Orangeville, went a good eleven-months bull, sired by Gainford Select and from an imported cow. Percy DeKay, St. Jacobs, Ont., has taken our former stock bull, Gainford Select. This sire has done a lot of good in our herd and is sure to do the same for Mr. DeKay. J. M. Gardhouse, of Weston, took the twin-bull calf, Gainford Sultan, sired by Gainford Marquis, and out of Sultan's Fancy, probably the only cow in Canada that was a first-prize winner in Chicago where she won as a calf for her breeder, F. W. Harding, and was sired by his great bull, Whitehall Sultan. The next dam was bred by Duthie and sired by his Highland champion, Pride of Morning. We are retaining Gainford Sultan's twin brother, Marquis Supreme, for our own use. We have two good roan bulls left yet for sale. They are about fifteen months old and sired by Gainford Select. We also have nine choice granddaughters of Right Sort (imp.), ranging in ages from six to fifteen months, and representing such strains as the Stamfords, Claras, Diamonds, Matildas and others. We are pricing these cattle for a quick sale.

Sunny Acres' Aberdeen-Angus.
Many of our readers who follow more closely the news of Aberdeen-Angus winnings, etc., at the time of the summer and fall exhibitions will remember the success which crowned the efforts of the Sunny Acres herd at Toronto and Ottawa last September. In competition with many of the largest and oldest herds in the Province they won for their proprietors, Messrs. Channon & Son, many laurels which gave them a considerable number of firsts as well as a grand championship ribbon. The grand champion bull, Elm Park Pat, referred to is the senior sire at Sunny Acres, and speaking from observation made during a recent visit to the farm by the writer, the five young bulls by this noted champion, that are now in the stables, are quite sufficient in the way of evidence to place Elm Park Pat amongst the best sires of the breed in Canada. Several of them were winners at both Toronto and Ottawa, but they have done exceptionally well since then. There are also a goodly number of thick, quality heifers among the younger things in the stables by this sire and these are being mated with the second sire in service, Kinnaird Lad (imp.). He is got by the noted sire, Prince Albert Ito, a bull that is now 14 years old and has been in continuous service on the farm of Stanley Pierce at Creston, Ill., ever since he was a calf. The sire of Prince Albert Ito, Prince Ito (imp.), was the highest-priced bull of the breed ever sold in a Chicago auction. From the mating of the daughters of the Elm Park sire to a son of this latter sire, Messrs. Channon & Son, may well expect some pleasing results. In the few remaining lines of allotted space we must mention the families represented among the breeding females which consist of Drummond Lucys, Rosebuds, Pride of Aberdeen, Heather Blooms etc. The first and second prize cow at Toronto, one of which was also the grand champion female at Ottawa, both belong to the Drummond Lucy tribe and both of these cows will be calving before the New Year to the service of the imported bull, Kinnaird Lad. For the present there are very few females being offered for sale and we mention these only because they are the dams of the young bulls offered at prices that should clear them quickly. In addition to the fifty pure-breeds kept on this 650-acre farm of Sunny Acres there are always upwards of three and four hundred feeders in the stables during the winter and these are held over for the ranch until spring and marketed the following fall.

Ditch Yourself Rich



All over the country—in every county and town, almost on every farm—there is wet, soggy land that needs underdrainage to be at all profitable. Owners are ready and waiting to have this ditching done by Buckeye Traction Ditchers and will pay good prices for contract work.

Why not take this up? You can make it a between-times job or a year round business. Either way it will pay you big. Some ditcher men clear \$10 a day and up, depending of course on circumstances; but anyway you look at it, the business is a gold mine.

Here is a letter from Mr. H. W. Sherrard, of Twelve Mile, Ind., who cleared \$97.96 a day. Sounds good, doesn't it?

"With my No. 1 14 1/2-inch-cut machine my helper and I put in 157 rods of tile in one day, of which 112 rods were for 12-inch tile averaging 48 inches in depth, bringing me 72 cents per rod, and 42 rods of 6-inch tile averaging 38 1/2 inches in depth, bringing 38 1/2 cents per rod—making a total of \$97.96 in a single day. I challenge anyone to beat it with a No. 1 machine."

The Buckeye is a complete machine. Cuts 100 rods of perfect trench true to grade and ready for the tile every full day. Gasoline or kerosene power, easily managed by one man and not at all liable to breakage. Our Service Department will coach you about details and help you to get started. Write for "Dollars in Ditches"—a book of facts; mighty interesting reading if you're interested.

The Buckeye Traction Ditcher Co., 2021 Crystal Ave., Findlay, Ohio

"A Perfect Trench at One Cut"
BUCKEYE
Traction Ditcher

51st Annual Dairymen's Convention and Dairy Exhibition
DAIRYMEN'S ASSOCIATION, WESTERN ONTARIO
Stratford, Ont., Wednesday and Thursday, Jan. 16 and 17, 1918
SPECIAL RAILWAY RATES
R. W. STRATTON, Pres. Guelph, Ont. F. HERNES, Sec.-Treas. London, Ont.

RECORD OF PERFORMANCE JERSEYS
Choice Bulls and Females. We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our junior sire, Brampton Bright Togo. Write for records. We also have females.
R. & A. H. BAIRD, (G.T.R. Stations—New Hamburg, Bright) NEW HAMBURG, ONT.

EDGELEY STOCK FARM
The home of Canada's greatest producing Jersey, Sunbeam of Edgeley, the Sweepstakes Dairy Cow at the recent Guelph test; is also the champion R.O.P. butter cow for Canada. Would a grandson or great-grandson of this famous cow improve your herd? We have them. Write for particulars.
JAMES BAGG & SON, (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONT.

THE WOODVIEW FARM JERSEYS
CANADA'S MOST BEAUTIFUL JERSEY HERD
The foundation of this herd is made up of very high-class cows, imported from the island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a specialty of in-calf heifers and young bulls. Write us your wants, or better still, come and see the herd. We work our show cows and show our work cows.
LONDON, ONTARIO
John Pringle, Prop.

BRAMPTON JERSEYS
Special Offering:—50 cows and heifers in calf, 7 bulls; the best breeding ever offered in Canada from R. O. P. stock. The ancestors of these bulls have made and are making Jersey history. No better stock can be obtained.
B. H. BULL & SON, BRAMPTON, ONTARIO.

"The Maples" Stock Farm—R. S. Robson & Son, Props., Denfield, Ont.
Present offering—100 home-bred Lincoln ewes; ages 1 to 4 years (registered); 20 imp. yearling ewes, all bred to the best of 20 rams we imported this season—an extra-good lot of the heavy-shearing kind. In Shorthorns we have for sale cows and heifers of such strains as Clarets, Clippers, Village Girls, Missies and Miss Ramdens.

YORKSHIRES
From choice breeding stock. Four large litters, recently weaned; also some a few months old.
WELDWOOD FARM, Farmer's Advocate, LONDON, ONT.

ELMHURST LARGE ENGLISH BERKSHIRES
From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock; all ages. Satisfaction and safe delivery guaranteed.
H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO
Langford Station on Brantford and Hamilton Radial

OAK LODGE YORKSHIRE HOGS
We have a large selection of extra-good boars and sows of different ages. We are selling at prices that make it attractive for the purchaser. Write for what you want.
J. E. BRETHOUR & NEPHEWS, Burford, Ontario

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Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending December 20.

Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

Table with columns for Receipts, Top Price Good Steers, Top Price Good Calves, Top Price Selects, and Top Price Good Lambs. Rows include Toronto (Union Stock Yards), Montreal (Pt. St. Charles), Montreal (East End), Winnipeg, and Calgary for CATTLE, CALVES, HOGS, and SHEEP.

Market Comments.

Toronto (Union Stock Yards).

Cattle receipts at the Stock Yards for the week totalled thirty-five hundred head or about half of the usual weekly run; consequently prices held fairly steady in all departments, with an active demand prevailing. The number of choice killing cattle was rather limited, a large proportion of the cattle being medium quality butcher cattle and canners. The exceptionally high prices that were paid last week were not duplicated in this week's trading. For a half load of heavy cattle, twelve hundred and sixty pounds, \$12.50 was paid on Monday, while a load averaging thirteen hundred pounds and of scarcely as good quality realized \$12 per hundred. Other sales throughout the week were made at \$11.50 to \$12 per hundred. For butcher steers of ten to twelve hundred pounds, the best sales were: one head, \$12; seventeen head, eleven hundred pounds, \$11.25; twenty-two head, eleven hundred pounds, \$11.25; twenty-one head, eleven hundred and fifty pounds, \$10.90; and twenty-seven head, eleven hundred pounds, \$10. Other good sales ranged from \$10.50 to \$11.25. A few choice baby-beef animals realized fancy prices, two choice on Monday realizing \$13.25, with other good sales being made at \$12 to \$13. Straight loads of good killing cattle in this class sold as high as \$11.50, twenty-nine head of nine hundred and fifty pounds bringing that price, while thirty-three head, averaging nine hundred and eighty pounds brought \$11.25, and twelve head averaging nine hundred and twenty pounds, \$11.20. Other good sales were made at \$10 to \$11 per hundred. Common and medium cattle sold at \$8.50 to \$9.50 per hundred. Only a few choice cows were on sale, one selling on Wednesday at \$11, while two or three sold on Monday at \$10.50 per hundred. Common cows brought \$6.50 to \$7.75, and canners and cutters \$5.75 to \$6.25. Few choice bulls were on sale, one bull of twenty-one hundred pounds bringing \$10.50 per hundred. This was the top price, while a few others sold at \$9.50 to \$10.50 per hundred, with good bulls bringing \$8 to \$9. Bologna bulls sold at \$6.50 to \$7.50. There was little movement in stockers and feeders, but prices were steady. Feeders were selling from \$9 to \$10 per hundred, and the best stockers from \$8 to \$8.75, with \$9 being asked for some choice loads of the latter. Calves were active and steady, choice veal selling from \$15 to \$16 per hundred. Lambs were selling at steady prices, only twenty hundred head being available throughout the week. \$17.50 to \$18 was the ruling price, with one or two loads of choice lambs realizing \$18.25, and ewe lambs for breeding purposes bringing \$18.50. Sheep for a similar purpose sold from \$14.50 to \$16 per hundred, according to quality. Since the inauguration of the Free Freight Policy by the Live Stock Branch, Dominion Department of Agriculture, on October 11, very few sheep or lambs of breeding quality have gone to the killing pens, while approximately four thousand head of sheep and lambs, and nine hundred heifers have been shipped out to Ontario farmers under the supervision of the officers of the Branch.

Close to twenty thousand hogs were received in the Yards during the week, but several thousand of these were con-

Table with columns for Classification, No., Avg. Price, Price Range, and Top Price. Rows include STEERS, HEIFERS, COWS, BULLS, CANNERS & CUTTERS, OXEN, CALVES, STOCKERS, FEEDERS, HOGS, LAMBS, and SHEEP for TORONTO and MONTREAL.

signed to local plants or billed through to other points. Notwithstanding this record run, prices held up remarkably well, while the bulk of the hogs sold on Monday were contracted for at \$18.50 per hundred for selects, fed and watered, those on the open market sold at \$18.00 or 50 cents below last week's close. This level was maintained on Tuesday and Wednesday, and on Thursday the market advanced from 25 to 40 cents, closing at \$18.25 to \$18.40, fed and watered, and \$18.50 weighed off cars. The hogs on the whole are showing good quality, the average weight for the past four weeks ranging from one hundred and ninety to one hundred and ninety-five pounds.

Of the disposition from the Yards for the week ending December 13th, Canadian packing houses bought 188 calves, 61 bulls, 4,076 butcher cattle, 12,855 hogs, and 3,567 lambs. Local butchers made purchases amounting to 225 butcher calves, and 886 butcher cattle, 205 hogs and 609 lambs. Canadian shipments consisted of 54 calves, 103 milch cows, 90 butcher cattle, 468 stockers, 193 feeders, 277 hogs, 152 sheep and 101 lambs. Shipments to United States points were made up of 50 calves, 139 butcher cattle, 22 feeders, and 125 lambs.

The total receipts from January 1 to December 13, inclusive, were 286,796 cattle, 45,831 calves, 162,090 sheep and 426,050 hogs; compared to 290,570 cattle, 45,641 calves, 165,088 sheep, and

480,127 hogs received during the corresponding period of 1916.

Montreal.

Receipts of cattle during the week were fewer by seven hundred head than those of the previous week. The market opened on Monday at prices on a level with those prevailing at the close on Friday, but trading was inactive, and with the possible exception of canner stock, butcher cattle moved out very slowly. While there were a few head of steers and cows of much better quality than usual, the average quality of the run was lower than for some time past, the receipts consisting largely of common to medium stock, mostly of light weight. During the latter part of the week, a number of loads of very inferior stock were received and this gave additional slowness to the market. However, no price changes occurred, the light receipts evidently preventing any decline. One load of steers of fair quality weighing from eleven hundred and fifty to thirteen hundred pounds sold at \$11.75 per hundred. Steers weighing between ten hundred and twelve hundred pounds showed a lack of finish. A number of steers weighing ten hundred pounds sold from \$9.45 to \$10.75 per hundred, and those weighing less than one thousand pounds sold from \$7.50 to \$10.35 per hundred. One heifer of choice quality sold at \$11.25 per hundred, and heifers of medium to good

grading sold from \$8.50 to \$10.00. A considerable number of light heifers of dairy type were on hand, and sold from \$7 to \$7.50 per hundred. Two very fat cows sold at \$11 per hundred, three others of good weight and quality sold at \$9.85, while most of those of medium quality sold from \$7.75 to \$8.50, and common from \$7 to \$7.50. Bulls sold well, two extra heavy animals realizing \$11.25 per hundred. The majority of the offerings, however, were of poor quality, and sold from \$6.50 to \$8.50. Canners and cutters were fewer in number than last week, and were well taken care of. Most of the canners sold at \$5.75 per hundred, and cutters at \$6.35. The market for veal calves was steady at unchanged prices, but with a better quality run the average prices were advanced by 50 cents. Grass calves sold well at \$7 per hundred.

The market for sheep and lambs was active under a good demand from local buyers. Choice lambs sold at \$18 per hundred, while those of common quality averaged \$17. The best sheep offered sold at \$13 per hundred, and the majority of those of good quality at \$12.50; common sheep brought \$11 to \$12 per hundred.

Receipts of hogs were light, not enough being received to fill requirements. The packing houses are purchasing on their own account at country points in addition to buying at the Yards; but even under these conditions sufficient supplies are

lacking. Selects sold on Monday at \$18.50 per hundred, fed and watered, and maintained that price during the remainder of the week, the market closing fairly steady with no indications of a further advance. The number of light hogs being received is increasing. Prices for this class of hogs are high on account of a good outlet existing through the retail pork trade.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending December 13, Canadian packing houses and local butchers purchased 240 calves, 470 canners, 194 bulls, 822 butcher cattle, 929 hogs and 695 lambs. Canadian shipments were made up of 77 canners and 15 butcher cattle. No shipments were made to United States points during the week.

The total receipts from January 1 to December 13, inclusive, were 55,195 cattle, 53,650 calves, 70,977 sheep and 76,054 hogs, compared to 52,971 cattle, 45,127 calves, 57,308 sheep and 84,615 hogs, received during the corresponding period of 1916.

EAST END.—Of the disposition from the Yards for the week ending December 13, Canadian packing houses and local butchers purchased 115 calves, 1,667 butcher cattle, 624 hogs and 1,114 lambs. Canadian shipments consisted of 145 butcher cattle. No shipments were made to United States points during this week.

The total receipts from January 1 to December 13, inclusive, were 55,934 cattle, 49,491 calves, 49,186 sheep, and 46,462 hogs; received during the corresponding period of 1916.

Buffalo.

Cattle.—Offerings of cattle were comparatively light last week, resulting in anything in the butchering line selling a quarter higher. Values on shipping steers have declined all the way from three to four dollars per hundred in the West from the high time on choice grades, and the result was that buyers took hold of these grades here very slowly, it being a fifteen cent to quarter decline before any trading was done. Wholesalers who are killing shipping cattle maintain that they have made no money of late months and that more profit is being made on the medium and cheaper cow stuff than the steers. Best steers ranged generally from \$12.50 to \$12.60, with a load of fancy, good weight Canadian steers selling up to \$13.40. Yearlings ranged up to \$13 and \$14. Anything in the fat cow line sold readily. Feeling was strong on stocker and feeder stuff. Bulls brought a quarter higher prices, with the better kinds of milk cows and springers selling from \$2.50 to \$5 per head higher, other strong. Receipts for the week totaled 2,400 head, as against 5,050 head last week and 6,275 cattle for the corresponding week a year ago. Quotations:

Shipping Steers—Natives—Choice to prime, \$12.50 to \$13.50; fair to good, \$11.75 to \$12.25; plain, \$10 to \$10.75; very coarse and common, \$9 to \$9.75.

Shipping Steers—Canadians—Fancy grain fed, \$13 to \$13.40; best grass, \$12 to \$12.50; fair to good, \$11.50 to \$11.75; common and plain, \$9.50 to \$10.25.

Butchering Steers—Choice heavy, \$11 to \$11.50; Fair to good, \$10.50 to \$10.75; best handy, \$11 to \$12.25; fair to good, \$10 to \$10.50; light and common, \$8 to \$9; yearlings, choice to prime, \$12 to \$12.50; fair to good, \$10.50 to \$11.25.

Cows and Heifers—Best heavy heifers, \$10 to \$10.50; good butchering heifers, \$8.75 to \$9.75; fair butchering heifers, \$8.25 to \$8.50; common to fair, \$6.50 to \$7.75; very fancy fat cows, \$10 to \$10.25 best heavy fat cows, \$8.75 to \$9.25; good butchering cows, \$7.50 to \$8; medium to fair, \$6.75 to \$7.25. Cutters, \$5.75 to \$6.25; canners, \$4.50 to \$5.50.

Bulls.—Best heavy, \$9 to \$9.50; good butchering, \$6.50 to \$7.50.

Stockers and feeders—Best feeders, \$9 to \$9.75; common, \$5 to \$5.75.

Milchers and Springers—Good to best, in small lots, \$100.00 to \$140.00; in carloads, \$85.00 to \$100.00.

Hogs.—Some very heavy declines were noted in prices here last week, the drop being on account of the market at Buffalo, the week previous being altogether too high compared with other points. On the opening day of last week the top was \$17.40 and bulk sold at \$17.10 and \$17.15. Tuesday the average price was a little higher, bulk going at \$17.25 and the next three days values were on the decline. Friday, which was the low day, top dropped to \$16.75 and the bulk had to take

\$16.50 and \$16.60. Pigs the fore part of the week sold up to \$16 and \$16.25, with roughs \$15.75 to \$16 and before the week was out or on Friday buyers landed the bulk of the pigs and roughs down to \$15.50. Last week receipts were 32,600 head, as compared with 27,266 head for the week before and 41,500 head for the same week a year ago.

Sheep and lambs.—Market at Buffalo last week, notwithstanding that lamb values showed a heavy decline after Tuesday, was considerably higher than at any other marketing point. Monday best lambs sold at \$19.25 and Tuesday a few reached \$19.35. Wednesday's top dropped to \$18.85, Thursday none sold above \$18.75 and Friday, with Chicago quoting best lots at \$16.65, Buffalo's range was from \$18 down. Cull lambs brought within \$1 to \$1.50 cwt., of the tops. Sheep were higher the past week. Yearlings reached \$16.50, wether sheep, majority of which were two-year-olds sold up to \$14 and old ewes went from \$12 down. Receipts last week were 13,500 head, as against 8,756 head for the week previous and 20,800 head for the same week a year ago.

Calves.—Last week started with top veals selling at \$17.50, culls brought up to \$16 and fed calves were quoted from \$6 to \$9. Demand after Monday continued good and prices the next four days were held steady. Last week receipts totalled 1,500 head, being against 1,515 head for the week previous, and 2,350 head for the corresponding week a year ago.

Toronto Produce.

Live stock receipts at the Union Stock Yards, West Toronto, Monday, Dec. 24, were: 57 cars, 875 cattle, 29 calves, 966 hogs, 354 sheep and lambs. All cattle steady at last week's prices. Sheep and calves steady; lambs 50 cents lower. Hogs, \$18.50, fed and watered.

Breadstuffs.

Wheat.—Ontario, (basis, in store, Montreal.) No. 2, winter, per car lot, \$2.22. Manitoba (in store, Fort William, including 2½c. tax.)—No. 1 northern, \$2.23½; No. 2, northern, \$2.20½; No. 3, northern, \$2.17½; No. 4 wheat, \$2.10½.

Oats.—Ontario, according to freights outside, No. 2 white, 77c. to 78c., nominal; No. 3 white, 76c. to 77c., nominal; Manitoba oats (in store, Fort William)—No. 2 C. W., 80c.; No. 3 C. W., 76½c. extra No. 1 feed, 76½c.; No. 1 feed, 73½c.

Barley.—(According to freights outside) malting, \$1.29 to \$1.30.

Peas.—(According to freights outside) No. 2, \$3.70 to \$3.80.

Buckwheat.—(According to freights outside) \$1.50 to \$1.55.

Rye.—(According to freights outside) No. 2, \$1.78.

Flour.—Manitoba first patents in jute bags, \$11.50; second patents, in jute bags, \$11; strong bakers', \$10.60; Ontario winter wheat flour, according to sample in bags, \$9.95; Montreal, \$9.75; Toronto, \$9.70, bulk seaboard.

Hay and Millfeeds.

Hay.—Track, Toronto, No. 1, new, per ton, \$15.50 to \$16.50; mixed, per ton, \$13 to \$15.

Straw.—Car lots, per ton, \$9 to \$9.50.

Bran.—Per ton, \$35.

Shorts.—Per ton, \$40; middlings, per ton, \$45 to \$46. Good feed flour, per bag, \$3.25.

Hides and Wool.

City Hides.—City butcher hides, green, flat, 20c.; calf skins, green, flat, 23c.; veal kip, 20c.; horse hides, city take-off, \$5 to \$6; city lamb skins, shearings and pelts, \$1.50 to \$2.25; sheep, \$2.50 to \$4.

Country Markets.—Beef hides, flat, cured, 18c. to 19c.; deacons or bob calf, \$1.50 to \$1.75 each; horse hides, country take-off, No. 1, \$5.50 to \$6; No. 2, \$5 to \$6. No. 1 sheep skins, \$2.50 to \$3.50. Horse hair, farmers' stock, \$25.

Tallow.—City rendered, solids, in barrels, 13c. to 14c.; country solids, in barrels, No. 1, 12c. to 16c.; cakes, No. 1, 14c. to 16c.

Wool.—Unwashed fleece wool, as to quality, fine, 60c.; coarse, 58c.; washed wool, fine, 70c.; coarse, 65c.

Every farmer who desires to do business with **The Molsons Bank** is always assured of a courteous reception by local managers. And their object is to assist the farmer in a legitimate way, to make his land and stock more productive.

How About Sweet Clover ?

You have been thinking about it. Each year a few thousand more of our farmers are trying it out. Their experiences range from mildly favorable to the extremely enthusiastic. Its value as a sure grower, a splendid food producer and a wonderful soil builder is well established. As a better fodder crop, a bigger seed producer, an equal soil builder, we are offering our improved selected strain. It is known as Canadian Albotrea Sweet Clover. Write us for our descriptive pamphlet. It will tell you all about it.

Canadian Albotrea Clover Co. Limited
Warehouse and Office
LISTOWEL, ONTARIO

A Time To Be Cautious

It is no doubt a time to be cautious. But it is possible to be over cautious. There is no reason why a man should leave his money on deposit when he could as easily and with equal safety obtain 5% by investing it in

Mortgage Corporation 5% Debentures

At the present time, Mortgage Corporation 5% Debentures form a profitable and safe investment for idle money.

Interest at 5% is payable in cash at your local bank on the day it is due. Principal on the date agreed upon. The busy or inexperienced investor has no worry, no watching of values and markets. His security never shrinks.

Not a dollar has ever been lost by an investor in these Debentures.

An interesting booklet about "PROFITS FROM SAVINGS," which gives some very valuable advice, will be sent free on request. Write for it to-day.



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WE PAY THE HIGHEST MARKET PRICE IN CASH OR TRADE

The Tillson Company, Ltd.
TILLSONBURG, ONT.

Snow Ploughs

FOR TOWNSHIP ROADS

Snow Ploughs for Sidewalks

Stone and Stump Pullers

A. Lemire, Prop., Wotton, Que

Country Produce.

Butter.—Prices firmed slightly on the wholesales during the past week, selling as follows: Creamery fresh-made pound squares, 48c. to 50c. per lb.; cut creamery, 48c. per lb.; creamery solids at 44c. to 46c. per lb.; separator dairy 44c. to 45c. per lb., and dairy, 37c. to 38c. per lb. Oleomargarine.—32c. per lb.

Eggs.—New-laid eggs are very scarce and firmed a trifle wholesale, selling as 65c. to 70c. per dozen. Cold storage, No. 1s, 43c. to 44c. per dozen; se'ects, 47c. to 48c. per dozen.

Cheese.—New, large, 24c.; twins, 24½c.; old, 30c. to 31c.; twins, 31c.

Poultry.—Live weight prices kept practically stationary but dressed prices ad-

FOR SALE

Complete Water System

A complete plant which has supplied five families, but now replaced by connection with City Waterworks, is offered for sale at half Current Catalogue Prices as follows:

"Caldwell" Tank, 12,000 gallons, and 39-foot Tower, \$996.00 for \$498.00.

"Donaldson" Windmill, 10-foot wheel, on 80-foot Tower, \$400.00 for \$200.00.

"Donaldson" Windmill, 10-foot wheel on 30-foot Tower, \$207.00 for \$103.50.

"Erickson" Engine, \$200.00 for \$100.00.

Splendid opportunity to install an efficient water system, at low cost. Full description and particulars from

J. G. SAVAGE,

52 Trafalgar Ave., Montreal.

vanced materially as follows: (Dressed: Prices paid to producers)—Chickens, milk-fed, 28c. per lb.; chickens, ordinary, fed, 25c. to 27c. per lb.; fowl, 3¼ to 5 lbs., 20c. per lb.; fowl, 5 lbs. and over, 22c. per lb.; ducks, 26c. per lb.; geese, 24c. per lb.; turkeys, young, 35c. per lb.; turkeys, old, 30c. per lb.

Wholesale Fruits and Vegetables.

Apple prices have remained practically unchanged with an active demand—Ontarios ranging from \$4.50 to \$8 per bbl.; Nova Scotias from \$4.50 to \$6.50 per bbl.; Western boxed at \$2.10 to \$2.75.

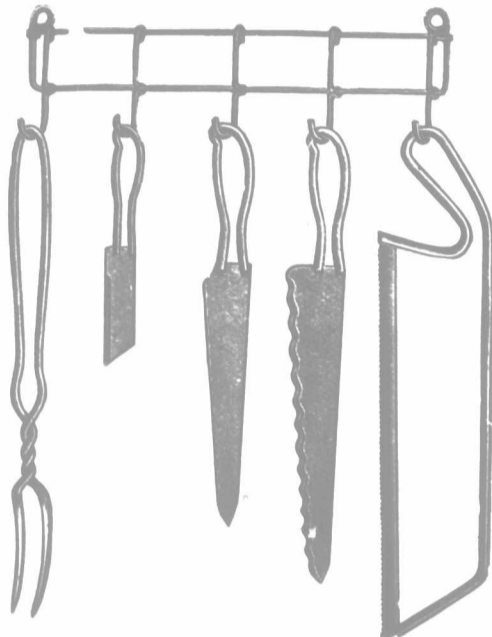
Potatoes did not vary in price, Ontarios bringing \$2.10 per bag and New Brun-

swick from \$2.25 to \$2.35 per bag.

YOU MAY HAVE ONE OF THESE KITCHEN SETS IN YOUR KITCHEN

THERE ARE MANY OTHER USEFUL ARTICLES TO CHOOSE FROM

HOW TO GET THEM



For Two New Subscriptions this Sanitary Kitchen Set, consisting of one all-metal Roasting Fork, Paring Knife, Waved Edge Bread Knife, Carving Knife and Meat Saw. Bright finish. Exactly as illustrated.

To buy one of these Kitchen Sets wholesale to-day would cost you \$1.50 or more.

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Bible. Clothes Line (50 feet) and Pulleys. Pickle Fork, (silver plated).

Two New Subscriptions.

Either Kitchen set as shown. Butter Knife and Sugar Shell (silver plated).

Three New Subscriptions.

Gem Food Chopper.

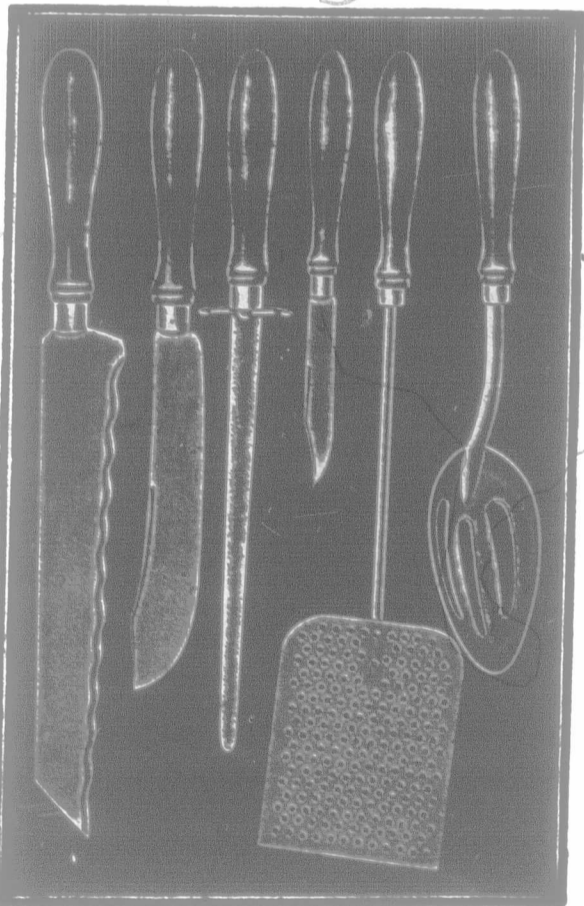
Four New Subscriptions.

China Tea Set (21 pieces).

If there are other gifts we have not suggested tell us what you want. We will gladly show you the way to get them.

A number of the articles listed above were bought before the war. They have doubled, some trebled in value. You get them at wholesale and peace-time prices.

As soon as you get enough subscribers to win the prize you wish, fill in the coupon and mail with cash to cover subscriptions. Then we can send your premium promptly. This year's Christmas Number will be included in each new subscription. You can promise your subscribers this big number worth 50c in itself. If you require sample copies we will gladly supply them.



For Two New Subscriptions this Complete Kitchen Equipment. The set includes Pan-Cake Turner, Basting Spoon, Large Butter Knife, Emery Knife Sharpener, Paring Knife and Bread Knife. All six pieces are of the best steel and are fitted with black rubberoid hardwood finished handles.

THE FARMER'S ADVOCATE, LONDON, ONT.

Gentlemen:— Enclosed find \$.....for.....New Subscriptions to The Farmer's Advocate for the following subscribers.

Form with fields for R.R., Town, and Name and Address.

I want as premium a..... Name and Address.....

Montreal Produce.

Horses.—Very little demand existed in the horse market last week, and it is possible that nothing more may be done until after the holidays. Meantime, prices were unchanged as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$225 to \$275 each; light draft horse, weighing 1,400 to 1,500 lbs., \$175 to \$225 each; small horses, \$150 to \$200 each; culls, \$75 to \$125 each; good saddle and carriage horse, \$200 to \$250 each.

Poultry.—Some very nice poultry was available in the market and prices were not regarded as out of the way by comparison with price of beef. The turnover has been fairly large. Turkeys were quoted at 32c. to 34c. per lb., while fine chickens ranged around 26c. to 28c., and poorer quality around 24c. Fowl were 19c. to 23c. and ducks 26c. to 27c. Geese were about the same price as fowl.

Dressed Hogs.—The tone for dressed hogs was somewhat weaker last week, but prices showed no great change. Fresh-killed, abattoir-dressed stock sold at 25 1/2c. to 26c. per lb., and country-dressed hogs were in good demand, at 24 1/2c. per lb.

Potatoes.—Offerings in the local market have been somewhat larger of late, and although demand has been very good, there has been some pressure to sell, and prices were somewhat lower. Car lots of Green Mountains were quoted at \$1.90 to \$2.00 per bag of 90 lbs., ex-track. In a smaller way, this stock changed hands at \$2.10 per bag of 80 lbs., ex-store.

Honey and Maple Syrup.—There was little maple syrup available, and the price ranged generally from \$1.40 to \$1.80 per gallon of 13 lbs., in tins; sugar is 15c. per lb. Honey held quite firm, and was in fair request. White clover comb was 19c. to 22c., and brown 17c. to 19c. per lb., while white extracted was 17c. to 18c.

Eggs.—The production of eggs is now light throughout the whole country. Dealers declare that it is almost impossible to get really fresh eggs. They, however, quote these at 60c. to 65c. per doz. for best, and 54c. to 55c. for ordinary fresh, with Fall fresh at 50c. to 52c. Cold storage eggs were steady at 45c. for selects, 41c. for No. 1, and 38c. for No. 2.

Butter.—Trade in margarine has not yet reached any particular volume, but promises to do so ere a great length of time. Meantime, creamery is holding its own at 41 1/2c. to 42c. to cover fine to finest September and October makes. Current receipts of creamery are available at 40c. to 41c. and dairies at 35c. to 38c.

Cheese.—Commission prices are 21 3/4c. for No. 1; 21 1/4c. for No. 2 and 20 3/4c. for No. 3.

Grain.—Oats are fractionally easier. No. 3 Canadian Western and extra No. 1 feed are 89 1/2c. per bushel; No. 1 feed 85c.; No. 2 feed, 82c.; Ontario No. 2 white, 84c.; No. 3, 83c. per bushel, ex-store. Manitoba sample wheat sold at \$2.05 to \$2.18 per bushel, ex-track, Ft. William, and rejected barley at \$1.28 1/2 and feed barley \$1.25 1/2 per bushel, ex-track.

Flour.—There is no change in the market. Manitoba first patents are quoted at \$11.60 per barrel, in bags; seconds are \$11.10 and strong bakers', \$10.90. Ontario winter wheat flour is changing hands at \$10.70 to \$11 per barrel for 90% patents in wood, and \$5.20 to \$5.35 in bags.

Millfeed.—The market is very firm with bran at \$35 per ton; shorts at \$40; middlings, \$48 to \$50; mixed mouille, \$56 to \$58, and pure grain mouille, \$61 to \$63 per ton.

Baled Hay.—Owing to the embargo by railway companies, export to the U. S. is light. The market is steady, however, at \$15.50 per ton for No. 2 hay; \$14 for No. 3; and \$11 to \$12 for clover mixed.

Hides.—Quotations this week are 22c. 23c. and 24c. per lb. for beef hides, Montreal inspection. Calf skins are 19c. to 20c. per lb. for grassers, and 28c. to 30c. for veals. Horse hides are \$5 to \$5.50 each; and lamb skins, \$4.25 each. Tallow, scrap fat is 3 1/4c. per lb., abattoir fat 8c. and rendered tallow 16c. per lb.

Chicago.

Cattle—Beeves, \$7.25 to \$14.35; West-ern steers, \$6.30 to \$12.75; stockers and feeders \$6.25 to \$10.20; cows and heifers, \$5.10 to \$11.20; calves, \$9 to \$16.50.

Hogs.—Light, \$15.30 to \$16.55; mixed \$15.90 to \$16.70; heavy, \$15.90 to \$16.70; rough \$15 to \$16.05; pigs, \$11.25 to \$14.50. Sheep—Lambs, native, \$12.50 to \$16.35.

Ontario Agricultural College.

Christmas Examinations, 1917.

MAXIMUM 1200.

FIRST YEAR.—1, McCrimmon, 1021; 2, Jukes, 999; 3, Ferguson 955; 4, Frith, 946; 5, Bates, 944; 6, Stock, 935; 7, Simpson, 929; 8, MacArthur, 914; 9, Graham, 909; 10, Eidt, 907; 11, Cole, 879; 12, Deneau, 874; 12, Irvine, 874; 14, McCague, 868; 15, Howe, 843; 16, Jamieson, 834; 17, Munro, 825; 18, Young, 823; 19, Smith, 817; 20, Chamberlain, 814; 21, Shoemaker, 812; 22, Jones, 809; 23, Macdonald, 803; 24, Coon, 794; 25, Clemens, 791; 26, Snyder, 771; 27, Clark, 749, *12; 28, Stirrett, 748; 29, Abadia, 743, *3; 30, Matthews, 739; 30, Watterworth, 739; 32, Maunsell, 736; 33, Gibbard, 725; 34, Barber, 724; 35, Welch, 718; 36, Greaney, 708; 37, Taylor, H. H., 707; 37, Sippel, 707; 39, Butt, 705, *3; 40, Stott, 704; 41, Webster, H. F. R., 703; 42, Katcharian, 699; 43, Rilett, 688; 44, White, 682, *10; 45, Ross, 681; 46, Lindala, 677; 47, Laing, 668; 48, Devitt, 662; 49 Taylor, W. D., 655; 50, Collier, 653; 51, Christensen, 652; 52, Bell, 649, *12; 53, Goodier, 648, *12; 54, Segal, 641; 55, Conway, 607, *12; 56, Sirrs, 604; 57, Brown, S. A., 601; 58, Alexander, 594, *1; 59, Brown, T. J., 585, *2; 12; 60, Webster, F. J., 578, *5; 12; 61, Featherstone, 571, *3; 62, Cohen, 564, *6; 12; 63, Ashby, 546, *12; 64, Williams, 544, *1, 7; 65, Hopkins, 526, *3; 12; 66, Thompson, 515, *6; 10; 12; 67, Bernal, 498, *1, 3, 8; 68, Bolton, 496, *3, 4, 6; 12; 69, Lowrie, 489, *1, 6; 12; 70, Lathey, 472, *4, 5, 7, 12.

List of Subjects.—1, English Literature; 2, Composition; 3, Arith. and Drainage; 4, Hydrostatics; 5, Chemistry; 6, Botany; 7, Field Husbandry; 8, Animal Husbandry 9, Dairy; 10, Poultry; 11, Apiculture; 12, Veterinary Anatomy.

MAXIMUM 1200.

SECOND YEAR.—1, Hopper, 931; 2, Maynard, 907; 3, Lindsay, 881; 4, Zavitz, 876; 5, Currier, 886; 6, Hansull, 851; 6, Harris, 851; 8, Hood, 847; 9, Hall, 843; 10, Murdoch, 838; 11, King, 837; 12, Porter, 823; 13, Begg, 808; 14, Smallfield, 800; 15, Jamieson, 795; 16, Mead, 793; 17, McKay, 791; 18, Leavens, 771; 19, Williamson, 758; 20, Frey, 749; 21, Arnold, 743, *5; 21, Patterson, 743; 23, Quirie, 734; 24, Williams, 729; 25, Patchett, 723; 26, Wood, 712; 27, Scott, 708; 28, Fraser, 689; 29, Silcox, 677; 30, White, 643, *5; 31, Whiteside, 595, *2.

List of Subjects.—1, English Literature; 2, Composition; 3, Surveying and Drainage; 4, Farm Mechanics; 5, Chemistry; 6, Entomology; 7, Landscape Gardening; 8, Botany; 9, Field Husbandry; 10, Animal Husbandry; 11, Dairying; 12, Veterinary Pathology.

MAXIMUM 1100.

THIRD YEAR.—1, Delong, 956; 2, Grant 918; 3, Shales, 917; 4, Campbell, 899; 5, Odell, 879; 6, Hunter, 873; 7, Oliver, 838; 8, Musgrave, 836; 9, Brink, 820; 10, Clark, 808; 11, Jackson, 795; 11, Munro, 795; 13, Quail, 780; 13, Scouten, 780; 15, Gunn, 776; 16, Sweeney, 764; 17, Aylsworth, 741, *1; 18, Gowland, 734; 19, Malyon, 720; 20, Caldwell, 687; 21, Steckle, 683; 22, Tice, 681; 23, Higgins, 680; 24, Jones, 664; 25, Mackenzie, 654; 26, Allen, 652; 27, Way, 649; 28, Matheson 643; 29, Stewart, 629; 30, Anderson, 626; 31, Light, 600; 32, Lamont, 594; 33, Almey, 582; 34, Minielly; 567, *5; 35, Stillwell, 560, *5; 36, Cook, 547.

List of Subjects.—1, English Literature; 2, Economics; 3, French; 4, Heat, 5, Inorganic Chemistry; 6, Quantitative Chemistry; 7, Geology; 8, Botany; 9, Systematic Entomology; 10, Economic Entomology; 11, Bacteriology.

* Indicates subjects upon which passing standing has not been obtained.

Sale Dates.

Jan. 3, 1918.—John Knox, Millbank, Ont., Holsteins. Jan. 3, 1918.—Mrs. E. J. Jackson and Sons, Teeswater, Ont.—Aberdeen-Angus. Jan. 29, 1918.—Victoria County purebred Stock Association, Lindsay, Ont.—Shorthorns. Feb. 23, 1918.—W. A. Dryden, Brooklin, Ont.—Shorthorns.

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Allies Face Serious Meat Shortage

There is a world shortage of meat. In Europe there are 115,000,000 fewer stock animals than before the war. The situation is so critical that meat is now one of the vital factors in deciding the outcome of the war.

The fighting forces of the Allies are fed heavily on meat, because meat, especially bacon, supplies a large amount of fat—and fat is worth twice as much as starch for producing energy. Meat is the food with "the punch."

The millions of soldiers and sailors in the Allied armies and navies must be ensured adequate supplies of this "fighting" food. The vast forces of workers in munition factories, shipbuilding plants and dock yards, and the women and children of Great Britain, France and Italy also require a huge supply of meat.

Some idea of the vital need for pork products overseas is given by the statement of British Imports of bacon and hams since the beginning of the war.

In 1913 they were.....	633,000,000 lbs.
In 1914 they were.....	664,000,000 lbs.
In 1915 they were.....	896,000,000 lbs.
In 1916 they were.....	1,006,000,000 lbs.

There has been no increase in the world's hog production to meet this enormous increase in consumption.

Instead, there are 32,425,000 fewer hogs in Europe than before the war. In the United States the receipts at Stock Yards up to the end of October 1917 show a decrease of 4,721,223 hogs, or 14 per cent. less than the same period in 1916. In Canada the receipts at Stock Yards from the first of January to end of November 1917 show a decrease of 13 per cent. as compared with the same period in 1916.

The foregoing figures indicate the seriousness of the meat situation which can only be met by a large increase in production in Canada and the United States. On us and our American neighbors lies a great responsibility.

The quickest way possible to meet the meat crisis is with hogs, because hogs are very much more prolific than any other stock animal and are ready for market at an early age.

Hogs also produce more meat from a given amount of food than any other stock animal.

They also produce more dressed carcass in proportion to live weight, and the carcass contains more edible meat in proportion to bone than any other animal.

Pork and bacon are about 50 per cent. fat which is so vitally needed in the rations of our fighting men.

Bacon is also the most compact form in which meat and fats can be supplied to the armies. It takes up the minimum of space in freight cars, ships, transport wagons and in supply depots at the front. It is easily handled, it keeps, it is easily cooked and readily digested.

Canada and United States Government Control

To encourage the producers, the Governments of Canada and the United States have taken steps to stabilize the market and protect the producers in every way possible.

The Dominion Government now controls and restricts the profits of packing houses. The hog producer is assured his fair share of the price paid by the consumer.

The Flour Mills are under a form of

license with restrictions on profits. The export of bran and shorts is under control.

The United States Food Administration also states that, by a license system of manufacturers and distributors, it will do all within its power to see that the prices of pork are maintained in a ratio to feed prices that will cover not only cost of production but proper remuneration to the producer.

The action of the Governments of Canada and the United States indicates a serious endeavor to give stability to the market for hogs. In addition, there are two other factors that will be effective:—(1) The tremendous decline in European and American hog production. (2) The constant increase in British imports of hams and bacon since the beginning of the war.

Save the Young Sows

Young sows which are slaughtered now only produce about 150 lbs. of meat per sow, whereas each of these young sows through her progeny could produce, at a moderate estimate, 1,500 lbs. of meat within a twelve month period.

Every pound of pork that can be raised is urgently needed. Every

soldier in the Canadian and British Armies requires $\frac{1}{4}$ lb. per day to maintain the highest bodily efficiency. Every soldier in the great American army now being raised will require a like amount. The armies of Italy and France must all have meat.

Canada has responded nobly to every call that has been made for

men, for money and for farm produce. Today's call for increased hog production is one of the most urgent and vital that the Allies have ever made to Canada. There is an individual responsibility—and every person who can raise hogs should seriously consider the possibility of raising at least one or two extra litters in 1918.

Dominion of Canada Department of Agriculture

LIVE STOCK BRANCH
OTTAWA



How is Your Stock Doing This Winter?



Are your horses, cattle and hogs out of condition, scraggy, hide bound, eating their heads off and getting little good from their feed? You know from past experience when your stock has been around the stables for a while they fall off, showing they are missing something. What they miss is the herbs and roots they formerly got while on pasture, and which are absolutely essential to animals' digestion. These must be replaced.

Other farmers have solved the problem successfully and point the way for you. They mix INTERNATIONAL STOCK FOOD TONIC with the feed and the results are astounding. The animals pick up as if by magic. Pretty soon you can begin to cut down on the feed rations. Here's the reason. You know you can't keep water in a sieve. So it is with your animals. If their digestive organs are not extracting and assimilating the nourishment from the food, the animals can eat their heads off and not get any fatter because the food simply passes right through the system.

INTERNATIONAL STOCK FOOD TONIC mixed with the feed supplies the necessary herbs, roots and bark to tone up the whole system particularly the digestive system.

International Stock Food Tonic

FOR YOUR HORSES

Keep horses thrifty and healthy with nice glossy coats. If you have a horse that is hide-bound, rough, off its feed or in a run-down or over-worked condition, use INTERNATIONAL STOCK FOOD TONIC. The remarkably quick results obtained will be evident in the improved, all-round condition and appearance of the animal.

FOR YOUR COWS

INTERNATIONAL STOCK FOOD TONIC tones up the sluggish digestive organs of your milch cows, assisting them to extract all the milk producing substances from the food. The cows thus give a larger flow of richer milk.

FOR YOUR HOGS

INTERNATIONAL STOCK FOOD TONIC increases your hog profits by giving quick growth and by keeping hogs healthy. It is not what a hog eats but what is digested and assimilated that means rapid growth and profitable feeding.

50c. and \$1.00 Packages Large Pails at \$3.75 Lithographed Tins at \$1.50

Sold by all dealers. Its use is guaranteed to keep your stock in better health and make you big, extra profits for its low cost of feeding. Remember you get "3 feeds for 1 cent."

READ THESE LETTERS

Dear Sirs:—
I have been using your INTERNATIONAL STOCK FOOD TONIC now for four years on all my stock—especially horses and cattle. I find it pays me well to use it as it keeps them healthy and thriving, improves the appetite and increases the quantity of milk. It certainly keeps stock in fine shape, and I would not be without it.
(Signed) JOHN S. HOLDON,
President of the Markham Producers' Association.
Markham, Ont., Sept. 22nd.

Dear Sirs:—
I always found your INTERNATIONAL STOCK FOOD TONIC to be a valuable tonic on my farm, and I have now used it for the past five years and have not had a sick horse or cow for one single day in that time. My six cows are as fat and healthy now as at any time in the summer and are always ready for their feed, and am certain they are giving more milk than other folks' cows who don't feed INTERNATIONAL STOCK FOOD TONIC, as it keeps the animals healthy and in good shape whether horses or cows or pigs.
(Signed) WM. H. DAY,
Waterville, Que., March 19th, 1917.

Dear Sirs:—
I use a lot of INTERNATIONAL STOCK FOOD TONIC and have for years. There is nothing like it for live stock. It keeps them healthy and thrifty with a good appetite, and I use it every winter, as it certainly helps to bring stock through in much better shape for the spring. A number of my neighbors now use your Stock Food, as I have highly recommended it to them.
Yours very truly,
(Signed) FRANK SINKLER,
Admiral, Sask., Nov. 25th, 1917.

Dear Sirs:—
I have used several stock tonics, but none can come up to the "International." I am feeding it to my hogs and milch cows with good results. I am also getting good results from your Poultry Food Tonic.
I sold six pigs last fall that were one week less than five months old and weighed 172 pounds apiece—something I could not make them do without INTERNATIONAL STOCK FOOD TONIC.
(Signed) JOHN S. BEHARREL, R. R. No. 3,
Shedden, Ont., Jan. 18th.
R. R. No. 1, Calumet, Que.

Dear Sirs:—
I know your INTERNATIONAL STOCK FOOD TONIC is a splendid preparation, both as a milk producer and a conditioner, and your INTERNATIONAL POULTRY FOOD TONIC is excellent.
Yours very truly,
(Signed) SAMUEL PATTERSON,
Belton, Ont., R. R. No. 1, May 22nd, 1917.

Dear Sirs:—
We have been using your GROFAST CALF MEAL on two calves, and we are going to have a picture of them taken and will send you a copy as we consider them two of the best calves we have ever raised, and they have not had one drop of milk—simply GROFAST CALF MEAL.
Yours truly,
(Signed) EUGENE MURPHY,
Mount Forest, Ont., March 1st.

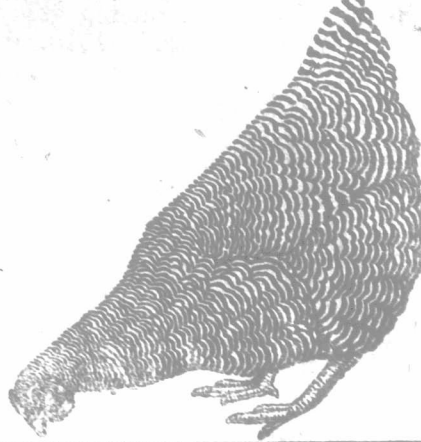
Dear Sirs:—
I have used 500 pounds of GROFAST CALF MEAL this year and never used the like of it. My calves are as fine a bunch as I ever raised on milk.
(Signed) JAMES BENNETT,
R. R. No. 1, Calumet, Que.

Dear Sirs:—
Kindly ship me at once by freight twelve pails of INTERNATIONAL STOCK FOOD TONIC. You will note this is the second twelve-pail order I have bought this season. I have used a lot of INTERNATIONAL STOCK FOOD TONIC, as you will see by your records, and find its use very profitable to me.
(Signed) J. H. TURNER,
Paisley, R. R. No. 3, Feb. 27th, 1917.

Dear Sirs:—
Your GROFAST CALF MEAL is great stuff to make calves grow, and I wish you would give me your price on 200 pounds.
Yours very truly,
(Signed) G. S. SEIBOLD,
Kendal, Sask., Nov. 8th, 1917.

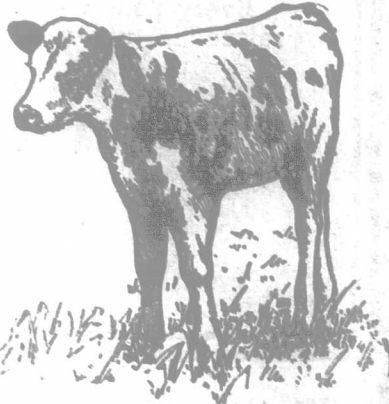
International Poultry Food Tonic

HOW ABOUT EGGS THIS WINTER AT SKY-HIGH PRICES—Give your hens the roots, herbs and seeds they need to make them lay in winter and you will be handsomely repaid. Thousands of farmers and poultry raisers have found these necessary tonics perfectly combined in INTERNATIONAL POULTRY FOOD TONIC, and are making big money year after year. It stimulates the digestive and reproductive organs, causing the hens to assimilate greater nourishment from the feed they eat, and making them lay as regularly as in summer. One extra egg per month from each hen will pay for all the tonic used. Sold by dealers everywhere—25c., 50c. and \$1 packages. Don't forget to use International Louse Killer generously—clean hens and the best layers.



International Grofast Calf Meal

This famous calf food is prepared to raise calves without the use of new milk. Three calves can be raised on Grofast and skim-milk at the cost of one fed on new milk. It is important that every man who has calves to raise should know about and use International Grofast Calf Meal. When you use GROFAST CALF MEAL in raising calves you save the cream and butter-fat, as well as sturdy, thrifty calves. It is easily mixed; calves like it. GROFAST CALF MEAL is put up in 25, 50 and 100 pound sacks. You can get it direct from us or your local dealer, but in any case, make sure you ask for INTERNATIONAL GROFAST MEAL.



International Stock Food Co., Ltd., Toronto, Canada

Also manufacturers and sole proprietors of International Poultry Food Tonic, Grofast Calf Meal, International Louse Killer, Silver Pine Peeling Oil, International Worm Powder, Day Patch White Liniment, International Colic Remedy, International Louse Remedy, International Distemper Remedy, etc.