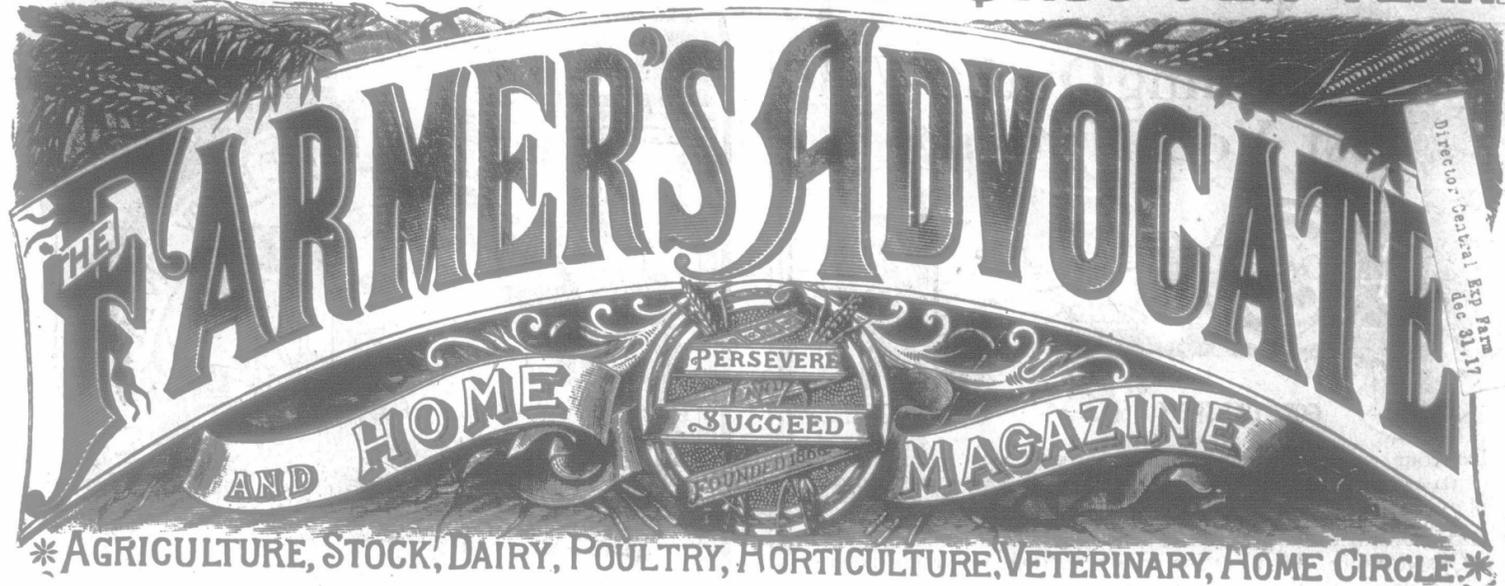


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Vol. LII.

LONDON, ONTARIO, DECEMBER 20, 1917.

No. 1317

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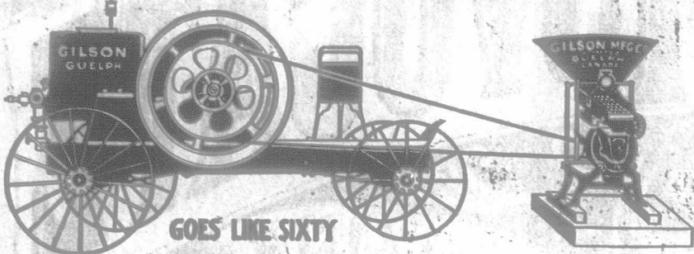
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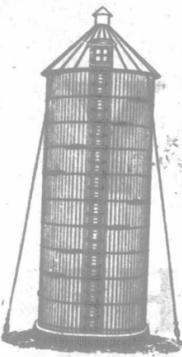
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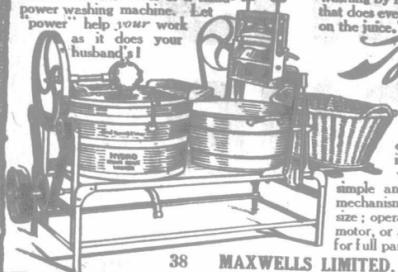
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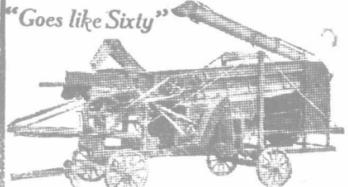
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LII.

LONDON, ONTARIO, DECEMBER 20, 1917.

1317

## EDITORIAL.

What about the extra sow?

Canada must watch her step.

Unity means strength—divided we fall.

Do your part to make it a sensible and helpful Christmas. Give useful gifts.

For a December election there seemed to be plenty of mud for both sides to rake.

Shingles or old bags where glass should be are poor light, and openings are poor protection.

Some politicians apparently believe that the end justifies the means. These are found on both sides.

Live-stock prices, both for finished fat stock and choice breeding stock, are high. The outlook is bright.

It took an election campaign to reveal to the authorities the fact that labor was scarce on the farms, and that farmers, their sons and hired men should be exempted.

Setting one section of Canada against another is no credit to the campaigners of either political party, and we are sorry to say both sides have gone the limit in this direction in the campaign just closed.

The shortage of coal in some parts of Canada is changing the line, "Grow old along with me," to "Grow cold along with me." The farm wood-lot comes in handy just now. It warms the owner twice—cutting and burning.

There is about 80 cents per pound between the value of a champion steer and an ordinary first-prize winner. This was revealed at the Toronto Fat Stock Show where the champion went at one dollar a pound, and first-prize winners, almost but not quite as good, at around 20 cents per pound.

Canada has considerably over thirty thousand miles of railways which have cost the people of this country 43,613,949 acres of land, over \$330,000,000 in building Government roads, over \$233,000,000 in cash subsidies, and bonds have been guaranteed to the extent of over \$400,000,000. This does not look like a bad case for Government-owned railways.

If those city people who complain of the H. C. of L. would take a glance over the figures in the 1915 report of the Ontario Bureau of Industries referring to population in Ontario, they would see something of the reason for rising prices of most farm produce. From 1872 to 1912—40 years—the rural population of Ontario actually decreased 34,336, while the urban population increased 1,054,417. If conditions favor living in town the people move to town, as they have done, and fewer stay on the land.

Now that the election is over, the defeated political outfit is absolutely sure that the country will go to the dogs, and the other believes that it has saved everything. When will the public realize that no matter which party is in power the affairs and business of the country go on much as before? To read some political propaganda put out by both sides, the elector would almost think that if the party which the propaganda opposed were elected that the entire country would go straight to oblivion and there would be no use of waking up the morning after the polls closed.

### A Problem Which Must be Faced.

Few people realize what a Province of cities and towns Ontario is. We who are interested in agricultural development are still prone to talk about this as a purely agricultural country. True, Canada must always be a country in which agriculture is the industry of first importance, but Canada is a big country and contains provinces which may become more noted for manufactured than for agricultural products. Ontario at the present time turns out more than half the manufactured products of the entire Dominion, and Quebec the bulk of the remainder. In 1912, before the war, Ontario had 272 incorporated towns and villages and 20 cities with a preponderance of urban population over rural of over 400,000. Let us look back a little. According to the Bureau of Industries Report for the Province, Ontario had, in 1872, 406 townships with a population of 1,047,931, and 122 cities, towns and villages with a population of 374,854. Forty years later, in 1912, the change that had taken place was enough to cause anyone interested in the development of the Province to pause and think. Ontario had developed wonderfully. The Province then had 544 townships (138 more than in 1872) but their population was only 1,013,595, or 34,336 less than it was 40 years before. What had happened in the urban centres? In 1912 Ontario had 292 cities, towns and villages, (170 more than in 1872), with a population of 1,429,271 showing an urban increase for the four decades of 1,054,417 while the townships in the same time decreased population by 34,336. Of course, during this time villages and towns with a population of slightly over 140,000 had been added to the urban section of the community from the townships. Even taking this into consideration, it would leave the strictly rural population about stationary for 40 years, while the urban made an increase of nearly one million souls.

What does it all mean? Simply this: Manufacturing has been encouraged and has made a rapid advance. Urban population means a manufacturing people, and Ontario had over 400,000 more urban than rural dwellers before the war. Producers of foodstuffs were numerically inferior. Consequently prices were bound to be high. The difference is even more marked to-day. Ontario is a manufacturing Province.

What about all Canada? As a Dominion, Canada is looked upon as strictly an agricultural country. The great West must for all time be pushed forward as a farming district. In the last census decade, between 1901 and 1911, the urban population of all Canada taking cities, towns and villages of 1,500 or over increased 1,073,638, whereas the rural increase was only 761,690, or over 300,000 less. This rapid increase in urban population continued in greater contrast to the rural increase up to the time war broke out in 1914. Canada's manufactured products were worth over one billion dollars in 1911. Canada's field crops in 1917, when they had the greatest value they ever had, were worth the same amount. With millions of acres of the finest farming land in the world, with whole provinces of it, a country essentially, logically and fundamentally agricultural, has developed in another direction for a time and Ontario has put out the bulk of the manufactured products.

What about after the war? True, everyone desires that business continue good, that wages bear a fair relation to the cost of living, and that the country prosper, but at the same time before Canada reaches the stage where production of farm crops meets the increasing demands, more people must be found on the farms, and to get them there they must be assured of at least as good a living as they can get in town. City people say to the farmer: "Pay the price and you'll get the help." What price will keep the farmers' own sons and daughters in the country? Who can answer? What price will keep these, the best of young stock for

the rural or any community, in the country? Simply a reorganization which will give the farmer what is coming to him, and the city consumer a fairer deal without too many living in between. What this country needs is fewer parasites, and then legislation which will ensure fair profits, no more, no less, for all. The returned soldiers are not anxious to go on the land, and no one can blame them. As one was heard to say: "What have we done to deserve such a sentence." While the farm is a healthful and free place to live, the average young man sees little in farming. His actions prove his feelings. After the war agriculture must be looked to to sustain this country over the reconstruction period. If the best success is to be obtained there will of necessity be required a little reconstruction of Government policies toward agriculture. Immediate action may not be possible, but thinking on this subject is quite in order. Will Ontario show a similar state of affairs over the next forty-year period, and will Canada continue to grow much more rapidly in urban centres than in rural districts? This is a problem which must be faced.

### The Importance of Agriculture Recognized.

It now appears as if the Canadian authorities were beginning to realize that without at least a few men on the farms it would be a rather difficult proposition to grow more wheat than usual, to feed more hogs than usual, to milk more cows than usual, and to finish more beef than usual. Increased production depends on several different factors, one of which is labor, and labor is at a minimum now. When first starting work some of the Tribunals seemed to operate upon the assumption that troops for the ranks were the only consideration and they refused exemption to practically all the fit men who came before them, whether they were engaged in farming or other industry which many believe necessary to the winning of the war. We have heard of young farmers farming for themselves having been ordered into uniform and given only a very short time to dispose of their business. This may be necessary, but, if it is, little can be expected from the call for increased production. Happily, however, the appeal court to which young men have access has taken a somewhat different view of the matter, and the great majority of farmers, farmers' sons, and bona fide farm laborers, who have applied, have been granted exemption. Moreover, it has been stated clearly by the Minister of Militia, by the Premier, and by their colleagues that farmers and farm laborers will not be taken for the army, and that their efforts at home on the land will render greater service in the fight than if they "joined up." Lived up to, these statements will reassure farmers and place them in a position to lay plans for bigger crops and more live stock next year. If all the young men were to be taken from the farms, of course, production would be curtailed. It has taken a long time to get this point driven home, but now daily newspapers are taking up the argument in favor of leaving some men on the land, and many speakers who never before showed so much interest in the farmer have gone on record as in favor of assuring production of food products by retaining on the land a few men who know how to farm. There is good and sufficient reason why these men should be left to produce. Canadian farmers can produce more surplus food per man than farmers of any other country. Particularly is this true of the grain-growing farmers of the prairies, and the live-stock farmers of the other provinces. We are told that food is scarce. Everyone knows that armies cannot fight without it. It must then be good war business to do everything possible to save men to produce food. The nonsense about boys, old men, women, and the physically unfit being able to operate our farms is passing. The crops of France, and the

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women and old men of France have worked like Trojans, have decreased to a most alarming extent since the men left for the front. The crops of Canada would show an even worse condition if all the men were taken. At last the farmer is assured that some satisfactory help will be left him. Now is the time to do the planning to make the best of it. As during the last years, let us plan to make every hour count in food production. Labor is already inadequate, and each man must be used to best advantage.

### Nature's Diary.

A. B. KLUGH, M. A.

Birds exhibit in their bodily structure many very interesting adaptations, and one of the most interesting of these is the conformation of the bill. Beebe puts the matter very nicely when he says, "Tie a man's hands and arms behind his back, stand him on his feet, and tell him that he must hereafter find and prepare his food, build his house, defend himself from his enemies and perform all the business of life in such a position and what a pitiable object he would present! Yet this is not unlike what birds have to do, and it is made possible, and chiefly executed, by one small portion of the bird—its bill."

The finding and securing of food being the most important problem which birds have to solve for themselves, it is for these purposes that we find bills most adapted. This is so universally the case that we may often judge accurately the kind of food of a certain bird from a glance at its bill.

If we look at the bill of a Merganser we notice that it is toothed along the inner edges of the mandibles, (See Fig. 1) in a manner which gives these ducks their common name of "Sawbills", and we find that the Mergansers feed exclusively on fish. They carry with them a very efficient pair of "fish tongs". Now if we look at the bill of some other kind of duck, one such as the Mallard or the Black Duck, which is given to feeding on small creatures which it finds in the mud at the bottom of the water, we see that the bill is fashioned like a combination of scoop and strainer, so that a bill-full of mud may be scooped up, the semi-liquid mud allowed to run out, and the organisms retained and swallowed.

The Avocet, a bird of the sloughs of the West, has a very efficient probe with which it can seek out worms and snails concealed in crevices, in its recurved bill (See Fig. 2).

The Woodcock also probes for its food, but it does so, not in the water, but in wet soil. Its bill is remarkable in that the tip of the upper mandible, is very pliable and sensitive, so much so that the end third of this mandible can be freely moved while the inner two-thirds of the mandibles remain closed. In this way the Woodcock can feel for the food which it cannot see, can seize the organism and draw it forth.

The bill of the Skimmer, a marine species which is common off the coast of the southern States, and which is occasionally seen off the coast of Nova Scotia, is remarkable in that the lower mandible projects considerably beyond the upper one. Both mandibles are as thin and pliable as paper-knives. This peculiar form of bill is an adaptation to a unique method of obtaining food. The strong wings of this species enable it to fly very close to the surface of the water, so close in fact that the lower mandible dips below the surface, thus ploughing a furrow and catching up any animals which chance to be floating on the water.

In the Hawks and Owls we find a bill admirably adapted for tearing flesh, and in the Shrikes, though they belong to an entirely different order we find a bill much like that of a bird of prey and we notice that these birds are likewise given to feeding on birds and small mammals.



Bill of Merganser.



Bill of Avocet.



Bill of Skimmer.



Bill of Crossbill.

Among the Sparrows and Finches we see a heavy bill, adapted for crushing seeds, a form of bill which reaches its highest development in the Evening Grosbeak in which species the bill is strong enough to crack even such hard objects as cherry stones.

The bill of the Crossbills, (See Fig 4) is decidedly unique, but it is a very useful implement for extracting the seeds from between the tight scales of the cones of evergreens upon which the Crossbills mainly feed.

The stout, straight bill of the Woodpeckers is a most efficient "pick-axe" and enables these birds to gain entrance to the burrows of the wood-boring larva upon which they feed.

These are a few examples of bill-adaptations and the reader can, by observation, find many more for himself.

### Government by the People.

BY ALLAN MCDLARMID.

We hear a good deal these days about the lessons that have been taught by the war, but there is one of which very little mention has been made, and which has, I think, been plainly demonstrated, and that is that a great part of the world is not yet ready for self-government. It may be all right to "make the world safe for Democracy", but it's a pretty evident thing that Democracy wouldn't yet be safe for all the world. (Of course the outstanding proof of this statement, just at present, is Russia. We can all see now that Russia would have been better off if she had kept her Czar a few years longer, or until the mass of her people had acquired a hazy idea of the elements of self-government. Russia reminds us of a rooster that has lost his head by the old-fashioned block and axe method, but is still flying here and there without either aim or understanding. That is what Democracy amounts to for some people and some nations.)

But certain things have happened in this country lately that show us we don't need to go as far as Russia for peculiar methods of government "by the people." The thing to which I refer particularly is the "Exemption Court" system which has been in operation throughout this country for the past few weeks. Men taken from "the people" were appointed as judges for these courts, although they gave no evidence of having the "judicial temperament" or any other particular qualifications for the position. A review of their work and the decisions they have given on the cases tried by them up to the present go to show that if our rulers and judges are to be taken from the rank and file of the nation, then the rank and file must be educated. It will be necessary to give a couple of examples to prove our point. It is evident to anyone who understands the situation at the present time that the cheese industry is one of the important branches of agriculture, supplying as it does one of the most compact, nourishing and altogether valuable foods that this country has for export to the seat of war. Nothing else can quite take its place. But at some of our tribunals cheesemakers have not been granted exemption, although there is already

too few of them in this province, and it was with difficulty that some factories secured their makers last year. Here is what happened at one court. A young cheesemaker just two days past the minimum age fixed by the government, applied for exemption. He had made as high as eighty-five cheese a week during the past summer and had done it alone, owing to the scarcity of help. His employers wanted him back next year, as his work had been satisfactory. Moreover he already had a brother in the trenches in France. When he protested at the judge's decision to refuse him exemption, saying that the farmers needed the cheesemakers, the judge replied that the farmers could keep more pigs and get rid of their milk that way.

Now for the second case. At a tribunal not twenty miles from the one already mentioned a young man applied for exemption. He owned a small general store at a country cross-roads which was looked after by his sister. His own occupation would be pretty hard to define, but he could be spoken of, probably, as a furnisher of supplies for the wet-goods department of his dry-goods store. The community being one where this was contrary to law and the occupation consequently a hazardous and somewhat strenuous one, the judge of the court was moved to grant him exemption. His business was evidently looked upon as a necessary one, as a number of the young men of the place were dependent on him for their regular supplies. At any rate his invaluable services are no longer in danger of being lost to his native land. He stays at home while the cheesemaker who last summer sent across some seventy tons of food supplies is conscripted and becomes a consumer at a time when it is admitted to be of the greatest importance that we have at least a fair proportion of producers.

This question of who should do our fighting for us ought to be decided by some hard and fast rule and then no unfairness or favors could be handed out to any man. If the law provided that the producer of certain war-time necessities should be exempt from service in the army, then the duty of the exemption court officers would be clear and their feelings or private opinions would not be consulted, as they evidently are at present. As it is at present a judge of an exemption court would need to be a Solomon for wisdom and a Lincoln for honesty of purpose to have any hope of dealing out justice to all comers. If this war is to bring us any compensation for all it is costing us it will be by increasing human efficiency and making either a worker or a fighter out of every man who has the necessary strength of mind and body. So it seems to me little short of a crime that men who are, in plain words, too lazy to earn their salt, should be allowed to remain in this country when they might be doing a man's work at the front; and at the same time have our government sending across men that could and would be doing ten times as much for the cause if they had been kept at home. If we are to have selective conscription let it be selective in every sense of the word and take those that are not in the vitally necessary occupations. If we neglect to draw this line of distinction the chances are that after a certain point every man we send over to France will go at the risk of being starved through our inability to send him food. "There's no money in that."

## THE HORSE.

### Docking Horses.

EDITOR "THE FARMER'S ADVOCATE":

Docking horses has in many localities in Ontario become a common custom, especially in the heavy breeds, and its practice should be discouraged especially when done indiscriminately. It is up to the practicing veterinarians as well as the judges at the fall fairs to do all they can to discourage the practice. It is not only cruel but absolutely foolish. How often in the hot summer months do we see, in going through the rural districts, the farm horses, colts as well as the work horses, standing under a shade tree doing all in their power to protect themselves from the flies and their only weapon is their muzzle, the tail being docked so short that they cannot reach to the external angle of the ilium, and where is the advantage? Of course, we are told that the tail can be done up much neater which adds to the appearance of the animal. Now, even if this is the case it is only a fad which the people have become accustomed to, and the undocked horse appears to be out of fashion, but let us see. Take for example men's suits, go back ten years and we have the full peg trousers, the wide padded shoulders in the coats, etc., and a man who didn't have such a suit was considered poorly dressed, but now let a man go to a tailor and order a suit as above mentioned and walk down a street in town and who would consider him well dressed, why? For the simple reason that fashion has changed and we are taught to think the other extreme is the smarter appearance. If you have a colt you are contemplating having docked this winter reconsider the matter, and unless the dock is crooked or some other good reason exists, just leave the colt as nature has created him, as you cannot improve on nature, also for the sake of those who think that an article such as this is written by some city man who doesn't know anything about a horse, I will mention the fact that I am a veterinary surgeon practicing in a rural district where the Clydesdale is the predominating breed, and I am doing all I can to discourage docking unless some good reason exists for doing so, and I have reached this conclusion after docking a good many horses and watching the results. I will admit the operation in itself is not particularly painful if done by a qualified man. It is very simple to inject a local anesthetic along the coccygeal nerves and the

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patient scarcely knows what is done, but when we see the poor brute attacked by flies and his only natural protection taken from him, and very few of the men who practice docking will even go to the expense of putting a sheet on the docked animal to protect him from insects, we can see the folly of the practice. I do not advocate legislation to make the practice illegal, for there are cases where it is permissible but in probably ninety-five per cent. of the cases, there is absolutely no necessity for it, and I believe we can do a great deal towards making the docked horse a back number by taking it up in our veterinary association and have each practitioner discourage it in his own territory. The agricultural papers, especially "The Farmer's Advocate", which I believe leads in Ontario as an agricultural paper, can be a big factor to help us eliminate this ridiculous practice by publishing from time to time articles which will deal with the matter in a sensible manner and the public will become convinced that docking is a detriment to the horse and not an improvement.

Oxford Co., Ont.

G. P. M., V. S.

**Diseases of the Feet—IV.**

**Laminitis—Inflammation in the Feet—Founder.**

Laminitis, commonly called *founder*, consists in inflammation of the sensitive laminae which surmount the walls of the bone of the foot, and are attached to the horny or insensitive wall by small, leaf-like processes, which are very numerous and correspond in number and depth to the insensitive laminae found on the inner surface of the wall, the leaves of the one fitting into and being firmly united to those of the other. The disease appears in two forms, viz., inflammation primarily limited to the sensitive laminae and sensitive sole; and *ostitis*, or inflammation involving the bone of the foot from the first. The causes and tractability of the two forms differ, but the first if not subdued promptly, may develop into the second.

Laminitis is one of the most painful diseases to which the horse is subject. It is caused by over-exertion, inordinate feeding, drinking cold water when overheated, long voyages, from the horse being compelled to stand for a long time in a constrained position, hard driving on hard roads, a sudden chill, etc. It is often communicated to the feet from internal organs. The manner in which irritation to a mucous membrane, as from engorgement with grain, or other forms of indigestion, drinking freely of cold water when overheated, irritation to the mucous membrane of the womb during parturition, etc., occurs is hard to explain. Some claim that it is the extending of the inflammation or irritation along the mucous membrane to the skin, and thence to the feet; while others favor the theory that in such cases toxins are formed, become absorbed, enter the circulation, and having an affinity for the feet have a specific action on the sensitive laminae.

Laminitis caused by over-exertion, concussion from travelling on hard roads, standing during long journeys by rail or boat, or standing for a long time on one foot on account of disease of its fellow, etc., is much more intractable than when it appears during or following irritation to a mucous membrane, when, if promptly and intelligently treated, it yields readily to treatment and passes off without leaving any structural change; while the form caused by concussion, etc., is more liable to be complicated by inflammation of the bone, does not yield so readily to treatment and is very painful, at the same time, if promptly treated it usually results in a complete cure, but if its cause be not arrested until after there is a partial or complete separation of the

sensitive and insensitive laminae, a complete cure cannot be effected. The symptoms of the two forms are identical, except in their severity. The pain is agonizing and persistent because the sensitive foot is invested with an unyielding, horny box pressing upon the engorged blood vessels, preventing free exudation and swelling, thus proving a barrier to the method by which congested blood vessels are relieved. In most cases the disease is confined to the fore feet, especially when caused by concussion, but it is not unusual to find all four feet involved, sometimes the hind feet only, and, in rare cases one fore and one hind.

**Symptoms.**—When both fore feet are affected the horse is very lame, almost immovable, especially at starting; he acts as though the whole body were cramped, stands with hind feet well under body and the fore feet well advanced, in order to relieve them of weight as much as possible; occasionally he may be noticed to sway backwards, elevating the toes, throw his weight upon the heels of the fore feet for a short time, and then assume the original position. If compelled to move he elevates his feet with difficulty, as he requires them all on the ground to bear the weight of the body. If forced to back he will drag the fore feet backwards, with the heels bearing upon the ground and the toes elevated. He will often groan from pain, while sweats bedew the body. The pulse is full, strong and frequent, and the general temperature usually above normal. In some cases the patient lies down on his side, with his legs outstretched for hours at a time, evidently getting great relief by relieving the feet from pressure. In other cases, especially in earlier periods of the disease, he will persist in standing. When the hind feet only are affected the patient stands with all four feet well under the body, and the general distress is well marked. When compelled to move, as soon as the toes of the hind feet are pressed to the ground, he takes a somewhat jumping motion forward. He is usually inclined to lie, and he experiences almost immediate relief when recumbent. The pulse often becomes rapidly reduced, both in number and force after he has assumed this position. When all four feet are affected, the symptoms consist in a combination of the fore-going, with a local heat in all feet.

**Treatment.**—Constitutional treatment consists in the administration of a moderate purgative, as six to eight drams of aloes and two drams of ginger. This to be followed with two to three drams nitrate of potassium twice daily for two or three days. The advisability of blood-letting is debatable. In the early stages, when the pulse is full, frequent and bounding, the extraction of two to three quarts of blood from the jugular vein is practiced by some practitioners, while others favor controlling the pulse and temperature by the administration of twelve to fifteen drops of Fleming's tincture of aconite in a little cold water every two to three hours for two or three doses. When pain is excessive it is well to relieve it by the administration of anodynes, as two drams of the solid extract of belladonna, or about six drams of chloral hydrate. The result depends greatly upon local treatment. The shoes should be removed, the heels pared well down, and heat applied. Some favor cold, but our experience has been in favor of heat. If the patient can be induced to lie a good part of the time, it favors successful treatment. The heat can be applied by standing the patient in a tub containing hot water, or by applying hot poultices. In either case the water or poultices should be kept hot for twenty-four to forty-eight hours, or in some cases longer. So soon as the acute pain and soreness have been allayed, cold may be substituted for heat. Some tie the patient in a stream of running water for a few hours daily for a few days. If

local treatment be promptly applied, a perfect recovery usually follows, but if treatment be neglected until there is partial separation of the sensitive and insensitive laminae and more or less descent of the bone of foot, a perfect cure cannot result. If the patient continues a little tender after lameness practically ceases, it is good practice to blister the coronet. It is also good practice to wear bar shoes with good frog pressure for a couple of months after he is put to work.

WHIP.

**Percherons For England.**

An importation of 50 more Percherons has just been made into England under the sanction of the Board of Agriculture. They include 15 stallions and 35 mares, and Lord Lonsdale, Henry Overman, Sir Merrick Burrell, and Captain T. L. Wickham-Boynton are the chief buyers concerned. Several Paris and Nogent-le-Rotrou winners have been secured. A new society is to be established on novel lines to England and to Canada. The breed has made thousands of admirers among English army men. They realize that it has many uses to which other horses cannot possibly be put.

ALBION.

**LIVE STOCK.**

**Our Scottish Letter.**

For nine weeks I have been laid aside from active duty with a severe illness, and, although during the past three weeks I have done more or less journalistic work, the machine is not working full power. I find that my last letter was written on September 8, or over two months ago. Much has happened since then and comment on all the events of these three months would be an old song now. In general, they have been eventful enough. The phenomenal sheep sales culminated in the record price of £300 being paid for a Black-face shearing ram, at the Perth sales in September. This was followed by a record sale of Clydesdales at the same centre, when a three-year-old filly sold for £1,029. In October the Aberdeen Shorthorn sales eclipsed all records, and one of Mr. Duthie's bull calves sold for £2,835. All other classes of pure-bred stock have been selling at prices in sympathy with these extreme figures. Clydesdale horses were never as high in price. At the Lanark October sales, which lasted four days, 80 three-year-old geldings made an average of £114 2s. 9d., as compared with £69 4s. 6d. for the same class last year; 53 mares, over three years old, made an average of £99 0s. 9d., as against £67 6s. 5d.; 76 brood mares made £116 18s. 9d., as against £83 7s. 1d.; 94 yearling fillies made £73 13s., as against £58 3s. 1d., and 247 two-year-old fillies made £95 0s. 2d., as against £66 13s. 4d.

The Ayrshire pure-bred bull and heifer calf sales are being held in these later weeks. This week the Lessnessock sale of Adam W. Montgomerie's calves took place when 23 bull calves made an average of £85 2s. 10d., as against £26 14s. 9d. last year, and 13 two-year-old heifers made an average of £85 12s. 3d., as against £42 for the same class last year. The top price of the sale was £273 paid for the bull calf, Lessnessock Kerensky, out of a cow with the fine record of 892 gallons at 4.22 per cent. butter-fat in 54 weeks. The next best figure was £152 5s. for Lessnessock Merry Thought, out of a cow with a 958-gallon record in 42 weeks. Ayrshires are sharing in the boom in live stock, and in spite of the strong opposition of the British Holstein, which breed is being superbly handled, it is evident that the Scottish dairy breed is to hold its own. As a matter of fact, under certain conditions of soil and climate, no breed can approach the Ayrshire. Given a poor, thin soil, and a moist climate, the Ayrshire will return a higher percentage of profit per acre than any other class of cattle. At the present time when milk is selling in Glasgow at 2s. 8d. per gallon, or one penny per gill, a herd of Ayrshires with a high milk yield is very nearly a gold mine. Unfortunately, most expenses have increased to an abnormal degree and the profit overhead is not so great as it appears. The Government has put a premium on grain growing, and almost weekly we hear of dairy stocks being dispersed. Quite naturally a farmer will not continue the slavish work of dairying when he can derive much greater profits from the easier business of cereal growing.

This naturally leads one to offer some comments on the ever-recurring problem of Food Control. The situation is likely to become intensified during the next few weeks, or perhaps days. Lord Northcliffe, who has been for about five months on the other side of the Atlantic with the British Mission, has written an open letter to the Prime Minister which is well fitted to make many people in this country "sit up". He contrasts the thoroughness of the war policy in Canada and the United States with the slackness discernible in certain departments in this country. The letter forms a startling and confirmatory sequel to Mr. Lloyd-George's own arresting speech in Paris. There is a Food Economy crusade being organized and mass meetings are being held throughout the country, at which we are being urged to eat less bread, less meat, less sugar, less lard; to be sparing in the use of wheat and grain of every kind for food. All this is well, and the people of this country generally are willing to respond. But what baffles the sober, middle-class community is the silence of these apostles on the drink question. We are to eat less and waste nothing. The only edible for which a ration has not been ordained is potatoes. This is an abundant crop, and we are urged to eat plenty



Clydesdales Coming Home from Work in Scotland.

of potatoes and so economize in bread. But the Government has authorized brewers to increase their output of beer by 33 1/4 per cent., and they have given a like license of distillers in respect to spirits. Not only so, but while they have fixed a maximum price for cereals and recommended the addition of certain proportions of barley to wheat in the manufacture of bread, they actually allow the brewer to pay 5s. 3d. per quarter more for barley than they allow the miller to pay. The consequence is that not only is the miller unable to buy what he wants in quantity, but he only gets what the brewer leaves in respect to quality. It is hardly possible to conceive of any Trans-Atlantic Government sanctioning such a condition of things. Whether Lord Northcliffe had this in his mind when he penned the following words, we do not know, but certainly his words are applicable: "From countless conversations with leading Americans, I know that unless there is swift improvement in our methods here the United States will rightly take into its own hands the entire management of a great part of the war. It will not sacrifice United States blood and treasure to incompetent handling of affairs in Europe." In the opening of his letter Lord Northcliffe speaks of the "virile atmosphere of the United States and Canada", and I take it that the above sentence is as applicable to Canada as to the United States. Much of the big work on the Western front has been done by the Canadian troops, and on all hands we hear complaints of the temptations to which these splendid fellows are subjected when they arrive here. It will be well if our rulers would take heed. The Food Economy campaign is all necessary, as is also the Food Production campaign, but the official silence on economy in alcoholic drink is a baffling phenomenon to thinking men.

This is a somewhat lengthened, and perhaps slightly irrelevant, prelude to some reference to the matters which press most upon us in these days. We have had a strangely unequal harvest. In the Eastern and North-eastern sections of Scotland the harvest was almost a record one. In Aberdeenshire it has been described as "the harvest of a lifetime." In the West of Scotland it has been characterized by one who measures well his words as "the worst harvest he has experienced since 1879." That was the record bad year. There are farms in Renfrewshire on which many acres of grain are still to be seen in stook. A week ago we heard of a field of oats uncut in a good part of Ayrshire. In Lochaber there were scarcely two days of continuous dry weather from the middle of August to the middle of October. The bounteous potato crop is still to a large extent in the ground. Happily, weather conditions seem more settled this week-end than they have been for some time. The barometer stands high, and although the day is short a few weeks of dry weather would do much to save the potato and root crops of 1917 and pave the way for a greatly extended crop area in 1918.

A heroic effort is being made to increase the crop acreage next year by no less than 2,400,000 acres. This is a very large order even for the whole United Kingdom, but, along with Food Control and Food Economy, for the present there is an urgent call for self-contained Food Production. What prior to the war was generally dismissed as an idle dream, the production in the United Kingdom of enough food to maintain its own population, is the deliberate objective of the three departments charged with the development of agriculture in England, Scotland and Ireland. As an auxiliary to this end, plowing by motor tractor is being largely resorted to. A trial of such machines was organized by the Highland and Agricultural Society and extended over six days. I was precluded from seeing any of these trials but the unanimous verdict of those who did see them is that an immense improvement has been made in these internal combustion tractors since the last trials at Stirling, in 1915. Then they were a purely experimental proposition; now they have clearly come to stay. The opinion of practical farmers is that to be successful and to do good work the tractors must be driven by men who understand plowing—not simply by mechanics who understand machinery; and, secondly, that the plows must be adapted to the work as well as the tractors. One noted firm of plow-makers in Scotland, and another noted firm in England, have brought out plows during the past two years which meet these requirements. They turn over three furrows and four furrows at one time, and when the man who drives the tractor understands how to "set" his plow-irons and knows when they are right, a big stretch of work can be done on reasonably level land, even in the short days of winter. At the same time, so far as Scotland is concerned, the application of mechanical traction in plowing can never be universal. The land generally is too steep and rocky, and horse-plowing is in most cases a more economical proposition. The tractor plowing is in most cases rough work compared with the plowing which delighted the farmer of pre-war days, but these things we cannot think about now; quantity rather than quality is the demand of the hour.

Another phase of the food question is the scarcity of meat and feeding stuffs to produce meat. Lord Rhondda has devised a great scheme whereby he hopes to make an equitable distribution of the available meat supply in beef, mutton and pork, and at the same time an equitable distribution of the available feeding stuffs. This twofold scarcity is lined up with the question of transport, and in fact the question of enhanced food production finds its *motif* in the same quarter. The returns of vessels sunk by German U-boats show a gratifying decrease in the numbers reported during the past two weeks being the lowest since the unrestricted submarine warfare began. But those who have a right to speak on the subject warn us that shortage of

transport service is acute and would be acute even were the war to be over inside of months, and therefore we must ration not only the individual but also live stock. The plan adopted to make the meat supply go round is that of mapping out the country into subdivisions, each under the control of a Sub-Commissioner. All these Sub-Commissioners are linked up with a Chief Commissioner, whose headquarters are in Glasgow. It is the duty of these Sub-Commissioners to have a census of all available cattle, sheep and pigs in their respective areas; also to know what the requirements of each distributing centre are. And the Chief Commissioner is armed with power to requisition stock from the area which has more than its quota, to supply what is lacking in another area. Full supplies are not available anywhere, and if left to the law of supply



Prof. H. S. Arkell.

and demand the upshot would be that the area which could afford to pay most, e. g., Glasgow and the Clyde Valley, where money flows freely, would get all it wanted, and other areas would starve. The task set before the Commissioners is no easy one, yet with good-will on the part of all concerned it may be fulfilled, and the civilian will do his share in winning the war.

SCOTLAND YET.

### The Newly-Appointed Live Stock Commissioner.

H. S. Arkell, who since 1910 has been known to stockmen throughout Canada as the Assistant Live Stock Commissioner, was recently promoted to the head of the Branch in which he has been such a faithful servant. Since the death of John Bright those interested in matters pertaining to live stock have felt that the honor was due Prof. Arkell inasmuch as he has been a very important factor in the working of the Branch for the last seven years. His promotion has evoked approval from all quarters, for the appointment is considered a happy one for the industry for which he has labored so effectively. Mr. Arkell was born at Teeswater, Ont., in 1880. He graduated from Mc Master University in 1902 with the degree of Bachelor of Arts, but true to the traditions of his family, widely known as stockmen, he turned his attention to agriculture, and graduated from the Ontario Agricultural College in 1904 with the degree of B. S. A. After spending seven months as Instructor in Animal Husbandry

at the Ohio State College, he succeeded Prof. M. Cumming as lecturer in Animal Husbandry at the O. A. C. At this Institution he proved himself a good judge of stock and an able teacher. He distinguished himself by his assistance to Prof. Day in the training of the College stock-judging teams which won the Spoor trophy at the Chicago International Live Stock Exposition, and ranked highest in general average among the competing colleges in 1905 and again in 1906. His promotion to the head of the Animal Husbandry Department of Macdonald College, Que., followed on June 1, 1907, and there he continued until June, 1910. Throughout his college work Prof. Arkell demonstrated his ability and grasp of live-stock problems to a marked degree, and proved himself unusually successful as an instructor and in the training of students. In 1910, when Dr. Rutherford, the Veterinary Director-General and Live Stock Commissioner, required assistance in extending the usefulness of the Branch, he chose Prof. Arkell as Assistant Live Stock Commissioner, which position he has filled until recently with no small measure of success. His energetic manner and unusually liberal amount of executive ability, which have made him such a valued servant of the stockmen since 1910, render him peculiarly adapted to the new duties he has assumed. His acquaintance with agriculture arising out of his early training on the farm and extensive travel, has been added to by years of intimate association with the live-stock industry. In his labors with the Branch he has acquired a grasp of the situation and the difficulties consequent to the estranged conditions of the nations. Prof. Arkell's appointment as Live Stock Commissioner is a happy one for the industry, upon which so much depends at the present time, and which will require a guiding hand when the war is over.

### Sheep and Swine Carcass Awards.

Owing to lack of space the awards in classes for dressed carcasses of sheep and swine had to be omitted from the issue in which the report of the Winter Fair was given. The swine carcasses were sold at 22 cents per pound; lamb carcasses at 20 to 30 cents and yearlings at an average of 22 cents. The following are the awards in sheep and swine carcasses at Guelph Fair, together with awards in fleece wool.

**Dressed Carcasses.**—Awards.—Cotswold lamb: 1, Brien & Sons; 2, Mark & Son; 3, Dolson & Son; 4, Campbell. Lincoln lamb: 1 and 2, Brien & Sons; 3, Linden. Leicester lamb: 1 and 2, Whitelaw; 3 and 4, McTavish. Oxford lamb: 1 and 3, Armstrong; 2 and 4, Barbour & Son. Shropshire lamb: 1, Lloyd-Jones; 2, Armstrong; 3, Larkin; 4, Wright & Son. Southdown lamb: 1, Lloyd-Jones; 2 and 3, Larkin. Dorset Horned lamb: 1 and 2, Wilson; 3 and 4, Wright & Son. Hampshire or Suffolk lamb: 1, Wilson; 2 and 4, Henderson & Son; 3, Telfer Bros. Grade lamb, long-wooled: 1, Dolson & Sons; 2, Armstrong; 3 and 4, Brien & Sons. Grade lamb, short-wooled: 1, Wright & Son; 2, Blackburn & Son; 3, Wilson; 4, Johnson Bros. Shearling, long-wooled: 1, Linden; 2, Campbell; 3, Linden; 4, Mark & Son; 5, Whitelaw; 6, Brien & Sons. Shearling, short-wooled: 1 and 4, McEwen; 2, 3 and 7, Wright & Son; 5, Larkin; 6, Kelsey.

**Fleece Wool.**—Exhibitors.—G. H. Mark & Son, Little Brittain; A. Ayr, Bowmanville; J. D. Larkin, Queenston; W. M. Smith, Scotland; W. E. Wright & Son, Glanworth; A. A. Armstrong, Fergus; E. Barbour & Son, Hillsburg; A. & W. Whitelaw, Guelph; G. B. Armstrong, Teeswater.

**Awards.**—Fine medium: 1, Mark & Son; 2, Larkin; 3 and 4, Ayr; 5, Smith. Medium: 1, Smith; 2 and 3, Barbour & Son; 4 and 8, A. A. Armstrong; 5, Ayr; 6, Larkin; 7, Wright. Lustre: 1 and 2, Whitelaw; 3, Mark & Son; 4, G. B. Armstrong. Coarse: 1 and 2, Whitelaw; 3, G. B. Armstrong.

**Dressed Carcasses.**—Awards.—Bacon hogs: 1, Brethour & Nephews; 2 and 3, Boynton; 4, Stevenson; 5 and 6, Murdock; 7, Brownridge; 8, Templer; 9, Featherston; 10, Dolson & Son; 11 and 12, Douglas & Sons. Butcher hogs: 1 and 2, McEwen; 3, Wright & Son; 4, Robinson; 6, Brien & Sons; 6, Brownridge; 7, Boynton.



A Group of Winning Young Bulls at Penrith.

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# Toronto Fat Stock Show.

Immediately following the Ontario Provincial Winter Fair held at Guelph came the annual Toronto Fat Stock Show, Friday and Saturday December 7 and 8. It was a very successful show and evidence of the high quality of the stock in all classes was found in the prices obtained generally at the Saturday auction following the judging. Jas. Leask's Guelph champion "Black George" repeated and was made grand champion at Toronto where he afterwards sold for \$1 per pound to the Harris abattoir. This junior yearling weighed 1,360 lbs. The heaviest steer of the show, a two-year-old, weighed 1,950 lbs., a grade Angus, fed by D. Ferguson & Son, R. R. 6, St. Thomas. He sold at 18 1/2 cents per lb. Campbell Bros. of Shedden had a two-year-old pure-bred which weighed 1,900 lbs. and sold for 18 cents per lb. Thirty cents per lb. was paid by The T. Eaton Company for the first-prize 990-lb. calf, exhibited by W. H. Guthrie, New Dundee. Price range on prize-winning cattle ran from 11 1/2 cents up to \$1 per lb., the bulk selling at from 16 cents to 25 cents per lb. Fat wethers brought up to 24 1/2 cents per lb., and lambs up to 36 cents per lb. Prize-winning hogs sold as high as 28 cents per lb. Following is a list of prize-winners:

**Pure-breds.**—Steer, 2 years and under 3: 1, J. D. Ferguson & Sons, St. Thomas; 2, Campbell Bros., Shedden; 3, A. L. McNeil, Woodbridge; 4, J. D. Ferguson & Sons. Steer, 1 year and under 2: 1, A. Barber, Guelph; 2, John Brown & Sons, Galt; 3, James Bowman, Guelph. Steer, under 1 year: 1, Campbell Bros., Shedden; 2, John Brown & Sons; 3, A. Elcoat, Seaford; 4, Jacob Lerch, Preston. Heifer, 2 years and under 3: 1, H. Wade, Pickering; 2, W. S. Hair, Watford. Heifer, 1 year and under 2: 1, Jos. Stone, Seagrave; 2, John Brown & Sons. Heifer, under 1 year: 1, Jacob Lerch; 2, A. Elcoat; 3, W. Batty, West Hill. Champion pure-bred steer or heifer: A. Barber, Guelph; also winner of the Walker House Cup.

**Grades and Crosses.**—Steer, 2 years and under 3: 1, D. Ferguson & Son, St. Thomas; 2, B. E. Hicks, Centralia; 3, James Leask & Sons, Seagrave; 4 and 5, J. D. Ferguson & Sons, St. Thomas. Steer, 1 year and under 2: 1, Jas. Leask & Sons, 2, Jos. Stone, Seagrave; 3, 4 and 5, A. Barber, Guelph. Steer, under one year: 1, Jas. Leask & Sons; 2, W. H. Guthrie; 3, R. D. Hunter, Exeter; 4, A. White, Guelph; 5, John Brown & Sons, Galt. Cow, 3 years and over: 1, A. Paul, Kirkton; 2, A. Barber, Guelph; 3, W. H. Coates, Centralia. Heifer, 2 years and under 3: 1 and 2, J. Leask & Sons; 3, F. G. Moffat, Teeswater; 4, J. Delbridge, Woodham. Heifer, 1 year and under 2: 1, Jos. Stone; 2, Wm. Marquis & Son, Sunderland; 3 and 4, James Leask & Sons. Heifer under 1 year: 1 and 2, Jos. Stone; 3, T. A. Russell, Downsview; 4, James Leask.

**Boys' Steer Feeding Competition:** 1, Edward F. Mundle, Owen Sound; 2, Ford I. Willson, Kitchener; 3, Irwin T. McMahon, Hawkestone.

**T. Eaton Co. Special,** for the best dehorned butcher steer any breed under 1 year: W. H. Guthrie, New Dundee.

**Harris Abattoir Company Limited Special,** for the best dehorned butcher steer any breed under 1 year: James Leask & Sons, Seagrave.

**Carloads.**—15 dehorned steers, 1,250 lbs. and over: 1, John Brown & Sons; 2, J. H. Simonton, Chatham; 3, J. D. Ferguson & Sons. 15 dehorned steers under 1,250 lbs.: 1, A. White; 2, James Cameron Co., Fergus; 3, J. E. Gallagher, Flamboro Center.

**Hartord Fire Insurance Co. Special:** A. White, Armour & Company Special, carload 15 butcher steers without horns each 1,100 lbs. and under: A. White. Swift Canadian Company Special, carload 15 butcher cattle, steers or heifers or mixed steers and heifers without horns, 1,100 lbs. and under: 1, A. White; 2, James Cameron Co.; 3, W. J. Taylor, Varna. Harris Co., Ltd., Special, for best carload lot 15 dehorned steers under 15 months and under 1,000 lbs.: A. White.

**Lot of 15 heifers average weight:** 1, Short Bros., Elora; 2, Michael Thompson, Chesley; 3, A. White, Gunns Limited special, carload 15 butcher heifers without horns, each 1,100 lbs. and under: Short Bros.

**Grand Champion "Black George,"** owned by James Leask & Sons, Seagrave, also winner of the following prizes: Champion grade or cross-bred steer or heifer. First prize grade or cross-bred steer, 1 year and under 2; added prize for being sired by Aberdeen-Angus bull; Exchange Hotel Cup; Gunns Limited Special, and Toronto World Gold Watch.

**Sheep and Lambs, Long Wools.**—3 wethers or ewes, 1 year and under 2: 1, J. D. Ferguson & Sons. 3 wethers or ewes, under 1 year: 1, The Dunrobin Farms, Beaverton; 2, J. D. Ferguson & Sons; 3, A. Elcoat. Carload, 50 lambs, wethers or ewes: 1, J. D. Ferguson & Sons. Swift Canadian Company Special, 10 lambs under 100 lbs. bred, fed and owned by exhibitor: 1, The Dunrobin Farms, Beaverton; 2, J. D. Ferguson & Sons; 3, John Houston, Chatham.

**Short Wools.**—Three wethers or ewes, 1 year and under 2: 1, C. J. Brodie, Stouffville; 2, J. D. Ferguson & Sons; 3, J. S. Baker, Burford. Three wethers or ewes under 1 year: 1, J. E. Brethour & Nephews, R. R. No. 2, Burford; 2, John Houston, 3, C. J. Brodie.

**Carload of 50 lambs, wethers or ewes:** 1, Campbell Bros., Shedden; 2, J. D. Ferguson & Sons; 3, Hanley & Miggs, Cainsville. Swift Canadian Co., Ltd. Special for farmers, 10 lambs under 100 lbs. bred, fed and owned by exhibitor: 1, A. A. Armstrong, Fergus; 2, C. J. Brodie; 3, Robt. E. Cowan, Galt. Swift Canadian Co., Ltd., Farmers' Special, 6 lambs under 90 lbs. each, bred, fed and owned by exhibitor: 1, C. J. Brodie; 2, Hanley & Miggs; 3, John Houston.

**Hogs.**—Pen 3 barrows bacon type 170-225 lbs.: 1, Oscar Lerch, Preston; 2, C. B. Boynton, Dollar; 3, John Duck, Port Credit; 4, Jos. Stone, Seagrave. Boy's Hog Feeding Competition, limited to boys under 21 years.—Pen 3 barrows bacon type, 170-225 lbs.: 1, Oscar Lerch; 2, J. A. P. Helmky, Richmond Hill; 3, Thos. Chard, Lambton Mills. Swift Canadian Co., Ltd., Special.—Best pen of three bacon type hogs, 170-225 lbs.: 1, Oscar Lerch; 2, C. B. Boynton. Gunns Limited Special.—Pen of 3 barrows range 170-225 lbs.: 1, John Duck, Swift Canadian Co., Limited, Farmers' Special.—Pen of 10 hogs, bred, fed and owned by exhibitor, 170-225 lbs.: 1, A. L. McNeil, Woodbridge; 2, Jos. Stone; 3, John Duck.

**Wm. Davies Co., Ltd., Special.**—Pen of 5 barrows individual weights 170-225, must have been fed since weaned at six weeks old by exhibitor. Judged from the standpoint of long side and general suitability for bacon for the English market: 1, Jos. Stone; 2, J. E. Brethour & Nephews; 3, Murdoch Bros., Palmerston. William Davies Co. Ltd. Annual.—Limited to young men under 25 years of age, pen containing litter of one brood, entire litter must be shown, irrespective of number, and must be fed, bred and owned by exhibitor, individual weights 170-200 lbs., to be judged from the standpoint of long side, and general suitability for bacon for the English market: 1, C. B. Boynton; 2, Thos. Chard, Lambton Mills; 3, Russell Templar, Burford. Carload 50 bacon hogs, 170-225 lbs.: 1, Jos. Stone; 2, I. N. Armstrong, Clarksburg; 3, Hanley & Miggs; Gunns Limited Special—Carload 50 bacon hogs, range 170-225 lbs.: 1, Jos. Stone.



**The Heaviest Steer at Toronto Fat Stock Show.**  
This grade Angus two-year-old steer, fed and exhibited by D. Ferguson & Son, St. Thomas, won his class and sold for 18 1/2 cents per pound. He weighed 1,950 pounds.

## Pure-bred Sheep Sales in Quebec.

EDITOR "THE FARMER'S ADVOCATE":

In the past two years the pure-bred requirements of the local Wool Growers' and Sheep Breeders' Associations in Quebec had been partially met by the holding of four pure-bred sales in 1915 and two in 1916. These sales were very successful but it was felt that there was room for a larger number, and accordingly this year a more extensive program was planned with the object of affording better opportunities for individual selections within the province as well as to provide better facilities for outside purchasers.

The pure-bred sheep auction sales car was decided upon as the most convenient, cheapest and most expedient means of transportation for stock consigned to the sales, and in consequence thereof arrangements were made with the Canadian Pacific Railway to run a palace horse car from Waltham to Megantic, making twelve stops, inclusive, each of which an auction sale was held. The route leads directly through or borders all of the ten Associations already organized so that each stop on the four hundred and sixty mile circuit was within the territory of one or other of these Associations.

The palace horse car with slight reconstruction and some additional equipment proved to be entirely satisfactory from every standpoint. It provided ample accommodation for eighty to one hundred head of sheep, allowing sufficient space for feeding and watering during

transit. The pens were so arranged that intending purchasers could see and handle the stock previous to the hour of sale.

The car was placed at Lennoxville when some eighty head of the Shropshire, Oxford, Leicester, Cheviot, Hampshire and Southdown breeds were consigned for sale. The car was then moved to Waltham where the first sale was held at Chapeau. Succeeding sales were held at Campbell's Bay, Shawville, Low, Lachute, Cowansville, Magog, Lennoxville, Cookshire, Scottstown, and Megantic. At each stop animals of desirable conformation, quality and breeding were consigned for sale, and if not sold were carried to the following sales. In this way a full quota of animals, both male and female, was maintained in the car at all times.

Aside from the advantage of individual selection which the sales afforded to intending purchasers, they have had the effect of giving a general impetus to pure-bred breeding by stimulating interest in pure-bred stock among farmers in the various communities. The small and uninitiated breeders were also benefited not only by securing a larger number of sales but as well by their actual association with other breeders. The exchange and sale of older rams which was effected in a large number of cases has been one of the greatest benefits of the sales, as many excellent sires which would otherwise have gone to the block are now doing good service at the head of other flocks. The avenue of sale for the older rams at breeding value, thus eliminating the usual loss which previously occurred when they were sold for the block after one to two years of service, has tended to make the farmer more liberal, particularly when purchasing a good individual.

The sales were on a cash basis and entirely self-sustaining. No capital was provided except in certain cases where Associations wished to bring in special stock. Each contributor consigned his flock subject to a reserve bid, and a fee of seven per cent. of all sales was deducted to cover expenses incidental to sale.

As was anticipated a number of outside purchasers took advantage of the sales to make their selections. A representative of the New Brunswick Government purchased seventy-three head. Thirty head went to the Prince Edward Island Government, thirty head were sold to parties in Alberta and several head went to Ontario, the balance being sold to farmers and farmers' clubs in Quebec. A much larger number of pure-bred ewes could have been sold had they been available. In all two hundred and thirty-five head were sold.

Below is a statement of the numbers, average selling price and total value of sales for each breed.

Shropshires.—56 Rams Ave. price \$28.24.....	\$1,581.50
36 Ewes Ave. price \$33.15.....	1,193.50
Oxfords.—42 Rams Ave. price \$28.06.....	\$1,178.50
20 Ewes Ave. price 27.27.....	545.50
Leceisters.—12 Rams Ave. price \$24.71.....	296.50
Cheviots.—35 Rams Ave. price \$26.01.....	910.50
3 Ewes Ave. price 34.16.....	102.60
Hampshires.—10 Rams Ave. price \$33.62.....	336.20
1 Ewe Ave. price 26.50.....	26.50
Southdowns.—4 Rams Ave. price \$23.75.....	95.00
Dorsethorns.—6 Ewes Ave. price \$20.00.....	120.00
Total value	\$6,386.20
Total number sold 235; average selling price \$27.17.	
A. A. McMILLAN.	

From 1901 to 1911 the urban population of Canada increased from 1,771,435 to 2,845,073 for cities, towns and villages of 1,500 or over—an increase of 1,073,638. In the same time the rural increase, including many villages under the 1,500 mark, was 761,690, or over 311,000 less than the urban increase. Cities are built-up at the expense of the rural population. From 1911, the last census year, from the report of which these figures were taken, up to the outbreak of the war the increasingly rapid growth of cities was even more in evidence. The war has further stripped the farms, and returned soldiers do not show a preference for agriculture. A period of fewer farmers and more consumers is likely to continue after the war. Unless a change comes there may be more urgent need of a greater production cry. Economical living for all in the interests of the Dominion can only come when the country districts have a fair proportion of the population.

## Saves His "Advocates."

EDITOR "THE FARMER'S ADVOCATE":

If you will look up when I subscribed for the Advocate first you can find out how many copies I have on hand as I have all that have come to the house since the first one. If your travels visits these parts I will tell him what a benefit the Advocate has been to me.

P. Q. WILLIAM HAY.

Don't take any risks with the bull, use a strong staff when leading him from his stall. The most quiet are the ones which frequently do the damage.

## THE FARM.

### Seed Grain at Guelph Winter Fair.

The entries from the Field Crop Competition were not so elaborately displayed this year as in the past. However, the entries of grain, roots and corn were arranged so that visitors to the Fair could examine the samples, consequently they got more value out of the exhibit put up as it was this year than they were able to get in the past. The entries in the open classes for grain and seeds fell off considerably but what was lacking in quantity was made up in quality. The grain was particularly good. There were several entries in oats which would be hard to duplicate. This has been a poor season for corn, consequently there were few exhibits, and only two or three lots of what was shown were thoroughly matured. There was a very good showing of potatoes. It was unfortunate for Mr. Naismith, of Falkenburg, that his entries in the open competition were all damaged by frost in transit. His entry in the Field Crop Competition escaped the frost and it not only won first prize in its class but was the champion bushel of tubers at the Fair. Wm. Hutcheon, of Rockwood, had the championship oats in his entry of O. A. C. No. 72. Mr. Hutcheon also secured the championship in 1916. The prices secured for the seed which was auctioned off were good. The sweepstakes entry of oats which was O. A. C. No. 72 brought thirteen dollars; in 1916 the sweepstakes oats of the same variety brought eleven dollars. The second-prize oats this year, which were also No. 72, brought \$9.25, and the fifth prize of the same variety brought \$5. Prize barley went as high as \$3.75 per bushel; spring wheat, \$5.50. The top price for red clover was \$21.80, of alsike, \$18.50, and timothy, \$8. Following is a list of the winners, in the open classes:

Fall wheat, white: 1, G. A. Burns, Paris; 2, Andrew Schmidt, Mildmay; 3, Geo. W. Glover, Nottawa; 4, C. W. P. Brock, Waterford; 5, Beamer Bros., Ridgeville; 6, Ernest M. Readhead, Milton. Spring wheat, except Goose: 1, W. C. Barrie, Galt; 2, S. W. Bingham, Hillsburg; 3, Jno. T. Rettinger, Formosa; 4, A. Schmidt; 5, Knox Bros., Wroxeter; 6, F. Buckland, Warton. Goose wheat: 1, R. M. Mortimer, Honeywood; 2, W. E. Steen, Streetsville. Oats, Banner: 1, J. A. Dixon, Varney; 2, G. A. Burns; 3, A. Schmidt; 4, S. W. Bingham; 5, G. W. Glover; 6, J. T. Rettinger; 7, G. Erwin, Simcoe; 8, J. Lerch, Preston. Oats, O. A. C. No. 72: 1, J. Lerch; 2, A. Schmidt; 3, J. T. Rettinger; 4, R. H. Marshall, Embro; 5, H. L. Goltz, Bardsville; 6, J. Winer, Guelph; 7, R. Wilkin, Palmerston; 8, W. A. McCutcheon, Glencoe. Oats, O. A. C. No. 3, Daubeny, or Alaska: 1, G. Ruber, Arkell; 2, C. A. Wilson, Jarvis; 3, B. Tolton, Guelph; 4, A. Elcoat; 5, R. R. Moore, Norwich. Oats, any other white, correctly named: 1, J. Winer; 2, R. M. Mortimer; 3, H. L. Goltz; 4, T. Sellers, Zephyr; 5, A. Schmidt; 6, Short Bros., Elora; 7, R. Erwin, Villa Nova; 8, J. Lerch. Oats, black: 1, A. Schmidt; 2, J. Lerch; 3, J. M. McCormack, Rockton. Barley, 6 rowed: 1, B. R. Cohoe, South Woodslee; 2, W. E. Steen; 3, W. C. Barrie; 4, S. W. Bingham; 5, A. W. Van Sickle, Onandaga; 6, A. Schmidt; 7, J. T. Rettinger; 8, H. L. Goltz; 9, W. A. McCutcheon; 10, C. A. Wilson. Rye: 1, J. Lerch, Buckwheat; 1, G. W. Glover; 2, J. Lerch, Field Peas, large; 1, H. L. Goltz; 2, F. Buckland. Field peas, small: 1, P. McLaren, Hillsburg; 2, S. W. Bingham; 3, G. W. Glover; 4, W. A. McCutcheon. Field Beans, small white: 1, C. Lawton, Cookstown; 2, A. Gilbert, Simcoe; 3, J. Lerch; 4, A. W. Van Sickle; 5, W. C. Barrie. Red Clover: 1, S. Richardson, Oxdrift; 2, R. Latimer, Oxdrift; 3, J. Parks, Amherstburg; 4, C. Snider Junior, Oxford; 5, J. Adams, Oxford. Alsike: 1, C. Snider; 2, W. Roth, Fisherville; 3, H. Wheatley, Oxdrift; 4, S. Richardson; 5, R. Latimer; 6, G. W. Glover. Timothy: 1, A. Schmidt; 2, W. Roth, Compton's Early corn: 1, F. A. Smith, Port Burwell. Long-fellow: 1, A. S. Maynard, Chatham; 2, R. J. Johnston, Chatham; 3, D. S. Maynard, Chatham. Salzer's North Dakota: 1, R. J. Johnston; 2, A. S. Maynard; 3, D. S. Maynard. Bailey: 1, Walkerside Dairy, Walkerville; 2, W. C. Anderson, Amherstburg; 3, D. S. Maynard; 4, A. S. Maynard; 5, J. Wallace, Ruscomb. White Cap Yellow Dent: 1, Walkerside Dairy; 2, B. R. Cohoe. Wisconsin No. 7: 1, B. R. Cohoe; 2, J. Parks; 3, Walkerside Dairy; 4, P. McKinley, Tecumseh; 5, R. J. Johnston; 6, J. Wallace. Sweet corn, table: 1, F. A. Smith; 2, A. S. Maynard; 3, D. S. Maynard; 4, W. M. Smith, Scotland; 5, B. R. Cohoe. Sweet corn, canning: 1, W. M. Smith; 2, F. A. Smith. Potatoes: round white type: 1, F. Farrow, Mt. Brydges; 2, G. A. Burns, Paris; 3, P. McLaren, Hillsburg; 4, H. L. McConeill, Port Burwell; 5, R. M. Mortimer; 6, D. Hamilton, Varney; 7, H. L. Goltz; 8, H. F. Loney, Warton. Potatoes, long white type: 1, G. Ruber; 2, H. L. McConeill; 3, D. Hamilton; 4, A. Schmidt; 5, R. M. Mortimer. Potatoes, rose type: 1, H. L. McConeill; 2, F. Farrow; 3, A. Schmidt. Potatoes, any early variety: 1, G. Ruber; 2, H. L. McConeill; 3, F. Buckland; 4, J. D. Steen, Meadowdale; 5, R. Wilkin. Mangel seed: 1, H. Stokes, Chatham; 2, W. C. Barrie. Sugar Beet seed: 1, R. R. Moore, Norwich; 2, H. Stokes. Beet seed: 1, R. R. Moore. Carrot seed: 1, R. R. Moore. Onion seed: 1, R. R. Moore. Parsnip seed: 1, R. R. Moore. Cucumber seed: 1, R. R. Moore. Beans: 1, Lerch. Peas: 1, R. R. Moore. Autumn wheat, sheaf: Arch, MacColl, Rodney. Spring wheat, sheaf: H. L. Goltz. White oats, sheaf: 1, B. R. Cohoe; 2, H. L. Goltz; 3, A. W. Van Sickle; 4, A. MacColl. Six-rowed barley, sheaf: 1, H. L. Goltz; 2, A. Schmidt; 3, A. W. Van Sickle; 4, A. MacColl.

### Field Crop Competition

Oats: 1, Wm. Hutcheon, Rockwood, R. R. 1, O. A. C.

72; 2, A. Schmidt, Mildmay, O. A. C. 72; 3, Jos. A. Dixon, Varney, R. R. 1, Banner; 4, H. L. Goltz, Bardsville, Imp. Scotch; 5, Alex. McKague, Teeswater, O. A. C. 72; 6, J. & F. Laidlaw, Walton, R. R. 3, Imp. Banner; 7, R. H. Marshall, Embro, R. R. 6, O. A. C. 72; 8, F. W. Oke, Alvington, R. R. 2, O. A. C. 72; 9, W. H. Atkinson, Port Elgin, R. R. 3, O. A. C. 72; 10, Paul L. Gram, Pt. Colborne, R. R. 1, O. A. C. 72.

Barley: 1, E. M. Readhead, Milton, R. R. 2, O. A. C. 21; 2, J. H. Wilson, Milton, R. R. 4, O. A. C. 21.

Fall wheat: 1, J. A. Cockburn & Sons, Puslinch, Dawson Golden Chaff; 2, Wm. Johnstone, Galt, R. R. 7, Dawson Golden Chaff; 3, Thos. Young, Galt, R. R. 4.

Peas: 1, W. J. Walpole, Lion's Head, R. R. 2, Golden Vine; 2, Wm. Warder, Lion's Head, R. R. 1, Golden Vine.

Potatoes: 1, Wm. Naismith, Falkenburg, Delaware; 2, D. A. McNeill, Strathroy, R. R. 1, Dooley; 3, Robt. Agar, Unionville, Bell's Deposit; 4, H. F. Loney, Warton, R. R. 2, Am. Wonder; 5, W. M. Sinclair, Huntsville, Delaware.

Corn, (Flint): 1, R. J. Johnston, Chatham, R. R. 3; 2, A. S. Maynard, Chatham, R. R. 3.

Corn, (Dent): 1, B. R. Cohoe, South Woodslee; 2, Peter McKinley, Tecumseh; 3, Arthur Taylor, Comber; 4, Jno. Wallace, Ruscomb; 5, J. D. McPherson, Blenheim, R. R. 1.

Turnips: 1, Jos. Martin, Paris; 2, Robt. Geddie, Paris, R. R. 3; 3, Marshall Wright, Mt. Forest; 4, W. H. Russell, Dundalk, R. R. 4.

Mangels: 1, Thos. Johnston, Kemble.

### The N. B. Potato Situation.

EDITOR "THE FARMER'S ADVOCATE":

A few days ago I read in a Montreal paper some more advice by our food controller to Canadian farmers telling them to put their potatoes on the market now as he is to fix a minimum price in the near future, which will be lower than the actual market price. I do not pretend to advise him on fixing a minimum price on wheat, but I do know what it costs to raise potatoes in the province of New Brunswick and the reason that we are not selling our potatoes is that we cannot afford to place them on the market now. The average crop throughout N. B. and the State of Maine this year is between 20 and 25 barrels to the acre. I planted 20 acres, took the best of care of them, sprayed them from early growth till late in the summer, no disease has affected them whatever. I used a car of fertilizer and a car of lime. The total cost after storing was \$2,050.00 making \$102.50 for each acre. From that 20-acre field I raised 500 barrels of good market potatoes making the cost over \$4 per barrel and I was one of the best of them. Some of my neighbors did not get more than half that crop with practically the same proportional cost per acre. Now is the food controller to sacrifice the potato growers of a whole Province, and does he think by doing so he will encourage farming and accelerate production? No farmer can afford to lose \$1,000.00 on his crop and the New Brunswick potato raiser did not keep his potatoes to speculate and make an unreasonable profit like some have done in these critical times. He is simply keeping them to break even if possible and be financially able to try again next year and do his bit. Is the food controller going to deny him that right?

N. B.

OSCAR LEVASSEUR.

### Medical Inspection of Schools.

EDITOR "THE FARMER'S ADVOCATE":

I noticed in the December 6 issue of "The Farmer's Advocate" an editorial on the subject of Medical Inspection in Schools. You might be interested to have the results of the Medical Inspection of the 1,000 pupils in the 38 schools of the Townships of Caledon and Chinguacousy in Peel County. We have just completed this inspection which was done by Dr. McKenzie-Smith who was sent out by G. A. Putnam of the Institutes Branch. The details of the inspection were worked out by the Peel Department of Agriculture in co-operation with the local Women's Institutes. We arranged with our local Branches of the Institute to supply the transportation for the Doctor and to send someone along to act as clerk in making out the reports. Before anything definite was done I first wrote the Secretary of each Trustee Board for permission to do the inspecting and this was granted without exception. We invited the trustees and any parents who could spare the time to drop in while the Doctor was at their school, and we found that the people took a keen interest in this work.

We have not a full report at this time, but the following figures of the first 700 children examined will be of interest. Twenty per cent. of the pupils were found to have defective eyesight and 12 per cent. of the total were in need of glasses. Seventy per cent. of the children had teeth requiring attention and 35 per cent. were suffering from enlarged or diseased tonsils and adenoids.

In every case where a child required treatment a note to that effect was sent to the parent and I know positively that already a great number of these have been acted on. We are planning for four clinics to be held in the two townships, but complete arrangements of these have not been made as yet. I believe that there is no line of work that we have taken up that is of more value to the people than this Medical Inspection and we are planning to have every school boy and girl in the County inspected before next midsummer. This work is something that can be carried on at very little expense to the Government and practically no expense to the School Boards. There is no matter of greater importance to-day than the health of the boys and

girls who are now growing up, and the time is not far distant when we shall all realize that it is better to make a little expenditure to keep people healthy and well than to wait until something more serious develops that will handicap them through life, and then attempt to cure them after much unnecessary suffering and waste of energy.

Peel Co., Ont.

J. W. STARK.

### Hoping For a Fair Deal.

EDITOR "THE FARMER'S ADVOCATE":

Much discussion is taking place in this great hog producing section of Canada as to the advisability of keeping that extra sow. Every farmer wishes to be patriotic and help out in this food crisis. It is doubtful if any farmer would refuse to keep the sow if he were sure he would come out even on the proposition. There are many farmers, however, who feel that, in view of certain losses in the last two years, they cannot venture into this new scheme. There are two principal reasons why the farmer is dubious of keeping more hogs. First there is the matter of feed. Corn is out of the question and oats are selling at 90c. per bushel. We paid \$2.35 per cwt. for shorts a few days ago. In ordinary times shorts would fatten hogs fairly well when fed with water. In times like these shorts are highly ground bran and weed seeds. Hogs eat the mixture merely to live, not to grow and get fat. A man, unless he is very hard-hearted, gets so he will not look a pig in the face at feeding time. Hence one has a vision of himself selling a load of hogs which will not bring him enough to pay for the feed they have eaten—not to mention the farmer's labor or interest on investment. The other reason for doubt is the jockeying of pork prices by the packers. We are given no definite assurance of a profit-sharing price for that litter of pigs of the extra sow. In other lines of business, men, engaged in similar business get together and so regulate their affairs that they know beforehand what they will receive for their goods. No one has ever heard of farmers getting together and sticking together. When they do this they will be more honored than they are to-day and possibly in so doing, farmers may catch the eye of the government.

A few problems are causing the farmer to think as he never has before. It seems you've got to get this species in a pinch before he cries out for light. So long as he moves along in only fair prosperity he never makes a sound. To-day you'll hear scores of farmers discussing the 80% pork packers' profits. Taking this last year as an example a packer would make 11% and the government will take the remaining 69%. Now, the farmer wants to know how this legislation will benefit the raiser of hogs or the consumer of bacon. Surely in a country like Canada the farmer and the laborer are the men whom any legislation should affect most happily. Likewise the farmer wants to know why, when the price of wheat was set by the Food Controller, he did not also set the price of flour and feed. Will some one tell us why? The price of farm machinery is a serious phase of farm life just now. For instance, I understand the price of a common steel land roller will be about \$100 inside of a year. At that rate what will we pay for a binder or a corn harvester? Is it a fair demand when we ask for free implements in an agricultural country? Surely the farmers need a share of the protection given to the "Big Interests."

Is it too much to hope for a fair deal for those who keep an extra sow?

Kent Co., Ont.

L. L. GOSNELL.

### Facts Regarding Production.

EDITOR "THE FARMER'S ADVOCATE":

I noticed in "The Farmer's Advocate" and read with some interest an article on production written by W. S. Poole of New Brunswick. Mr. Poole's article brings out some very good points but I think is a little misleading. This gentleman tries to make it very plain that he has a big farm and a large stock of cattle and hogs and that he has been producing at a loss. Now, Mr. Editor I have been wondering if Mr. Poole is in earnest or has he got the election fever and just wants to get a dig at the other fellow. I am taking a number of papers at the present and a lot we see in print now is enough to make a man quit the biggest part of them. I think if there ever was a time when people should put their shoulder to the wheel and try to produce and encourage production it is the present. I haven't been farming for some time but have been interested in farming both here and in the West. I have a stock farm here and buy my cattle in the spring and when you have to pay farmers the price we have had to pay the last two years I tell you it does look like taking a mighty big chance.

Space permitting I would like to give your readers my experience in feeding hogs for twelve months. A neighbor and myself decided about October 1916 to give the feeding of hogs a test for twelve months. My neighbor had the room but not the feed, so I agreed to furnish the feed and hogs, the other fellow to do the feeding and looking after them and if they made any money we were to play halves and if they lost I was to be the loser except the labor. There were plenty of light hogs from fifty to a hundred pounds in weight to be had at \$2 a hundred less than the market price of finished hogs. I think it would take too much space to give an itemized account so will just give a lump sum in figures during the twelve months. I paid \$802.70 for feed, mostly shorts at from 30 to \$44 per ton, also \$631.60 for light hogs and brood sows. The price of hogs when sold was from \$10.50, that being the price at December first 1916; the highest price received was \$17.50. At the end of the year we weighed our light hogs up at the same

reduction of \$2 a hundred less than market price. With those prices of feed and hogs we had for our labor and trouble \$722.85. Of course this may look small to some of the packers but we are only farmers and are not used to big profits.

As to the grazing of the high-priced feeders I may say when I closed out in the fall the figures were on the right side of the sheet. As there is a movement on foot to produce more hogs let every person that can keep a hog even if he is not sure of a profit. It will help to feed the Allies and the boys at the front. There was one thing our Government did that pleased me very much that was when they saw fit to prohibit the use of grain for the manufacture of liquor. If they would go a little farther and stop people from growing that cursed weed tobacco and compel those companies and farmers that are blowing about the large profits they are receiving per acre to grow something to feed the Allies and the starving nations what a blessing it would be for our rising generation.

Kent Co., Ont.

JOSEPH ANDERSON.

**The Farm Situation.**

EDITOR "THE FARMER'S ADVOCATE":

As our family has taken your paper since it was first published, I take the liberty of addressing a few lines to you, knowing that you have the interest of the country and farmer at heart.

I might say that conscription has already left its mark on this district in the unfinished fields, orchards and gardens, for through this district the farmers themselves have been refused exemption. As I write this letter I can see people passing along the highway to attend a sale of stock and implements, held by two brothers who had been given a few weeks to sell out, and the same men put \$4,000 worth of vegetables on the market last season. They have done the same business for years, and they are not the only ones, for farmer after farmer has been taken, from the 240-acre farm down to the 5-acre garden. In my own case I have farmed all my life and am nearing thirty. I am an only child, my father is 68 years of age and in poor health, also my mother, and, of course, I have run the place for the last few years. We have 18 acres of orchard and 15 acres used for vegetable and corn growing, the vegetables for the market and the corn for pig feed, as I keep two and three brood sows. The orchard is principally Spys and Greenings, 25 and 30 years and in fine condition, also 600 plums 8 years old, and the rest in pears and early apples, and yet the local board claimed that the fruit was not a national asset but a luxury and that the loss of the orchard would not be a national loss, nor yet the unproductive ground and also the pork.

From the above you can draw your own conclusions as to the judgment used by the local boards in the different districts in this locality. Now, if the need of this war is food production what is the country doing to win the war? Why where I sit I can see hundreds of acres of idle land, land that has been idle for years and yet it used to produce some of Ontario's banner crops, and more land is to go untillied. Can the country stand the strain?

Farmers for miles around here have held meetings night after night to try and find a remedy for the trouble and to discuss food production, and what result? The resolutions are all written up by capable men and are handed to different papers, and what happens? In the majority of cases the articles or meetings are simply ignored and our opinion as farmers never gets before the public, and the meetings stand for something, as you will know, when I state that anywhere from 100 to 300 men from one to fifteen miles distant attended.

Downsview and Islington meetings were examples of the feeling of the country, and the night of the Islington meeting was very cold and sleeting, and yet the town hall was filled with middle-aged farmers who were anxious for the national welfare.

Coming back to conscription. Our Government leaders promise that our appeals will receive the justice they did not get on the local boards, and yet how can we have confidence in the promise when the appeal boards are composed of men who are in similar walks of life to the men on the local boards who are not farmers or in sympathy with the rural people and rural ideas, and yet they are the men who are to judge who are necessary on the land and who are not?

York Co., Ont.

G. WOOD.

[NOTE.—Since our correspondent penned the foregoing letter we have read of many appeal cases going

general a nature to go down with farmers in this portion of the country. We have probably had dealings with as many farmers as your critical correspondent, and can assure you, as far as our experience goes, the charge is a gross injustice.

In his tirade he also soars to the heights in describing the apathy of one farmer who probably very naturally was sick and tired of viewing rocks and water on the journey West between Toronto and Winnipeg, and so very naturally welcomes the sight of "cows grazing and grain growing." I must plead guilty myself to a distinct relief on my westward way after leaving those interminable rocks behind.

The farmer is intensely practical and rightly so, else his success in his calling would be nil. Your correspondent also dabbles a little in politics. A very dangerous thing for a so-called "Higher Standard" farmer of such high standards of morals to meddle with. Throw it aside and come out honestly in true blue colors or lay no claim to being the most "honest" and moral farmer of our fair County of Middlesex. Quoting from Burns the Immortal Plowman Bard. Ah, sure:

"Could we but see oorsel's as ithers see us,  
It wad from mony a blunder free us,  
And foolish notion."

E. T. CAVERHILL, Sec.-Treas. Middlesex F. G. A.



A Result of the Coal Shortage.

before the judge, and of many bona fide farmers and farm laborers being exempted. Also, the Minister of Militia, the Prime Minister and other cabinet members have stated emphatically that farm workers will not be taken to the war.—Editor.]

**Do Farmers Need a Higher Standard?**

EDITOR "THE FARMER'S ADVOCATE":

Under the "virtuous heading" "A Higher Standard for Farmers," a correspondent recently had published in your column a tirade on the farmer which we cannot let pass unchallenged. The whole tone of the letter would lead one to say that your critical correspondent's liver was out of order and needed immediate attention, or that his mental faculties were pessimistic to an alarming extent. The charges of dishonesty on the part of the farmer are serious and altogether of too

**Fed Up Again.**

EDITOR "THE FARMER'S ADVOCATE":

Since writing my last I have been reading more Government literature, and it is wonderful the amount of money that the farmer should make from all the different successful demonstrations. The trouble is that the most important demonstration is still left for the farmer to work out alone with no help on this important point. All "hot air." Something like the latest system of bookkeeping advised. I know I could improve on my system, but I have no time or money to spend on one that has not been proven to be practical on the average farm. Since making my statement of what all farmers would be willing to do as their share in winning the war, I have questioned a large number and I have not interviewed one who is not ready and anxious to sign an agreement to work his farm during the continuation of the war for the current rate of wages with board for himself and such members of the family who assist him, depreciation on farm, stock and implements, taxes and 2½ per cent. on investment. In fact, the majority say that is more than they are making now.

A progressive farmer, live-stock salesman for a large farmers' club, said "if you take interest you have no wages; if you take wages you have no interest". Personally, I would state that I own one-third the farm, and as I am too old to enlist I thought my "bit" should be producing foodstuffs, so I gave up my position. I have invested \$4,000 in stock and implements, and for the duration of the war will be satisfied with no rent for share of farm, no interest on money invested, and one-half the salary, which included expenses, that I have made in commercial work for the past ten years.

Grey Co., Ont.

G. T. MARSH.

Tilbury United Farmers of Ontario, Kent County, R. W. Shaw, Secretary, report that during the year they held 37 meetings of their club and did a business of over \$18,000. Their membership is 84 with an average attendance of 50 at their meetings. Any club that can put up such an annual report as this must be a great factor for good in a rural community.

**Automobiles, Farm Machinery and Farm Motors.**

**Care of Farm Machinery.**

EDITOR "THE FARMER'S ADVOCATE":

Every man who owns farm machinery should at least take reasonable care of it, as it is made of wood and iron—two materials which rapidly deteriorate if left exposed to the elements. There is always a certain amount of wear and tear which can be somewhat lessened by judicious care. Judging from appearances, some people do not think that machinery requires attention. One of the things most important is to keep it well oiled so that the wear on bearings and castings will be alleviated as far as possible. They way some implements are oiled would lead one to believe that the owner thought the manufacturer put the oil holes in to lighten the weight of the machine. Not only is frequent oiling an important factor, but it is necessary to use good oil. Thick, dark oil, even though it is cheaper than the clearer and better running oil is not to my mind a paying proposition. You should be certain that the oil is clean and free-running. Rough ground is also very hard on implements, and it is a good plan to use a roller on meadows which are to be cut.

When the season for using the implement is over, it should be put in a dry place. The shed need not be spacious or elaborate, provided that it keeps the implements dry. There is not a man who would think of leaving his car in the snow all winter, and it is just as unreasonable to leave implements exposed as it is the car. Harrow teeth get loose and fall out, disks get rusty, binders, rakes and cultivators depreciate in value at an alarming pace if left in the open. When housed, it is an easy matter to repair them and it is more

likely that the repairs will be done during a slack time than if the implements are left exposed. Leaving the machine out in the weather is all right for the manufacturer's pocket but not for yours.

Haldimand Co., Ont.

L. B. HOOVER.

**Too Cold and Too Hot.**

The manifold is a constant study but perhaps it comes in for more attention during the cold winter days than it does at any other time of the year. Under ordinary driving circumstances occasions arrive when your car does not start with the ease that you desire. Under these conditions you have always pulled the primer on the dash or at the front of your car. When you used this primer you cut off the air intake on the carburetor but your purpose was to develop a quick vaporization in the manifold in order that firing in the cylinders might commence without delay. Perhaps it is not necessary to do so, but we shall explain in any event that the word manifold simply means "many fold." The device is nothing more nor less than tunnels or tubes constructed as gas connections to the engine proper.

When the manifold is cold and clammy the gasoline does not vaporize readily and so you might crank the engine for a long time or even exhaust your battery by working the self-starter without attaining results. Days and conditions are bound to come when you must give attention to the manifold or else you will never get your plant power into operation. There are a number of devices that can be used and there are many things that can be done to assist the manifold in its functions.

If the ordinary priming device fails to work satisfactorily it might be well for you to install a primer that will spray high test gasoline in the manifold until the engine turns over regularly. Such a contrivance consists of a pump installed on the dash or upon the front of your car. This pump draws a small quantity of good gasoline from a little tank and by means of two pipes connected with holes near the top of the manifold shoots the fuel in a vapor throughout the manifold. When the engine turns over it immediately finds gasoline to its liking ready to enter the cylinders. You can buy these gasoline primers or it would not be a difficult matter for an expert to install one.

A system that works out practically along the same lines is called a manifold plug heater. This is nothing more nor less than a piece of wire inserted in the manifold by means of a plug and fed with electric energy from a battery. When you use this device you turn the electricity into the interior of the manifold. The current runs over a wire that by giving resistance, produces heat and in turn makes the vaporization of the fuel a comparatively easy matter. When your engine commences operation it is not necessary to keep the current on the manifold because the car will immediately have become warm enough for all purposes.

If you are living in a climate that is not snowy enough to prevent traffic along the roads but at the same time is extremely cold you could install on your machine a combination primer that would not only spray gasoline in the manifold but also throw in some electric heat. Such a dual system of quick work should enable you to start your motor no matter how adverse the weather conditions might be.

We do not advise that you take any drastic steps in connection with the manifold simply because you may have been angry with it in one or two instances. There are extreme days when almost any motor is balky and must be nursed to a certain extent. Perhaps in a winter's driving, under ordinary climatic conditions, you will be compelled two or three times to provide auxiliary heat for the manifold, but the necessary steps are simple and cannot cause a great deal of inconvenience.

If you are close to some place where it is possible to secure a hot iron or some cloths that have been moistened with hot water, use these on the manifold or pour hot water over it, taking care that none of the water gets into the carburetor. If you are stalled some distance from a farm house or city dwelling get an old can and heat some water on a fire, that you can very quickly develop by the use of a little gasoline from your tank. We have seen a blow torch used on a manifold but we

warn you against any such method, as it is dangerous in the extreme. There are always vapors about the engine and it is often covered with oil and grease. Do not use a blow torch yourself and do not let anyone else use one unless they are willing to take the fullest measure of responsibility. It is better to walk home leaving your car intact upon a roadside than it is to walk home leaving it a burned and charred wreck.

Auto.

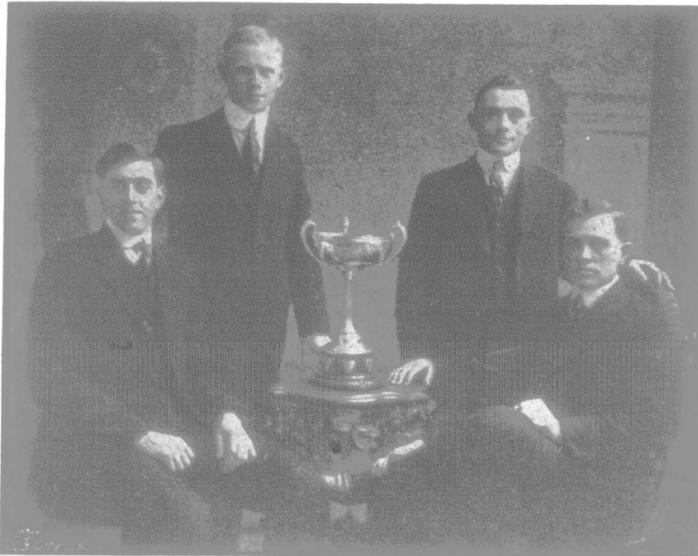
## Canada's Young Farmers and Future Leaders.

### Judging Competition at Guelph.

A good deal of interest was taken in the Inter-County Stock Judging Competition held at the Winter Fair. This year a team of three men from each of nineteen counties competed for the Duff Trophy. The men eligible in these competitions must at some time have taken the Short Course in agriculture held in his county, under the supervision of the District Representative. During the course the boys receive considerable instruction in judging stock and giving reasons. While they have a good deal of practice by visiting various herds in the county, they are unable to compare their ability with that of the boys in the neighboring counties. The competition at the Winter Fair gives an opportunity for a grand work-out on first-class stock of the various breeds. The teams are selected by the District Representative according to their proficiency in judging, consequently the members of the class work hard to get on the team. Placing the animals is not the only thing; the boys must be able to give reasons for placing one animal above another. Some of the boys who secured almost full marks for placings were low in the final score owing to their failure to give satisfactory reasons. In all, ten classes of stock were judged, and written or oral reasons given on the same. The team from York County secured a score of 2,324 out of a possible 3,000. This is two years in succession that York County team has won the honors. Oxford County was second with a score of 2,203; Victoria County third with 2,143; Middlesex fourth with 2,127; Essex fifth with 2,079, and Waterloo sixth with 2,062. The members of the winning team were: Clarke Young, Irwin Winch, and Frank O'Sullivan. Cash prizes were offered for the individual scoring the highest in each class. The maximum score was 200. Following is a list of the winners, together with their score: Horses: Norman Hoggarth, Oxford, 184; Frank Laidlaw, Haldimand, 182; Frank Scott, Oxford, 179; Gordon Anderson, Haldimand, 177; E. Sena, Haldimand, 176; Morley Moynes, Victoria, 176. Beef cattle: C. Young, York, 188; W. G. Sellars, Essex, 179; F. O'Sullivan, York, 171; I. Winch, York, 170; A. G. Page, Waterloo, 169; A. Gordon, Ontario, 167. Dairy cattle: Clarke Young, York, 170; H. Hallman, Waterloo, 160; F. O'Sullivan, York, 169; N. Hoggarth, Oxford, 158; E. Robinson, Middlesex, 957; H. C. Cameron, Peel, 151. Swine: M. Moynes, Victoria, 185; S. Merrill, Middlesex, 184; I. Winch, York, 183; S. McBlain, Brant, 182; E. Lemon,

Grey, 167; B. A. Wilson, Victoria, 163. Sheep: N. Stark, Haldimand, 172; E. Smith, Simcoe, 165; E. Stubbs, Peel, 154; W. G. Sellars, Essex, 151; E. Robinson, Middlesex, 150; A. Gordon, Ontario, 149.

There was also a competition for judging live stock open to students of the Ontario Agricultural College and farmers' sons throughout the Province, who are under twenty-five years of age. The following were the winners.—Swine: 1, G. W. Michael; 2, Wm. Boynton; 3, A. P. Clark; 4, R. R. Secord; 5, W. Hawley; 6, S. King. Sheep: 1, R. Newton; 2, A. Musgrave; 3, G. H. Scott; 4, R. J. Quail; 5, J. R. Sweeney; 6, T. Cooper. Horses: 1, H. Earle; 2, W. R. Gunn; 3, D. J. Matheson; 4, C. Lamont; 5, G. Patchett; 6, G. DeLong. Dairy Cattle: 1, T. R. Maxwell; 2, W. A. Hume; 3, E. C. Stillwell; 4, H. L. Davis; 5, G. De Long; 6, C. F. McKenzie. Beef Cattle: 1, D. Lerch; 2, D. W. Maxwell; 3, W. E. Snowden; 4, C. Jamieson; 5, W. D. Tolton;



Winning Stock Judging Team at Guelph.

Clarke Young, Irwin Winch and Frank O'Sullivan, the York County team, and instructor J. C. Steckley.

6, T. W. Foran. Poultry: 1, E. S. Snider; 2, A. B. Jackson; 3, H. G. Pringle; 4, M. Malyon; 5, C. A. Campbell; 6, R. C. Elder.

### Science and System Needed on the Farm.

EDITOR "THE FARMER'S ADVOCATE":

In the past few years it has been proven time and again that if work is done systematically and scientifically by the farmers as done by the men of other professions, a great deal more can be accomplished with less effort

than if no system is followed. Many of our farmers do work scientifically and they are the successful ones.

If there ever was a time when scientific farming was needed it is now, in the Empire's dark hour, when thousands of hungry mouths in Europe are open for food, and Canada is called upon to do her share in production. How much longer the war will last we do not know. Food may decide the issue, so if Canada's farmers are to do their utmost to bring it to a successful end they must farm scientifically. They must learn to know the weeds, and insect pests and study how to combat them. An elementary knowledge of all this is gained in public schools under the name "Nature Study".

The Department of Education has, for the last two years, allowed entrance students the privilege of working on a farm for their certificates. Is it but natural for a boy who has taken this subject in school, to try out some of the things he has learned, when he gets on the farm? When, for instance, he sees a weed not yet firmly established, he knows its name and habits, and instead of attacking it "any old way" he follows certain methods and the weed is eradicated. A correspondent in a recent issue says that "the time spent on Nature Study in public schools is wasted." Personally I believe that from the farmer's view point it is a beneficial subject. Our education in school consists of what others have found out, afterwards it consists largely of what we find out ourselves. Men's whole lives have been spent in working out laws and principles which we may learn in a few minutes; so there are many things that it is much better to learn in Public School when young, than in the painful school of experience at a later date.

Of course only elementary work on this very extensive subject can be taken in Public Schools; but many of our farmer boys get very little more than the education there provided. We have all heard the saying "All work and no play makes Jack a dull boy", and I believe that if the farmer had some "play" intermingled with his work, it would act as a stimulus and in the end he would accomplish as much if not more, than if he did nothing but toil, day in and day out. Continual work without recreation or amusement of some sort becomes monotonous. This amusement may be found in the study of nature and the things around us. "Nature Study" in schools is an effort to stimulate an interest in these things in our young minds, and make life on the farm more attractive. "Nature is God's handiwork", and the reason most farmers and farmers' wives are not interested is because God has been so liberal with his handiwork that a blade of grass seems too common to hold a sermon, and there is nothing interesting in a dandelion. It does not stop here—there is the insect life, the bird life, etc., all laid before the farmer better than before any other man.

When we realize the extent and beauty of this life around us farm work will cease to be a drudgery, and I firmly believe that Nature Study taught in public schools will do its share in opening the eyes of our future farmers along this line.

Elgin Co., Ont.

SUBSCRIBER'S SON.

Run the clippers along the backs of the cattle and dust them with some efficient louse killer. There will be no corn in Canada for lice this winter.

## THE DAIRY.

A new butter record has been made by the Holstein cow, Aaggie Acme of Riverside 2nd. Her official record is 24,690 lbs. of milk, making 1,331.77 lbs. of butter. She is owned by A. W. Morris & Sons, Woodland, California.

An Ayrshire breeders' club was recently organized at Foster, Quebec. The membership is limited to Ayrshire breeders residing in the counties of Brome, Missisquoi and Shefford. W. F. Kay, of Phillipsburg, was elected president; J. Davison, Waterloo, vice-pres., and W. M. Wallace, Warden, Quebec, secretary.

From October 1 to November 30, 13 Holstein cows and heifers qualified in the yearly Record of Performance test. There were six qualifying in the aged class, with Elsie Fairchild's Queenie leading with 498 lbs. of fat. Alma Patricia was first in the four-year-old class with a record of 12,046 lbs. of milk and 400 lbs. of fat. There were only two qualifying in the three-year-old class, and the highest record was made by Cherry Grove Mata Favorite. Her butter-fat record was 441 lbs. Countess Eva Walker led in the two-year-old class with 9,027 lbs. of milk and 323 lbs. of fat to her credit.

In the Record of Merit test, 47 Holstein cows and heifers qualified between October 1 and November 30. There were 18 in the mature class, with Johanna Jemima

Posch leading with 23.43 lbs. of fat. There were two in the senior four-year-old class. Lady Mercena Royal gave 484.07 lbs. of milk, yielding 17.87 lbs. of fat. Lulu Ormsby was first of the junior four-year-olds, and Hillcrest Pontiac De Kol first in the senior three-year-old class. Quora Pontiac Segis, a junior three-year-old, gave 14.23 lbs. of fat. In a class of 11 senior two-year-olds, Floral Hill Molly Walker was first with 419.2 lbs. of milk and 16.16 lbs. of fat to her credit. Sixteen junior two-year-olds were entered, and the highest record for the class was made by Calamity Kate Pontiac.

### Dairy Bulls at Guelph Show.

It is only the last year or two that there have been classes for dairy bull calves at the Winter Fair. It is not much extra trouble for a dairyman to bring a couple of bull calves to the fair, along with his cows, and it gives visitors at the fair an opportunity of getting a line on young stuff to place at the head of their herds. This year there was a total of thirty in the different classes, and competition was keen. While some of the calves would have stood a little more fitting, the quality on the whole was good. A. Kains, Byron; Percy Clemons, St. George, and J. M. Dolson, Alton, made the awards in the Ayrshires, Holstein and Jersey classes, respectively.

Humeshaugh Kate's Champion won first in the senior Ayrshire calves for A. Hume & Co. He was a straight, deep-ribbed, well-made calf, with a rugged constitution and a masculine front. There were nine

entries in the class. A. S. Turner & Son secured the red ribbon on Springbank Major, a strong, fine-quality senior calf. There was a half dozen right good calves in the senior Holstein bull class. The first placing went to King Fayne Alcartra, a winner at several fairs last fall. He has developed considerably since last being shown. The junior class was won by C. N. Hilliker on a growthy individual of good type and build. There were only five Jersey bull calves out, and the senior class prize went to J. Bagg & Sons, while A. Bagg secured the junior honors.

**Ayrshires.**—Exhibitors.—F. H. Harris, Mt Elgin; Collier Bros., Beachville; H. C. Hamill, Markham; W. Stewart & Sons, Campbellford; A. S. Turner & Sons, Ryckman's Corners; A. Hume, Campbellford; H. McPherson, Copetown; E. D. Hilliker, Burgessville.

**Awards.**—Senior bull calf (9): 1 and 2, Hume; 3, Turner; 4, Stewart. Junior bull calf (4): 1, Turner; 2, Stewart; 3, Hilliker; 4, Collier.

**Holsteins.**—Exhibitors.—J. J. Fox, Guelph; A. B. McPhail, Galt; A. E. Hulet, Norwich; M. H. Haley, Springfield; T. W. McQueen, Tillsonburg; Chas. N. Hilliker, Burgessville; W. C. Prouse, Tillsonburg.

**Awards.**—Senior bull calf (6): 1, Haley; 2, Fox; 3, Hulet; 4, McPhail. Junior bull calf (5): 1, Hilliker; 2, Hulet; 3, Haley; 4, Prouse.

**Jersey.**—Exhibitors.—Jas. Bagg & Sons, Edgeley; H. H. Gee, Hagersville; E. Craddock, Hagersville; A. Bagg, Edgeley.

**Awards.**—Senior bull calf (3): 1, Bagg; 2, Craddock; 3, Gee. Junior bull (2): 1, A. Bagg; 2, J. Bagg.

**Cheese and Butter Makers in Session.**

EDITOR "THE FARMER'S ADVOCATE":

The cheese and butter makers of Western Ontario filled the classroom of the dairy building at the O. A. College, on Tuesday afternoon of Winter Fair week at their annual gathering to discuss the work of the past season. R. W. Stratton, President of the Western Dairymen's Association was in the chair. Frank Hens, secretary of the association introduced the various topics.

The first topic was: Exhibitions of Cheese & Butter. The value of these for educational purposes was pointed out and from figures submitted it was shown that the creamerymen of Ontario had not exhibited at the leading fall fairs in anything like the same numbers as had buttermakers from the Province of Quebec. The cheesemen had done very much better. Lack of time and labor were given as reasons for not sending butter exhibits to the fairs. Some thought the money prizes were not sufficient. A committee was appointed to look into the whole question, and if possible, secure more money for distribution among those whose butter scored above a certain number of points—say 92 out of a possible 100. Some difference of opinion was expressed as to the best method of dividing the prize money. The suggestions were—to increase the number of prizes in each class; to give group prizes; and to give a prize to every exhibit that might be classed in grade 1.

The cream-buying station was thoroughly discussed. It was shown that these stations are on the increase in Ontario. The consensus of opinion seemed to be that they are unnecessary under creamery conditions as found in Ontario, and simply add another "middleman" to those already found located between the producer and consumer, which means less money for the farmer and more cost to the buyer of butter. Instructors McMillan and Smith reported on conditions as they found them at these stations in their districts.

Rennet substitutes have given more or less trouble to cheesemakers in Western Ontario during the past season because they become very much weakened in strength after holding for some time. Messrs. Gracey & Boyes, of the dairy instructors' staff, both reported that makers in their districts had difficulty this year when replacing rennet with pepsin. More care is needed in the setting of the vat for cheesemaking when using pepsin as compared with rennet. The meeting urged the importance of saving every calf's stomach from now until next spring, as there is likely to be a shortage of both rennet and pepsin next season. It was also advised to send these stomachs to a rennet manufacturer, rather than "soak" them at home. This is a very important question for cheesemakers to consider. The danger to the cheese trade is very great. A national conservation of rennet sources is needed, if we are not to suffer a serious drawback to our cheese trade in the near future.

A minimum temperature of 150 degrees F. and holding for 20 to 30 minutes, or a temperature of 170 degrees to 185 degrees F. by the "flash" system, seemed to be the prevailing opinion as to the best temperature for heating pasteurized cream. The immediate and proper cooling of the cream was also emphasized. Where this is practicable it was advised to cool and churn as soon as possible and by so doing the quality of the butter is improved. Where proper cooling is not possible, then it is better to hold over night in order to get good body in the butter and prevent excessive loss of fat in the buttermilk. Some advised the use of a culture or "starter", after pasteurizing and some not. Where the cream is delivered fairly sweet and pasteurized, Mr. Medd of Winchelsea found better results by not using a "starter".

Mr. Scott gave a brief account of grading butter during the past season during which twenty-six creameries sent samples to be scored and graded. All butter scoring 92 points and above, was placed in first grade. Eighty-nine per cent of the lots graded number one. Twenty-six per cent. scored 94 points and over. Mr. Scott thought it might be advisable to have a class known as "Special" for those scoring 94 points and over. Such butter should be made from pasteurized cream in order to prevent after development of objectionable flavors if held for some time in cold storage.

The moisture and salt contents of the graded butter varied a good deal, ranging from nine to sixteen per cent. moisture and averaging fourteen per cent. for the samples tested. The salt ranged from less than one per cent. to six per cent. and averaged 2.9 per cent.

There is much room for improvement in securing more uniform percentages of salt and moisture in creamery butter. The variations at present are altogether too great for best results in marketing.

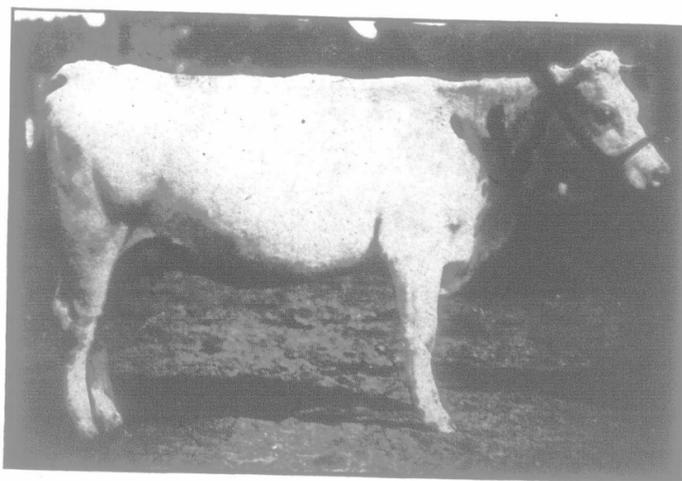
The grading of cream and butter was strongly advised as a means of improving the quality of Ontario butter. It was pointed out that in the future, it will be more difficult than in the past, to sell the poorer grades of butter. This will be brought about by the new conditions allowing the manufacture and sale of oleomargarine in Canada. Creamerymen and farm buttermakers do not know, as yet, just what they will be "up against", in this new competitor, but the judgment of those whose opinions are worthy of respect, is that it will compete most strongly with low-grade butter; therefore, buttermakers can no longer afford to make a second and third grade goods, as it will have to be sold at "oleo" prices.

The regulations with reference to butter substitutes was the last topic for discussion. So far as can be judged at present, the regulations seem to be all that are likely to be needed in order to insure that the imitation product shall not be sold for the genuine article, which is the

point of most importance now for buttermakers to guard against, as it is too late to prevent its manufacture and sale in Canada. One member thought there was a "Joker" in the latest regulations with reference to importation of coloring, and thought that there was a possibility of persons importing the necessary coloring and selling it to restaurants and other consumers for coloring purposes. This is a point which needs careful scrutiny by those interested in this question.

The meeting, as usual, was one of the most important dairy manufacturers get-togethers, that is held during the winter. There is no program of set speeches and anyone may introduce any topic he sees fit to discuss, or would like some enlightenment on, during the afternoon. The fact, that practically every one present remained until the last item was disposed of, indicates the interest and enthusiasm of those present. There cannot be too many of these free-and-easy gatherings, where formalities are dispensed with, and where subjects of interest are discussed from the "floor-of-the-house."

H. H. D.



**Francy Maid 2nd.**

Junior champion Holstein female at London for A. E. Hulet, Norwich, Ont.

**Beware of Tuberculosis.**

There is every reason to believe that tuberculosis in dairy herds is becoming more prevalent. It is a subtle disease that oftentimes becomes firmly entrenched in the animal system before clinical symptoms are visible. The germs lurk in dark and dirty places about the stable seeking whom they may weaken and destroy. The animal in a run-down or weakened condition is a fit subject for this disease which is no respecter of persons, times or places. Pure-bred as well as the grade herds are affected. The rich and the poor man suffer. It makes its appearance in the most elaborate stables, as well as in the ordinary cow barn. It gradually saps the

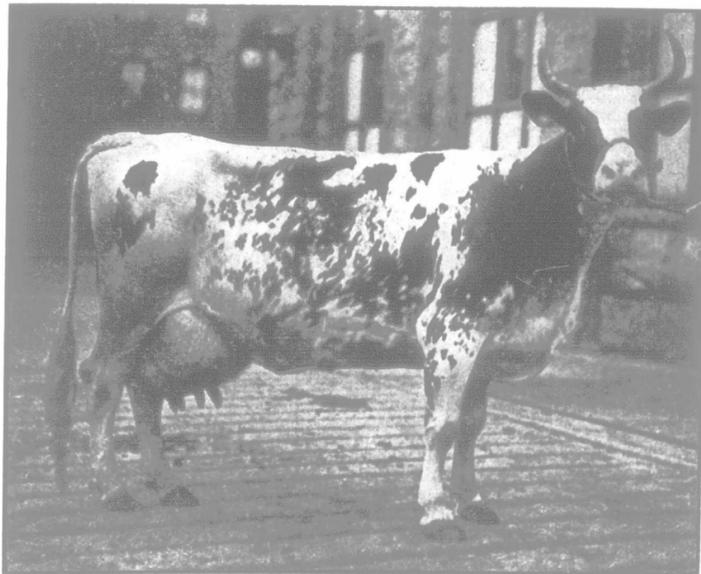
spread of the disease. But there are other animals, with bright eye, in high flesh, lacking cough, and to all intents and purposes healthy and thrifty, which may have tubercular lesions in some part of the system. They are strong and consequently are able to prevent the disease completely over-powering them, but they are dangerous; they spread the germs throughout the stable, and a less rugged member of the herd falls a prey. You may be fortunate enough to have a herd that is absolutely free from the trouble, but are you sure that the herd is free? It has happened that the animals least expected to be tubercular have proved reactors and post-mortem examinations revealed badly diseased organs. Hogs fed unpasteurized skim-milk from tubercular cows have contracted the disease, which goes to show the evil of laxity which results in the spread of a trouble which is preventable but incurable once it gains a foothold.

In Bulletin No. 253 on "Dairy Cattle," by Messrs. Leitch, King and Sackville is the following statement to tuberculosis: "This disease is much more common in Ontario herds than is usually supposed. This is due to the fact that animals well fed and cared for do not show any outward indications of the disease until it has reached a well-developed stage. There is no known cure for this disease and treatment consists only in preventing its spread to healthy animals. The presence of the disease is indicated only by the application of the tuberculin test. Every farmer would be wise to test all his cattle at least once a year. If only a few animals react they should be disposed of to avoid infecting the balance of the herd. In its first and middle stages the disease does not usually affect the sale of the meat. If quite a number react so that immediate disposal would cause a severe loss, all possible means should be taken to isolate the reacting ones from the healthy cows, both in the stable and in the pasture. The calves from diseased cows are always born

healthy and if removed at birth from contact with the mother and fed only the milk from healthy cows they will be as free from disease as calves from dams that have no tuberculosis."

Eckles and Warren, in "Dairy Farming," state: "Tuberculosis is caused by a species of bacteria. The bacteria cannot develop from the surroundings or conditions of handling, but must come from another animal having the disease. The germs which cause the disease escape from an infected animal in the slobbers from the mouth, with the manure, and sometimes in the case of udder infection, with the milk. As a rule, a cow does not die quickly from tuberculosis. The disease usually progresses slowly. The animal may have it for years without indications of ill health. The disease may attack almost any organ of the animal's body, but is common, as with human beings, in the lungs. . . . The tubercular organism in cattle is slightly different from the human form, but sometimes the bovine form is found in human beings. It is thought that tuberculosis of the lungs is rarely if ever contracted from cattle, but some of the cases of tuberculosis in the intestines and glands, especially in young children, are thought to be so contracted." Thus it will be seen how vital it is not only to the dairy industry, but to the human race that every possible means be taken to prevent the further spread of this disease. While it may be incurable, the seriousness of the situation may not be felt at the present time but it is necessary to take time by the forelock so that the herds of the future may be clean.

Fred F. Field, of Massachusetts, has been successful in eradicating tuberculosis. His efforts are based on scientific and common-sense theories and their practicability has been demonstrated. His methods, as given at the Holstein-Friesian Association meeting last summer, and published by that Association, are in effect as follows: Cleanliness is essential. Cobwebs should be swept from the stables, and the application of whitewash to walls and fixtures aids in cleaning things up. It is impossible to get too much sunlight in the stable. There should be plenty of fresh air in the barn, as every breath the animal takes should be new air going into her system. It is advisable to treat mangers, stachions, feeding boxes, etc., with a disinfectant solution, and to assume that every breeding cow is tubercular. As



**Lady Jane.**

Highest scoring Ayrshire cow at Guelph dairy test. Exhibited by A. S. Turner & Son, Ryckman's Corners, Ont.

vitality of its victim, and the diseased animal becomes a spreader of the scourge. Fred F. Field, of Massachusetts, speaking at the annual meeting of the Holstein-Friesian Association of America, advised breeders to be honest with themselves and to take it for granted that animals in the herd are affected and endeavor to protect the stock from the spread of the disease. It is a mistake for a man to lead himself to believe that his herd is clean unless he has used the tuberculin test. Some animals show clinical symptoms as a cough, failing in flesh, emaciated appearance, dry, harsh hair, etc. It is plainly to be seen that there is something wrong with an animal in such a condition and steps are necessary to prevent

soon as the calf is dropped it should be taken away, as it should never be allowed to have any of its mother's raw milk. The calf should not come in contact with any of the other animals, old or young, which are reactors. The calf may safely be fed on pasteurized milk, which is milk heated to 145 degrees F. and held at that temperature for thirty minutes. This should always be fed at blood heat. Under this system of feeding the percentage loss of calves at Dutchland Farms, operated by the Fred. F. Field Holstein Company, has been less during the past three and a half years than when raw milk was fed or the calves allowed to suck the dams. These calves should at no time mingle with reacting animals, or drink water from a trough or bucket that has been used by the reactors, as water is a carrier of tuberculosis germs. It is necessary to separate the healthy animals from the reactors on pasture. If this system is adhered to carefully it is possible to build up a new herd free from the disease. When they reach the age of yearlings the tuberculin test should be applied in order to determine the progress which has been made. It is possible that there may be one or two reactors, even when all this care is taken. Samples of the sputum or secretions of lungs and throat should be taken from the breeding animals for the purpose of a bacteriological test. This will determine whether the cow is passing off infectious tubercle bacilli. The presence of disease germs in the sputum indicates that the animal is a "spreader." It is possible for a cow to react and yet not be a spreader; in this case, she is not such a source of danger to the herd.

When pasteurizing the milk for the calves, care should be taken that it does not get much over 145 degrees. Holding it at that temperature for thirty minutes destroys the germs, while if the milk is scalded it may result in the death of the calves. Adhering to this method for a few years will result in the building up of a healthy herd, while at the same time preserving the breeding herd, without material loss, until it is time for their disposal. Unless precautions are taken there are many breeders who will sooner or later suffer a severe loss. The disease may remain more or less dormant for a few years and then due possibly to climatic conditions or to a weakened constitution break out in a pronounced form which will necessitate the disposal of the entire herd. It is a disease which has been trifled with for too long a time by the majority of breeders. The demand arising for tubercular-free breeding stock and for milk from tubercular-free herds has awakened many to the need of knowing their animals and keeping them healthy. If milk cows are infected, then, the owner should know it, as by using milk from such cows he is running the risk of infecting the calves and swine. A still greater risk is in the liability of children, the heaviest users of milk, contracting this dread disease. Clean milk is nature's best food; we do not use enough of it for our own good, but we should have reasonable assurance that it is free from disease germs. Pasteurization, if properly done, will destroy tubercular germs without injuring the quality of the milk.

Breeders are beginning to realize the importance of fighting this disease. When purchasing stock they are asking if it is tuberculin tested. If so, and they do not react it enhances their value; if reactors, they are not wanted. The removal of one or two individuals may safeguard the rest of the herd. If the disease has gained a foothold and has a large number of the herd in its clutches, then a system of handling and building up a clean herd as previously outlined might well be resorted to. Allow plenty of fresh air and sunlight into the stables. Get rid of dark corners by putting in more windows and then clean out the dirt and rubbish and apply a coat of whitewash to the interior of the stable. Winter is the season when the vitality of stock is liable to reach its lowest point and the housing of a number of cattle together tends to the spread of disease should it be present. A tubercular-free herd should be the aim of every stockman.

### Shortage of Cheese and Butter-makers.

EDITOR "THE FARMER'S ADVOCATE":

The importance of dairy products in connection with the present world-shortage of food, cannot be over-estimated. Dairy farmers are being urged to produce to the limit, which is quite important, but we need to remember that dairy farmers, in most cases, prepare raw material in the form of milk and cream, which must be further changed or manufactured into concentrated food products like cheese, butter, and condensed or powder milk. Without this manufacturing process, the great dairy industry of Canada would be seriously handicapped—in fact would be almost crippled. In order to manufacture these food products, a factory properly equipped and skilful operators are necessary. The season of 1918 is likely to see a great shortage of cheese and butter makers and something must be done to increase the available supply of trained persons, men or women, before the opening of next season.

To meet this shortage, the Dairy School, in connection with the O. A. College, Guelph, will admit those without factory experience to the Factory Dairy Course, which opens Jan. 2nd, 1918. Any person not fit for immediate Military Service will be allowed to take this course, and those passing the examinations at the end of the twelve weeks' course are practically sure of a job at good wages for next season.

Some good friends of the dairy industry of Canada who were wise enough to see the threatened menace to the business, have furnished cash scholarships to the value of \$125 to be given to successful students of the Dairy School Class, 1918. An extra effort must

be made before the Spring of next year, to secure a larger supply of competent butter and cheese makers, or matters will be in a serious condition for manufacturing milk products and the world will suffer accordingly.

H. H. DEAN.

Professor Dairy Husbandry, O. A. College.

### Election of Directors of Holstein Breeders' Association.

The election by ballot of directors of the Holstein-Friesian Association for the provinces other than Ontario has been completed with the following results: Maritime Provinces, Thomas, Westford, N. B.; Quebec, Neil Sangster, Ormstown, Que., P. J. Salley, Lachine Rapids, Que.; Manitoba, Homer Smith, Winnipeg, Man.; Saskatchewan, Harry Follett, Duval, Sask.; Alberta, E. W. Bjorkeland, Red Deer, Alta.; British Columbia, Dr. S. E. Tolmie, Victoria, B. C.

## HORTICULTURE.

### Cover the Strawberry Plantation.

One year with another, strawberry growers gain by mulching the plants in spite of the disadvantages which accompany the practice. Mulching entails considerable extra labor and, most of all, it too often carries a wealth of weed seeds that germinate and grow luxuriantly where they should not. On the other hand the intermittent freezing and thawing in the spring plays havoc with the unprotected plants, and when not held back artificially the bloom may develop too early and get nipped with unseasonable frost. This is, in brief, the case for and against mulching. The strength of the arguments on either side vary with local conditions but in Canada generally they are strongest on the side of winter clothes for the strawberry patch. Coarse material is usually more free from weed seeds than fine straw or or strawy manure, but when it is too bulky it is necessary to remove it in the spring. Corn stalks, small boughs, marsh hay, etc., all answer the purpose, but on the average farm straw or strawy horse manure are most easily obtained. In most districts of Canada a considerable snowfall covers the ground and it is only necessary to apply a thin covering, two or three inches in depth during the fall or early winter. This can be raked between the rows in the spring where it will help to conserve moisture and keep the berries clean. If the straw is well shaken the fine stuff will fall out and leave a material for covering from which the weed seeds have been partially eliminated. Three years out of five strawberries suffer from drought when the fruit is developing and maturing. Where some efficient system of irrigation is not installed it is practically impossible to overcome this great deterrent to a good crop except through cultivation or mulching. The difficulty connected with cultivation at that particular season is well understood, and the only remaining method of supplying moisture to the plants is in conserving it in the soil from early spring. A fine mulch between the rows is instrumental in preventing evaporation and thus a mulch or covering serves two purposes, inasmuch as it acts as a protection so long as needed after which it conserves moisture for the developing and maturing crop.

### Plan in the Winter and Plant in the Spring.

The plans for next season's cropping system should be made largely during the first few months of the year. One usually has some time then before pruning starts and before spraying equipment must be oiled up and put into operation. Labor is the all-important factor now and the schedule for the whole season must be drawn up to comply with conditions under which agriculture is being carried on. Unless situated near a town or village upon which one can rely for day labor and female help it is useless to attempt any big things that will require many hands. Strawberries for instance are a paying crop when pickers can be gotten, but if they cannot it is a money-losing crop. The same is true of raspberries and other small fruits. On the other hand, where pickers and day labor are available small fruits such, as previously mentioned, are splendid money-making crops on account of the difficulties which exist almost universally and which only a small percentage of growers are in a position to overcome. Of course, one cannot jump into these things in one season, but the exceptionally high prices which have prevailed in some lines during the last two or three years might induce some, in a moment of weakness, to launch upon a scheme which they will eventually find themselves unable to carry to fruition. No doubt the girls from colleges, towns and cities will volunteer their services again next season, and until the labor situation is re-adjusted; but when laying plans to use them one must provide sufficient work and suitable accommodation. Here is where neighbors should co-operate. Their employment should extend over a period long enough to warrant their moving to the location and ample enough to engage a number so as to make it congenial. This class of pickers have rendered valuable assistance in the Niagara District and near some of the larger urban centres where they could be accommodated in numbers, their life made pleasant and their toil remunerative.

Many growers could increase their revenues by adding vegetable culture to their fruit-growing activities. In connection with this one factor might be kept in

mind. The backyard garden in the urban centres is being encouraged and during the season just past the city homes were largely supplied from these small, but in most cases, productive plots. The market for vegetables was dull indeed during the period when different kinds were, under natural conditions, ready for use. The commercial grower might mature his product and offer it either early or late, but not at that time when the backyard garden is at its best. By the use of glass and cold frames the gardener can supply the urban consumer before the little town plots are ready to decorate the table, and then again he can have a late product to go into their cellars after the limited town-grown supply is exhausted. This is one phase of the subject but the fruit grower who opens the new branch of olericulture must see to it that vegetable and fruit do not require attention at the same time, or he will find himself in a dilemma and pressed to such an extent that loss instead of profit may result. An apple grower might find early vegetables most remunerative while the owner of a small fruit plantation could handle late vegetables best, such as could be lifted in the fall after the berry and fruit harvest is ended. It is no use attempting too much; the chief idea is to distribute the demand upon labor over the entire open season.

Some action should be mixed with the planning. Order vegetable seeds early; put the spraying machinery in the best possible condition and make everything as convenient as possible; have extra connections and replace those parts which are likely to give out; obtain the spray material in good time and have the fertilizer purchased and in the place before it is time to use it. Don't be obliged to go to town for something when you can work on the land or in the orchard. Winter has just nicely set in now but it will soon pass and we shall find ourselves shortly in the midst of work with an unprecedentedly short supply of labor and confronted by an urgent demand for production. Plan in the winter and plant in the spring.

## POULTRY.

### A Great Poultry Show.

The poultry show at the Guelph Winter Fair was claimed to be the largest held in the world this year. Guelph has always been noted for staging a high-class poultry show, but it broke all records this year when 6,200 entries were made. It was quite common to see from 90 to 100 birds in a single class. The quality on the whole was excellent. White Leghorns, Rocks, Wyandottes, Reds, and Orpingtons were among the strongest in point of numbers. The cockerels and pullets were well developed, and the older stock had fully recovered from moult. There was a large showing of what are termed the exhibition and fancy fowl, the Silkies, Polands, etc., attracting a good deal of attention. There were thirty-two exhibitors of Barred Rocks, twenty-eight of White Wyandottes, twenty-five of Single-comb Reds, thirty-seven of White Leghorns and sixteen of Buff Orpingtons. There were about ninety classes in all for fowl. The showing of water fowl and turkeys was somewhat superior to past years.

The Laying Competition was inaugurated this year for the first time at the Guelph Winter Fair, and the records of the pens entered were closely followed throughout the entire show. Ten pens were entered, and in judging, the number of eggs laid, the weight of eggs, and the candling condition were taken into consideration. The first prize went to a pen of Rhode Island Reds, exhibited by H. Sutton, of Guelph. The pen of five birds laid 24 eggs in six days. Barred Rocks came second, with a record of 18 eggs; they were shown by J. R. Stork, of St. Catharines. White Leghorns were third, their record being 17 eggs. They were exhibited by J. W. Pigott, Sulphide.

There was a very fine showing of dressed fowl, and not only were the birds well fitted but the carcasses were nicely dressed and put up in an attractive manner. The last day of the Fair the dressed poultry was auctioned off. Chickens brought from 20 to 37 cents per pound; ducks, 20 to 41 cents; turkeys, 38 to 42 cents, and geese, 18 to 28 cents.

### Early Pullets vs. Old Hens For Eggs.

For profitable early winter egg production the early hatched pullet is three times better than the late pullet, four times better than the yearling hen and thirty times better than the "aged" hen.

Early pullets are best for winter eggs. This has been demonstrated many times. The Poultry Division, Experimental Farm, has collected figures for several years and when the three months (November, December and January) only are taken into consideration the relative profitability of the four ages is as noted above. If the six winter months were considered the contrast would not be so striking for the hens and the late pullets were just beginning to lay when the experiment closed. However, if eggs alone are to be considered we cannot afford to feed birds until towards spring before they produce. Even if desired for breeding it is a question if, with the high price of feed, we had not better rely upon the well matured pullet for hatching eggs next spring rather than feed hens that will not produce or only at a loss. Certainly there is no excuse whatever for keeping in our poultry houses late pullets whose eggs cost more than they are worth and birds that are absolutely useless as breeders.

This summary is of results that extend over four

years and are taken from several of the farms of the system so that the figures will indicate fairly well what may be expected for these three months.

These figures show that early pullets (hatched before May 1st.) produced eggs at a cost for feed of 18.3cents. The late pullets (hatched after May 15th) at a cost of 56 cents. The year old hens at a cost of 78.2 cents, and for every dozen eggs laid by the hens in the aged class the cost of feed was \$5.73.

Again these facts should be emphasized (1) that for profitable egg production birds should lay before February. (2) Early, well-matured pullets are the only birds that may be expected to do this. (3) Late pullets as a rule will not pay to keep. (4) For eggs, hens are not profitable. (5) If we have a good flock of early pullets, for the time being depend upon them for breeding. (6) It is a national loss to keep birds that eat a dollar's worth of feed to produce fifty cents worth of eggs.—Experimental Farms Note.

**Guard Against Overcrowding in the Pen.**

It is necessary to give the birds plenty of room, not only on the scratching floor but also on the roosts. If there are more birds in the pen than it can rightly accommodate, there is danger of vices such as feather pulling and egg eating commencing, and crowding and quarrelling on the roosts at night are not conducive to the well being of the fowl. For convenience it is customary to house the entire flock in one pen. This practice facilitates feeding and general care of the flock, thus saving time and labor. However, it does not always result in this practice giving the highest average percentage of eggs. In the first place the individuality of the birds cannot be as closely observed as where they are kept in small flocks. It is generally conceded that the average production of eggs is greater from a small flock than from a large one. One reason for this is that the birds in the small flocks get better care as individuals; slight ailments are noticed more quickly and remedies applied before complications set in. Be that as it may, the highest egg yields are usually secured from pens of a dozen to twenty birds. To divide a farm flock of one hundred or more birds up into such small groups would hardly be practicable. It would require a readjustment of the poultry building, and the returns might not warrant the change. It must be remembered, however, that crowding must be avoided if the best results are to be obtained. All cockerels, except those kept for breeding purposes, and the pullets should be disposed of. If the pen is still crowded, further culling should take place, even if it does necessitate getting rid of some fine birds in order that those that are retained may have every chance so far as space is concerned to make good. If the housing is faulty, a lot of feed is practically wasted; it does not bring the desired results.

The hens should be induced to take exercise; in fact, they must take a certain amount of exercise or their vitality will be lowered to the point where they become as easy prey to disease. Feeding the grain part of the ration in a deep layer of straw is one of the best ways of making the birds bestir themselves. Unless the pen is overcrowded and is poorly ventilated, this straw will remain dry for some time, but it soon becomes wet if there are too many hens for the pen. There should be at least four square feet of scratching space for each bird.

In order to get eggs, even from the right quality of pullets, it is necessary to cater to their likes a little, rather than merely throw a certain amount of feed at them each day. Some birds prefer one thing, some another, consequently a varied ration is desirable. If the various ingredients which are required for egg production are placed within reach the birds will find what suits their particular taste. Bran, shorts, and rolled oats, with a little charcoal and beef scrap, will comprise the dry mash; all but the oats can be used in the moist mash. A mixture of wheat screenings, buckwheat, barley, corn, and oats makes a very good grain ration. If corn is not available, more barley can be fed. It is surprising the quantity of oats fowl will consume and as they are quite plentiful they might form a considerable portion of the ration. Don't neglect the green and animal feeds; they are essential. Shell, grit, and clean water, or sour milk, should be available for the birds at all times. Neglect any one of these and production suffers. Good birds, proper housing, and sufficient of the right kinds of feeds are required to get eggs during the winter.

**The Value of Oats For Poultry.**

EDITOR "THE FARMER'S ADVOCATE":

It has been truly said that "Necessity is the mother of invention." The absolute need for obtaining results at lesser cost than by using the old methods has taught many valuable lessons in the matter of feeding that may mean much later.

The number of big poultrymen who have specially mentioned the value of oats as the basis of poultry feeding this year is surprising, but undoubtedly all have been experimenting to keep their cost down and have come to the same conclusion, namely, to put their main dependence on oats. With wheat as high as it is and so urgently needed for the warring nations, it becomes almost prohibitive to depend much on it, and corn is almost as bad.

Here is what a prominent Wisconsin breeder says of his experience, in meeting the high cost of feed situation: "We did not attempt to meet it by feeding corn, because no corn has been on sale around here lately.

Our main food in bringing along these hundreds of large and healthy cockerels and pullets has been oats—oats just as they come from the threshing machine. Have been feeding mostly oats right along and we never had the birds do better. They speak for themselves, as you see them here.

"We now feed a daily ration, made up of five parts wheat bran, two parts beef scrap, five parts ground oats, and three parts milk mash. We should like to add two parts flax meal, but have not had it lately. Additional to this ration which is fed once daily—all they will eat up clean—we feed whole oats twice a day, either in litter inside the house during bad weather, or scattered broadcast outside when the weather is favorable. Once a week for variety we substitute barley for oats; also twice a week we feed a commercial scratch feed. On range, as you see our stock here, they do not need special green food at this season of the year, but occasionally we boil up small potatoes for them—potatoes too small for marketing.

"I am fully converted to the use of oats as the chief grain food for growing fowls on range. We have never had a sturdier, healthier flock. The percentage of loss has been practically nothing—so slight that we have not paid any attention to it. Disease has not visited our flock at all since we have been feeding oats."

The writer has been advising neighbors and friends to work in more and more oats into their rations and, in all cases, the results seem to be very satisfactory. One friend who has been getting more eggs than his neighbors is feeding only crushed oats, bran and the smallest quantity of poultry regulator. A little bran and oats are fed moistened with scalding hot water and a spoonful of regulator mixed in for the morning feed, just house scraps at noon and crushed oats at night.

When oats or any other grain is used as a basis of ration results naturally will largely depend on the other foods furnished, and will vary according to what that supplementary supply may be. It is probably not generally known that there is just as much protein in a ton of good oats as there is in a ton of plump wheat, although, of course, there will be considerably less bulk in a ton of wheat than the same weight of oats. Naturally when wheat becomes shrunken from drying it contains more protein for its weight and less water. In fact, wheat that is thoroughly dried or shrunken for the same price, will contain fully half as much protein again as new, plump wheat. It must be remembered, however, that digestibility is always a very important factor, and ease of obtaining the elements really reduce their cost by increasing the amount of protein obtained from the amount eaten in less time, and with less work to the digestive organs.

Oats form the most ideal grain for poultry. They have almost a perfect balance, and with suitable green food will work to better advantage than any other grain alone. Moreover, the use of oats meets the win-the-war desires and serves a double purpose. So long as the price is reasonable oats can very well form the basis for the feed with expectations of the best results. Welland Co., Ont. A. P. MARSHALL.

**Poultry Accounting.**

Few poultrymen take the trouble to keep accurate account of the expenditure and receipts in connection with their business. While they may have an idea of the number of eggs produced and the amount of feed consumed, the profits or losses are largely guessed at. Some claim that the birds do not pay for themselves, while others announce profits of a dollar or more per hen. It would be much more satisfactory if there were records kept of feed and eggs. Cost accounting is advisable in every department of farm work, in order that the operator may know exactly whether or not each department pays its way. With poultry it is as easy or easier to keep accounts than with other branches of farming. The feed consists chiefly of grains which have a cash value. Of course, the roughages consumed by other stock also have a value, but it is not so easily reckoned as the grain. The custom of going to the granary twice a day and taking so much grain out of the bin to feed the fowl is all right, but, after keeping strict account of feed necessary for a flock for a year, we believe that many poultrymen would be astonished at the weight of good grain they had carried to the birds in the course of twelve months. Now, it is not a difficult matter to bag up a few hundred pounds of grain and either leave it in the granary or empty it in a covered box in or near the poultry pen. The weight of this could be marked down together with the market price. The bran, shorts, shell, etc., that are fed must be purchased so that there is little trouble in getting either the weight or price. It is a little more difficult to keep track of the eggs. They may be gathered at different times in the day, by different persons. However, if a sheet were tacked up at the place where the eggs are stored, it would not be much trouble to record the number of eggs gathered each day. A handy method is to rule a medium-sized sheet of paper vertically so that there will be a column for each day of the month, one for total number of eggs for the month and also the price, one for grain feeds, mashes and price of same. On the left hand side of the sheet there could be a column to record the number of hens in the flock each month.

This sheet could then be ruled horizontally, leaving a space for each month of the year. By so doing the number of eggs and the cost of feed for any period of the year could be seen at a glance. At the end of the year the feed and monthly egg column could be totalled and the profit or loss noted at a glance. This sheet can be filed at the end of the year for future reference. There is nothing complicated about this method of accounting, yet it records all the information the average poultryman wishes to know about his flock. Other columns can be added, if it is so desired, to keep track of birds sold, together with the price. Not only will the profit and loss be shown on the sheet, but it will be interesting to note the rise and fall of production with the change of seasons.

If the balance is on the wrong side at the end of the year, it is an indication that there is something wrong with the method of feeding or housing, or possibly the breed of fowl kept is not of a heavy-laying strain. If a poultryman is making a profit on his flock, he is not anxious to make much change in his system or methods of feeding and care, but, if figures clearly indicate that the birds have not paid for themselves it is time to make a change if the fowl are kept as a money-making proposition. If the records show that the bulk of the eggs are gathered during the time of lowest price, an effort should be made to hatch the chicks early in the spring and then feed them so that they will start laying early in the winter. There is ample proof that it is possible to get eggs during the winter, and it is the flock that lays a fair percentage of their yearly output at the time when eggs are highest priced that gives the greatest profit. To get winter eggs may require a re-modelling of the pens or a change in the system of feeding. If hens are kept they should be handled so as to give a fair profit over cost of feed and labor. Keeping feed and egg records will show exactly where the flock stands as a source of revenue on the farm.

**FARM BULLETIN.**

**Sir Mackenzie Bowell Passes.**

One of Canada's oldest and most highly respected statesmen, Sir Mackenzie Bowell, passed away at his home in Belleville, Dec. 10th. He was 93 years of age. His first political fight took place away back in 1863 and he was first elected to the House of Commons in 1867. He became Minister of Customs in 1878 and Minister of Militia in 1892 and was from 1893 to 1894 Minister of Trade and Commerce. From 1894 to 1896 he was Premier. He was appointed to the Senate where he was leader until 1896 and afterwards leader of the opposition in the Senate until 1906. The late Sir Mackenzie Bowell was born in England came to Canada when ten years of age and started work in this country at the age of eleven as a printer's "devil". His rise to fame and place was rapid. He was an ardent Imperialist and an Orangeman.

**No Bran and Shorts to be Exported.**

The Food Controller announced last week that no bran and shorts will be allowed to be exported from Canada until Canadian requirements are fully met. The Food Controller is also considering fixing prices for such feed but at any rate he has assured that it will be made available to farmers at the lowest possible cost and the profits of dealers may be fixed. Farmers are asked to make full use of the New Feed Branch of Dominion Department of Agriculture, Ottawa.

The Western Ontario Seed Growers' Association recently held their annual meeting and elected the following officers for the ensuing year: Hon. Pres., G. H. Clark, Ottawa; Hon. V.-Pres., Dr. C. A. Zavitz, O. A. C.; Pres., A. McKenny, Amherstburg; V.-Pres., A. S. Maynard, Chatham; Sec.-Treas., W. J. Lennox, Toronto; Asst. Sec., R. E. Mortimer, Toronto. Directors: Wheat, Will Barrie, Galt; Oats, R. E. Mortimer, Honeywood; Barley, R. B. Cohoe, S. Woodsee; Corn, A. McKenny, Amherstburg; Rye and Buckwheat, R. R. Moore, Norwich; Peas, C. M. Laidlaw, Powassan; Glovers and grasses, A. W. Mason, O. A. C.; Roots, A. McMeans, Brantford; Potatoes, H. L. McConnell, Pt. Burwell; Vegetables, J. W. Crow, O. A. C.; Beans, A. S. Maynard, Chatham; Reps. to Winter Fair Board, A. McKenny, R. E. Mortimer, W. J. W. Lennox and W. J. Squirrel.

From now till spring there will not be too much light in the stable at any time. Clean down the cobwebs and wash the windows.

**A Great Help.**

EDITOR "THE FARMER'S ADVOCATE":

I have found your magazine the best of its kind and would not like to do without it for it has been a great help to me.

Nipissing District, Ont. K. F. JOHNSON

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending December 11.

Receipts and Market Tops.

Dominion Department of Agriculture, Live Stock Branch, Markets Intelligence Division

CATTLE							CALVES						
Receipts			Top Price Good Steers (1,000-1,200)				Receipts			Top Price Good Calves			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	Week Ending	
Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 6	
Toronto (Union Stock Yards)	5,560	7,345	7,971	\$12.25	\$ 9.25	\$11.50	445	939	574	\$16.00	\$12.00	\$15.50	
Montreal (Pt. St. Charles)	1,515	1,626	1,206	11.00	9.25		240	573	243	15.00	10.50	15.00	
Montreal (East End)	1,812	1,803	1,576	11.00	9.25		115	461	282	15.00	10.50	15.00	
Winnipeg	7,344	3,782	7,284	12.00	8.00	10.50	200	140	259	9.00	9.00	9.75	
Calgary	2,649	2,108	4,156	10.00	7.00	11.00							

HOGS							SHEEP						
Receipts			Top Price Selects				Receipts			Top Price Good Lambs			
Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	Week Ending	
Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 13	1916	Dec. 6	Dec. 6	
Toronto (Union Stock Yards)	10,631	14,416	7,823	\$18.75	\$11.90	\$18.00	4,484	4,381	5,014	\$17.00	\$12.75	\$18.25	
Montreal (Pt. St. Charles)	929	931	848	18.25	12.60	17.50	695	376	1,167	17.25	12.50	17.00	
Montreal (East End)	624	1,238	1,201	18.25	12.60	17.50	1,114	1,196	2,147	17.25	12.50	17.00	
Winnipeg	8,267	8,143	8,718	17.00	11.15	16.25	309	227	590	15.75	12.25	15.50	
Calgary	1,396	2,932	2,914	16.80	10.15	16.00	233	189	442	15.75	11.25	15.75	

## Market Comments.

### Toronto (Union Stock Yards).

Three thousand cattle were on sale on the Monday market, a large proportion of them being of good to choice quality. With a keen demand prevailing for choice killers for the Christmas beef trade, prices advanced sharply on all the best grades of cattle. On Tuesday with eight hundred cattle on sale, trading was steady at Monday's advance, but with twelve hundred available on Wednesday, prices declined 25 cents per hundred on all except really choice killers. The market closed on Thursday with trading none too brisk at the previous day's decline. With anything like a liberal supply available next week it is scarcely probable that present prices will be maintained. One load of heavy steers of thirteen hundred pounds sold on Monday at \$12.75 per hundred, two other loads sold at \$12.50, while several lots sold from \$11.75 to \$12.25. Butcher steers of choice quality weighing from ten hundred to twelve hundred pounds sold from \$11.75 to \$12.15 per hundred, one load of 23 head bringing the latter price, quite a number of loads sold from \$10.25 to \$11.50. For choice handy weight butcher steers and heifers, some exceptionally good prices were realized. One choice baby beef animal of nine hundred and sixty pounds from Woodbridge, Ontario, sold at \$17.50 per hundred. Seven head sold at \$15.00 while eight others sold at \$14.00. Other sales were made at \$12 to \$12.50, while several loads sold from \$11.25 to \$11.85 per hundred. Medium butcher cattle sold from \$9 to \$10, and common from \$7.50 to \$8.50, per hundred. Choice young cows sold as high as \$11.90 in one or two instances, and several sales were made from \$10.50 to \$11.90, while good to choice cows brought from \$9 to \$10, medium from \$7.50 to \$8.50, canners and cutters from \$5.75 to \$6.25. Bulls were selling at higher prices in sympathy with other grades of cattle, most of the best bulls selling from \$9.50 to \$10.50 per hundred, and bologna bulls from \$6.50 to \$7.50. Calves of good quality were in steady demand with top sales being made at \$16, and the majority of the sales from \$14.00 to \$15.50 per hundred.

The lamb market was a trifle lower last week, the bulk of sales being made on Monday at \$16.75 to \$17.50, while on Tuesday one or two lots were weighed up at \$17.75 in a somewhat stronger market. A further slight advance followed on Wednesday with \$17 to \$17.50 being the range for most of the sales, although one small lot of black-faced lambs sold at \$18. The market closed on Thursday at \$17 to \$17.75 per hundred. During the week a number of breeding lambs were sold at prices ranging from \$17.75 to \$18.25 per hundred with breeding ewes realizing \$14 to \$16 per hundred.

The hog market developed further strength during the week, selects opened on Monday at \$18 and advanced on Tuesday to \$18.25 on some lots, followed by a further advance on Wednesday of 50 cents, with \$18.50 to \$18.75 covering most of the sales. The market on Thursday closed at \$18.50. A large number of hogs were on sale on the latter day, about four thousand being on the open market with twenty-five hundred being in the yards consigned from Western Canada to local plants.

TORONTO (Union Stock Yards)					MONTREAL (Pt. St. Charles)				
CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS heavy finished	129	\$12.12	\$11.50-\$12.50	\$12.75	46	\$12.10	\$11.00-\$12.60	\$12.60	
STEERS good	352	11.25	10.75-11.75	12.25	2	11.00	11.00-	11.00	
STEERS 1,000-1,200 common	20	9.93	9.00-10.50	11.00	37	10.25	9.45-10.50	10.50	
STEERS good	804	10.67	9.75-11.50	11.75	5	10.35	10.25-10.50	10.50	
STEERS 700-1,000 common	380	8.56	8.00-9.25	10.25	144	9.25	8.50-9.90	10.00	
HEIFERS good	656	11.13	10.00-11.75	12.25	88	9.25	8.50-9.50	9.75	
HEIFERS fair	464	9.61	8.50-10.00	10.25	144	7.25	7.00-7.50	7.50	
HEIFERS common	135	7.83	7.00-8.75	9.00					
COWS good	88	8.58	8.00-9.25	10.00	10	8.90	8.75-9.00	9.00	
COWS common	1,082	6.99	6.25-7.50	8.00	342	7.50	6.75-8.50	8.50	
BULLS good	71	8.77	8.00-10.00	10.50	12	9.60	9.00-10.15	10.15	
BULLS common	60	7.02	6.75-8.00	8.75	182	7.25	6.50-8.50	8.75	
CANNERS & CUTTERS	906	6.00	5.75-6.25	6.25	484	6.25	5.50-6.50	6.50	
OXEN					7	9.75	8.50-11.00	11.00	
CALVES veal	438	14.00	13.00-15.00	16.00	226	12.50	11.00-14.50	15.00	
CALVES grass	7	7.00	6.00-8.00	8.00	14	7.35	6.75-7.50	7.50	
STOCKERS good	5	8.25	7.75-8.50	8.50					
STOCKERS 450-800 fair	252	7.62	7.00-8.00	8.00					
FEEDERS good	69	9.53	9.00-10.00	10.00					
FEEDERS 800-1,000 fair	83	8.75	8.50-9.00	9.00					
HOGS selects	9,793	18.40	18.00-18.75	18.75	830	18.01	17.75-18.25	18.25	
HOGS heavies	119	18.05	18.00-18.75	18.75					
HOGS (fed and watered) lights	466	16.81	16.00-17.50	17.75	70	17.25	17.00-18.00	18.00	
HOGS sows	248	16.55	15.00-17.50	17.50	27	15.45	15.25-15.75	15.75	
HOGS stags	5	14.25	14.00-14.50	14.50	2	13.50	13.50-	13.50	
LAMBS good	4,080	17.19	16.75-18.00	18.00	220	17.25	17.25-	17.25	
LAMBS common	224	13.92	13.00-15.00	15.00	344	16.75	16.50-17.00	17.00	
SHEEP heavy	6	10.33	9.00-12.00	13.00					
SHEEP light	70	14.00	11.00-15.00	15.50	68	12.50	12.00-13.00	13.00	
SHEEP common	104	7.00	6.00-8.00	8.00	63	11.50	11.00-12.00	12.00	

Of the disposition from the Yards for the week ending December 6th, Canadian packing houses bought 264 calves, 150 bulls, 4,459 butcher cattle, 10,068 hogs, and 2,953 sheep and lambs. Local butchers purchased 167 calves, 550 butcher cattle, 233 hogs, and 612 lambs. Canadian shipments were made up of 27 calves, 73 milch cows, 118 butcher cattle, 559 stockers, 421 feeders, 213 sheep, and 66 lambs. Shipments to United States' points consisted of 21 butcher cattle, and 114 lambs. The total receipts from January 1st to December 6th, inclusive, were: 281,204 cattle, 45,364 calves, 157,465 sheep, and 415,076 hogs; compared to 283,225 cattle, 44,702 calves, 160,707 sheep, and 465,711 hogs, received during the corresponding period of 1916.

### Montreal.

Receipts of cattle showed an increase of approximately six hundred head over those of last week. The quality of the run was much higher than for some time, a large part of the stock showing a fatter condition and a better degree of finish in comparison with the quality of the receipts of the previous three or four weeks. On account of the better weights and finish much higher prices were paid and although no price changes, quality and weight considered, occurred in the

steer classes, the average prices for the week were considerably higher than for the same class of stock last week. One load of steers averaging fourteen hundred pounds sold at \$12 per hundred, twenty head averaging thirteen hundred and forty-five pounds at \$11.25, and two loads of mixed cattle averaging about twelve hundred and fifty pounds from \$10.25 to \$10.50. These cattle were all of good quality. Two loads of fair quality steers weighing from ten hundred to twelve hundred pounds each sold from \$9 to \$10.25. The remainder of the run of steers weighed around ten hundred pounds and sold from \$8.50 to \$10 per hundred. Practically all the heifers offered for sale were of dairy breeding and were weighed up in mixed lots of butcher cattle; they sold from \$7 to \$9.75 per hundred. Butcher cows were in demand and those of good weights and fair quality sold from \$9 to \$12 per hundred, the latter price being paid for fat cows in which the demand is exceptionally keen and the prices high. Inferior grades of cows were advanced 25 cents over last week's closing prices, benefitting to that extent by being sold in mixed lots with butcher steers on account of the light receipts of the latter; they showed a wide range of quality and sold from \$6.75 to \$9 per hundred. Canners and cutters sold from \$5 to \$6.50, an advance over last

week of 25 cents per hundred. Bulls sold well, two of dairy breeding, well finished, bringing \$10.15 per hundred, while the majority of the good bulls sold from \$9 to \$10; those of common quality sold at \$6.50 per hundred on Monday and \$7 per hundred on Wednesday. Six oxen averaging fourteen hundred pounds sold at \$10 per hundred. Veal calves were in demand from \$10 to \$15 per hundred, while calves of grass quality sold at an advance of 25 cents per hundred over last week, prices ranging from \$7 to \$7.50 per hundred.

The quality of the lamb run was poor, but under a good demand, prices were much stronger than last week. Good lambs sold at \$17.25 per hundred and common from \$16.50 to \$17. Ewes showed a wide range of quality and sold from \$11 to \$13 per hundred.

Hogs were in good demand but receipts were light, there not being enough to fill requirements. A larger number than usual of light hogs were received, but very few sows of breeding value were offered. Selects sold at \$17.75 per hundred, fed and watered, on Monday, and advanced to \$18.25 for long-runs on Wednesday; the market closed firm at this level on Thursday.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending December 6th, Canadian packers and

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local butchers purchased 243 calves, 370 canners and cutters, 546 butcher cattle, 726 hogs, and 1,043 sheep and lambs. Canadian shipments were made up of 83 canners and cutters 37 butcher cattle, and 60 hogs. Shipments to the United States points consisted of 62 hogs and 124 lambs.

The total receipts from January 1st to December 6th, inclusive, were 53,660 cattle, 53,410 calves, 70,282 sheep, and 75,575 hogs; compared to 51,345 cattle, 44,554 calves, 56,932 sheep, and 83,684 hogs, received during the corresponding period of 1916.

**EAST END.**—Of the disposition from the Yards for the week ending December 6th, Canadian packers and local butchers purchased 249 calves, 1,420 butcher cattle, 1,182 hogs, and 790 sheep and lambs. Canadian shipments were made up of 33 calves, 256 butcher cattle, 19 hogs, and 642 lambs. Shipments to United States' points consisted of 2,565 lambs.

The total receipts from January 1st to December 6th, inclusive, were: 54,122 cattle, 40,376 calves, 48,072 sheep, and 45,838 hogs; compared to 55,383 cattle, 43,953 calves, 52,114 sheep, and 61,026 hogs, received during the corresponding period of 1916.

**Winnipeg.**

Eighty-three hundred cattle were received during the week and of this number eight hundred were on through billing. Further heavy receipts however, are not expected as shippers are being advised to hold their cattle until the first of the new year. The market for cattle was unsteady and the demand light as the packing houses were not anxious to buy, having apparently saved the choicest of their previous purchases for the Christmas trade. The majority of the receipts were of medium quality, and with the exception of fat cows, the market closed 50 cents per hundred below the opening prices of the week. During the week two freight trains wrecks occurred and a number of cattle and hogs in transit to Winnipeg were killed. Fire also broke out at the Yards but was quickly got under control. The bulk of the best light butcher cattle sold from \$8.20 to \$9.20 per hundred, and those of medium quality from \$6.75 to \$8. Heifers constituted a strong feature of the market, one animal weighing twelve hundred and fifty pounds selling at \$10.50 per hundred and a large number at \$10; those of fair quality sold from \$8 to \$8.75, and common from \$7 to \$7.50. Fat cows held steady under a good demand; twelve head averaging eleven hundred and thirty pounds sold at \$9.75, the majority of those of good quality from \$8 to \$8.50, and those of medium quality from \$6.80 to \$7.75. Springers and milkers were steady although slow of sale. Bulls also were steady selling up to \$8 while most of the sales of the best, were made from \$6.75 to \$8. Canners and cutters were weaker, and closed 50 cents below the opening price of the week, the majority selling from \$4.25 to \$5.25 per hundred. Oxen held steady at a top price of \$9. The market for calves opened with firm prices, but closed 50 cents lower on Thursday, the bulk of the sales being from \$7.50 to \$8.50. Heavy calves are not in demand. The inquiry for stocker cattle has fallen off, and the market has declined 50 cents per hundred. While twenty-eight head sold at \$8.50 per hundred, most of the best animals sold from \$7.25 to \$8.25.

Feeder cattle showed the largest decline, and sold during the week as butcher cattle at \$8.50, per hundred, compared to a feeder cattle price of \$10, two weeks ago. Demand is about over for heavy feeder cattle.

Sheep and lambs were unchanged and receipts light. Fat lambs are selling well but most of the receipts show a falling in flesh. The best lambs sold from \$15 to \$15.75, and common from \$10 to \$12.60. Good sheep brought \$12 to \$14.20 and common \$8.40 to \$10.90 per hundred.

The hog market opened on Friday 50 cents per hundred over the close of the previous week. The market advanced a further 50 cents on Wednesday and closed steady on Thursday. Select hogs sold at \$17 per hundred, sows from \$14 to \$14.50, lights from \$14.50 to \$15 and stags around \$10, on the closing market. The packing houses attribute the advances in price purely to an increase in quality. Receipts for the week show a decrease of five hundred on through billing. Nine hundred light hogs were shipped west, and one hundred and forty six south, during the week. The Manitoba Government purchased four sows for Brandon Asylum Farm.

Of the disposition from the Yards for the week ending December 6th, Canadian packing houses bought 115 calves, 5,000, butcher cattle, 6,515 hogs, and 439 sheep and lambs. Local butchers purchased 84 calves, 803 butcher cattle, 519 hogs, and 287 sheep and lambs. Canadian shipments were made up of 6 calves, 98 butcher cattle, 1,328 stockers, 442 feeders, 267 hogs, and 166 sheep and lambs. Shipments to United States points were made up of 50 calves, 260 butcher cattle, 115 stockers, 147 feeders, and 1,895 hogs.

The total receipts from January 1st to December 6th, inclusive, were 238,613 cattle, 11,714 calves, 19,902 sheep, and 250,835 hogs; compared to 139,895 cattle, 11,405 calves, 20,042 sheep, and 299,126 hogs, received during the corresponding period of 1916.

**Buffalo.**

Cattle.—Offerings of cattle last week, by reason of a very severe blizzard and the general interference of railway traffic fell below the past few weeks, as a result of which a generally very satisfactory market was had, prices ruling generally very strong with the preceding week and good clearances being had from day to day. Around twelve to fifteen loads of shipping steers included, some choice native steers selling up to \$13 to \$14.25. Yearlings reached thirteen cents. On stockers and feeders the trade was about steady, demand at this time being better for feeder stuff than for stockers. Bulls of all classes sold at full steady prices, while on milk cows and springers, the choice lots brought firm prices, but dairy cow dealers declined to buy the medium and commoner grades, which had to go for slaughter. Offerings for the week totaled 5,050 head, as against 6,900 head for the week before and 5,575 head for the corresponding week a year ago. Quotations:

Shipping Steers—Natives—Choice to prime, \$13 to \$13.50; fair to good, \$11.25 to \$12; plain, \$10 to \$10.75; very coarse and common, \$9 to \$9.75.

Shipping Steers—Canadians — 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 \$11.50; 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, \$8.25 to \$9; fair butchering heifers, \$7.75 to \$8.50; common to fair, \$5.50 to \$7.50; very fancy fat cows, \$9.25 to \$9.50; best heavy fat cows, \$8.25 to \$9; good butchering cows, \$7.50 to \$8; medium to fair, \$6.75 to \$7.25; cutters, \$5.75 to \$6.25; canners, \$4 to \$5.

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 to \$140; in carloads, \$85 to \$100; medium to fair, in small lots, \$75 to \$85; in carloads, \$70 to \$80.

Hogs.—Buffalo had a good trade last week. Monday best grades sold up to \$18.25, bulk moved at \$18 and the price for pigs was \$16.50. Tuesday's top was \$18.40 but the general market was \$18.25

and pig weights sold up to \$17. While prices the next three days were lower, values here showed a big margin over other points. Wednesday the bulk of the crop moved at \$18.10, with pigs \$17; Thursday the range was from \$17.75 to \$18.10, bulk \$17.80 and \$17.85, with pigs \$16.75 and Friday the majority moved at \$17.75, top was \$18 and pigs \$16.75. Roughs brought from \$16.50 to \$17 and stags \$15.50 down. Last week receipts were 27,600 head, as against 29,040 head for the week before and 39,000 head for the same week a year ago.

Sheep and Lambs.—Prices showed a sharp advance last week. Monday top lambs sold up to \$18.50, Tuesday the range was from \$18.25 to \$18.40, Wednesday the quality was poor and nothing sold above \$18, Thursday best lambs brought \$18.25 and Friday tops were back to \$18.50, with a few up to \$18.65. Best cull lambs undersold the tops by from \$1.25 to \$1.50 per cwt. Yearlings reached \$15, wether sheep were quoted from \$12 to \$12.25, ewes brought from \$11 to \$11.50 and cull sheep \$9 down. Receipts last week were 8,500 head, as compared with 16,105 head for the week previous and 18,200 head for the same week a year ago.

Calves.—Market occupied a very favorable position last week. On the opening day top veals sold at \$16.50, with culls \$15 down and before the week was out or on Friday best veals reached \$17.50 and culls went from \$16 down. Heavy fat calves showed a range of from \$10 to \$14, and fed calves from \$6 to \$8. Receipts last week totaled 1,450 head, as against 2,107 head for the week before and 2,200 head for the same week a year ago.

**Toronto Produce.**

Receipts of live stock at the Union Stock Yards, Monday, Dec. 17, consisted of 132 cars, 1,271 cattle, 52 calves, 5,126 hogs, 764 sheep and lambs. Strong market, cattle 15 to 25 cents higher, calves, and sheep, strong, lambs fifty to seventy-five cents higher. Contract hogs \$18.50, others \$18, fed and watered.

**Breadstuffs.**

Wheat.—Ontario, No. 2, winter, per car lot, \$2.22; (basis in store Montreal)—Manitoba wheat, 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.—(According to freights outside) Ontario, No. 2 white, 77c. to 78c., nominal; No. 3 white, 76 to 77c., nominal; Manitoba oats, No. 2 C. W., 82½c.; No. 3, C. W., 79½c.; (in store, Fort William). Extra No. 1 feed, 79½c.; No. 1 feed, 75½c. cents.

Barley.—Malting \$1.25 to \$1.26. Peas.—According to freights outside; No. 2, \$3.70 to \$3.80.

Corn.—American (track, Toronto), No. 3, nominal.

Rye.—No. 2, \$1.77.

Flour.—Manitoba first patents, in jute bags, \$11.50; second patents, in jute bags, \$11; strong bakers' in jute bags, \$10.60. Ontario winter, according to sample, \$9.95, Montreal; \$9.75, Toronto; \$9.70 bulk, seaboard.

**Hay and Millfeed.**

Hay.—Track, Toronto, No. 1, \$15.50 to \$16.50 per ton; mixed, per ton, \$13 to \$15.

Straw.—Car lots, per ton, \$9 to \$9.50, track, Toronto.

Bran.—Per ton, \$38.

Shorts.—Per ton, \$44; middlings, per ton, \$48 to \$49.

Good feed flour, per bag, \$3.25.

**Hides and Wool.**

Prices delivered, Toronto:

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 skins, \$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, 70c.; coarse, 65c.

**Country Produce.**

Butter.—Prices kept practically sta-

tionary on the wholesales during the past week, selling as follows: Creamery, fresh-made pound squares, 47c. to 49c. per lb.; creamery solids, 44c. to 46c. per lb.; dairy, 37c. to 38c. per lb.; separator dairy, 44c. to 45c. per lb.

Oleomargarine—32c. per lb. Oleomargarine, which was placed on the market this week, is finding a ready sale, the Harris Abattoir Co., Limited, stating they could not supply the demand, No. 1 grade selling at 32c. per lb., wholesale.

Eggs.—Eggs of all classes remained stationary in price, selling as follows: Cold storage, new-laid, 65c. per dozen; No. 1, 43c. to 44c. per doz.; selects, 47c. to 48c. per doz.

Cheese.—Cheese remained unchanged in price: Old cheese selling at 30c. per lb.; new at 24c. per lb., and new twins at 24½c. per lb.

Honey.—is very little honey on the market, and it is very firm in price. Extracted, 5 lb. and 10-lb. pails, 22c. per lb.; 60-lb. pails, 22c. per lb. The comb selling at \$3.25 to \$3.75 per dozen.

Beans.—The bean market is very firm. Hand-picked Canadians selling at \$8 per bushel wholesale; the Indias going at \$6.60 per bushel.

Poultry.—Prices, though practically unchanged, showed a firming tendency. The following prices being quoted for live weight: chickens, milk fed, per lb., 21c.; chickens, ordinary fed, per lb., 19c.; fowl 3½ lbs. and under, per lb., 13c.; fowl, 3½ lbs. to 5 lbs., per lb., 18c.; fowl, 5 lbs. and over, per lb., 20c.; ducklings, per lb., 12c.; geese, per lb., 14c.; turkeys, young, per lb., 25c.; turkeys, old, per lb., 22c.

**Wholesale Fruits and Vegetables.**

Apples continued to come in quite freely.—The Western boxed varieties predominating—Ontario Snows and Spys selling at \$5 to \$8 per bbl.—Greenings, Kings, Baldwins, Russets at \$4.50 to \$7 per bbl. British Columbias at \$2.25 to \$2.75 per box—Nova Scotias \$4 to \$7 per bbl. Western States \$2.50 to \$3 per box.

**Montreal Produce.**

Horses.—The market for horses is neglected. Lumbermen are making enquiries and sales are taking place to them. Otherwise no horses are changing hands. Prices continued steady as follows: Heavy draft horses, weighing 1,500 to 1,700 lbs., \$225 to \$275 each; light draft, 1,400 to 1,500 lbs., \$175 to \$225 each; small horses, \$150 to \$200 each; \$75 to \$25 each; good saddle and carriage horses, \$200 to \$250 each.

Poultry.—The market for poultry advanced all along the line, this being due to the approach of Xmas as well as to the fact that prices were relatively low by comparison with other meats.

Turkeys sold at 33c. to 34c. per lb., and geese at 20c. to 21c., while chickens were 25c. to 30c., and ducks in the vicinity of the same price. Fowl sold at 24c. to 25c. Supplies were very fair but it is predicted that there will be a scarcity after the holidays.

Dressed Hogs.—Dressed hogs were in demand and everything offered was taken readily. There were quite a few country-dressed hogs on the market and these sold at 23½c. to 24c. per lb. while the fresh-killed, abattoir-dressed stock sold at 25½c. to 26c. per lb.

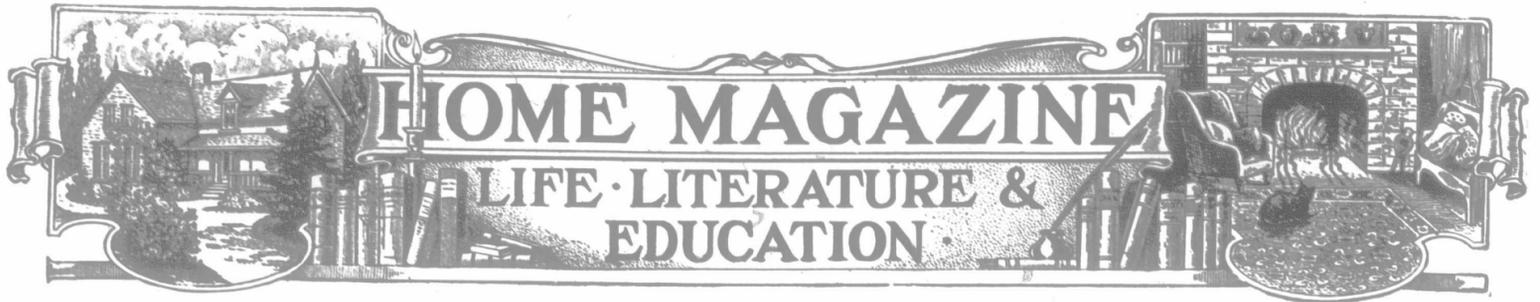
Potatoes.—Prices of potatoes have showed very little alteration though in some quarters the market was said to be easy. Green Mountains were quoted at \$2 to \$2.05 per 90 lbs., carloads, ex-track, while re-sales were made at and advance of 10c. to 15c. per bag of 80 lbs.

Honey and Maple Syrup.—White clover comb honey was still firm in tone and prices were in the vicinity of 18c. to 22c. per lb. while brown clover comb was 16c. to 19c. according to quality. White extracted ranged from 17c. to 18c. Maple syrup was not in very active demand and prices were steady at \$1.40 to \$1.80 per gal. of 13 lbs., in tins, while sugar was 15c. per lb.

Eggs.—Fresh stock was almost impossible to secure and prices were firm at 60c. to 65c. per doz. and the stock hard to obtain. More might be paid for the best. Fresh eggs sold at 55c.; fall fresh at 50c. to 52c.; selected cold storage at 44c. and from that prices ranged down to about 37c.

Butter.—Margarine is now in the country but has not yet found its commercial basis, though it is likely it will

Continued on page 2025.



### Christmas Eve 1917.

BY GLENN WARD DRESBACH.

I bring no wreaths of holly to the shrine  
I keep for you within the troubled days;  
No mistletoe I bring; no crown of bays.  
Instead, I bring dreams that are yours  
and mine,  
And will to fight for them. I take no wine  
Of quick desires and of sweet delays  
Of fancy wreathing mists near hell that  
sways  
With might of conflict on each firing line.

And yet—and yet I dream of other nights  
When hand in hand we watched the fire  
glow.  
How red the days, how long and brave  
since then!  
And so I face the morrow for the rights  
Of firesides that love like ours may know,  
Fostered by Peace and the good will of  
Men.  
—The Bookman.

### Among the Books

THE PIPER AND THE REED.

(It is always interesting to read what one poet has to say of another. The following appreciation comes from the pen of Albert Durrant Watson—the author himself of several books of poems. As both of these writers are well-known to readers of *The Farmer's Advocate* and *Home Magazine*, the article will be read with double interest. *The Piper and the Reed* by Robert Norwood; McClelland, Goodchild & Stewart, Toronto, \$1.25.)

THE nineteenth century emphasized form, therefore most of its earlier poetry was chiefly *belles-lettres*. But no century can hypnotize its successor. Already we have learned that the most significant art is not enhanced by studied forms but by a more spontaneous expression. The best art soars too high for sense-blinded eyes to see, but it is clear to those who hear:

"Time with his golden gong  
Tapping the ages by."

The poet weaves garments for the soul. Fabric and form are both necessary, but as a garment rises in nobility, the form has less of fit and more of fitness. The king's robes are free-flowing. Here, the fabric counts. The form is of chief importance where the art is insignificant. In true art the message develops its own form.

The king's robes are free-flowing, but the clown's are also not a close fit. *Vers libre* must be a king's garment and not a clown's else it is ridiculous. On the other hand, the noble thought or emotion cramped in jingling rhyme and metre is like a queen in calico.

In Norwood's poems, art constantly transcends the form; lifts itself out of forms and wraps itself in the blue sky and the sun-glow. Its wings take spacious flight, till elevation ministers to wide vision. On pp. 94-95 are two short poems: *The Ploughman* and *Dear Little Maid of Dream*. The latter is an exquisite song in dainty form with everything charming and fitting. But who would compare

"Dear little maid of dream,  
My heart, dear Heart, is breaking;"

with

"Witless of wind that finds my face  
I lean against the blast  
And plough to my appointed place—  
You sipping like a mast."

Accuracy of form never mars this poet's art, — a high tribute to his power. He continues the foregoing stanza in double rhymes, keeping up the vital message all

through. It is as if he had doubled his rhymes for the lover of such ornament, saying in his jolly way: "Here's rhyme for those who love it." Then, as if tossing it off, he springs back into the old giant stride and the single rhyme:

"This thing my duty: cleave the clod,  
Ploughing the field alone with God."

In *The Slow Emerger* we get the swinging rhythm of strength and freedom:

"Sometimes I see you, Woman. . . in  
a shaft of light  
Smiting the mists of valleys where I call,  
Dividing them as with a two-edged sword  
Swung by an angel.  
I have deceived you;  
You in turn have punished me—  
Have punished me with a mere semblance  
of yourself.  
A fiction of yourself that did escape me,  
Leaped up to claim those hills remote  
from me,  
Until I learned man must not chain  
a woman's soul."

He who would become unspeakably beautiful in life and being must—absolutely must—get this poet's dream; must see as with his eyes and with his ecstasy—at least in some glorified moments—the hills of gladness piled up towards the blue; must delight himself in people and be almost delirious with joy because of the love of comrades; must be also a great lover. Earth is

"The shadow of heaven. . .  
More than on earth is thought";

The words are Milton's, but in Norwood none the less.

"The minstrel Lord hath found  
A tone of His eternal need."

Here is a poet who reveals a God of good-fellowship beyond all human dream.

"Fear not to address Him—  
Cosmic Comrade He—  
Lonely for the love He wants from you!  
Up at once and bless Him—  
Lift a jubilee  
With the host of loyal hearts and true."

Norwood is sure to go all of God's bright way. So are you, Reader, therefore it will help you to study the message of this great artist, not for Art's sake only, or chiefly, but for life's sake; for the sake of the life which has no limitations. Study *Dives in Torment* in the poet's first book; Study the great passages in *The Witch of Endor*, one of the really great dramas of the world; but most of all study that blaze of gladness and beauty love-revealed in *The Piper and the Reed*.

We have spoken chiefly of the shorter poems in this collection. The reader will come with all the more surprise upon the dream of "The little reed down by the river," will hear with the greater joy, in the blaze of *Aldebaran* how

"That age by age one broad highway  
Leads up the host to fuller day,  
"Will seek to know the reason why  
The millions in their hunger cry

will see in *That One Should Love me* how

"I stood triumphant for a space  
Held by the rapture of one face."

"But if you take this road my friend,  
My wistful friend,  
Your world will wake to song,  
And all high holy angels bend  
To hail you of their throng:  
And where the sons eternal are,  
You shall be throned upon your star."

### "The New Joan."

OF late years the idea of reincarnation has caught the imagination of poets everywhere. Almost, it seems, the sweet singers find this world so beautiful that they cannot conceive that "folk" who have once lived here, can stay away, but choose rather to hold that they must come back and back, re-living in new bodies—not the old life, but a better one, mayhap,—and so helping to work out the dream of Eternal Love which looks out into the Universe and sees things, not as they are, but As They Shall Be.

In *The New Joan*, Katherine Hale, who needs no recommendation to Canadian readers, fancifully—and yet really, too—sees the spirit of Joan of Arc here, once more, in these days of weeping and working, entering into women everywhere: making them desire to bring forth wonderful children; to make laws that shall be just and high; giving them courage to work on the land "with double-soled boots;" and sanctifying their work in the kitchen, where, among the pots and pans, they must still keep the home fires burning.

One of the most appealing poems in the little book is *The Battlefield*, truly a poem of these days:

"Something sings gently through the din  
of battle  
Something spreads very softly rim on  
rim  
And every soldier hears, at times, a  
murmur  
Tender, incessant,—dim.

"A tiny click of little wooden needles,  
Elfin amid the gianthood of war;  
Whispers of women, tireless and patient,  
Who weave the web afar.

"Whispers of women, tireless and patient,  
"This is our heart's love," it would seem  
to say,  
"Wrought with the ancient tools of our  
vocation,  
Weave we the web of love from day to  
day."

"And so each soldier, laughing, fighting—  
dying  
Under the alien skies, in his great hour,  
May listen, in death's prescience all-  
enveloping,  
And hear a fairy sound bloom like a  
flower.

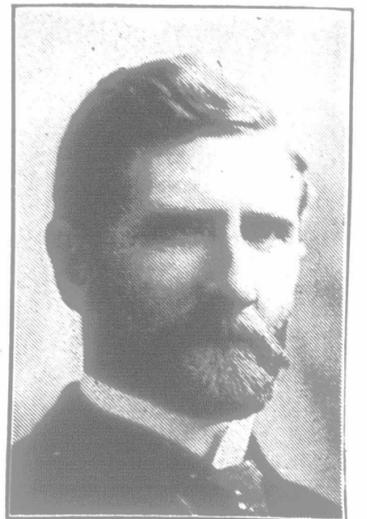
"I like to think that soldiers, gaily dying  
For the white Christ on fields with  
shame sown deep,  
May hear the tender song of women's  
needles,  
As they fall fast asleep."

*The New Joan*, like Katharine Hale's preceding Christmas booklets, *Grey Knitting* and *The White Comrade*, is published in attractive pamphlet form, price 25 cents. McClelland, Goodchild & Stewart, Publishers, Toronto.

### Some Garden Folk.

AT the recent Annual Convention in Toronto, of the Ontario Horticultural Association, one statement was made which must be of especial interest to the farm folk of the Province,—viz., that this year the Horticultural Societies' Act has been amended and its scope enlarged so that now Township Societies may be formed in any place in which 25 members can be secured. This means that in regard to horticultural work farmers now have the same advantages as town and city folk, including the Government grant.

Having told you this, on the authority of the Superintendent, Secretary and Editor, Mr. J. Lockie Wilson, one may



Mr. J. Lockie Wilson.  
Superintendent of Agricultural and Horticultural Societies.

presume that you will wish to know something of the Convention itself.

There is an atmosphere about the Horticultural Association's meetings which, somehow, suggests happiness and restfulness. Very seldom do irritating questions come up; tenseness is conspicuous only by its absence; everyone seems not only interested, but enthusiastically so. Indeed, after attendance at several of the annual Conventions, one must come to the conclusion that it is quite true that, as Mr. Hartry said this year, horticulturists are among the most unselfish people in the world, because they always want to give. If a member has found out an especially good way of growing something, at once he wants to tell the whole world about it; if he has discovered a banner variety he wants to advertise his discovery; if he has committed blunders in his garden he never thinks of trying to hide his failure but blazons it abroad mirthfully, thinking that a laugh is good for the soul and that the tale of his garden woes may warn others from stumbling into pitfalls which, however amusing they may be, are not to be commended for general practice.

And these gardeners but tell the story of things actually accomplished. This year their efforts have been chiefly directed, of course, to the production campaign. Vegetables have been given more time and care than flowers. Next year the same thing must happen. And yet the flowers and shrubs have not been overlooked, for it has been recognized that they help to form beautiful character, the thing that the world needs more today, perhaps, than it needs anything else.

THE Convention met in the Foresters' Hall, 22 College St., with the President, Dr. Bennett, (who has done so much for horticultural work in St. Thomas), in the chair.

In his address Dr. Bennett spoke of the almost unusual beauty of the flowers this year, when it seemed as though Nature herself was trying to make atonement for the dreadfulness of the war. The influence of beautiful gardens, he thought, should be made nation-wide, for its refining influence on the people, and for the physical advantages to be gained through the work. Dr. Bennett himself had helped to organize several societies during the year, and instanced especially the village of Dutton, where excellent work has been done.

As aids to the success of the societies

he mentioned exchange of exhibits and speakers. The St. Thomas branch this year had sent exhibits to the Fairs in Toronto and London. An important matter in regard to fairs is revision of the prize lists, and among other things to be pushed this year by the societies, are increased vegetable production, and the conservation of bird and tree life. In passing, Dr. Bennett referred to the present scarcity of wool and meat. With one per cent. of the world's manpower in arms, using 60 per cent. of the wool, those who are left have to do with 40 per cent.

GLADIOLI.

THIS subject was taken up by Mr. Hartry of Seaforth.

No flower will give so great returns for the labor and money spent—variety of color, freedom from insects and value as a cut flower being its distinguishing qualities.

"Never", he said, "buy cheap collections of bulbs"; secure named varieties. Among those which he had found very good were: *Halley*, (salmon pink, best and cheapest yet produced); *Empress of India*, (brown streaked with yellow); *Glory of Holland*, (white, shaded yellow); *Lily Lehman*, (white, shaded cream); *Pink Perfection*, (a grand flower); *Panama* (splendid pink); *America* (light pink, with strong stem); *Peace* (white, violet shade in throat. A strong grower); *Princess* (scarlet with white throat); *Niagara* (light yellow); *Baron Hulot* (fine dark blue, tall); *Mrs. Frances King* (red).

Mr. Hartry's method of growing: Select an open space and dig a trench 12 inches wide and 7 deep, throwing off the top soil on one side and the subsoil on the other. Put in 2 inches of well-decomposed manure, then 2 inches of soil in which may be mixed a little commercial fertilizer. Cover with 1 1/2 inches of fine top soil, and plant the bulbs (corms). Cultivate often, and as the plants grow level in the soil. In fall take up the corms, leaving 4 inches of stalk, dry about 2 months in baskets, then store in a place that is dry and free from frost.

In the discussion which followed, Mr. Ogilvie, Hamilton, noted that few flowers give such a range of color—white, yellow, red and blue, in many combinations. In hard clay he advised mixing sand or humus. By saving and planting the bulbets, in 3 years, he said, good flowering "bulbs" could be produced. A sunny position, away from the roots of trees is necessary, and always, when planting, care should be taken that the bulbs should not come in contact with the fertilizer at first. He plants 4 to 6 inches apart and 4 inches deep, a little deeper in sandy soil. If a crust forms after rain the surface of the soil should be loosened by shallow raking. When the plants are up 2 inches a little sheep manure may be worked into the soil, and when the bulbs are drying in fall they should be left outside in day time and taken in at night, as drying in a warm room has a tendency to dry them up too much. Before storing, the outer husks should be stripped off, to prevent parasites if they appear they may be routed by washing with sulpho-tobacco soap solution.

Mr. Johnson thought 6 inches a better depth for planting, to develop a strong root system. He had found a compost of decayed leaves good as a fertilizer. If the ground becomes very dry, after the spike begins to show, he waters the plants well. Two kinds which he had found very good are *Schwaben* and *Hohenzollern*. (This announcement was greeted with good-natured laughter, and someone suggested re-christening one of them *Lloyd-George*.)

Mr. Woods, London, who grows 10,000 gladioli each year, said that he had found hybridizing the most interesting feature of gladioli growing. A great joy may be found in growing new species from seed.

Mr. R. B. Whyte, Ottawa, said he preferred to grow gladioli in clumps among the peonies or shrubbery rather than in rows. He praised the *Schwaben* as the finest of all the creamy yellow flowers, and to the list already given added *Apollo*, *Carnegie*, *Car Peter*, *Kunderdy Glory*, *Mrs. Francis Pendleton* and *Canary Bird*.

At the close of the discussion the President advised those who were thinking of growing gladioli to send for catalogues from Campbell Bros., growers, Simcoe, Ont., and Mr. Gilchrist, Runnymede Road, Toronto.

SECRETARY'S REPORT.

MR. J. Lockie Wilson now read the report for the year, showing a membership of not less than 25,000 in 90 societies, and splendid work accomplished, especially in production. More, however, he thought, could be done. "It's up to you," he said, but health, enjoyment and a fair remuneration await



Dr. F. E. Bennett, St. Thomas. President Ontario Horticultural Association, 1917.

the enthusiastic gardener. Horticulture also can be made greatly to help the soldiers returning from the front, an aspect of the work which should not be neglected.

Referring to a Resolution of the Sandwich Society asking for legislation to combat the San José scale, he said that the Assembly has already taken steps for the eradication of the pest.

During the year splendid work in vacant lot gardening had been done, especially in the city of Ottawa where 50,000 bushels of good food had been raised in this way. In Toronto 798 lots were under cultivation, one of them looked after by a soldier who had lost both legs.

In closing Mr. Wilson said that, as far as possible, speakers on horticultural

subjects will be sent to all societies that ask for them.

AFTERNOON SESSION.

IN the afternoon delegates from Hamilton, Windsor, Lindsay, Brantford, Seaforth, Galt, Barrie and other places spoke on the "production" work this year accomplished in growing potatoes and other vegetables.

Also the San José scale scale discussion was continued, and Mr. Wilson read section 7 of the Fruit Pest Act, which sets forth what can be done on the appearance of this pest in any district. Copies of the Fruit Pest Act can be secured from Dr. Gordon Hewitt, Dominion Entomologist, Ottawa.

A delegate from Walkerville stated that his district has had inspection for 4 years. They had written to the Agricultural Department, (Parliament Buildings, Toronto), for all information in regard to steps to be taken and the result had been very satisfactory.

VEGETABLE GARDENING TALK.

MR. Dunnington Grubb, then gave an illustrated lecture on *Planning Grounds for Homes*, which cannot be epitomized here without the diagrams; and Mr. T. D. Dockray followed with a humorous account of his efforts to grow vegetables on a city lot, and how he learned by his blunders. He had put in too many radishes, but discovered that the green seedpods can be pickled. He had planted "large potatoes, small potatoes and peelings" (explaining that by "peelings" he meant pieces cut 2 eyes to a slice) and all had done equally well, provided they were in sunshine. All were Delawares. . . . Everyone who passed had given him remedies for the cutworm. He mixed all the remedies together and put them on at once, but the cutworms still flourished. Bran mixed with Paris green and syrup, put on the ground, finished them. Funnels of paper put about the plants also helped. . . . Tomatoes pinched to the single stalk gave earlier and larger fruit; the four-stalk method gave more weight to the plant. He had found *Bonny Best* the best tomato, and *Golden Bantam* the best corn. . . . For growing in the shady parts of the garden, Swiss Chard had been found "the best of the lot", as you could cut off leaves to cook and it would at once put forth more leaves. Carrots radish and lettuce also did fairly well in the shade. A shout of laughter greeted

Mr. Dockray's summary (with a twinkle in his eye) that after 180 hours of evening work, equivalent to 22 working days of about 8 hours each, his cash earnings totaled just \$26.00. "But I'm going on that lot again next year," he said, gamely. And then people had time to reflect that his showing—on a hard city lot filled with broken crockery and tin, in ground "not in shape," with the difficulty of getting manure, and the handicap of too much shade of buildings and fences—had not been so very bad after all, and promised much for next year's work.

Mr. Kilmer, Brantford, told of a "Thrift League" formed in that place. Indeed, the whole note sounded by these city men who have become gardeners was *enthusiasm*. If an equal enthusiasm could be instilled into every farm garden, what could not be accomplished? . . . Other points brought out in the discussion were: That the *Irish Cobbler* potato and *Earliana* tomato are excellent varieties. That leaves that fall off the trees in fall should be conserved and made into fertilizer, "the finest in the world". That all vegetable matter from homes, not needed in other ways, should be made into compost, by burying it in a trench in the garden.

THE INFLUENCE OF SCHOOL GARDENS ON COMMUNITY LIFE.

THIS subject was taken by Mr. J. A. Taylor, B. A., St. Thomas. In the first place, he said, the garden furnishes a good environment for the children; in the second, intelligent farming will be a necessity of the future; in the third, the school garden gives good material for teaching.

When the war is over we shall be faced by a terrible economic struggle; the children of to-day will be the citizens of to-morrow, who will have to meet it, therefore they should be put in a state of preparedness for the burdens which will come to them.

The intercourse with Nature tends to give lofty ideals and sweetness of soul, Wordsworth has said:

"To me the meanest flower that blows can give Thoughts that do often lie too deep for tears,"

—and again, in "Tintern Abbey":

"For I have learned To look on nature, not as in the hour Of thoughtless youth, but hearing often times

The still, sad music of humanity, Nor harsh, nor grating, though of ample power

To chasten and subdue. And I have felt A presence that disturbs me with the joy Of elevated thoughts; a sense sublime Of something far more deeply interfused, Whose dwelling is the light of setting suns, And the round ocean and the living air, And the blue sky, and in the mind of man. A motion and a spirit, that impels All thinking things, all objects of all thought,

And rolls through all things. Therefore am I still A lover of the meadows and the woods."

And Tennyson has said:

"Flower in the crannied wall, I pluck you out of the crannies, I hold you here, root and all, in my hand, Little flower—but if I could understand What you are, root and all, and all in all, I should know what God and man is."

Gerard has attempted to account for the spirit that brought on the war in the cold, bleakness of Prussia, and has attributed England's greatness somewhat to her beauty. However that may be, the environment of the child counts.

In agriculture the school garden is advisable because a change in our educational system is impending. Henceforth more attention will be paid to vocational and industrial training. The greatest national bulwark of any country is its farming. Labor has at last come into its own, is at last being recognized as honorable and dignified.

To-day rich and poor are fighting together in the trenches, and this must bring about a change in the ideals of life. We are learning that it is not wealth, pleasure or fame that makes a nation or an individual, but only the eternal verities; we are learning that the unseen is the only actual.



Gladioli.

Farming is the most scientific occupation in life. The boy of ability is needed there, for it calls for a trained intelligence. Men do not farm to-day as they did ten years ago. New insects are calling for knowledge, keenness of competition for specialization. The farmer needs understanding of bacteriology, chemistry, zoology, entomology, botany, physics and manual training. If ever the rural renaissance comes it will revolutionize economy the world over.

The school garden should teach the fundamentals of agriculture and give a love for the country. It should train the pupils to observe, think and judge. It should form a basis for the teaching of draining, fungicides, fertilizers, insecticides and tillage spirit,—should be, in short, "an O. A. C. in each community," a community center.

Every child is a small savage until the age of 12 or 14, given naturally to the destruction of bird-life and everything else. The school garden will help to eliminate that. There is nothing so refining and dignifying as the garden in the hands of the right teacher.

In the discussion that followed, Mrs. Cadwell of Windsor and others took part. A Toronto delegate thought there should be two women on every school board. Mr. R. B. Whyte, Ottawa, spoke of the tremendous yield that might be obtained from little gardens rightly managed, and expressed the opinion that an expert adviser should be appointed to help the teachers.

#### Evening Session.

REV. G. W. Tebbs, Hamilton, in conveying greetings from the American Civic Association, read a letter whose leading message was given in the words of President Wilson, "The war must not be permitted to destroy civic efficiency."

#### ASTERS FOR AMATEURS.

MR. G. H. Ryerson, Brantford, made a plea for the aster as a "people's flower", but the most neglected of our annuals. In growing them success depends greatly on the quality of the seed. To have the best seed, select your own as follows: First secure good plants from a reliable dealer and grow them well. When in bloom tag the best flowers, giving name of the variety, and break off all other flowers and buds. When the flower begins to wither pull up root and all, and hang in a cool place. When ripened break off the flowerheads and rub between the hands, blowing off the chaff and retaining the seed. If this is kept up year after year the strain will improve.

In starting your own seed, get flats—may be finnan haddie boxes—3 inches deep, and fill with a mixture of soil with one-fourth rotted manure and a little sand. Sow thinly and cover with sand to a depth of one-eighth of an inch. Press down firmly and shade with paper. Avoid frequent sprinklings and do not water late in the day.

When four leaves have appeared transplant, then transplant again when 3 inches high, but harden off before putting the plants in the garden, by exposing gradually to the colder air. The garden beds should be rich with old manure and well pulverized, and plants should be set 12 x 18 inches apart. Stir the surface of the soil once a week, and when the plants are 6 to 8 inches high, if show-flowers are desired, pinch out the terminal bud and the lateral buds near the ground, leaving 6 to 8 branches to a plant. When the flower-buds are well formed give weekly applications of manure water, increasing from weak to strong. Give abundance of water to the plants.—This treatment should result in exhibition blooms, long-stemmed and graceful, rivalling those of the chrysanthemum.

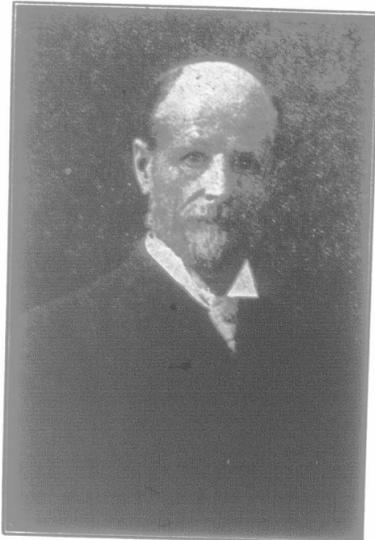
Stem-rot and blight may attack asters. When stem-rot appears the plant withers and the stem will be found to be decayed just above the ground. When blight occurs half the leaf turns white. The best preventive of both is to grow strong plants. For white grub hand picking will help, digging him out an inch below the surface, and for the red-headed flea-beetle, or one like the cucumber bug, spray with whale-oil soap solution once a week. If the black beetle appears on the flower heads shake them off, as you would potato bugs, early in the morning, keeping this up steadily until they disappear.

Among the best varieties for home

growing are the late branching comet varieties.

In the discussion that followed, Mr. Whyte said that he never bothers with a hotbed, he finds sowing in the open air is easier and better, giving stronger plants. He transplants on a wet day. Mr. Ryerson added that asters should never be grown near a fence or buildings, as the reflected heat or shade are both bad

Mr. Walter T. Ross, of Picton, gave an interesting talk on the tropical plants he has grown at his home—oranges,



Mr. R. B. Whyte, Ottawa.

Who has won continental fame as a horticulturist.

lemons, spices, etc., but as few farm homes have time or facilities for such experiment, this talk is here passed over.

#### Evening Session.

##### AN AMATEUR'S GARDEN.

REV. G. W. Tebbs gave an illustrated talk on gardening, the pictures having been taken by himself, "for", said he, "I like to enjoy my garden in winter as well as in summer, and when I have pictures I can back up my garden stories." He had found bees a valuable asset in gardening, for their work in fertilizing. Cauliflower and vegetable marrow had been two of his banner crops, the latter being cooked as a vegetable or made into a preserve with ginger. To abolish squash and marrow beetle he had planted moth balls in the hills. In passing he took occasion to warn

against eating parsnips left in the ground over winter, which have begun to sprout in spring. The sprouting generates prussic acid, a poison.

Excelsa he recommended as an especially beautiful climbing rose.

#### MUSHROOM CULTURE.

THIS talk, also illustrated by lantern views, was listened to with great interest. Mr. Allan, Toronto, who gave it, said that mushrooms are really very easy to grow. The simplest way may be carried out as follows by anyone who has a warm cellar and will take a little care:

Get one or two loads of horse manure and put it in an open shed or cellar, turning it several times the first day. Mushrooms like the nitrogen that is secured in this way. Keep turning it for about a week, then put it in the bed to the depth of 8 inches; if deeper than this it is likely to heat violently and spoil the spawn. Tramp it down then, but not too hard; test with a thermometer, and when from 70 to 90 degrees F., and when the temperature is falling, insert the spawn 1/2 inch below the level of the manure.

Don't be in a hurry to earth it over; leave 10 to 15 days before putting on the soil. This keeps it from getting too hot. Next seal it over with fine soil and water at once, just to the depth of the soil.

If the spawned bed becomes too dry, water it with water of the same temperature. Never let it get too dry, as the results will be fatal. Another mistake is frequently made: When root threads appear on the surface do not water; wait. When the "peas" appear they will need 8 to 10 days to develop.

Also, the cellar must not be too draughty. When the mushrooms begin to appear cover the beds with canvas, 6 inches above, or with 3 or 4 inches of straw.

When showing the slides Mr. Allan said he knew one man who, off a bed 6 ft. 6 in. x 2 ft. 3 inches, had sold 40 lbs. of mushrooms. Of one bed shown 6 crops had been taken, and he remarked that one can get 7 or 8 crops without re-spawning. One slide showed a single bunch of mushrooms that weighed 2 lbs. 3 oz. In every case "Lambert's Pure Culture" spawn had been used.

In closing Mr. Allan invited any of the members to his home to see a bed 15 ft. long by 3 ft. wide, which was completely covered with mushrooms.

At the close of his talk many questions were asked, to which Mr. Allan gave the following answers: The bricks of spawn should be broken in 8 pieces and set 9 inches each way. When straw is put on top it should be left until the mush-

rooms are coming through nicely. After picking the first crop the "dents" should be filled with soil, the bed gently watered, and the canvas put over. The beds may be on the floor, or in tiers of shelves.

This talk was followed by an illustrated lecture given by Mr. Frank Yeigh, the pictures showing our boys of the first contingent on their way from Canada to the trenches. Especial applause greeted One of "Billy" Bishop in his airplane. Especial mention was made of Mr. Campbell of Mount Forest, who got the first V. C. won by a Canadian.

#### Thursday Sessions.

AN important event of the second day was the election of officers for the following year, the result of which was as follows:

President—T. D. Dockray, Toronto.  
First Vice-Pres.—Professor Crow, O. A. C., Guelph.

Second Vice-Pres.—Wm. Hartry, Seaford.

Directors:

District 1.—Rev. A. H. Scott, Perth.

District 2.—G. H. M. Baker, Lindsay.

District 3.—R. Whorley, Haileybury.

District 4.—Miss Yates, Port Credit.

District 5.—J. A. Webber, Hamilton.

District 6.—John Grieves, Seaford.

District 7.—H. W. Brown, Kitchener.

District 8.—Dr. Bothwell, Stratford.

District 9.—C. D. Brown, Walkerville.

Secretary and Editor.—J. Lockie Wilson, Toronto.

Treasurer.—C. A. Hesson, St. Catharines.

Honorary Director.—Dr. Bennett, St. Thomas.

Delegates to American Civic Association: Dr. Bennett, J. Lockie Wilson, T. D. Dockray.

Auditors.—W. J. Evans, W. J. Graham.

Representative to Canadian Exhibition: Board.—P. H. Mitchell, Toronto.

Rep. to Civic Improvement League.—R. B. Whyte, Ottawa.

Rep. to School Gardening Association.—Mr. Hamilton, Toronto.

Committee on Names and Varieties: F. E. Buck, Ottawa; H. J. Moore, Niagara Falls; Mr. Herrick; Mr. Crombie, St. Thomas; Prof. Macoun, Wm. Hunt, O.A.C., O. J. Robb, Vineland Sta.

#### AN OPPORTUNE ARRIVAL.

JUST as Rev. A. H. Scott was in the midst of a forceful paper showing why Government Grants to Horticultural Societies should be increased, Premier Hearst entered the hall, and subsequently gave assurance that the matter would be given consideration. He thanked the Association for its help in the Greater Production campaign and asked for further co-operation next year, further "worthiness of the men at the front". The one important question for the society must now be foodstuffs. Upon the work of North America in this may depend the outcome of the war. The local military tribunals had made some mistakes in calling men from the farms, but from their ruling appeal could be made. A great burden must rest on the farmers next year, but we must think of the burdens and sacrifices of the boys in the fighting lines. One important way of helping them is the Victory Loan. By buying bonds we help to win the war by keeping up the fighting strength and sending food overseas, and we also help ourselves.

Rev. A. H. Scott replied to the Premier's address, assuring him that money received from the Government would be used wisely.

A discussion then followed on Mr. Scott's address, in which Mr. Wilson emphasized the statement that townships in which live Horticultural branches are established will participate in the grant.

#### AFTER-DINNER SPEECHES.

After luncheon, held in the Parliament Buildings, three-minute speeches were given.

Prof. Macoun of the Central Experimental Farm told something of the splendid production campaign in the Capital city. Recognizing the necessity of expert instruction to make the gardens and vacant lots produce their utmost, those in charge of the work provided that lectures on gardening be given beforehand. The average attendance at these was 300 people per night. Demonstrations also were given showing how to control insects, etc. Prof. Macoun told of the sending of maple seed to Kew, the object



Doing His Bit in Greater Production.

being eventually to plant maple trees on the graves of the Canadian boys who fell in France and Flanders.

Mr. Woods, London, spoke on Irises, recommending the species Kämpferi. "Keep the feet of the iris dry", he said, in other words, see that the drainage is good, but give plenty of water and heavy feeding of cow manure. Good seed could be obtained from the Yokohama Seed Co., New York.

Miss Yates, Port Credit, spoke a good word for rockwork, with plantings at levels of different heights; and Prof. Crow advocated raising new varieties of flowers from seed—hybridizing to get something entirely new. He thought individuals and towns should try to establish "collections", then let their efforts be known. Miss Blacklock, Meadowville, favored having a town or district flower, and made a plea for peonies, "the king of flowers", especially for people in the country who have large grounds. Mr. Hartry told of the extensive rose-growing at Seaforth.

PARKS AND PLAYGROUNDS.

DR. Silcox of Stratford spoke of the necessity of parks for grown folk and supervised playgrounds for children and showed pictures taken in Stratford, Ottawa, Algonquin Park, Niagara, St. Catharines, Rocky Mountain Park, St. Thomas and other places.

In the discussion afterwards, Prof. Crow remarked that about the only growing things admissible in children's playgrounds are shade trees and vines on buildings; the flowers and shrubs should be elsewhere. Among trees he recommended the White Elm.

Mr. H. J. Moore of Victoria Park, Niagara Falls, advised keeping natural beauty, whenever possible. Where planting had to be done, he would rule out highly-colored exotics and evergreens cut in shapes. For informal planting anywhere native trees, etc., should be used as much as possible. "Go to the bush", he said, "and get dogwood, wild roses and native trees." They are just as beautiful and are suited to our climate.

At the close of the meeting Mr. F. E. Buck, of the Experimental Farm, Ottawa, brought in a motion to obtain for Canada a National Flower, incorporating a clause that the Horticultural Association should take immediate steps to see that native Canadian flowers are planted on the burial grounds in Flanders and France. As no time was left for discussion it was decided to place the matter in the reports of the Convention which will be printed in "blue books" during the winter. In the meantime it may be opportune to state that the flowers suggested for choice are: Columbine, Perennial Aster, Trillium, Iris, Delphinium, peony (not native), Canada Lily, Anemone, Lady's Slipper, Goat's Beard (Spiraea), Violet, Twin Flower.

This matter will, no doubt, be discussed at the next Convention.

A paper on Flowers Best Suited for Northern Ontario, by Mrs. Lorne MacDougall, was also left to be printed in the Report. At the close of the Convention the delegates had the privilege of paying a visit to Sir Edmund Osler's splendid greenhouses, an event which was greatly enjoyed.

Why a New Idea?

BY "THE OWL." Paper II.

LAST time reference was made to the evidence that people in general everywhere, are becoming interested in education, and anxious that their children shall have better opportunities in "schooling" than they themselves had in their youthful days.

It is possible, of course—yes, probable—that, for the most part, the ideal in this is not the very highest, that, in short, in the minds of nine people out of ten, the subconscious force in regard to the matter is that education "pays"—pays in business because it opens doors to big salaries and positions of influence and power;—pays in agriculture because it is seen that the really successful farmer is as a rule, the agriculturist, the man who has education enough to profit, not only by what he picks up from his neighbors, but also by every little bit of real information he finds in papers, and books, and the bulletins sent out from stations where experiments in agriculture are being carried out by expert scientists.

It is realized that, in the advanced and

complicated state which the world has reached, the young folk must be equipped with every help that will enable them to keep their footing, else they must go down; that while, here and there, a genius crops up who, without education, "makes money", the great majority need all the armour available to enable them even to hold their own.

Some time ago, when competition in mere making-a-living was not so keen, all this did not matter so much. Nor did the schooling bear so much upon life as it does to-day. Even in the public schools the lessons in arithmetic, for the advanced classes, were chiefly devoted to



Rev. A. H. Scott, Perth.

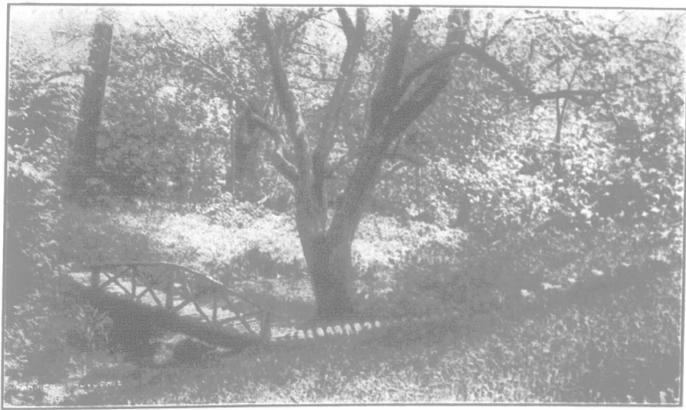
A former president and enthusiastic worker in the Horticultural Association.

"brain twisters", while, in the high schools, Latin and Greek—dead languages—occupied an over-balancing place on the curriculum. Education—especially higher education—was in short, for the "gentleman," who was then defined to be the man who does not work with his hands.

All that has changed. To-day, and especially in this Western Hemisphere, education is for all the people. Arithmetic and elementary algebra deal more with things of everyday life; Latin and Greek have largely given way to the sciences. Education has become a necessity and a light to everyday living.

NOW, all this is very good, so far as it goes. But the New Idea should go far beyond mere money making and power-getting.

The great doctor, it is true, is in a position to make money; but the great



A Bit of "Netherwood."

Residence of W. A. Child, Hamilton.

motive power should be his usefulness to humanity. The great engineer is paid heavily for his work,—but what of his service to his country? The great farmer is likely to make money, but he should be prepared also to be a sane and guiding voice in the councils of his neighborhood, his Province, his Dominion. The same idea—service to the world—should be the basis of the work, likewise, of the great author, statesman, mechanic, inventor, preacher, lawyer.—Yes, of all of us, great or small, since the greatest forces are, when all has been said, made up of units—if only there are enough units.

Education, it is true, pays, or should pay, in money, but still more in opportunity. Don't lose sight of that fact. President Wilson, a college professor, is head of the whole United States, and his word is felt to the ends of the earth. The great Lloyd-George is an educated man, and so are Marconi, and Alexis Carrel, and Professor Graham Bell, and Kerensky (though Russia has failed us it is not his fault), and—but why multiply?

These are educated men, but I think that their sense of serving humanity is the strongest force of their lives.

When you think of Education, please remember that, and do not pin it to mere moneymaking.

PEOPLE need to make enough money to be independent, all their lives.

But no one needs a great fortune—that is, unless his genius for moneymaking is also expended in reasoning out how that money can be made to serve the whole world.

And why all this insistence upon this point?

Simply because one sees that this is the NEW IDEA which is just beginning to creep into the minds of people in general in regard to Education. It is the idea which, if many prophets mistake not, is the one which is to dominate the whole world in its next stage of Evolution, which may now be nearer than we think.

The old ideal for life—money-getting and power-getting—brought on the war. By the time the fighting is over the most of us will be so sick of it that we will gladly turn to any world-ideal which promises to prevent it forever.

In Germany the people were educated for war and war-making. The education everywhere, in the next and coming cycle, must point away from it else our boys have bled in vain.—And remember that education takes place in the homes in the schools, in the conversations of men and the books and papers they read.

FOR a long time a few fine minds have seen the real meaning of Education. These are the people who, long ago, pointed out that the word signifies—not ten thousand facts acquired, a period of training that ended when one walked away gleefully or heart-tearfully, as the case might be, from the old college doors—but rather a developing of the whole personality; an aiming to develop the body, the intellect, character itself, which a great man persistently calls "salvation".

And now other fine and sane souls everywhere are beginning to see that the great aim of Education is to build up bigger Persons, fuller lives and bigger ideals; to create great and good people rather than great fortunes.

to be happy without success; because the shadow of success is vulgarity.

What I desire is that men should learn to see what is beautiful, to find pleasure in homely work, to fill leisure with innocent enjoyment. It is commonly said that education ought to make men dissatisfied, and teach them to desire to "improve their position." That is a pestilent heresy. It ought to teach them to improve themselves rather than their position.

Slowly but surely such understanding as this is beginning to filter out among the masses of the people. It will not stop. It will go on and on until it takes possession of all intelligences, making them understand that real Education is inextricably bound up with Life, that it must help to develop a richer and fuller experience. For, after all, what have we but Life?—Life with its Opportunities for to-day and its Possibilities for tomorrow; Life that must go on when the body that holds it now has broken up into a few chemicals, some water-vapor and a few bones.—Not pretty, that, but something that must be faced.—and, after all, what does it matter, so long as mind persists? We have to give up this body, but, we hope, it will be but to don a better one, one fitter for the enlightened Mind that is to come, towards which the Education of all these days—through books and every-day experience—helps to prepare us.

Medical Inspection in Schools.

EDITOR "THE FARMER'S ADVOCATE":

I HAVE read with great interest a letter signed "Marion", Bruce Co. on the necessity of Medical Inspection in Rural Communities. As I was raised and educated in Bruce County, Ontario I know the possibilities and advantages there, and how much more easily Medical Inspection may be conducted there, than in the district where I live. However, I am going to tell you of the Medical Inspection we have just had in the Rainy River Valley, and the very gratifying results. The members of the Women's Institute here felt that our children were not having the best advantage physically, in life, so we wrote to Mr. Putnam, who in October of this year sent us a lady doctor to inspect the schools. We found the parents willing, yea eager, to have their children examined and there was only one school in the district where the trustees refused to have the inspection. The inspector examined nineteen schools, and in all five hundred and ninety-six children, and found that fourteen per cent. of those children had defective eyesight (some children totally blind in one eye); twenty-five per cent. diseased tonsils and adenoids, and thirty-two per cent. diseased teeth. But what was worse than all these, she found in each of four schools a child suffering from that most dreaded of all diseases, tuberculosis. Four cases in six hundred may not seem a very large percentage, but those children were going to school, and think of the danger of contagion! Those parents did not know their children had tuberculosis and, undoubtedly, are isolating them from others now.

We have in the past been quick to look upon a child as being dull at school without paying any attention to his physical condition. When a child has to strain every nerve to see what he is to read, he has no mental strength left to remember it, and is considered dull. The same with large tonsils and adenoids when children are suffering from those troubles they cannot breathe properly, they cannot hear well and in many cases cannot speak correctly. Is it any wonder that a child with throat and nose trouble is dull at school? The fault is not in the mental condition, but in the physical.

Now, as to the results of our examination, for an examination without results is worse than useless. The parents have in most cases had their children's eyes fitted with proper glasses. The Women's Institute arranged to hold clinics in the district for operations on nose and throat. Three clinics were held and in all one hundred and twenty operations performed. Think of it! One hundred and twenty children who can now breathe freely and need never know the meaning of tonsillitis and quinsy! The churches were fitted up for hospitals, the Presbyterian in one town, Methodist in one, and Baptist in the third. We hired two doctors and one nurse. We paid our surgeon \$35 per day,

the anaesthetist \$20 per day, and the nurse \$4 per day. We also paid for our own ether, provided plenty of sterilized towels and sheets, and attended the patients when they came from the operating room. We got some help from the Institute headquarters and were able to have the operations performed for the very nominal sum of \$5 per operation. It meant a great deal of work for those of us on whom fell the responsibility of the clinic, but not one of us regrets it, the results have been so gratifying, and we feel we have done something for the good of the community and the rising generation which will not soon be forgotten.

Nor have we neglected that part of the human anatomy which has so much to do with the health, namely the teeth. We consulted our dentist, and he very kindly agreed to do the school children's work at half-price, and even go himself to the schools to do the work where it was not convenient for children to be brought out to him.

We expect, if possible, to arrange for another inspection next year are looking forward for the time in, we hope, the near future, when Medical and Dental Inspection will be compulsory in the Rural as well as the city schools.

As an ex-teacher I would like to have said something on the mental capacity of the individual pupil, but I have already taken up so much space that I that I will refrain. I will just say in closing that I will be willing to answer privately or through the medium of the paper any questions which I can answer about this question so near to the heart of every thinking mother in the community.

Box 60, Emo, Ont. AN EX-TEACHER.

### The Art of Giving Gifts.

BY ELEANOR ROBBINS WILSON

"Those gifts are ever the most acceptable Which the giver has made precious."

So runs the ancient adage and we all agree on the evident truth of the statement. But what qualities, what subtle imprint must a gift bear to render it precious, we ask. What gifts have brought us this peculiar satisfaction?

Let us pause for a moment and look with discerning eyes; lo! monetary value fades to insignificance and we can truthfully say only those gifts are precious which carry the hallmark of thoughtfulness—the gift that bespeaks the donor's close study of our personal tastes and bears testimony of heart-interest.

This haphazard giving of Christmas presents is to be deplored. Because Mrs. A. sent us a hand-painted calendar last year, we straightway ran amuck and, at some eleventh-hour bargain sale, bought her a bonbon dish or, forsooth, a doily "to pay her back," for, we argue, bonbon dishes and doilies are always useful. And behold! Mrs. A. mournfully added one more to her large and meaningless array of these articles and wondered why measures aren't on foot for a "safe and sane" Christmas. And now we know that appropriateness is an important factor.

Yet, appropriateness offers so much license that we are in danger of again making a mistake.

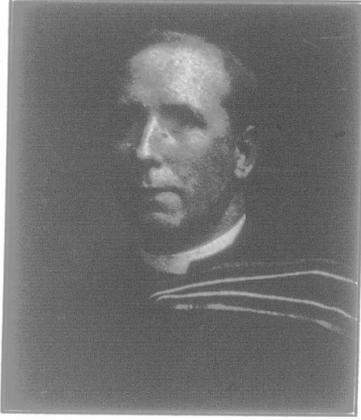
Because mother happens to be the dynamo of the household is no reason why we should select an electric iron or dustpan and brush broom for her. Very often mothers' minds flit above the level of laborious days and they enjoy reading Ibsen and Maeterlinck.

So, we learn that a gift, to be truly acceptable, must give pleasure and bear the unerring distinction of good taste.

I remember of paying a Christmas visit at a home where the father had been very generously remembered. Yet, waving aside the customary donations of neckties, slippers and handkerchiefs, he said, "but just see what the baby gave me! She had only twenty cents to spend and see the judgment she displayed!" He held aloft two boxes of his favorite smoking tobacco tied together with a tiny red ribbon, while on top was tucked a slip of paper on which was written in the penmanship of a young girl, "Have a good smoke." And from the look in that father's eyes, I knew he considered the gift thoughtful, appropriate, pleasing, given, in good taste and worthy of the attention of precious. So those of us who keep our finger on the pulse of personal taste and supplement

any material shortcoming with love cannot go far wrong.

I know one young woman who makes out her gift list months in advance and she says: "if I am not quite sure what music would be acceptable to my musical friend, I make a careful survey of her bookcase and then add a biography of some favorite composer. If I am afraid to select some work for my bookish friend, I send him an artistic bookplate, bookrack, or even bookmark. Yet, many times, some trifling homemade gift has found readiest welcome; for instance, a little personal calendar bearing a weekly quotation from some strong thinker, an A. B. C. book, for a college chum, containing jingles reminiscent of college fun and illustrated with my own crude draw-

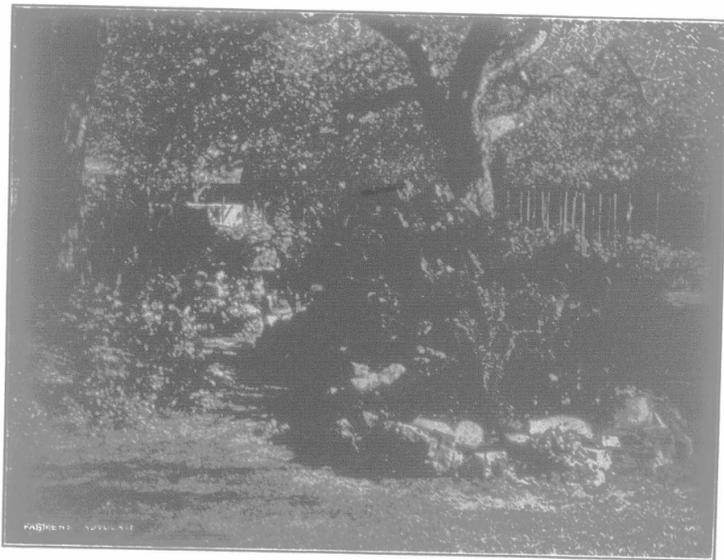


Rev. G. W. Tebbis, Hamilton.

An enthusiastic horticulturist, president of the O. H. A. in 1815-16.

ings, were deeply treasured. Each year I try to make the spiritual side gain on the material," and I, for one, knew how well she had succeeded. I thought of the little plaster "Winged Victory" that stands on my desk and told her how it had never ceased to act like a bugle call to my drooping spirits. Therein lies true value—to let the spiritual message bide within the gift, as Prometheus hid the spark of living fire in the hollow of the fennel stalk.

My friend, who remembers the old wood-road where we once took such soul-satisfying rambles together and who steals out with his camera and catches it in all the pristine loveliness of a May



The Rockery.

A corner of the garden, residence of A. G. Alexander, Hamilton, Ont.

morning and then sends it to me, gives not only for the present, he has added a pleasant thought to all May mornings. And the friend who takes loving interest in your Colonial room and on Christmas Eve slips a bayberry candle in your tall brass candlesticks, has, with the taper of her thoughtfulness, lighted many future twilights.

But why must it be a Christmas gift, a wedding present, a birthday remembrance! Who does not appreciate the gift out of season? The little love-token that happiness the gray of daily existence,

as the first spring daffodil or the first bluebird's strain gladdens a March day. A dear acquaintance of mine adopts this mode of living. She rarely remembers a holiday, but a morning in early spring may be made memorable with a box of trailing arbutus she has gathered in some fair wood-way; or, perhaps, on a bleak day in late November will arrive an Indian basket filled with pine cones to brighten my fireside, and with the delight of a Parsee I cherish that evening blaze and think loving thoughts of my glorious Lady Bountiful who carries the Christmas spirit throughout the year,—who has learned that it is these little sweet surprises in life that make us forget the desolate places.

This is distinctly the woman's age, and, while her ladyship is busy, in the women's clubs, bringing about betterment in civic conditions, in the Consumers' League, keeping a wise surveillance of the sanitary requirements of manufacture, let her seek the equally important task of lifting the burden of Christmas. I know of no better way of starting the reform than by resolving to abolish the meaningless gift and, like the true Lady Bountiful, to spread the Christmas Spirit over a twelve-month instead of confining it to the ephemeral holiday season,—to cease thrusting the unneeded and, perhaps, unwanted donation in prosperity's circle and remember some unfortunate outsider with a true Christmas present that is promoted by joy, not fear.

So few lives are poor in the three-fold treasury of mind, heart and pocket-book, that it is the privilege of all to give something. I remember hearing a noted Southern educator speak with much affection of his home-town nestled in the beautiful hill country of Tennessee. So rich, fertile and picturesque was this little valley habitation that it was often referred to as "the dimple of the Southland."

But on the outskirts of this "dimple" lay an arid, sandy tract known as "the barrens." Some years later in visiting his birthplace this man found "the barrens" mottled with green patches. "What does this mean?" he exclaimed. "Oh," came the jubilant response, "we have found the barrens can produce cantaloupes unequalled throughout the South." The barrens had given that which the rich valley could not.

So those of us who are not financial magnates nor yet such towering personalities that our gifts may be great, may, perhaps, from the simple fruitage of

### Italy.

AS the year 1917 draws to a close, the eyes that look anxiously out on the war turn often to Italy the country upon which the latest impact of the Teuton drive has been turned. In childhood days one looked at the map of it playfully. It was the "boot" of Europe, the long boot-shaped peninsula shooting out from the Alps into the blue waters of the Mediterranean. One noted that the Apennines ran along it like a central brace, to which clung the rich, vine-clad slopes of that southern clime. One saw, in imagination, "Rome on the Tiber," beautiful on her seven hills, the "Eternal City;" and one looked at the pictures in the old "Geography"—the Coliseum, the Forum—and thought shudderingly of the terrible old days of war, and conquest, and gladiatorial encounter—the Caesars starting forth on their raids of victory, Nero fiddling while Rome burned.

One turned the pages again, and read of the great achievements of art and architecture in the wonderful little country. There was the cathedral of St. Peter's at Rome; there were the wonderful art treasures of Florence! What a fascination in the leaning tower at Pisa, not far from that fated water in which our own British poet, Shelley, met his death. And then Venice—Venice, Queen of the sea! Venice built among the lagoons, with her "streets" of water, along which gondolas ply, while the mellowed walls and arched bridges repeat themselves in shadows. Venice, city of the old doges, home of Titian, with her fine old palaces, her statuary and paintings—and her "Bridge of Sighs." Then, passing to the westward, Milan. Did you not love to read of her glistening white cathedral? And did not Leonardo da Vinci live again for you? And could you not see him, as he sat there in the refectory of the convent church of Sta Maria delle Grazie, gazing for hours at the wall on which was beginning to be shadowed his great picture of *The Last Supper*, springing to his feet to grasp his brushes as inspiration came to him?—Leonardo, beautiful of soul as of body, with his sunny hair and mighty mind, the illegitimate lad who has been numbered among the world's supermen. Ah, but one does not know where to leave off with Leonardo da Vinci. One sees him again as he plans great bridges and aqueducts; as he studies politics and the stars; as he paints the Mona Lisa, musicians playing the while to keep upon the face of his model, La Gioconda, that strange expression that has caught his fancy: Leonardo telling stories in the market-place, laughing the while, while upon his words and his steps hang a motley crowd who look upon him, almost as upon a young god.

Italy! Even yet does not the very mention of her, call up the memory of many more of the world's great ones: Dante of Florence and his weird allegories—visions of Hell and Purgatory and Heaven made to symbolize the progress of the human soul through life; Galileo of Pisa, gazing upon the starry heavens through the telescope which he had invented, and calling out to an incredulous world that there were mountains on the moon, that the stars were indeed but planets and suns, and that the mystic Milky Way was none other than a heavenly band made up of infinitesimal numbers of them—Galileo, like that other Italian philosopher, Giordano Bruno, fighting the battle of Truth against superstition, and, like him, paying the price of meeting with bitter opposition, although he did not, like Bruno, pay the full price with death at the stake.

TO-DAY this Italy, to which we owe so much, is in the throes of events which threaten her very existence. Over the mountains the Teutons have come, Austrians and Germans, with the heavy artillery that has wrought already so much devastation on the face of this fair earth; and to-day, on the plains of Northern Italy, Italy's sons, under General Diaz, are locked with them in deadly combat. In our childhood days we learned of the Po and the Tiber; to-day little rivers hitherto unknown to fame—the Tagliamento, the Piave and the Adige, mere mountain streams with riverbeds almost dry in summer—loom large in the story of the day's events, and their names are on everyone's lips. Along the Piave cannons roar and the barrage falls, a screaming curtain of

fire. Who can say what may have happened there before this reaches its readers? From Venice, the Beautiful, art treasurers are being hurriedly removed, and such protection as can be contrived is being given to those that cannot be taken away to safety. But Italy's soldiers are forming line upon line. Great Britain, and France, and America are moving up to take part in the wall of defence. The Teuton is meeting all he had bargained for, and may meet with more.

In the mountains Italy's sons fought well, facing almost insuperable difficulties, climbing up the steep slopes by rope ladders or in cars swung by cables, digging trenches in the snow and suffering from frost-bite, melting snow for drink, or, when it was not to be had, placing pipes up which water had to be forced from the valleys. Two winters ago the call came to us for "old furs" for Italy. We tried to have some idea then to what use the warm fur was to be put, but imagination fails when one attempts to picture winter fighting among the cliffs and boulders and peaks of higher altitudes.

When the great and unexpected drive came a few weeks ago, at a weak spot the Hun gained entrance. It is no longer mountain fighting that engages the main body of the Italian army. Italy's plains between the Apennines and the Alps, must now bear the brunt.

**Italy in Peace Time.**

Look at the map of Italy and you will be better able to visualize the scene. See there in the north the comparatively flat central lands of Piedmont, Lombardy and Venetia. Here there are many rivers that branch out into marshy deltas at the mouth, the best known that one, 40 miles long, on which Venice is situated. In this great plain the winters are cold, cold winds coming down from the Alps, while the Apennines cut off the tempering breezes from the Mediterranean. Here, in the upland valleys, the snow often lies very deep, so that, even in times of peace communication trenches have to be kept open from point to point.

In this region grain is grown,—wheat (the most important crop), maize, barley, oats and millet, which last is much used for bread for the agricultural laborers as well as forage for the cattle. White beans are also grown and are much used by the working people; potatoes, turnips, lentils and beets all finding a place on the farms. Along the Po some rice is cultivated.

In the summer large flocks of sheep are pastured in the mountains, then brought down to the plains and valleys in winter. One species, raised about Saluzzo in Piedmont, have hanging ears and are kept for dairy qualities. Herds of cattle are also to be seen on these plains, in the vicinity of Milan chiefly the mouse-colored Swiss breed, and elsewhere the Padolian, white or gray, with enormous horns.

Farther to the south and in the warmer regions between the Apennines and the sea, fruit is grown everywhere; oranges, lemons and limes; almond, hazel and pistachio nuts; olives; grapes, in some sections trained to trees; mulberry trees, which afford food to the silkworm, so that in several places extensive silkworm rearing farms have been established.

Among manufactured products may be mentioned, as characteristically Italian, Parmesan and Gorgonzola cheese, made in the north; macaroni, and cameos.

In Italy, of late years, much attention has been paid to agriculture, and co-operation has gained great development. Co-operative dairies are numerous, and co-operative societies strong in the plains of the north. Travelling teachers of agriculture are appointed by the Government.

Not the least indication of this development is to be found in the International Institute of Agriculture, which has given Rome a new prominence, very different from that of the old days of history and romance.

Tommy—"Mammy had a lot of Christmas things sent home C. O. D. to-day. What does C. O. D. mean?"

Tommy's pop—"C. O. D., my son means 'Call on Dad.'"

**Hope's Quiet Hour**

**Go Forward.**

And the Lord said unto Moses, wherefore criest thou unto Me? speak unto the children of Israel, that they go forward.—Exodus, 14: 15.

"In hastening on, o'er rough and smooth, You may be apt sometimes to stumble, For only he who stands stock-still Is certain to avoid a tumble. In forming plans and doing deeds, You'll often make mistakes, of course, For only he who never strives Will never meet opposing force. Better to lose a dozen fights, And yet march on courageously, Than halt, a coward, in the field, And fail to live, through fear to die."

The text given above is a strange one, isn't it? We don't expect God to say to a man of splendid faith: "Wherefore criest thou unto Me?" It is not God's wish that we should spend our lives on our knees, like the hermits of old—although we are told to pray without ceasing. The spirit of prayer is the atmosphere of the spirit of man. Prayer is the breath of the soul; but the body does not have to stop breathing while it is working, and the soul also can breathe while it works.

expresses it. Christ's soldiers are expected to be men, not helpless infants. David was not afraid to attack a giant warrior, though he was only a shepherd lad himself, because he went forward in the strength of the Lord of hosts. Men of prayer should prove their worth as workers, and should be fearless in danger because they know that their Master can conquer—and has conquered the great enemy—Death.

It is said of Dr. Adam Clarke, the commentator, that he was an early riser. A young preacher, who regretted his failures in the way of early rising, said to the doctor: "How do you manage it? Do you pray about it?" "No," was the blunt reply, "I get up." The best way to perform any hard duty, or break any bad habit, is to pray and then go ahead (in God's strength) and fight to win. As Bunyan discovered, the lions in the way, which look so terrible, are chained. As Israel discovered, the way through the sea of difficulties opens up as we advance. "For a web begun God finds the thread," but we must go forward—as the soldiers do—without worrying about necessary supplies. God is in command, and is able and willing to supply every real need of His soldiers.

Perhaps you are facing the New Year with dread, instead of hope and good cheer. The way looks impassable and it seems mockery to talk about a "Happy" New Year. Well, our business is not to take the year as a whole, but to make the best of each day as we come to it.

defenders of freedom be anything else but happy? Though we so constantly misjudge the evidences, eternal justice runs through all human affairs."

As for himself, Mr. Copping discovered that he lost all sense of fear. He went into danger with no preparation beyond accustomed prayer, feeling that to be killed "is the most trivial of insignificant incidents, when you are sure that angel hosts are waiting, with outstretched welcoming arms, on the other side of the same barriers." When he reached the front line he was astonished to find in himself a feeling of tranquil serenity. In that front line trench his attention was not fixed at first on danger and death, but on a skylark blithely singing against the lovely background of blue sky. He had expected to be afraid, and yet went forward—and the fears fled as he faced them.

Let us go forward to meet the coming year, trusting in our Father's power to control His own world. I know a woman who has made herself ill by worrying over her husband—who is at the war. A few days ago she told me that wonderful happiness had come to her at four o'clock that morning. She said: "I knew that Christ was beside me and I told Him that I wanted Him to do His own will, not mine. Even if my husband should be killed, or if I should die, I am sure it will be all right." Her face was shining with her newly-found joy. She said she had often prayed before, but it was prayer that her own will might be done; now she really placed her affairs in God's hands.

The coming year may not be an easy one; but an easy, comfortable life is not the most noble or desirable. We should rather pray for victorious living, feeling it a high honor to be sent forward by our Commander to the post of difficulty, instead of seeking a safe and comfortable place far in the rear. Our Lord's road to the Mount of Ascension led over—not around—the hill Calvary. Let us give up our gloomy forebodings, and go forward where duty calls, "with step triumphant and a heart of cheer."

One of our readers in Manitoba has sent me ten dollars to be spent on family Bibles, to be given away wherever I think advisable. Last year he sent the same sum for the same purpose, declaring that he intended to do this every Christmas. I will do my best to carry out the wishes of this generous giver, and place the Bibles where they will be of real service.

DORA FARNCOMB.

**Gifts For The Needy.**

A friend in Quebec sent me \$2 "to help some one in need"; and this went the same day to a poor woman whose husband has been several weeks in the hospital. She has seven children—six under fourteen years old—and finds it hard to provide for their healthy appetites. The dollar from R. A., sent "to comfort some dear baby", went to a poor woman whose baby is ill. Both these women asked me to thank the givers. I must also thank those who have sent S. S. papers to give to the "shut-in". The postage on papers is four cents a pound—I am afraid one of our readers paid more than was necessary on the package she sent.

DORA FARNCOMB.  
52 Victor Ave., Toronto.



The Bridge of Sighs, Venice.

The crowded multitudes of Israel were huddled together in abject fear. They had just broken free from Egyptian slavery and started on their journey to the Promised Land. They were caught in a trap—or so it seemed—with the army of Pharaoh pursuing them and the narrow neck of the Red Sea in front. The water, which seemed to make their escape impossible, was really their helper—but they did not know that. They could not foresee the future, and they had lost faith in God's power to save them. So they furiously upbraided Moses for bringing them out of oppression into danger. He was splendidly fearless, telling his people that the Lord was their Mighty Ally and that the grand army of Egypt was doomed.

Then he turned from his terrified flock to God, asking the help so sorely needed. The answer was startling: "Wherefore criest thou unto Me? speak unto the children of Israel, that they go forward." In the strength of prayer we are to "carry on"—as the watchword of the day

And even the days come broken up into moments. The troubles we most dread either vanish altogether, as we approach them, or become bearable.

Arthur E. Copping, in his book "Souls in Khaki", describes the sadness of a crowd of British soldiers as they said goodbye to parents, wives, sisters and sweethearts at the railway station. He says that if things look so grey at the start, how increasingly dark the men might expect them to be as they went forward to the trenches. But when the railway journey was over, and they reached the steambot which was to carry the troops across the channel, the sadness melted away like a morning mist before the sunshine. He was startled and amazed to find himself in the midst of compressed lips, buoyant footsteps, and shining eyes. All who were not seasick were full of exultation as they went forward to meet danger, hardships and all the horrors of war.

"When you come to think of it", he remarks, "how could those voluntary

**The Beaver Circle**

**Our Senior Beavers.**

**The Bird's Christmas.**

BY NELLIE M. COVE.

Why not make a Christmas present To the birds that with us stay When the snowflakes fast are falling, And the skies are dull and gray? Just a little bag of suet That can dangle from a tree Will the woodpeckers give pleasure; While the merry chickadee May be made supremely happy By crumbs scattered round our door; And as soon as these are eaten He will quickly chirp for more. At Christmas, the time of giving, Heed then these advising words, And do not neglect to furnish Some such presents for the birds.

### Last-Minute Gifts Beavers can Make.

A few weeks ago we told you some Christmas gifts you could make for the grown folk. To-day we are giving you some ideas for things you can make for little brother and sister, or for Fred and May across the way. What about candy dolls? You make them this way. Get some striped stick candy and a box of marshmallows. Put the marshmallows on for heads, first making them round in your hands. Make the eyes, nose and mouth of melted chocolate, put on with a toothpick. Then finish by putting on little crepe paper bonnets and capes. If you make a little box full of these for anybody, write on the top of it:

There was an old woman  
Who lived in a shoe;  
She had so many children  
She didn't know what to do.  
And so she bundled some of them  
To send them to you.  
With best Christmas love.

Probably little Fred or May would like, too, a box of Christmas cookies, made into dolls, horses, elephants and Santa Claus. Ice the cookies, and paint where needed with melted chocolate. Very gay dresses may be made for these cookie dolls by sticking colored caraway candies into the icing. If you don't know how to make the cookies, get mother to show you. You will find it lots of fun.

"All-day-suckers" may be made at home by putting lumps of taffy, while still warm, on small sticks.

And here are some perfectly splendid dollies made of clothespins. Pad each clothespin from the head to the waist line with white cotton, tightly stitched, then put on whatever clothes you like. The face—for every real dolly must have a face, may be made with ink or paint on the wood. One may be made into a darkey dolly by coloring the whole face and putting on the features with paint. If you like you may pad the heads, too. Cover them with white cotton, then paint the faces with your water colors. Yarn may be put on for hair, or real hair may be used.

Now can't you imagine how happy little May will be if you give her a box containing half a dozen of these dollies? Perhaps a Chinaman, a Red Cross Nurse, a bride, a fat baby in long clothes and its father and mother. Just try it and see.

### Little Bits of Fun.

Little Lydia had been given a new ring for Christmas, which none of the guests at the Christmas dinner had noticed. Finally, being unable to stand the obscurity any longer, she remarked, "Oh, dear, I'm so warm in my new ring."

A certain small boy has already learned the saving of time that may be achieved by dealing with things in the mass instead of in detail.

"Well," he said to his mother, shortly before Christmas, "I've written a letter to Santa Claus, and I think it covers everything I want."

"That's good," said mother. "What did you ask for?"

"Two toy-shops and a candy-store", said Willy.

New French Town.—The geography lesson was about to begin, and the subject of it was France.

Accordingly, the teacher started off with the question: "Now in this present terrible war, who is our principal ally?"

"France," came the answer from a chorus of voices.

"Quite right", said the teacher, beaming. "Now can any of you give me the name of a town in France?"

A small boy at the back of the class almost fell over in his eagerness to tell; "Somewhere," he said, breathlessly.—Pittsburg Chronicle-Telegraph.

### How Fast Can You Say This?

If you stick a stick across a stick,  
Or cross a stick across a stick,  
Or stick a cross across a stick,  
Or cross a cross across a stick,  
Or stick a cross across a stick,  
Or stick a crossed stick across a stick,  
Or stick a crossed stick across a crossed stick,  
Or cross a crossed stick across a stick,  
How will you stick a cross across a crossed stick?

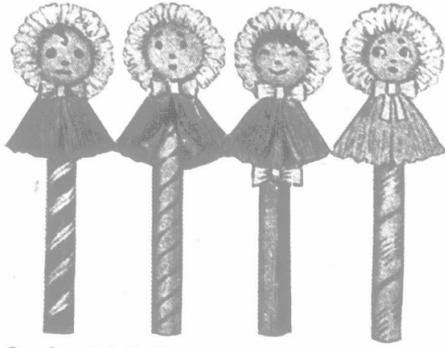
### Our Junior Beavers.

#### A Christmas Fairy Story.

"—oo—oo", moaned the wind, sighing through the pine-trees. "Mm—mm—mm."

"Oh, do stop that," said the Snow Fairy, sliding down on a ray of moonlight, just as the moon peeped out from behind a black cloud. "Don't you know that this is Christmas Eve, and no one should be moaning and sighing. Besides there is little Mary, right there in the big house beside you. I think she's in bed now, likely wide awake, listening to you. You don't want to make her feel sad, do you?"

"No-o, no-o, no-o", said the wind.



Candy-stick Dolls with Marshmallow Heads.

"Her father's away at the big war," went on the snow-fairy, and she has come here to spend Christmas at her grandmother's."

"Oh-o, oh-o, oh-o," said the wind "So everyone is going to try to make her as happy as possible", went on the snow fairy, "and you must be cheerful. Now, let me see what you can do?"

And with that the wind began to blow until the tree-tops shook as though with laughter, and the big lack cloud all broke into bits and sailed off in shreds leaving the moon shining clear and bright. "Ho-ho! Ho-ho! Ho-ho!" it laughed.

"Come, let us laugh and dance," said the Snow Fairy, and from out of the shadows came a troop of other snow fairies, who gathered about the first Snow Fairy. They were all dressed in white and their clothes glistened in the moonlight. Perhaps, if you had looked you would not have seen them; you might have thought they were just snow-diamonds and bits of hoar-frost gleaming beside the pine trees.

Soon they were all dancing about. "Come", said the Snow Fairy, "let us do something beautiful, as everyone should on Christmas Eve. Let us decorate the trees so that when little Mary looks out in the morning she will see a beautiful world."



Dolls Made of Clothespins.

And soon all were at work, dancing and flying from branch to branch, putting on bits of white frost that soon glittered like diamonds. Just once they stopped, as a sound of bells came on the air.

"It's Santa Claus", said they, "Let's look in the window."

And so they looked while the jolly old fellow went down the broad chimney and found little Mary's stockings. What things he pulled out of his bag, to be sure!

A doll, and candy, and a little red muff, and a little sled that wouldn't go into the stockings at all, and a nice book for Mary to send to her papa for his birthday. Santa Claus put that beside the sled, for he knew Mary would like it best of all. She was an unselfish little girl and she loved her papa.

"Ho-ho! Ho-ho! Ho-ho!" laughed the wind, "and now I must go away, or I will spoil the snow-fairies' work."

So he went away, and soon it was very still, and so the white diamonds that the snow-fairies put on the branches were not shaken off.

When little Mary got up in the morning she ran first to see what Santa Claus had brought her.

"How dear of him to bring a book for my papa!" she said, first thing. "I must post it this afternoon."

The sun was just rising before she had time to go to the window.

"Oh, how lovely!" she said, "The whole world is shining! I'm sure my papa will soon come home." But she did not see the Snow-fairies who were peeping from an overhanging snow-bank at her bright face.

They did not want her to see them, for like all good people, they liked to do beautiful things unawares.

### Junior Beavers' Letter Box.

Dear Puck and Beavers.—

This is my second letter to your Circle. I have three quarters of a mile to go to school and my only sister goes with me. Our teacher's name is Miss Willis. We have taken the Farmer's Advocate as long as I can remember. And I enjoy reading the Circle letters very much. During the summer holidays I helped build loads of grain and drove the horses on the hayfork, and, too, I topped nearly all the turnips and helped Daddy bring them in. I was trying to do my bit. I must close now as my letter is getting long.

JOHN STEWART, age 8.

R. R. No. 1, Arnprior, Ont.

Dear Puck and Beavers.—This is my third letter to the Beaver Circle. Since I never saw my last letter in print I thought I would try my luck again.

I have read many books such as "Little Danny" and I have also read "Animal Chums" and I am now reading the "Third Golden Rule" book and many others. I go to school every day. My teacher's name is Miss Rooney. We all like her fine.

I guess I will close. Wish some of the Beavers would write to me.

HELEN E. CAMPBELL.

R. R. No. 5, St. Thomas, Ont.

Dear Puck and Beavers.—This is the first letter that I have written. I like reading them. I go to school every day and like it fine. My teacher's name is Miss Morrison. I like her fine; she boards

Wishing the Beaver Circle every success.

Yours truly,

VIOLET MCCRAE, age 10, Sr. II class.  
R. R. 2, Kingsville, Ont.

### The Ingle Nook.

[Rules for correspondence in this and other Departments: (1) Kindly write on one side of paper only. (2) Always send name and address with communications. If pen name is also given, the real name will not be published. (3) When enclosing a letter to be forwarded to anyone, place it in stamped envelope ready to be sent on. (4) Allow one month in this Department for answers to questions to appear.]

### Soldier's Sleeveless Sweater

Someone asks how to make a trench sweater.

There are several methods. For (1) and (2) use 4 or 5-ply fingering wool wound double, and bone or celluloid needles, size 6. Required, 1 lb. wool.

(1) *First Method.*—Knit in plain garter stitch, to required size, following pattern and sewing up under arm to finish.

(2) *Second Method.* in "Brioche" stitch.

Brioche Stitch.—Put wool over the needle then slip one, knit two together.

Cast on 60 stitches loosely, knit ribbed (3 plain, 3 purl) for 3 inches. Then knit "brioche" (wool over, slip 1 knit 2 together) to within 2 stitches of end of first row and knit these 2 stitches together. This leaves 59 stitches on the needles. Continue "brioche" for 19 inches (always slipping first stitch of each row.)

Knit the first 16 stitches "brioche" then the next 27 ribbed, (3 plain, 3 purl) and the remaining 16 "brioche". Continue this for 3 inches. Then knit the first 16 stitches of the next row "brioche", cast off the 27 ribbed stitches loosely and knit the remaining 16 "brioche".

Now knit "brioche" for 16 stitches cast on 27 stitches, opposite those cast off (this forms the neck) and knit "brioche" the remaining 16 stitches.

Next knit 16 stitches "brioche", 27 ribbed as before and 16 "brioche". Continue thus for 3 inches. Then knit the entire 59 stitches "brioche" for 19 inches, rib 3 plain, 3 purl, for 3 inches and cast off loosely. (By adding 1 stitch in the first row, the 60 stitches required for the ribbing are obtained.)

Sew up either side, leaving 10 inches at least for the armholes.

Garter stitch may be used instead of the Brioche stitch, if preferred.

(3) *Third Method.*—Sleeveless Sweater—Cast on 72 stitches, knit 4, and purl 4 for 3 inches; then knit for 21 inches. For neck opening knit 24 stitches, bind off 24 stitches, and knit 24. Knit 4 ribs on each side, knit 24 stitches, cast on 24 stitches, and knit 24. Knit for 21 inches, knit 4, and purl 4 for 3 inches, and bind off. Sew up side seams, leaving ample armhole. Knit or crochet ½-inch edge around neck.

Such jackets require ¾ lb. of wool (grey beehive, double knitting yarn at \$2.50 per pound, or Canadian khaki yarn at \$1.75, are suitable for the purpose) and one pair of number 5 or 6 needles (20 and 30 cents a pair).

If for home use sleeves may be added.

### Christmas Cake and Pudding—Artichokes.

Would like if you would have printed again as soon as possible the recipe for McDonald Christmas cake, also Christmas pudding. I once made a cake by the recipe and as it was the best I ever tasted would like to make another.

I am greatly interested in the Ingle Nook. Have been reading in the issue of Sept. 27th about how to prepare artichokes. I bought a pound 2 years ago and planted them but as for eating them, couldn't do it. I wonder if they are not the right kind they are still growing in the garden about 6 ft. tall. Tubers are kind of flat and very irregular. When cooked were mushy and sweet. Have been thinking of feeding them to the hens.

Thanking you in advance.  
X. Y. Z.

The following recipe, one given at Macdonald Institute, is probably the one you want, as it was printed before in this paper: One lb. raisins, ½ lb. currants, ½ lb. mixed peel, ½ lb. figs, ½ lb. sugar, ½ lb. butter, ½ doz. eggs, ½ cup syrup, ½ lb. flour, ½ lb. almonds, spices to taste.

Here is one for English Plum Pudding,

Circle every

0, Sr. II class.

**Nook.**

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is Department for

**Wool Sweater**

make a trench  
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1 lb. wool.  
Knit in plain  
size, following  
under arm to  
in "Brioche"

**Trench Sweater**

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knit 2 together)  
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the neck) and  
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Then knit the  
for 19 inches,  
ches and cast  
stitch in the  
quired for the  
ing 10 inches

**Bran Biscuits.**

Dear Friends of the Ingle Nook.—I was  
so pleased to see a letter from Lancashire  
Lass again. One of the first things I do  
in looking into the Advocate is to see if  
there is a letter from her. How very  
brave and cheery she is with all her  
suffering. I must say she is an inspiration  
to me quite often. You know sometimes  
those who are well are not as strong  
to endure and patient as those who have  
suffered. We become perfect through  
suffering. Christ upholds and strengthens  
if we look to Him for help. How much  
we all need Him.

**From Lancashire Lass.**

Dear Junia and Readers of Advocate:  
Well, well here I am again. So strange  
to have to realize that it really is nearly  
Christmas. Seems so short a time since  
the last new year was ushered in with its  
sadness and gladness. How much we  
have to be thankful for, the comfortable  
homes and food and clothing which so  
many are deprived of. This is a long  
war. Everyone should put their shoulder  
to the wheel and help to move it along  
with all help possible. Christmas is  
near but there is not that glad cheer  
the old time Christmas used to bring,  
before the war began. No time or money  
for worldly pleasures should be spent.  
Just do all possible to help, and save  
to help along. It would be grand to be  
well and able to do our bit more these  
anxious times. May it all soon end.  
No more war would be welcome news  
Again I must thank you all so much for  
so much kindness shown me in so many  
ways. So glad for your letters and cards;  
wondering where is Glengarry Lass and  
Juanita who wrote those bright little  
stories. The help and comfort dear  
Hope gives us all week after week. May  
those in Australia and far and near be  
helped by it. How nice to think friends  
far away read same paper we do. Jesus  
surely makes them bloom, they are so  
cheery.

**From Lankshire Lass.**

Have you who have children ever given  
them granulated sugar and dry alum  
ground fine for severe case of croup? It  
will cure it quickly. For large child give  
more. Do not give a drink after as the  
dry alum and sugar cut the filling out of  
the throat. I hope it will help some  
little sufferer, as I have used it many  
times with success.  
I will leave you now, not able for more,  
so close with thoughts in verse:

**Just to wish you a Christmas greeting,**

So glad for your kindness, dears;  
I have such a grateful feeling,  
For all your past help and cheer.

that is not very expensive—an item to be  
considered in war-time:

Take 2 cups dry bread crumbs, 2  
cups raisins and currants (mixed), 1/2 cup  
sugar, 1/2 cup syrup, 1 cup chopped suet,  
1 teaspoon salt, 1 teaspoon cinnamon,  
several gratings of nutmeg. Add the  
spices, fruit and sugar to the bread  
crumbs, then add the suet, then the  
syrup. Place in a greased pudding  
mould, two-thirds full, cover, and steam  
for 3 hours steadily. Serve with sauce.

Many people make carrot pudding,  
even for Christmas. One recipe is as  
follows: One cup sugar, 1 cup chopped  
suet, 1 cup raisins, 1 cup grated carrots  
or beets (raw), 1 cup grated potatoes  
(raw), 1 1/2 cups flour, 1 teaspoon soda,  
pinch salt. Steam or boil in a cloth 3  
hours. See elsewhere in this paper for  
another recipe.

I think the artichokes you have are  
the right kind, but perhaps you could  
never learn to like them. I myself am  
very fond of them, either serve with a  
cream sauce or cooked in a sort of mock  
oyster dish. They should not be "mushy".  
Perhaps you boiled them too long. Of  
course they are never dry and mealy  
like potatoes. Artichokes, for those  
who like them, are a very good food, and  
are very easily grown, as easily, in fact, as  
weeds.

**Bran Biscuits.**

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to endure and patient as those who have  
suffered. We become perfect through  
suffering. Christ upholds and strengthens  
if we look to Him for help. How much  
we all need Him.

Now Dear Lancashire Lass, those  
bran biscuits are very easily made:  
Two cups white flour, one cup bran  
(or more bran may be used if desired).  
Just make like ordinary white biscuits  
but only half the amount of shortening  
is required. Quite often instead of rolling  
them out I make them soft enough to  
drop from a spoon, either putting them  
in gem pans or drop in spoonful on a  
large pan if one is hurried.

Russell Co., Ont. A FRIEND.

**From Lancashire Lass.**

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to have to realize that it really is nearly  
Christmas. Seems so short a time since  
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Have you who have children ever given  
them granulated sugar and dry alum  
ground fine for severe case of croup? It  
will cure it quickly. For large child give  
more. Do not give a drink after as the  
dry alum and sugar cut the filling out of  
the throat. I hope it will help some  
little sufferer, as I have used it many  
times with success.  
I will leave you now, not able for more,  
so close with thoughts in verse:

**Just to wish you a Christmas greeting,**

So glad for your kindness, dears;  
I have such a grateful feeling,  
For all your past help and cheer.

The old year is quickly passing,  
And the new one is drawing near,  
May it bring to many a blessing,  
And follow through all the year.  
With love to all, your shut-in friend.  
LANKSHIRE LASS.  
Wellington Co., Ont.

**Getting Ready For Christmas.**

Good Christmas Cake (not too rich).—  
One teacupful each of butter, cream,  
treacle, and moist sugar, 1/2 oz. powdered  
ginger, two eggs, 1/4 lb. raisins, 2 oz.  
currants, 2 oz. candied peel, one table-  
spoonful water, one teaspoonful cinnamon,  
1 lb. flour. Warm the butter; put flour,  
sugar, ginger, cinnamon, raisins, currants  
and peel into a basin, mix thoroughly;  
stir in butter, cream, treacle, and eggs  
well beaten. Beat the mixture well.  
Dissolve soda in the water, and add  
this also. Beat for some time longer.  
Bake in buttered tin in moderate oven  
for two hours, or rather more.—T. P's  
Weekly.

Cranberry and Raisin Pie.—Two cups  
cranberries, 1 cup sultana raisins, 3  
cups water, 1 cup sugar, 1 tablespoon  
butter, 1 teaspoon vanilla. Cook all  
together, except the butter and vanilla,  
which are added just before taking from  
the fire. Bake in an open crust. You  
may criss-cross the top with strips of  
pastry, if you like.

A Boiled Fruit Cake.—Take 1 cup  
water, 1 cup sugar, 1/2 cup lard, 1 teaspoon

teaspoon mixed spice, 1 lb. candied peel,  
grated rind and juice of 2 lemons.

Bread Stuffing for Chicken, Veal or  
Fish.—Mix together 2 cups-fine bread-  
crumbs, 1/2 cup melted butter, 1/2 tea-  
spoon (scant) each of salt, pepper and  
powdered thyme. For fish, which needs  
a higher flavor, add chopped onion and  
2 tablespoons green or red pepper if it  
can be got (sweet, fresh peppers). In  
season, mushrooms may be added.

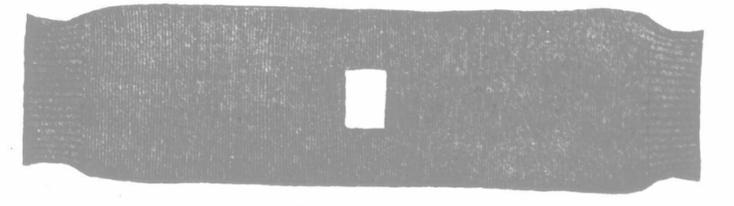
Stuffing for Turkey or Chicken.—  
To 2 cups grated bread crumbs add  
2 sage leaves, a dash of summer savory,  
and a pepper pod, all minced fine, also  
a teaspoon of onion juice, 1/2 cup melted  
butter, and salt to season. Mix all well  
together.

Stuffing for Goose.—Boil 4 or 5 medium  
onions, then chop fine, mix with mashed  
potatoes or bread crumbs, and season  
with butter, pepper, salt and 8 finely  
minced sage leaves. The quantity of  
potatoes or crumbs should be equal in  
bulk to the onions.

**The Scrap Bag.**

**Odor of Cabbage.**

Allow cabbage water to become cold  
before pouring it down the sink and there  
will be no unpleasant smell. But re-  
member that vegetables should be steamed  
when possible or cooked in as little  
water as can be used. In this way the  
medicinal properties are conserved.



**Trench Sweater.**  
Double over and sew up at sides, leaving armholes.

**Mice.**  
Mice do not like the smell of pepper-  
mint, and a little oil of peppermint  
placed about their haunts will help to  
make them look for other quarters.  
Rats and mice, however, should be  
exterminated. They only do harm and  
are instrumental in carrying disease.  
When bubonic plague appeared in Cali-  
fornia a few years ago vast sums of money  
were spent in killing the rats.

**To Prevent Red Hands.**

People who suffer from red hands  
should never wear tight gloves or woolen  
gloves, and should avoid exposing the  
hands to extremes of temperature. When  
washing the hands use moderately warm  
water, and after partly drying rub into  
the skin a solution of equal parts of  
bay rum and glycerine, or rose-water and  
glycerine.

**To Prevent Sugaring.**

All syrups made of sugar may be kept  
from grainy if a teaspoonful of cream  
of tartar is added to the syrup and the  
whole brought to a quick boil before  
putting away.

**To Remove Ring on Cloth.**

When a garment is stained or streaked  
from being partially dipped in cleansing  
fluid, it should be allowed to dry and then  
held over the steam from a kettle until  
the ring disappears.—D. B., New York.

**Saving Fats.**

Fats which can no longer be used for  
deep frying and left-over fats which are not  
quite sweet, may be put in a crock to save  
for lard soap-making for home cleaning.  
Dissolve one can of lye in one quart of  
cool water. Stir until it is white. Add six  
pounds of fat, melted but not hot. Pour  
it into a pan and cut it into squares as  
it hardens. Let it dry thoroughly before  
using it. If the soap is to be white the  
fat must be clarified.

**Colds.**

Do not forget that "cold" is a germ  
disease, and contagious. If you kiss any-  
one who has a cold, or receive any of the  
germs flating about in the air near that  
person, you are likely to "catch one"  
too, or, rather a cold is thrust upon you.  
If you have a cold cough into a hand-  
kerchief, and change the handkerchief  
very often; that may help to save the

rest of the family from suffering likewise.  
Wet feet are very likely, also, to give  
a cold; so, also, is a chilling received after  
being overheated. When very warm  
from working put on heavier clothes,  
if possible, or keep on walking or exer-  
cising for a time, but more gently,  
until the effect of the overheating wears  
off. In every case of cold eat lightly,  
drink plenty of hot drinks of any kind  
and take a dose of laxative medicine.

**Soap Bandages.**

Two European surgeons have recently  
recommended the use of ordinary soap  
for dressing wounds. Surgeon's gauze  
bandages covered with a thick suds  
made from pure white soap, is used, and  
are said to be very helpful in healing.  
The soap is dissolved in warm water  
which has been freed of all harmful  
germs by boiling, the bandages are  
dipped in, then rubbed again with the  
soap and placed over the wound. Finally  
absorbent cotton is placed above. The  
bandage is renewed every two or three  
days. It is very useful to know this  
treatment on farms, where accidents  
are likely to happen at any time, and  
where antiseptics other than soap may  
not be on hand.

**Time for Cooking Vegetables.**

Often one is puzzled to know just  
when to put vegetables on to boil, so  
that they will be ready just in time,  
therefore the following table for winter  
vegetables may now be found of use.  
A little longer time may be necessary  
if vegetables are large, or cut in large  
pieces.

- Beets.—30 minutes.
- Cabbage.—10 minutes.
- Carrots.—30 minutes.
- Celery.—30 minutes.
- Dry beans.—2 hours.
- Macaroni.—30 minutes.
- Onions.—30 minutes.
- Salsify.—45 minutes.
- Turnips.—30 minutes.

**Christmas.**

The snow-flakes are drifting o'er mead and  
o'er mountain,  
The sun plunges on through a cloud drift  
of white,  
There's ice in the lakelet and frost on the  
fountain  
And chill are the winds on the prairie to-  
night.  
But bells gayly ringing all these are de-  
fying.  
Let winter enthral us, we laugh at its  
sway,  
Hearts beating with pleasure dark  
thoughts are defying,  
Our souls hold the sunshine, 'Tis Christ-  
mas to-day.

We're some of us nearing the end of our  
travel,  
We're some of us bearing the brunt of the  
strife,  
We're youth that at age and its weakness  
may cavel,  
Our feet are just set in the pathway of life.  
But whether the morn or the even be o'er  
us,  
And if we be children or long on the way,  
There's hope and there's joy and there's  
promise before us,  
For God's in His Heaven, 'tis Christmas  
to-day.

—L. M. Thornton.

When Gen. Leonard Wood was a  
small boy he was called up in the grammar  
class.  
The teacher said: "Leonard, give me a  
sentence and we'll see if we can change it  
to the imperative mood."  
"The horse draws the cart," said  
Leonard.  
"Very good. Now change it to an  
imperative."  
"Get up!" said young Wood.

## Serial Story.

## An Alabaster Box.

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

## Chapter VII.

"Does my hair look decent?" asked Ellen, as the two girls peered into the mirror together. "The dew does take the curl out so. It must be lovely to have naturally curly hair, like yours, Fanny. It looks all the prettier for being damp and ruffled up."

Fanny was pulling out the fluffy masses of curling brown hair about her forehead. "Your hair looks all right, Ellen", she said absentmindedly.

She was wondering if Wesley Elliot would speak to her.

"I saw that Orr girl," whispered Ellen; she's got on a white dress, all lace, and a black sash. She does look pretty, Fanny; we'll have to acknowledge it."

"Ye-es", murmured Fanny who was drawing on a pair of fresh white gloves.

"You aren't going to wear those gloves down stairs, are you, Fan? I haven't got any."

"My hands are all stained up with currant jelly," explained Fanny hurriedly. "Your hands are real pretty, Ellen."

Ellen glanced down at her capable, brown hands, with their blunt finger-tips. "Did you ever notice her hands, Fanny?"

Fanny shook her head. "Her nails are cut kind of pointed, and all shined up. And her hands are so little and soft and white. I suppose a man—do you think Jim would notice that sort of thing, Fanny?"

Fanny snapped the fastenings of her gloves.

"Let's go down stairs," she suggested. "They'll be wondering what's become of us."

"Say, Fan!"

Ellen Dix caught at her friend's arm, her pretty face, with its full pouting lips and brilliant dark eyes upturned.

"Well?"

"Do you suppose— You don't think Jim is mad at me for what I said about her, do you?"

"I don't remember you said anything to make anybody mad. Come, let's go down, Ellen."

"But, Fan, I was wondering if that girl—Do you know I—I kind of wish she hadn't come to Brookville. Everything seems—different, already. Don't you think so, Fanny?"

"Oh, I don't know. Why should you think about it? She's here and there's no use. I'm going down, Ellen."

Fanny moved toward the stairs, her fresh young beauty heightened by an air of dignified reserve which Ellen Dix had failed to penetrate.

Wesley Elliot, who had by now reached the wide opening into the hall in the course of his progress among the guests, glanced up as Fanny Dodge swept the last step of the stair with her unfashionable white gown.

"Why, good evening, Miss Dodge", he exclaimed with commendable presence of mind, seeing the heart under his waistcoat had executed an uncomfortable *pas seul* at sight of her.

He held out his hand with every appearance of cordial welcome, and after an instant's hesitation Fanny laid her gloved fingers in it. She had meant to avoid his direct gaze, but somehow his glance had caught and held her own. What were his eyes saying to her? She blushed and trembled under the soft dark fire of them. In that instant she appeared so wholly adorable, so temptingly sweet that the young man felt his prudent resolves slipping away from him one by one. Had they been alone—

But, no; Ellen Dix, her piquant, provokingly pretty face, tip-tilted with ardent curiosity, was just behind. In another moment he was saying, in the easy, pleasant way everybody liked, that he was glad to see Ellen; and how was Mrs. Dix, this evening? And why wasn't she there?

Ellen replied demurely that it had been given out on Sunday as a young people's social; so her mother thought she wasn't included.

They entered the crowded room, where Deacon Whittle was presently heard declaring that he felt just as young as anybody, so he "picked up mother and came right along with Joe." And Mrs.

Daggett, whose placid face had lighted with pleasure at sight of Fanny and Ellen, proclaimed that when the day came for her to stay at home from a young folks' social she hoped they'd bury her, right off.

So the instant—psychological or otherwise—passed. But Fanny Dodge's heavy heart was beating hopefully once more.

"If I could only see him alone," she was thinking. "He would explain everything."

Her thoughts flew downwards to the moment when she would come down stairs once more, cloaked for departure. Perhaps Wesley—she ventured to call him Wesley in her joyously confused thoughts—perhaps Wesley would walk home with her as on other occasions not long past. Jim, she reflected, could go with Ellen.

Then all at once she came upon Lydia Orr, in her simple white dress, made with an elegant simplicity which convicted every girl in the room of dowdiness. She was talking with Judge Fulson, who was slowly consuming a huge saucer of ice-cream, with every appearance of enjoyment.

"As I understand it, my dear young lady, you wish to employ Brookville talent exclusively in repairing your house," Fanny heard him saying, between smacking mouthfuls.

And Lydia Orr replied, "Yes, if you please, I do want everything to be done here. There are people who can, aren't there?"

When she saw that Fanny had paused and was gazing at her doubtfully, her hand went out with a smile, wistful and timid and sincere, all at once. There was something so appealing in the girl's upturned face, an honesty of purpose so crystal-clear in her lovely eyes, that Fanny, still confused and uncertain whether to be happy or not, was irresistibly drawn to her. She thought for a fleeting instant she would like to take Lydia Orr away to some dim secluded spot and there pour out her heart. The next minute she was ready to laugh at herself for entertaining so absurd an idea.

She glanced down at Lydia's ungloved hands, which Ellen Dix had just described, and reflected soberly that Wesley Elliot sat at table with those dainty pink tipped fingers three times each day. She had not answered Ellen's foolish little questions; but now she felt sure that any man, possessed of his normal faculties, could hardly fail to become aware of Lydia Orr's delicate beauty.

Fanny compelled herself to gaze with unprejudiced eyes at the fair transparent skin, with the warm color coming and going beneath it, at the masses of blond hair drawn softly back from the high round forehead, at the large blue eyes beneath the long sweep of darker lashes, at the exquisite curve of the lips and the firmly modeled chin. Yes; Jim had seen truly; the ordinary adjective "pretty"—applicable alike to a length of ribbon, a gown, or a girl of the commoner type—could not be applied to Lydia Orr. She was beautiful to the discerning eye, and Fanny unwillingly admitted it.

Lydia Orr, unabashed by the girl's frank inspection, returned her gaze with beaming friendliness.

"Did you know I'd bought a house?" she asked. "It's old and needs a lot of repairing; so I was just asking Judge Fulson—"

"Deacon Amos Whittle is, so to say, a contractor," said the Judge ponderously, "and so, in a way, am I."

"A contractor?" puzzled Lydia. "Yes; but I—"

"If you'll just give over everything into our hands connected with putting the old place into A-number-one shape, I think you'll find you can dismiss the whole matter from your mind. In two months' time, my dear young lady, we'll guarantee to pass the house over to you in apple-pie order, good as new, if not better. . . . Yes, indeed; better!"

The judge eyed his empty saucer regretfully.

"That's the best ice cream—" he added with total irrelevance. "Have some, won't you? I hear they're passing it out free and permissuous in the back room."

"I think we should like some cream, if you please, Judge Fulson," said Lydia, "if you'll keep us company."

"Oh, I'll keep company with you, as far as strawberry ice cream's concerned," chuckled the Judge, his big bulk shaking with humor. "But I see Mis' Fulson over there; she's got her weather eye on us. Now, watch me skeepdaddle for that cream! Pink, white or brown, Miss Orr; or all three mixed? There's a young

fellow out there in charge of the freezers that sure is a wonder. How about you, Fanny?"

The two girls looked at each other with a smile of understanding as the big figure of the judge moved ponderously away.

"We never had ice cream before at a church sociable", said Fanny. "And I didn't know Mrs. Solomon Black had so many lanterns. Did you buy all this?"

Her gesture seemed to include the shaded lamps, the masses of flowers and trailing vines, the gay strains of music, and the plentiful refreshments which nearly every one was enjoying.

"It's just like a regular party," she added. "We're not used to such things in Brookville."

"Do you like it?" Lydia asked, doubtfully.

"Why, of course," returned Fanny, the color rising swiftly to her face.

She had caught a glimpse of Wesley Elliot edging his way past a group of the younger boys and girls, mad with the revelry of unlimited cake and ice cream. He was coming directly toward their corner: his eyes, alas! fixed upon the stranger in their midst. Unconsciously Fanny sighed deeply; the corners of her smiling lips drooped. She appeared all at once like a lovely rose which some one has worn for an hour and cast aside.

"It's such a little thing to do," murmured Lydia.

Then, before Fanny was aware of her intention, she had slipped away. At the same moment Judge Fulson made his appearance, elbowing his smiling way through the crowd, a brimming saucer of vari-colored ice cream in each hand.

"Here we are!" he announced cheerfully. "Had to get a *habeas corpus* on this ice cream, though. Why, what's become of Miss Orr? Gone with a handsomer man—eh?"

He stared humorously at the minister. "Twa'n't you, dominie; seein' you're here. Had any ice cream yet? No harm done if you have. Seems to be plenty. Take this, parson, and I'll replevin another plate for myself and one for Miss Orr. Won't be gone more'n another hour."

Fanny, piteously tongue-tied in the presence of the man she loved, glanced up at Wesley Elliot with a timidity she had never before felt in his company. His eyes under close-drawn brows were searching the crowd. Fanny divined that she was not in his thoughts.

"If you are looking for Miss Orr," she said distinctly, "I think she has gone out in the kitchen. I saw Mrs. Solomon Black beckon to her."

The minister glanced down at her; his rash impulse of an hour back was already forgotten.

"Don't you think it is awfully warm in here?" continued Fanny.

A sudden desperate *d'sire* had assailed her; she must—she would compel him to some sort of an explanation.

"It's a warm evening", commented the minister. "But why not eat your cream? You'll find it will cool you off."

"I—I don't care much for ice cream," said Fanny, in a low tremulous voice.

She gazed at him, her dark eyes brimming with eager questions.

"I was wondering if we couldn't— it's pleasant out in the yard—"

"If you'll excuse me for just a moment Miss Dodge," Wesley Elliot's tone was blandly courteous—"I'll try and find you a chair. They appear to be scarce articles; I believe the ladies removed most of them to the rear of the house. Pardon me—"

He set down his plate of ice cream on the top shelf of Mrs. Solomon Black's what-not, thereby deranging a careful group of sea-shells and daguerreotypes, and walked quickly away.

Fanny's face flushed to a painful crimson; then as suddenly paled. She was a proud girl, accustomed to love and admiration since early childhood, when she had quenched it over her playmates because her yellow curls were longer than theirs her cheeks pinker, her eyes brighter and her slim, strong body taller. Fanny had never been compelled to stoop from her graceful height to secure masculine attention. It had been hers by a sort of divine right. She had not been at all surprised when the handsome young minister had looked at her twice, thrice, to every other girl's once, nor when he had singled her out at the various social events of the country side.

Fanny had long ago resolved, in the secret of her own heart, that she would never, never become the hard-worked wife of a plodding worker. Somewhere

in the world—riding toward her on the steed of his passionate desire—was the fairy prince; her prince, coming to lift her out from the sordid commonplace of life in Brookville. Almost from the first she had recognized Wesley Elliot as her deliverer.

Once he had said to her: "I have a strange feeling that I have known you always." She had cherished the saying in her heart, hoping—believing that it might, in some vague, mysterious way, be true. And not at all aware that this pretty sentiment is as old as the race and the merest banality on the masculine tongue, signifying: "At this moment I am drawn to you, as to no other woman; but an hour hence it may be otherwise."

How else may man, as yet imperfectly monogamous, find the mate for whom he is ever ardently questing? In this woman he finds the trick of a lifted lash, or a shadowy dimple in the melting rose of her cheek. In another, the stately curve of neck and shoulder and the somber fire of dark eyes draw his roving gaze; in a third, there is a soft, adorable prettiness, like that of a baby. He has always known them—all. And thus it is, that love comes and goes unbidden, like the wind which blows where it listeth; and woman, hearing the sound thereof, cannot tell whence it cometh nor wither it goeth.

In this particular instance Wesley Elliot had not chosen to examine the secret movements of his own mind. Baldly speaking, he had cherished a fleeting fancy for Fanny Dodge, a sort of love in idleness, which comes to a man like the delicate, floating seeds of the parasite orchid, capable indeed of exquisite blossoming; but deadly to the tree upon which it fastens. He had resolved to free himself. It was a sensible resolve. He was glad he had made up his mind to it before it was too late. Upon the possible discomfiture of Fanny Dodge he bestowed but a single thought: She would get over it. "It" meaning a quite pardonable fancy—he refused to give it a more specific name—for himself.

To the unvoiced opinions of Mrs. Solomon Black, Mrs. Deacon Whittle, Ellen Dix, Mrs. Abby Daggett and all the other women of his parish he was wholly indifferent. Men, he was glad to remember, never bothered their heads about another man's love affairs.

The chairs from the sitting room had been removed to the yard, where they were grouped about small tables adequately illuminated by the moon and numerous Japanese lanterns. Every second chair appeared to be filled by a giggling, pink-cheeked girl; the others being suitably occupied by youths of the opposite sex—all pleasantly occupied. The minister conscientiously searched for the chair he had promised to fetch to Fanny Dodge; but it never once occurred to him to bring Fanny out to the cool loveliness of mingled moon and lantern-light. There was no unoccupied chair, as he quickly discovered; but he came presently upon Lydia Orr, apparently doing nothing at all. She was standing near Mrs. Black's boundary picket fence, shielded from the observation of the joyous groups about the little tables by the down-dropping branches of an apple-tree.

"I was looking for you!" said Wesley Elliot.

It was the truth; but it surprised him nevertheless. He supposed he had been looking for a chair.

"Were you?" said Lydia, smiling.

"I must go in", she murmured.

"Why must you? It's delightful out here—so cool and—"

"Yes, I know. But the others— Why not bring Miss Dodge out of that hot hot room? I thought she looked tired."

"I didn't notice", he said.

"Just look at that flock of little white clouds up there with the moon shining through them!"

Lydia glided away over the soft grass. "I've been looking at them for a long time," she said gently. "I must go now and help cut more cake."

He made a gesture of disgust.

"They're fairly stuffing", he complained "And, anyway, there are plenty of women to attend to all that. I want to talk to you, Miss Orr."

His tone was authoritative.

She turned her head and looked at him "To talk to me?" she echoed.

"Yes; come back—for just a minute. I know what you're thinking; that it's

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my duty to be talking to parishioners. Well, I've been doing that all the evening. I think I'm entitled to a moment of relaxation; don't you?"

"I'm a parishioner", she reminded him. "So you are", he agreed joyously. "And I haven't had a word with you this evening, so far; so you see it's my duty to talk to you; and it's your duty to listen."

"Well?" she murmured. Her face upturned to the moonlight wore the austere loveliness of a saint's.

"I wish you'd tell me something," he said, his fine dark eyes taking in every detail of delicate tint and outline. "Do you know it all seems very strange and unusual to me—your coming to Brookville the way you did, and doing so much to—make the people here happy."

She drew a deep, sighing breath. "I'm afraid it isn't going to be easy," she said slowly. "I thought it would be; but—"

"Then you came with that intention," he inferred quickly. "You meant to do it from the beginning. But just what was the beginning? What ever attracted your attention to this forlorn little place?"

She was silent for a moment, her eyes downcast. Then she smiled. "I might ask you the same question," she said at last. "Why did you come to Brookville, Mr. Elliot?"

He made an impatient gesture. "Oh, that is easily explained. I had a call to Brookville."

"So did I", she murmured. "Yes; I think that was the reason—if there must be a reason."

"There is always a reason for everything", he urged. "But you didn't understand me. Do you know I couldn't say this to another soul in Brookville; but I'm going to tell you: I wanted to live and work in a big city and I tried to find a church—"

"Yes; I know," she said, unexpectedly. "One can't always go where one wishes to go, just at first. Things turn out that way, sometimes."

"They seemed to want me here in Brookville," he said, with some bitterness. "It was a last resort, for me. I might have taken a position in a school; but I couldn't bring myself to that. I'd dreamed of preaching—to big audiences."

She smiled at him, with a gentle side-wise motion of the head. "God lets us do things, if we want to hard enough", she told him quite simply.

"Do you believe that?" he cried. "Perhaps you'll think it strange for me to ask; but do you?"

A great wave of emotion seemed to pass over her quiet face. He saw it alter strangely under his gaze. For an instant she stood transfixed; smiling, without word or movement. Then the inward light subsided. She was only an ordinary young woman, once more, upon whom one might bestow an indulgent smile—so simple, even childlike she was, in her unaffected modesty.

"I really must go in", she said apologetically, "and help them cut the cake."

To be continued.

Current Events

Victory Loan subscriptions in Canada amount to \$116,000,000.

Union Government was sustained by a majority of over 40, exact number not known at time of going to press.

This week's news from the Western front states that on Dec. 12 the Germans launched a strong attack just east of Bullecourt, which was successfully repulsed by Haig's men. On Dec. 10th Gen. Allenby's force in the Holy Land took Jerusalem, and next day Gen. Allenby with part of his staff and representatives of the French and Italian detachments, formally entered the city, the procession going on foot by the Jaffa Gate. Guards have been placed over all the holy places. In Russia the kaleidoscope has again turned, or is in process of turning. At time of going to press Korniloff is reported to have routed the Bolsheviks near Bielgorod in Southern Russia, where he will soon unite his forces with those of Gen. Kaledines, who have surrounded the city of Rostov-on-Don in which are part of the Bolshevik Council. Korniloff's forces are said to be made up of Cavaliers of St. George and the "Battalion of Death" which recently defeated Bolshevik troops near the town of Shlobin. In the meantime a practical

truce continues between the Bolsheviks and the Germans, who are said to be rushing troops from the Russian to the Western front. In Siberia a temporary independent Government has been organized, and Kerensky has been elected Minister of Justice. Siberia is said to be refusing to send any supplies through to Western Russia, fearing that they might eventually filter through to Germany. From Italy little definite news has been reported but the Italians are known to be holding solidly the upper Piave and Brenta River positions. Heavy snow, falling in the mountains, is looked upon by Italy as a timely reinforcement. Assistance from Britain has already arrived in Italy, while the recent declaration of war upon Austria by the United States, permits of American assistance as soon as possible.

The Dollar Chain

A fund maintained by readers of The Farmer's Advocate and Home Magazine for the soldiers and all who are suffering because of the war. Contributions from Nov. 30 to Dec. 14: "Charity", \$5.00; Guy Thurtell, Guelph, \$2.00; Mrs. J. E. Headly, Ailsa Craig, Ont., \$1.00; "Canadian", Theford, Ont., \$1.00; Robert Cox, Milton, Ont., 50 cents; Mrs. A. G. P., R. 2, Florence, Ont., \$5.00.

Previously acknowledged.....\$5,031.30

Total to Dec. 14th.....\$5,045.80

Kindly address contributions to The Farmer's Advocate and Home Magazine, London, Ont.

Markets

Continued from page 2015.

shortly attract attention. Creamery butter sold at 42c. to 43c. per lb. for finest September and October, and one cent less for fine. Current receipts were 40c. to 41c., and dairies 35c. to 38c. per lb.

Cheese.—Commission prices were: No. 1 cheese, 21 3/4c.; No. 2, 21 1/4c.; No. 3, 20 3/4c.

Grain.—The market for oats was steady, being 90c. per bush. for No. 3 Can. Western and extra No. 1 feed; No. 1 feed, 85c.; No. 2 feed, 82 1/2c.; Ontario No. 2 white, 83 1/2c.; No. 3 white 82 1/2c. per bushel ex-store. Manitoba barley \$1.28 1/2 per bushel for rejected, and \$1.25 1/2 for feed.

Flour.—Market was unchanged. Manitoba first patents \$11.60; seconds, \$11.10; strong bakers' \$10.90 per barrel in bags. Ontario 90% patent flour was \$10.70 to \$11 per barrel in wood, and \$5.20 to \$5.35 per bag.

Millfeed.—Bran was quoted at \$35 to \$37 per ton, and shorts at \$40 to \$42 with some asking more; middlings, \$48 to \$50; mixed mouille, \$56; pure grain mouille, \$61 to \$63 per ton in bags.

Hay.—The market for baled hay was firm at the following prices: No. 2 in car lots \$15.60 per ton; No. 3, \$14; clover mixed \$11 to \$12 per ton, ex-track.

Hides.—The market was weak. Beef hides 20c., 21c. and 22c. per lb., Montreal inspection. Calfskins 19c. and 20c. per lb. for grassers, and 30c. for veal. Horse hides \$6.50 each. Lamb skins, \$4.50 each. Tallow, scrap fat, 3 1/2c. per lb.; abattoir fat, 8c. and rendered tallow, 16c. per lb.

Chicago.

Cattle.—Beeves, \$7.15 to \$14.35; western steers, \$6.20 to \$13.10; stockers and feeders, \$6.10 to \$10.50; cows and heifers, \$5 to \$11.10; calves, \$9 to \$16.25.

Hogs.—Light, \$15.25 to \$16; mixed, \$15.50 to \$16.40; heavy, \$15.65 to \$16.15; rough, \$15.65 to \$15.90; pigs, \$11 to \$13.50.

Sheep.—Lambs, native, \$12.50 to \$16.75.

Cheese Markets.

New York, specials, 23 1/2c. to 23 3/4c.; average run, 22 1/4c. to 23c. Montreal, finest westerns, 21 3/4c.; finest easterns, 21 1/4c.

Sale Dates.

Dec. 21.—Jas. R. Fallis, Brampton, Ont.; Shorthorns.

Jan. 3, 1918.—John Knox, Millbank, Ont.; Holsteins.

Jan. 29, 1918.—Victoria County Purebred Stock Association, Lindsay, Ont.; Shorthorns.

Feb. 23, 1918.—W. A. Dryden, Brooklin, Ont.; Shorthorns.

New COAL OIL Light 10 Days Free—Send No Money | Beats Electric or Gasoline. Includes image of Aladdin lamp and text describing its benefits.

HOLSTEINS—Present offering: A number of yearling heifers by Butter Baron, a son of the due to freshen this fall and early winter. A few young bulls by the herd header will be sold right. Get of Butter Baron was first at Toronto and London this year.

M. H. HALEY, Springford, Ontario

To Our Subscribers: HOW Did You Like the Christmas Number A Few Left for New Subscribers. Includes a large question mark graphic and subscription information.

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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.

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**Growing Old.**

EDITOR "THE FARMER'S ADVOCATE":

"Grow old along with me!  
The best is yet to be.  
The last of life, for which the first was made:  
Our times are in His hand  
Who saith "A whole I planned,  
Youth shows but half; trust God; see  
all nor be afraid."

Should one allow oneself to think about feeling old age coming on when the festival of Christmas, par excellence the children's festival, is so near? Whether we ought to or not these anniversaries always have a tendency to make us do so. When do we feel so old as when another birthday, a milestone on life's journey is approaching? After it is past the impression leaves us and we resume our old attitude until another year comes round. The same may be said of Christmas and the beginning of another year. At all events we may say that every reader of the Advocate even the very youngest Beaver of the Circle has one experience in common. We are all one year older that we were last Christmas one year nearer the end of the war; one year nearer opening manhood; one year nearer old age and the end of all things on this side of time. I have met in the course of my life's journey few, I might say none, who when it came to the end of all did not face death bravely even meet it cheerfully as a kind of going home, a beginning of something new rather than an end of the old, but there are few, very few who look with equanimity on the approach of old age. When the Lord said to Peter on a memorable occasion, "When thou wast young thou girdest thyself and walkest whither thou wouldst but when thou shalt be old, thou shalt stretch forth thy hands and another shall gird thee, and carry thee whither thou wouldst not", I can imagine the prospect did not allure that impetuous spirit, nor does it attract us. We all wish to go whither we would and do what we feel inclined to do but in spite of us old age and infirmity set limits to that.

In matters of feeling we should always consult the poets who if they be true poets are also seers and are inspired by God to guide us, the weaker ones, in the right direction. Among the poets it seems to me Browning takes the sanest, therefore the most Christian attitude towards old age and gives it dignity. Poets and preachers tell us to revere grey hairs, whereas grey hairs are not in themselves objects to be revered. A man is no better for having lived a certain number of years if he has not learned to live more wisely, to think more justly and to act with more consideration for his fellow-men.

Browning's attitude towards old age, as exemplified in his beautiful poem, Rabbi Ben Ezra, is very modern as well as very Christian. For instance the ancient Greek, to whom we owe so much, hated the idea of growing old. "When old age with its pains comes upon us, which man alike even the fair ever do wretched cares besiege his mind, nor does he delight in beholding the rays of the sun, but is hateful to boys and despised among women, so sore a burden has God made old age." Again: "When youth has fled short lived as a dream, forthwith this burdensome and hideous old age comes over us, hateful and dishonored, marring his sight, and and his mind with mists."

There is abundant evidence that our own forefathers in remote times did not suffer their old people to become a prey to those hideous imaginings. Food was scarce and the old were useless and they were more or less mercifully put out of the way. There have been states of society in which old age simply meant death. De Windt, a comparatively modern writer tells how the modern Alaskans got rid of their old people. They strangle them, having previously drugged them with whiskey. De Windt himself witnessed one strangling, and relates that on that occasion the victim was anything but downhearted. "I'll die Monday", he said, and cheerfully helped in the preparations for the celebration. It is good to be the chief actor in one scene of your life even if it should be the last! So they felt of old, so many feel yet. Has not Tom Moore sung and do we not ourselves sing?

"Give me back, give me back the wild freshness of morning  
Her clouds and her tears are worth evening's best light."

Evidently in Cicero's time people had come to see that old age was not all unhappiness. He wrote a treatise in praise of "Old Age", but he was himself past sixty, old for a Roman, when he wrote it so perhaps he was whistling to keep his courage up.

When Browning wrote this poem he was over fifty. At that age a man is far enough upon the road of life to feel that growing old is a reality. It is no hearsay, he knows that in a few more years it will be upon him. What will it bring with it, how will he hear himself then? Will there be joy in living as in the days that are gone? To this last question Browning's answer is an emphatic, yes. He strikes out cheerily with the hope and lightheartedness of youth and assures us all that "the best is yet to be, the last of life for which the first was made." It is bravely and beautifully spoken with the courage of a man and the faith of a Christian. If life were what it was meant to be it is absolutely true, old age ought to be the rounding out of a perfect whole. In human life there are far more halves and quarters than wholes; fragments, unfinished growths, souls upon whom "Fate" lays an untimely, harsh hand. More than half of mankind possess no practical interest in old age for the reason that they are not spared to see it. "Our times are in His Hand as Browning says and we must trust God and fear not.

Some of us who are less gifted than was Browning, in less comfortable worldly circumstances, with less exalted feelings, who have not had success nor experienced as he had the adulation of his fellow-men, may, perhaps, say that it was easy for him to look forward to old age. It was in a way the end of a perfect day. It is given to few to achieve so many of his youthful aspirations as it was to Browning. There is an element of truth in this and perhaps he felt it himself either consciously or unconsciously when he caused the words to be spoken by Rabbi Ben Ezra. The Rabbi was no product of the poetic imagination. He was a real man, a wandering scholar of the 12th century. So unfortunate in worldly affairs was he that he could, in spite of his great scholarship, hardly earn his daily bread. "I strive to grow rich", he exclaims, "but the stars are against me. If I sold shrouds none would die. If candles were my wares the sun would not set till the day of my death." Great as he was as a philosopher he appears to have been greater as a man, a human spirit threading its lone way through the labyrinths of life, learning from everything it meets with, but learning most from the crosses it has to bear. One of the children of light, he had the children of light's luck, but he had an indomitable spirit which in all the darkness and tragedy that surrounded him could trust God and be not afraid.

This is all we can do these sad days. We who are growing old have the torture of seeing the young men who were our help and strength riven from us. How are we to look forward to helplessness with a cheerful spirit when we know how little we are able to do to hold high the banner which has fallen from their brave hands? But under whatever circumstances when old age comes let us go forth to meet it. It may have great lessons for us that neither youth nor middle age can teach. Some truth from above or from within may break upon us. "Is it for nothing we grow old and weak, we whom God love?"

It is not for nothing. Years assist the spirit, they wear thin the fleshly veil and lay bare our souls to the "universal prick of light". Wherefore when old age comes let us fear not to give it hospitable greeting.

Old age, calm, expanded broad with the haughty breadth of the universe.  
Old age, flowing free with the nearby freedom of death".

MARGARET RAIN.

He—"Margaret, there has been something trembling on my lips for months and months."

She—"Yes, so I see. Why don't you shave it off?"



Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock.

TERMS—Three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 50 cents.

FOR SALE—FARM 290 ACRES, FIRST-CLASS buildings and stabling. Brick house, slate roof, modern conveniences. Land all under-tiled; lots of water, good orchard and hardwood bush; also house for hired man. Apply Box 142, Springfield, Ont.

MARRIED FARMER DESIRES POSITION as manager—Good manager and worker; experienced in fruit, grain and poultry. Small family. Free January 1st. Box 1, Farmer's Advocate, London, Ont.

WANTED—EXPERIENCED FARMER TO take charge of 150-acre dairy farm in Eastern Ontario. Good accommodation and first-class equipment provided. Apply to L. H. Newman, 616 Wellington St., Ottawa, giving experience and wages expected.

150-ACRE FARM, 11 MILES FROM OTTAWA, suitable for dairying, 1 frame, 1 brick veneered house; 2 barns 98 x 34 and 65 x 34, with stabling also silo. Good orchard now bearing. Close to churches, schools and station. Rural mail and telephone. Never rented. Apply Wm. McLatchie, Ramsayville, Ont.



Condensed advertisements will be inserted under this heading at three cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 50 cents.

AFRICAN GEESSE, INDIAN RUNNER DUCKS Bourbon Red Turkeys, Black Spanish Barred Rocks. John Annesser, Tilbury, Ont.

BARRED ROCK AND WHITE LEGHORN cockerels; also Pekin drakes. Good, healthy stock. Garland Bros., Pinkerton, Ont.

EXTRA FINE EMBDEN GEESSE—SIZE AND quality. Also Utility Barred Rock cockerels. Stuart Hastings, Plattsville, Ont.

FOR SALE—25 W. WYANDOTTE COCK-ERELS of fine type and color; will make strong breeders, from my best pen, \$3 each; also a number of yearling hens. Eggs for hatching at all times. Robt. Montgomery, Box 113, Caledonia, Ont.

FOR SALE—ROSE-COMB, BROWN LEG- HORN cockerels and yearling hens; all first-class, pure-bred fowls, the results of 13 years' careful breeding for record layers. Prices very reasonable considering the laying qualities. Galloway & English, Box A, Ingersoll, Ont.

FOR SALE—A FEW SPECIAL BRED-TO-LAY S. C. White Leghorn Cockerels. C. E. Farm stock; Price \$2.00. Order immediately. Eldon Beach, Oxford Mills, Ont.

MINORCAS S. C. B.—A FEW CHOICE COCK-ERELS, \$1.50 each. W. F. Carpenter, Hocking's Mills, Ont.

TWENTY-FIVE YEARS A BREEDER OF Barred Rocks that are barred and bred right, from first-class laying hens. Cockerels for sale, both show and utility. Walter Bennett, No. 1, Cottam, Ont.

**CLEARING SALE**

January 3rd, 1918

35 HEAD Pure-Bred

**HOLSTEINS**

Cows, Heifers and Bulls

ALSO FARM OF 150 ACRES

1/4 mile from C.P.R. Station, Millbank

John Knox, Prop., Millbank, Perth County, Ont

B. Armstrong & Son, Codrington, Ont., write: "We have had a very successful season in selling Oxfords, Yorkshires and Collies, and we can still offer something extra in the two varieties last mentioned. We can say that your paper is the only advertising medium that we use and we get results. Our best working female collie is now raising a litter of six male puppies and we can safely say that there are no better working collies in Canada to-day than she is and her puppies are proving good too. The fact that we often get repeat orders speaks for itself."

An Irishman who was rather too fond of strong drink was asked by the parish priest: "My son, how do you expect to get into Heaven?" The Irishman replied: "Shure, and that's aisy! When I get to the gates of heaven I'll open the door and shut the door, and open the door, and keep on doing that till St. Peter gets impatient and says, 'For goodness sake Mike, either come in or stay out.'"



Examine Your Skin—Closely It Needs "Skin Food"

Stand in a strong light and, with a hand mirror, examine your skin. Do you discover fine wrinkles around the eyes? Any in the forehead? Are there lines beginning to show around the mouth? Other people see them and note them. The skin has been neglected and you must make up for it by extra care.

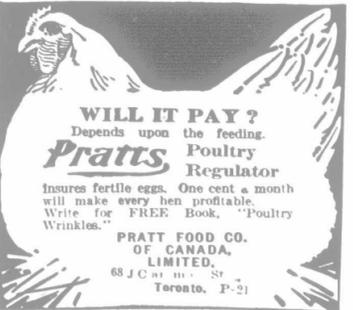
PRINCESS SKIN FOOD

A marvellous preparation, which feeds the starving cells and glands of the skin. It contains healing, strengthening and refreshing ingredients, which counteract the withering effects of soap upon the delicate dermal tissues. Soft, flabby muscles can be made firm, and hollows in the face and neck can be rounded out by its use. Put up in generous-sized jars, \$1.50 each.

Vacuum Cup This is ideal for preparing the skin to absorb the Skin Food. Beneficial to all, especially those who are not experts at massage. Price 75c.

All our preparations are sent postpaid to any address in Canada, with full directions for use, on receipt of price. Consultation Free.

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WILL IT PAY? Depends upon the feeding.

Pratts Poultry Regulator

Insures fertile eggs. One cent a month will make every hen profitable. Write for FREE Book, "Poultry Wrinkles."

PRATT FOOD CO. OF CANADA, LIMITED, 68 J.C. St., Toronto, P-21

BE YOUR OWN BLACKSMITH. FARMERS! SAVE REPAIR BILLS & VALUABLE TIME. ONE OF OUR BLACKSMITHING OUT-FITS WILL PAY FOR ITSELF. CATALOG FREE. THE HALLIDAY COMPANY, LTD. HAMILTON FACTORY DISTRIBUTORS CANADA

ARE YOU BUILDING OR REPAIRING? OUR CATALOGUE OF BUILDING MATERIALS AND TOOLS WILL SAVE YOU MONEY. THE HALLIDAY COMPANY, LIMITED, HAMILTON FACTORY DISTRIBUTORS CANADA

ROOFING AT FACTORY PRICES. SAMPLE FREE, INCLUDING HEAVY GRADES. ALSO CATALOGUES OF BUILDERS' SUPPLIES SUCH AS: FINE DOORS \$1.99 GLAZED SASH \$5 LOCK SETS \$3 PURE PAINT \$5 THE HALLIDAY COMPANY, LIMITED, HAMILTON FACTORY DISTRIBUTORS CANADA

CENTRAL NURSERIES. For reliable Apple, Pear, Plum, Cherry, Peach and Ornamental Trees, Shrubs, Roses, Grape Vines, Berry plants, Evergreens Hedges, etc.—good ones, too. We ship direct to customers. Our trees are extra fine. Write us for prices on your lists for early Spring planting. 38 years at it. No agents. A. G. Hull & Son, St. Catharines, Ont.

METALLIC METALLIC ROOFING CO. LIMITED TORONTO, CANADA. CEILING. WRITE FOR PRICES

"1900" Gravity Washer. Sent free for one month's trial. Write for particulars. "1900" WASHER COMPANY 357 YONGE ST., TORONTO, ONT. (Factory, 78-81 Portland St., Toronto)

Gossip.

Laurie Bros.' Ayrshires.

Patrons of Toronto and London Exhibitions and readers of the columns of "The Farmers Advocate" need very little introduction to the splendid Gladden Hill herd of pure-bred Ayrshires. Bulls and females from the Gladden Hill herd are advertised continuously in these columns, and Ayrshire breeders who follow the show-ring at both the fairs mentioned have learned to look with interest upon the splendid entries that have for the past several years at these shows become a feature of this section of the live stock exhibit. This too, is true of the season just closed and while it can not be said that they carried off a number of championships, a summary of the reports will reveal the fact that entries from these stables were in the money quite as often as those of any other one exhibitor. Leading the herd this year again was the several-times winner, Fairview Milkman, which was conceded to be the best yearling at the shows in 1915. He is a bull of many exceptional dairy qualities being one of the smoothest shouldered bulls ever brought out at any show. His sire is the noted bull, Hobsland Stumpie's Heir (imp.), while his dam is the 16,696-lb. one-time Canadian champion R. O. P. cow, Milkmaid 7th. She also produced 729 lbs of butter-fat for the year, and her average test throughout was 4.36. The three bulls now advertised are all by Fairview Milkman, and two of the three were winners at Toronto and London this year. As they are all from good record R. O. P. dams they should go out early in the season to good, officially tested herds. Referring to the breeding cows, many which have been prominent show-ring winners in different years and nearly all of which have qualified in the R. O. P., it might be of interest to mention several individually. White Lady of Craigielea, a past Toronto winner, has been one of the best breeding matrons in the herd. She has a 9230-lb. two-year-old record and was between ten and eleven thousand pounds as mature, while her daughter, Fanny of Gladden Hill, was the second-prize three-year-old heifer at Toronto this year, and is making around 9,000 lbs. in the R. O. P. Violet, another daughter and also in the herd has 9,000 lbs. in the two-year-old form and was third in a strong class at the same show last year. This latter heifer is the dam of the 12-months bull offered. Topsy of Gladden Hill, another of the mature cows is a combination of the right size and type and was first-prize dry cow at London in September. She has a year-old heifer in the herd and freshening since London Fair is now running well in the R. O. P. Shannon Bank Lucy 3rd, third prize cow at London, Pet of Gladden Hill, also a winner and Duchess of Gladden Hill, one of the most perfect types in the herd, are all favorable examples of the quality of the herd throughout.

The two three-year-old Clydesdale stallions, Surname's Pride by Surname (imp.) and Sir Shapely by Cairndale (imp.) are also priced for sale. The former is out of the 1913 Toronto November show Canadian-bred champion mare, Dolly Murray, while the other is out of an imported dam. Correspondence regarding the Gladden Hill offering should be addressed to Laurie Bros., Agincourt, Ont.

Questions and Answers. Miscellaneous.

School Taxes.

Trustees of rural public school sent their estimates in to the rural council on the expectation of running the school for the ten school months of the year. As they could not secure a teacher, the school has been closed for the last four months of the year, but the council are collecting the full tax-rate without giving the school supporters a rebate, knowing full well that the school is not running.

1. Can school supporters compel the council to give them a rebate on the school taxes?

2. If so, how should they proceed? Ontario. A SUBSCRIBER.

Ans.—We do not think that they are in a position to do so. For further information we would refer you to The Public Schools Act (Revised Statutes of Ontario, 1914) Chapter 266, Sec. 47, (1) (2) (3).

We want, and will pay highest prices for all kinds of RAW

FURS

Ship your skins to us at once. We pay Express Charges, or Postage.

Price list and shipping tags sent on request.

Revillon Freres

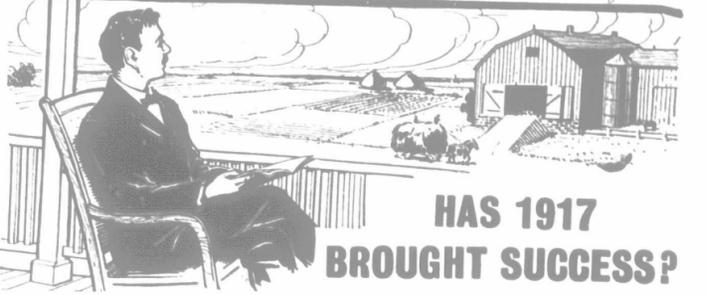
Established 1723 Largest Fur Manufacturers in the World

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MONTREAL,

P. C. 3

There is BIG MONEY IN TRAPPING when you ship your RAW FURS to John Hallam Limited. FREE Hallam's Trappers' Guide—96 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—36 pages; illustrated; rifles, traps, animal bait, headlights, fish nets, and all necessary 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. Address giving number as below. 131 HALLAM BUILDING, TORONTO.



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

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 3.99; 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.

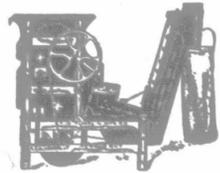
A few cows, heifers and young bulls for sale, three of the latter are out of cows in the herd which have given between 10,000 and 11,000 lbs. of milk each in one lactation period.

Weldwood Farm

Farmer's Advocate, London, Ontario

MILTON For that new building. Milton Pressed Brick Co. Milton, Ont.

Cockshutt Catalogue will give you valuable farming hints, and shows the full line of Cockshutt and Frost & Wood Implements. Write for a copy to-day. Cockshutt Plow Co., Ltd., Brantford, Ont.



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(Patented 1901)  
The best and latest mill for cleaning and grading all kinds of Seed and Grain.  
See nearest Agent or write for Catalogue to  
**THE TEMPLIN MFG. CO., FERGUS, ONTARIO**

**GLAZED SASH 65c.**  
4 light 8x10.  
BUY NOW AT OLD PRICES  
No. 1 clear white pine sash, already glazed. Specially low price for immediate shipment, safely packed. Over sixty other sizes and styles, including house, barn and cellar sash, also storm sash. Send for our free color catalogues.  
We sell direct. The Halliday Co., Ltd., Factory Distributors, Hamilton, Can.

A Better Separator For Less Money  
**VIKING**  
Cream Separators of Quality

**Harab-Davies Fertilizers**  
Yield Big Results  
Write for booklet  
**THE ONTARIO FERTILIZERS, LTD**  
WEST TORONTO

**THICK, SWOLLEN GLANDS**  
that make a horse Wheeze, Roar, have Thick Wind or Choke-down, can be reduced with  
**ABSORBINE**  
also any Bunch or Swelling. No blister, no hair gone, and horse kept at work. Concentrated—only a few drops required at an application. \$2 per bottle delivered.  
Book 3 K free.  
ABSORBINE, JR., antiseptic liniment for man-kind, reduces Cysts, Wens, Painful, Knotted Varicose Veins, Ulcers. \$1 and \$2 a bottle at dealers or delivered. Book "Evidence" free.  
W. F. YOUNG, F. D. F. 253 Lyman Bldg., Montreal, Can.



**DR. PAGE'S ENGLISH SPAVIN CURE**  
Cures the lameness from Bone-Spavins, Side-Bones, Ringbones, Curbs, Splints, etc., and absorbs the bunnies, does not kill the hair, absorbs Capped Hocks, Bog-spavins, thick pastern joints; cures lameness in tendons, most powerful absorbent known; guaranteed, or money refunded. Mailed to any address. Price \$1.00.  
Canadian Agents:  
**J. A. JOHNSTON & CO., DRUGGISTS**  
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**MORE HORSEPOWER**  
if your teams are equipped with  
**Ventis**  
These pads prevent Sore Shoulders and cure Gall Sores. Your dealer will supply you, or write:  
**BURLINGTON BLANKET CO., LIMITED**  
793 King Street, West, Toronto, Canada.

**Keep Your Live Stock Healthy**  
and in prime condition by supplementing the feed with  
**LINSEED OIL CAKE "Maple Leaf Brand"**  
With a trial ton order we will send you, free, "The Veterinarian," a valuable book about the diseases of cattle.  
**THE CANADA LINSEED OIL MILLS, Ltd.**  
Toronto and Montreal

**MESSRS. A. J. HICKMAN & CO.** (Late Hickman & Scruby) Court Lodge, Egerton, Kent, England, Exporters of  
**PEDIGREED LIVE STOCK**  
of all descriptions. Specialty made of draft horses, beef and dairy breeds of cattle, show and field sheep. Illustrated catalogues and testimonials on application. All enquiries answered with pleasure. Now is the time to import. Prospects were never better, and insurance against all war risks can be covered by payment of an extra 1% only.

**Dr. Bell's Veterinary Medical Wonder.** 10,000 \$1.00 bottle. FREE to horse-men who give the Wonder a trial. Guaranteed for Celi, 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.**  
Veterinary.

**Unthrifty Heifer.**  
Two-year-old heifer did not do well this summer. I now have her in the stable but she does not eat much, nor chew her cud, her bowels are very loose and she is getting very thin. She just seems to be pining away. J. W. F.

Ans.—The symptoms indicate tubercular disease of some of the digestive organs or glands. If this be the trouble treatment will do little good. If she be not tubercular the administration of tonics, and good feeding should give good results. Mix equal parts of powdered sulphate of iron, gentian, ginger and nux vomica and give her a heaped dessert-spoonful 3 times daily. Feed on good clover hay, chopped oats, bran, a little linseed meal, and a few raw roots. V.

**Undue Perspiration.**  
I am feeding a 6-year-old Clydesdale mare good hay, 3 qts. of oats daily, and a couple of carrots and a turnip daily. When brought in from work, and sometimes when standing in the stable she breaks out in a sweat at the flanks. G. R.

Ans.—This is due to a heavy coat of hair. Clipping during the first half of November would have prevented it, but it would not be safe to clip now, as the reaction would be too great unless she was very carefully protected from the cold when not in motion, for the remainder of the winter. The sweating will not cause serious trouble. It can be checked by thorough grooming twice daily, and after grooming, rubbing well into the skin of the parts a little of a warm solution of corrosive sublimate, 20 grains to a quart of water. Feed her a gallon of oats three times daily, so long as she is working or getting a little exercise regularly. V.

**Miscellaneous.**  
**Burrs in Wool.**  
My sheep came to the barn this fall with a lot of burrs in the wool. How can these burrs be removed? D. W. S.

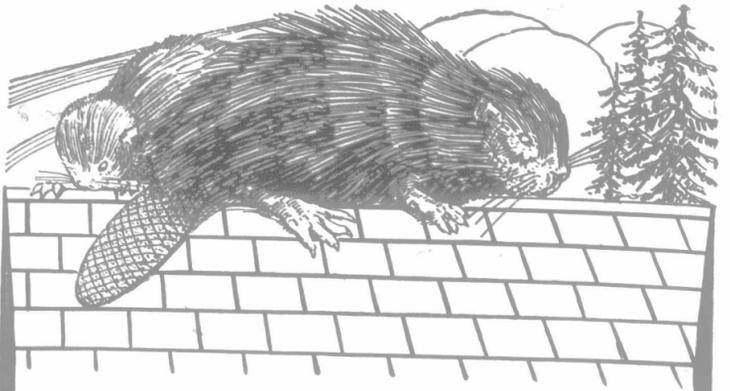
Ans.—We do not know of any way to get the burrs out except by removing them by hand. This is a slow and tedious job. Parts of the fleece which are matted with burrs may be cut off, but this gives the sheep a shaggy appearance and makes an uneven fleece at shearing time.

**Ringworm.**  
1. What is the best cure for ringworm?  
2. What is the proper feed for brood sows in the winter? L. R. I.

Ans.—1. The scurf should be moistened with sweet oil and then tincture of iodine applied daily. The premises should be thoroughly cleaned and disinfected in order to destroy the parasite and prevent the spread of the trouble. Sulphur and lard is a mixture sometimes applied with satisfactory results.  
2. The aim should be to keep the brood sow in a thrifty condition. It is detrimental to overload her with fat. Exercise is essential. A mixture of shorts, oats and barley ground, made into a slop makes a very good grain ration for a sow. She can also be fed fairly liberally on roots. More satisfactory results are obtained by giving the sow the run of the yard than by keeping her confined. Wintering the sow is fully discussed in an article on page 1810 of our issue of November 22.

**No Trespassing Sign.**  
I would like to put up a sign to keep parties from hunting or shooting on my property. How large should the signs be? How far should they be apart? Must I put up fresh signs every year, or will the old signs do so long as they are readable? If I word the sign "No Trespassing Allowed" is it necessary to put on "Hunting and Shooting", as it is the hunters I wish to keep out? What proceedings would a man take to keep a person from trespassing on his property? E. T.

Ans.—Notice to trespassers may be given verbally or in writing, or by signboards. Signboards should be at least one foot square, on or near boundary of the land to be protected, containing a notice in the following form or to the like effect: "Hunting or Shooting is Forbidden." Such signboards to be not more than 80 rods apart. A man who wilfully trespasses after due notice has been given makes himself liable and the owner of the land can apprehend him. So long as the signs are readable they need not be removed.



**Put Beavers on the Roof**

When you build a barn or a house you begin with the foundation and end with the roof. Generally the foundation is sound and solid—but what about the roof? After all, a building is as good as its roof . . . that's what you live under—the roof, not the foundation. You want a covering that is still on the job when the storm has quit. You have this if you use

**BEAVER BRAND WHITE CEDAR SHINGLES**

If you "put BEAVERS on the roof" they will defy the fiercest storms year after year; they will outlast any other roofing material, slate excepted. They are light, strong, and weather-proof. Made in six grades, to patch a hen-run or roof a mansion. Ask your dealer.

"THE SHINGLE ROOF THAT'S STORM-PROOF"



**YORKSHIRES**

From choice breeding stock. Four large litters, recently weaned; also some a few months old.  
**WELWOOD FARM, Farmer's Advocate, LONDON, ONT.**

**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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WATFORD, ONT.  
Robt. Taylor, Manager

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**Aberdeen-Angus Cattle are Growing Popular**

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 carloads, Aberdeen-Angus have won 12 times. Out of 15 grand championships for Carcass Contest, Aberdeen-Angus won 14 times.

For free information, write:

**W. I. Smale, Secretary,**  
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.

**WM. CHANNON & SON**

P. O. and Phone - - Oakwood, Ont.  
Stations—Lindsay, G.T.R. and C.P.R.

### Beaver Hill ABERDEEN-ANGUS

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

**ALEX MCKINNEY, R. R. No. 1, Erin, Ontario.**

### Aberdeen-Angus Cattle

**Suffolk Down Sheep**

The greatest breeds for producing highest quality of beef and mutton. They are both hardy and prolific. We have bulls, females, rams and ewes for sale.

**JAMES BOWMAN, Elm Park, Guelph, Ont.**

### 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.**

### Kennelworth Farm Aberdeen-Angus

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

**PETER A. THOMSON, HILLSBURG, ONT.**

### ANGUS CATTLE

Aberdeen Farm has for sale a nice bunch of young stuff of both sexes. Come and see us and supply your wants. **J. W. Burt & Sons, Hillsburgh P. O., R. R. 1, Erin Station, Ont.**

### Aberdeen-Angus

**Alonzo Matthews, Manager, Forest, Ontario**

**H. Fraleigh, Proprietor, Forest, Ontario**

### Balmedie Aberdeen-Angus

Get high-class Angus bull and breed the champion steers. I have show-ring quality bulls from 10 to 24 months of age; also choice 1 and 3-year-old heifers. **T. B. BROADFOOT, FERGUS, ONT.**

### Questions and Answers.

Miscellaneous.

#### Itchy Legs.

What is a good remedy for itchy legs on horses?

**Ans.**—Purge the horse with 10 drams aloes and 2 drams ginger. After the bowels have regained their normal condition give 2 ounces Fowler's solution of arsenic twice daily for a week. Make a solution of corrosive sublimate, 30 grains to a pint of water; heat to about 105 degrees Fahrenheit and rub well into the skin twice daily until the itchinness ceases. The purgative should not be given to a pregnant mare.

#### Quarrelsome Pigs.

I bought a bunch of April pigs on September 5. They were all reared together. Three weeks ago they started fighting one of the smaller ones. When I heard it squealing it was almost exhausted so I took it out, but put it back in the pen a few days later. Again they attacked it and since then I have had to remove three more pigs from the pen. When I went to feed them this evening, one of the pigs was lying dead with its ears nearly chewed off. Is there a cause for this? I feed mostly shorts and middlings, besides unthreshed pea straw. They appear to be gaining in weight but when waiting for their feed they make a desperate noise.

2. At what temperature should the water be for best results when scalding a pig?

This summer my neighbor had twelve tons of cabbage on a piece of land 50 by 200 feet in dimensions. The Early Drumheads yielded fully 50 per cent. heavier than his other varieties, which would make over seven tons of cabbage on one-eighth of an acre. He sold about a ton in small lots for \$3 per cwt., and the balance later for \$40 per ton. On one and seven-eighths acres I grew 29 tons of green oats, which I put into my silo. It was seeded June 20 and cut October 13. How is this for a crop? T. K.

**Ans.**—1. This unnatural condition is rather difficult to account for. It is possible that there is a deficiency in the ration. About the best remedy would be to feed a mixed ration. Use oats along with the shorts and feed a little charcoal, salt, sulphur and wood ashes. You do not state whether or not the pigs were confined in a pen. It is advisable to get them on the soil. During the winter they should be exercised in the open, and a little earth thrown into the pen.

2. Around 180 degrees Fahrenheit.

#### Lease—Hay in Mow.

A bought a farm from B subject to lease, and resold it to C. C is to get the lease when he makes payment on Dec. 15. The rent falls due on Dec. 10 and March 1. Who is entitled to collect the rent?

2. What is a rule for determining the tons of hay in a mow?

3. I have a mare which has been troubled with bots. Are they likely to do her any harm? Could you suggest treatment? J. R.

**Ans.**—1. If all the facts are stated in the question, the man who holds the deed should be entitled to collect the rent.

2. It is generally estimated that a ton of hay will occupy 450 cubic feet. The cubical contents are found by multiplying the length by the width by the depth, dividing this by 450, which will give approximately the number of tons in the mow.

3. The grubs or bots develop from the larvae of the bot fly, and are present in greater or less numbers in the stomachs of all horses that are exposed to the attacks of the fly. They attach themselves to the lining of the stomach. In the spring they let go and are voided. They burrow in the sand or manure and develop into the bot fly to bother the horses the next summer. It is only in rare cases that they do much harm. If they let go in sufficient numbers to form a ball there is danger of them occluding the passage from the stomach to the intestines. Large numbers of the larvae in the intestines may cause colic. Treatment consists in mixing 3 ounces each of sulphate of iron, sulphate of copper and tartar emetic, making into 24 powders and giving one night and morning. This should be followed by a purgative of 8 to 10 drams aloes and 2 drams ginger, if the mare is not in foal.

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is the subject of a little booklet that we want to place in the hands of every reader of this paper who is anxious to save, and to invest his or her savings where they will earn 5% with safety of principal and regularity of interest.

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**BERKSHIRE SWINE**

**SHROPSHIRE SHEEP**

**SOUTHDOWN SHEEP**

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 HEREFORDS**

**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.**

**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, Minus, Rosemarys, etc.—the best of breeding and the best of cattle, bulls or females; also have a few Herefords.

**CREEKSIDE SCOTCH SHORTHORNS**

**Herd headed by Gay Monarch 79011,** dam, Sally 8th Imp., and sire, the great Gold Sultan 75411. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow, well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers.

**Geo. Ferguson—Elora Station, C.P.R., G.T.R.—Salem, Ont.**

**WILLOW BANK STOCK FARM**

**Shorthorn Cattle and Leicester Sheep. Herd established 1855—Flock 1848.** The great show and breeding bull, Brownie = 89112 = by Avondale, head of the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams mostly from imp. ewes.

**JAMES DOUGLAS, CALETONIA, ONT.**

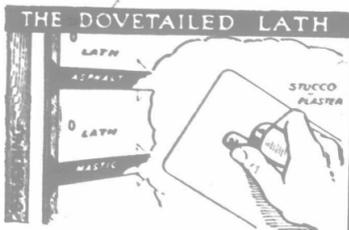
**IMPORTED SHORTHORN BULLS**

We have several newly imported bulls of serviceable age. Cruikshank, Marr and Duthie breeding, as well as a number of choice, home-bred young steers, got by our noted herd sire, Proud Monarch, by Royal Blood. Get our prices before buying elsewhere. **RICHARDSON BROS., Columbus, Ont.**

**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.**



**Build Inside and Out the Bishopric Way**

Whether it's a house, a barn, a garage or a granary you're planning, Bishopric Stucco and Lath Boards will save 25% to 50% of the cost, and give you a warmer, drier, better building all round.

**BISHOPRIC STUCCO BOARD**

is made of kiln-dried lath, beveled, imbedded under terrific pressure in toughened Asphalt Mastic, surfaced on the other side with sized sulphite fibre board. It comes in sheets 4 ft. wide and 4 ft. to 25 ft. long, ready to be nailed direct to the studding, lath side out, as a foundation for stucco outside the building or plaster inside. It takes the place of sheathing lumber, building paper, furring strips and lath. The dovetailed spaces between the lath make perfect keys, and the wall is really permanent.

Being air-tight and moisture-proof, Bishopric Boards make buildings that are free from draughts, warm and comfortable. At the same time they make a big saving in cost of material and an even bigger one in time and work.

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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.

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**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.

**R. O. P. SHORTHORNS**  
The Evergreen Hill Herd. Your next sire should be backed by both R. O. P. sires and dams. Our offering of young bulls are all bred this way. Write for particulars and come and see herd.  
S. W. JACKSON, R.R. 4, WOODSTOCK, ONT.

**MAPLE LEAF FARM**

Shorthorns, some good young bulls and females. Shropshires, 50 lambs. Our flock leading winners on Eastern show circuit.  
John Baker, Hampton, R. No. 1, Ont.

**Brownlee Shorthorns** Offers a choice lot of young bulls, ranging in ages up to nine months and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females. Douglas Brown, Bright, Ont., R. R. 3, Ayr Station, C. P. R.

**Shorthorns** Pull-bred for sale. Young bull and heifers out of high record cows. A few young cows and bulls with extra good breeding and quality.  
PETER CHRISTIE & SON  
Manchester P. O. Port Perry, Ont. Co.

**Why Bacon is Demanded.**

Many reasons combine to make bacon an exceedingly important meat item in the war-time trade from this continent to Great Britain and the armies at the front. "Bacon", as a trade term, includes the entire hog when dressed and split into sides, either "green" or "cured." The Wiltshire side averages from 50 to 75 pounds, of which only 7 per cent. is bone. This means a great economy in space when packed for shipments, for Wiltshire bacon is practically solid meat, and can be packed flat in cases of convenient size and shape, 14 to 16 in a case without loss of space.

The superiority of bacon in this respect is shown by comparison of the average percentage of bone in the different meats.

Wiltshire side bacon.....	7 per cent. bone
Dressed beef.....	20 per cent. bone
Mutton.....	20 per cent. bone
Veal.....	25 per cent. bone

As a result of the present shortage of available ocean tonnage this point is of no small consideration.

Moreover, bacon is very high in food value. The following table shows the relative food values of the principal meats entering into domestic consumption expressed in "calories," the units of heat and energy fixed by dietitians in considering the use of different foods to the human body:

Bacon (cured and smoked).....	2,930 Calories
Mutton (including tallow).....	1,520 "
Side of beef.....	1,180 "
Lean beef.....	670 "
Veal.....	640 "

These figures show that more vital heat and energy are concentrated in a pound of bacon than in a pound of beef, veal or mutton. The fat constituent of bacon is of particular advantage to men working and fighting in the open air, especially in a cold, wet climate. And the shortage of fats in Europe is acute.

The dressing percentage of hogs is high—that is, there is a very high percentage of meat in proportion to the weight of the live animal. Hogs will dress out about 75 per cent., butcher cattle will average about 53 per cent., and sheep and lambs about 50 per cent. Bacon, once cured, runs no immediate danger of spoiling and can be handled with less care and expense than meat shipped as fresh or frozen. In England the cured Wiltshire is smoked, cut up into shoulders, sides, hams, etc., repacked in smaller boxes and sent to the front. Every part of the side therefore reaches the soldiers.—Live Stock Branch, Dominion Department of agriculture.

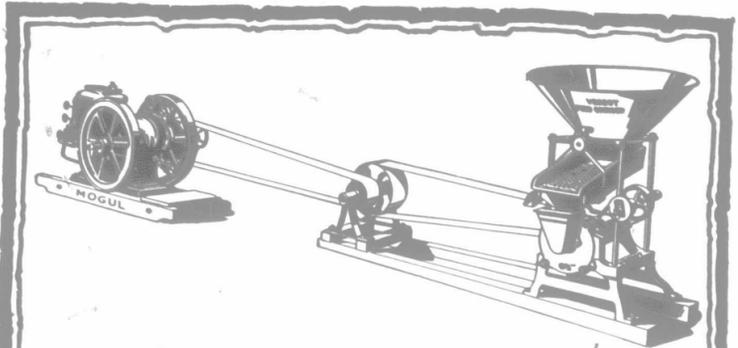
**Questions and Answers.**

**Miscellaneous.**

**Mirror.**

What preparation is used to make a mirror out of plate glass? T. V.

Ans.—The following is an amalgam for mirrors. A sheet of tinfoil somewhat larger than the mirror is placed upon the silvering table, which has a marble top adjustable by screws to either a horizontal or inclined position. After the sheet of foil has been spread out and made perfectly smooth, a small quantity of mercury is poured over and evenly distributed by means of a woollen cloth. When the whole sheet has been dampened with the mercury, more is poured on to make a layer about one-eighth of an inch deep and the plate of glass, first thoroughly cleansed, laid on it. The table is then slightly inclined so that the mercury can drop off and the plate settles firmly against the amalgam. When the mercury ceases to run off, soft, thick, woollen cloths are spread over the plate and weights are put on it to press out all excess of mercury. In about thirty hours' time the weights may be removed, as the amalgam will by this time adhere to the glass. The plate of glass is then set on edge. Great care must be taken to have the glass perfectly clean.



**Are You a Miller?**

**NO?** Well, that makes no difference. You can run a Vessot "Champion" grinder just as well as any miller could. With it you can save the miller's profit on all kinds of grinding—flax, barley, corn, crushed ear corn, oats, wheat, rye, peas, buckwheat, screenings, mixed grain, or any kind of feed stuff, fine or coarse as desired.

This grinder cleans grain as well as it grinds. The spout that carries the grain to the grinder is made with two sieves, a coarse one above and a fine one below. The coarse sieve catches nails, sticks and stones, but lets the grain fall through. The fine sieve holds the grain but takes out all sand and dirt. The grain passes to the grinding plates as clean as grain can be.

And it comes from the plates well ground. Vessot plates have such a reputation for good work that we have had to protect our customers and ourselves by placing the trademark "SV" on all the plates. Look for it.

To do its best work a Vessot grinder should be run by the steady power of a Mogul kerosene engine. Then you have an outfit that cannot be beat for good work or economy. Write us a card so that we can send you catalogues of these good machines.

**International Harvester Company of Canada, Limited**

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WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.  
EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

**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 Woodsee 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. Wait for these. Write for particulars.  
GEO. ISAAC, COBBOURG, 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.

**DUAL-PURPOSE SHORTHORN BULL**

Sired by Burnfoot Chis-ton, whose dams gave over 13,000 lbs. milk. Dam is Village Blossom, last season gave 11,200 lbs. milk. He is dark red in color, 8 months old, a splendid, thick fellow of good conformation and type. For further particulars and price, write to:  
HUGH A. SCOTT, Caledonia, 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.

**Wm. D. Dyer, R. 3, Oshawa, Ont. Brooklin, G.T.R., C.N.R., Myrtle, C.P.R.**

**SHORTHORNS.** Pure Scotch or Scotch topped, beef type, yet good milkers. 3 young bulls and a few young cows and heifers for sale.

**SHROPSHIRES.** Type and quality. A few ram lambs still left.

**CLYDESDALES.** Stallion, 1 year old, rich in Baron Pride blood, promises size and quality combined

**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. No. 3, Elora, Ont. G.T.R. & C.P.R.

Gossip.

Control of British Live Stock.

Effective control of the prices of any commodity cannot be secured over a long period in the face of a possible deficiency unless it is accompanied by power to control supplies, for the simple reason that, when the ordinary operation of the market is disturbed by the fixing of a maximum price, supplies do not necessarily continue to flow through their customary channels. It was therefore clear that the fixing of maximum prices for meat would have to be followed by the control of live stock. If a fair share of the available supplies of meat during the coming year is to be obtainable in each town and district of Great Britain, steps must be taken to establish an equitable system for the distribution of wholesale supplies before any serious deficiency arises or is even threatened.

Lord Rhondda has therefore decided on a division of Great Britain in 19 areas for the control of live stock—13 for England and Wales, and 6 for Scotland. For each of the English areas a Live Stock Commissioner has been appointed with comprehensive powers for the regulation of the sale and slaughter of all live stock within his area. Six Deputy Commissioners have been appointed for the Scottish areas, and they are controlled by one Live Stock Commissioner for Scotland. Each commissioner will be assisted by a sub-commissioner, who will be in personal touch with stock-keepers, and by the necessary clerical staff. A census of cattle, sheep and pigs in the area will be taken, as an essential preliminary to the work of controlling supplies. The territorial divisions correspond in most cases with the Food Control areas already established, an arrangement which facilitates co-operation between the Live Stock Commissioners who are concerned with wholesale supply, and the Local Food Committees, who, under the supervision of the Food Commissioners, are responsible for retail distribution.

The Live Stock Commissioner will have the assistance of an Advisory Committee, composed of two farmers, one auctioneer and one butcher, from each county within his area, with the addition of two dealers for the whole area. Members will be nominated by farmers' unions, chambers of agriculture, auctioneers' societies, and other representative bodies, and it is confidently expected that the expert knowledge thus placed at the disposal of the commissioner will be of the utmost value. As the season advances and the requirements of the army for home grown meat increase, it is possible that the requisitioning of live stock may be necessary, not only for the army but also for civilians. There can be little doubt, too, that to ensure equitable distribution of meat as between one area and another, it will be necessary, in areas where there is a surplus, to requisition cattle for transport to other areas where deficiencies occur.

The power to requisition live stock for the purpose of supplying ascertained demands within his area rests with the Area Live Stock Commissioner. If requirements cannot be met without making an undue demand on the available stock within the area, the situation will be reviewed by headquarters and a decision taken as to which area shall supply the deficiency. Auctioneers and cattle dealers will be licensed by the Area Live Stock Commissioner. The control of slaughterhouses and the retail sale of meat, including the licensing of butchers, comes within the scope of the Local Food Control Committees. ALBION.

Questions and Answers. Miscellaneous.

Pedigrees.

How can an inexperienced man tell the difference between a pedigree of a Scotch-bred Shorthorn and an English-bred one? Can I get a list of the Shorthorn families, showing which are Scotch and which English? W. D. R.

Ans.—The distinction is largely in the names of the families and names of breeders. We believe that a booklet published by the American Shorthorn Breeders' Association, Dexter Park Ave., Union Stock Yards, Chicago, will furnish you with the desired information.

It's a money-saver—this book we send you free

It's no exaggeration to call this book—

"What the Farmer can do with Concrete"—

a money-saver. It makes money by saving money—for every farmer who reads it and who acts on the advice and instructions it contains. How does it save money? Simply by telling how to build farm improvement of Concrete.

The farmer nowadays realizes that he is under a terrible handicap in his efforts to make money, if he has to be constantly sinking profits in repairs. Only by using Concrete can he have buildings that do not call for repairs and painting. Only with Concrete for his building material can he have his farm fire-proof, waterproof, watertight, repair proof, vermin

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In our 100-page book, there are directions which enable the farmer to construct all sorts of improvements of Concrete, in odd times—with the help of his man. Send for this remarkably useful, money-saving book. Mark on the coupon the subjects which are of immediate interest to you.



By building Roads of Concrete we can reduce the cost of living, and at the same time increase the farmer's profits on everything he sells or buys.

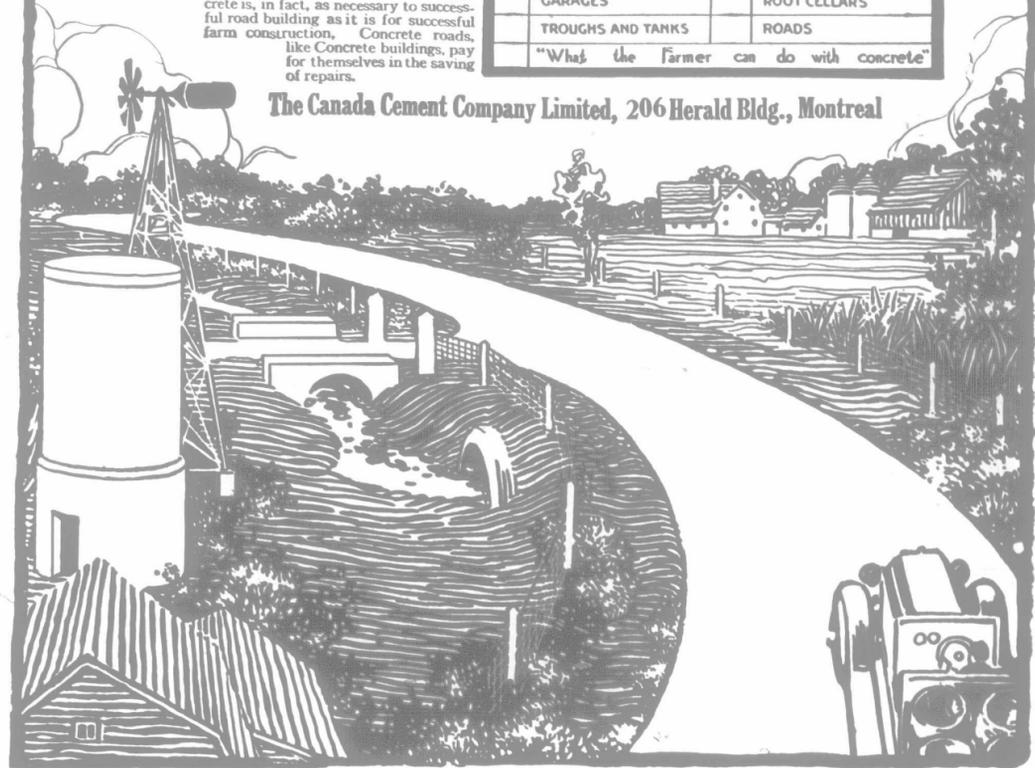
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We are now offering a number of young bulls, sired by our senior herd-header, Francy 3rd's Hartog 2nd, the noted son of the famous old Francy 3rd and Canary Mercedes Hartog; also a few females, all choice individuals. P. SMITH, Proprietor, R. R. 3,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

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For immediate sale—several cows and two year-old heifers, three due in February, two in April, also seven yearlings and calves. Several are granddaughters of King Pontiac Artis Canada, from high-producing dams. Must be sold. If you can handle this lot get busy. Don't take time to write, come and see them. No reasonable offer refused.

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## 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.**

## English Live Stock Notes.

The eighty-second exhibition and sale of Shorthorn cattle was held by the Birmingham Exhibition Society recently. The best average was that made by Sir Herbert Leon, which was £546 each for four heifer calves, three born in January and one in February.

The most sensational class, however, was that for heifer calves under one year old, in which Sir H. Leon's Bletchley Park herd was invincible, as it was a year ago. The first prize went to Princess Royal Barbara, calved January 10th last; she has a very level top, extra good over her shoulders, while her coat is one for Shorthorn breeders to envy. She is by Edgote White Eagle, out of Princess Royal Betty, a grand cow by Coming Storm of Mr. Duthie's breeding. She is a real gem, and Mrs. Burnyeat, Whitehaven, must be congratulated on beating off opponents and securing her at 750 guineas. The second heifer was Bletchley Clipper Queen by Coming Storm, dam Clipper Duchess, therefore of the best Cruickshank blood. She, too, is beautifully moulded and in capital coat, her color being white; Mr. R. Cornelius Eastham, Cheshire, paid 600 guineas to get possession of her.

Best price for bulls was 620 guineas paid by Mr. F. B. Wilkinson of Edwinstowe, Newark, Notts, for Sir H. Leon's Bletchley Neptune by Edgote White Eagle; dam, Augusta Mermaid by Coming Storm. This is a roan, in capital coat and beautifully balanced.

The English Shorthorn Society has just granted the following pedigree exportation certificates: For Argentina, fifty-four; Brazil, two; Canada, 223; Chili, one; South Africa, fifty-six; Uruguay, five; U. S. A., 149—total 490.

**Canadian Stores Condemned.**  
The Royal Agricultural Society of England has been debating Canadian stores. Mr. Middleton thought it was not sufficient merely to pass a resolution deprecating the proposal to admit Canadian stores. Some definite action ought to be taken so that the interests of stock breeders should be brought to the notice of the departments concerned.

Alfred Mansell, the Shropshire auctioneer, said they had handed down to them a great heritage in their valuable pedigree stock, and it would be a suicidal policy to repeal the Diseases of Animals Act of 1896. He was old enough to remember when foot-and-mouth disease was rife, and he felt, with Mr. Middleton, that no legislation should be passed until the live stock interests of the country had been considered.

Mr. Middleton moved: "That the Board of Agriculture be asked to give an assurance that no proposal shall be brought forward for the repeal of the Diseases of Animals Act of 1896 until the Royal Agricultural Society and the Breed Societies interested have been consulted."

Col. Stanyforth, in seconding the resolution, said that the members of the council of the Shorthorn Society felt that if the Act were repealed a door would be opened by which disease might come into the country, disease which hitherto they had been able to combat. —This resolution was agreed to.

ALBION.

## Record Price for a Dairy Shorthorn Calf.

Mr. Hildebrand Harmsworth, of newspaper fame, has just purchased for 750 guineas from Messrs. R. W. Hobbs & Sons, Lechlade, Gloucestershire, a bull calf ten months old, called Kelmscott Conjuror 8th, for service in the Freshwater herd of Dairy Shorthorns at Freshwater Grove, Shipley, Sussex. His sire, Kelmscott Acrobat 4th, is champion Dairy Shorthorn bull (having won the last Royal championship in 1916), his grand-sire, Helmscott Juggler, was first in 1913 and 1914. Hawthorn 7th, his paternal great-grandam, was champion cow in 1911, and his paternal grandam, Spotless 31st, reserve Royal champion in 1914. On the maternal side he is also uniquely bred for milk, his dam, Sybil 18th, his grandam, and great-grandam were all prize winners, and each of them 1,000-gallon cows.

ALBION.



## 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**

## 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 lbs 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 Idealine's Paul Veeman and King Segis Pietertje, and are in calf to Funderne King May Payne. 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. C. HOLTBY, GLANWORTH, ONT.**

**Low Banks Farm Holsteins** Fairview Korndyke Boy, our senior herd sire, is the same sire, and is proving his relationship to his noted sire in his daughters, 4 of which have made over 20 lbs. butter each in 7 days. Only 2 sons of Fairview left, nice, straight, deep-bodied fellows. Have 2 sons of Sir Echo, 3/4 brother to May Echo Sylvia—beautiful individuals. **K. M. Dalgleish, Kenmore, Ont.**

**Record Breeding and Great Individuality** are combined in the now offering from daughters of Lewis Prilly Rouble Hartog, and sired by Baron Colantha Payne. They will improve most herds. Several are of serviceable age. See these.

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**Pioneer Farm Holstein Herd** With big yearly records and high average butter-fat test, and headed by Canary Hartog, grandson of Royalton Violet, at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29,963 lbs. milk, 1,309 lbs. butter in 1 year. Sire, dam, Royalton De Kol Fern, 34.69 lbs. butter in 7 days, 116 lbs. milk in 1 day. Bull calves for sale born after Jan. 25th, 1917; dams over 11,000 lbs. milk up to nearly 16,000 lbs. milk in 1 year, at 2 years old. **Walburn Rivers, R. R. No. 5, Ingersoll, Ontario. Phone 343L, Ingersoll Independent Lines**

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Herd headed by King Walker Pride (C. H. B. 17362.) (A. H. B., 207261) who is a son of the famous King Walker and the great show cow, Pride Hengerveld Lennox 30.12, who is a granddaughter of Blanche Lyons De Kol 33.31 and King Segis, who is a grandsire of world-champion cow, also of the two highest-priced bulls of the breed. Young stock for sale.  
**C. V. ROBBINS, Bell Phone, WELLANDPORT, ONTARIO**

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A choice young bull from a 32-lb. dam, and a sire with a 38-lb. sister. Born last March. A beauty. Fifteen other young bulls with strong R.O.M. backing.

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

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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!

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## 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.

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## Successful Dairymen

have found that it pays to dehorn their cows. Drovers pay more when they are dehorned and shippers are insisting on having cattle dehorned. The KEYSTONE DEHORNER is the most effective instrument for the purpose. Write for booklet.

R. H. MCKENNA, 219 Robert Street, Toronto

## 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, Garclaugh May Mischief and Jean Armour.

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## AYRSHIRE COWS

are heavy milk producers, rich in butter-fat and very prolific.

WRITE W. F. STEPHEN, Secretary

CANADIAN AYRSHIRE BREEDERS' ASS'N  
Box 513, Huntingdon, 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 Cross-Ing, G. T. R., Athelstan N. Y. C.; Kelso, Que.

## CITY VIEW AYRSHIRES

Increase your test—5 young bulls from R. O. P. dams testing from 4.15 to 5.02% fat.

Sired by bulls from record cows.

JAMES BEGG & SON, ST. THOMAS, ONT.

Choice Offering in Ayrshires At Special Prices. Several young bulls of serviceable ages. All from R. O. P. sires and dams. Come and see them.

Jno. A. Morrison, Mount Elgin, Ontario.

Glencairn Ayrshires. Herd established ability from 8,000 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont. Copetown Stn., G. T. R.

## Questions and Answers. Veterinary.

### Cough and Nasal Discharge.

Six-year-old Shropshire ewe eats well, but is very thin. She coughs and has a nasal discharge.

F. C. I.

Ans.—The symptoms indicate pulmonary tuberculosis for which nothing can be done. The trouble may be catarrh which will probably yield to treatment. Fumigate her well 3 times daily by holding her head over a pot of boiling water with a little carbolic acid (say a teaspoonful) in it. Mix 1 oz. each of powdered sulphate of iron and sulphate of copper. Make into 36 powders and give one 3 times daily. Feed on good clover hay, whole oats and a few raw roots.

V.

### Miscellaneous.

#### Feeding Stock.

I would like a little information regarding the feeding of stock. We have corn silage, turnips, cut straw and hay. Should the cows be fed roots, cut straw and silage together, or should each feed be given separately?

W. H.

Ans.—When possible we like to feed a mixture; in fact, it is almost essential in order to get the maximum results. The feeds mentioned may be given at different times but by mixing them, that is, the silage and cut straw, or roots and cut straw, the palatability of the straw is increased and more of it is consumed without in any way detracting from the feeding value of the roots or silage than if the straw were fed separately. Roots may be fed alone and if the cattle's teeth are good, they may be fed whole as it saves a lot of work. We believe that better results are obtained by mixing straw with the silage than by feeding it alone. The hay may be fed whole after the other feeds are consumed. However, some feeders cut part of their hay and mix it with silage and roots. We think, however, that it is advisable that the stock have a little rough stuff to pick at. Silage or roots supply succulence to the ration, and where both are available we would favor mixing them with cut straw a few hours before feeding. In fact, a day's feed could be mixed up in the morning. This would give the straw an opportunity to be moistened by the juices from the roots or silage.

#### Share Farming—Cement for Walls.

What proportion should a landlord and tenant get from 40 acres of cleared land; the tenant to use the barns and furnish all working material? What should such a farm rent for?

2. Mow much gravel and cement will it take to put a foundation under a barn 92 by 34 feet, the wall to be 9 feet high? Four doors, 4 feet wide, are to be put in. What proportion of windows would be necessary for stable facing south-west?

B. D. E.

Ans.—1. It depends a good deal on the nature of crops grown and on the quality of the soil. Land suited for grazing only, or that was to be devoted to grazing would not rent for as large a sum as a farm for dairying, or for the production of fruit. For mixed farming, \$3 to \$3.50 per acre is a fair rent. It is a little more than is being paid in some sections, but again in other sections rents are higher. Where the farm is worked on a share basis and the tenant furnishes stock and implements and does the work the landlord should get around 35 per cent. of the returns and the tenant 65 per cent. The landlord should pay 35 per cent. of all repairs and cost of seedling down. It is rather difficult to arrive at an equitable basis of dividing the returns. Renting the land outright for cash is the most satisfactory method.

2. Building a wall one foot thick under a barn of the dimensions given and allowing for doors and windows would require about 78 cubic yards of gravel and 65 barrels of cement; that is, if one part of cement to eight parts gravel is used. The proportion of windows to be used would depend somewhat on the layout of the stable. It is generally estimated that there should be at least 6 square feet of glass for each cow or horse stalled. The windows could be put in horizontally or vertically. The latter method is preferred as it permits a greater volume of light to enter the stable. If the sashes are hinged at the bottom, they may be opened inwardly from the top, thus furnishing a means of ventilation without causing a draft on the stock.

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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.

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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. Will a grandson or great-grandson of this famous cow improve your herd? We have them. Write for particulars.

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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.

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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.

We have a number of exceptionally good bulls, as well as a choice lot of young heifers that we can offer at present. They are all sired by Auchenbraun Sea Foam (Imp.) or Cherry Bank Fair Trade 44413. We can also spare a few young cows with the best of type and breeding. Come and see the Ravensdale herd. Correspondence solicited.

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SPRING BANK R.O.P. AYRSHIRES—Herd Sires: Netherton King Theodore Imp. and Humeshugh Invincible. Grand Champion, London, 1917. Our herd at present holds the Canadian records for both milk and butter in the two-year, the 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.

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**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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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, Burketon, 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.**  
 Box 501, Ottawa, Ont. Write for samples and price

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Several sows, 2 years old, in pig. Also younger stock.  
 Write:  
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## TAMWORTHS

Young sows bred for Fall farrow and a nice lot of young boars for sale. Write  
**John W. Todd R. R. No. 1, Corinth, 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.**

**YORKSHIRES AND COLLIES**  
 We offer several fine sows that have been bred, and young stock, three months old; also choice, pedigree collie puppies. We guarantee satisfaction.  
**B. Armstrong & Son, Codrington, Ontario**

**Polands, Durocs and Berkshires**  
 Young stock at all times, both sexes and all ages. Can also supply anything in Dorsets or Southdowns. Everything priced to sell.  
**CECIL STOBBS, LEAMINGTON, ONTARIO**

**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.  
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**SPRINGBANK CHESTER WHITES**  
 Pigs, both sexes, five months old and younger; a number of them sired by Curly King—9997—, who has been a winner at Toronto and London the last several years. Satisfaction guaranteed. Inspection invited. **Wm. Stevenson & Son, Science Hill, Ont.**

**DUROC JERSEYS**  
 Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock all ages for sale. Visitors welcome. For further particulars write:  
**Culbert Malott, No. 3, Wheatley, Ont.**

**Prospect Hill Berkshires**  
 Young stock, either sex, for sale, from our imported sows and boars; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. **John Weir & Son, Paris, Ont., R. R. 1.**

**Featherston's Yorkshires**—The Pine Grove Herd I have the choicest lot of young sows of breeding age that were ever on the farm. A few are already bred. Also have 10 young litters. Prices reasonable.  
**J. K. FEATHERSTON, STREETVILLE, ONT.**

**Lakeview Yorkshires** If you want a brood sow or a stock boar of the greatest strain of the breed, (Cinderella), bred from prizewinners for generations back, write me. Young sows bred and boars ready for service.  
**JOHN DUCK, PORT CREDIT, ONTARIO.**

**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.**

## England's Non-Pedigree Shorthorns.

EDITOR "THE FARMER'S ADVOCATE":

All over England, particularly in the Northern Counties, there are to be found thousands of farmers who maintain still more thousands of milking cattle which are nearly pedigree Shorthorns. They are called Short-Pedigree Shorthorns and while many of them are more robust and produce far more milk than Dairy Shorthorns of full pedigree, they have no Herd Book and are somewhat looked down upon by pedigree men. As I have said they are great milk yielders, some of them producing much more milk than cattle in "The Book", while those herds found in Westmorland and Cumberland are noted for strong, big-framed, cattle which can honestly be described as being full of milk and being full of beef. They are long, level, large uddered, and are not of the wedgy type of the Jersey.

This big-framed type of cattle runs to many thousand head, not only in the country, but in the large dairy herds kept on the outskirts of such large cities as Liverpool and Manchester. The farmers of Westmorland and Cumberland about 12 months ago wanted to start a Society of their own but the English Shorthorn Society objected. The farmers were willing to show fight but the English Shorthorn Society proved the stronger and took ways and means of stopping the farmers from getting what they wanted. Anyhow, an alternative scheme has been devised and it is as follows: The English Dairy Shorthorn Association being anxious to encourage the breeding up for admission into Coates' Herd Book of non-pedigree Shorthorn cattle in Great Britain and Ireland, and in order to meet the demand for the registration of cows of this type with certified milk records, have resolved that a Register recognized by the Shorthorn Society (Coates' Herd Book) be issued in future Year Books (commencing in that for 1918) for the following classes of cattle:

Class A.—Cows that have been served by a bull registered in Coates' Herd Book.  
 Class B.—Cows with one top cross of registered Shorthorn blood, and served by a bull registered in Coates' Herd Book.  
 Class C.—Cows with two top crosses, etc.  
 Class D.—Cows with three top crosses, etc.

Note.—Heifer calves from cows in Class D will be eligible for Coates' Herd Book, and must be entered therein. A foundation cow, to qualify for registration, must be passed by an inspector or inspectors appointed for that purpose by the Dairy Shorthorn Association as being of the Shorthorn type, and of suitable conformation. She must also have been awarded a certificate as proof that:

(a) She has yielded not less than 8,000 lbs. of milk during a milk-recording society's year of operations, or (b) she has yielded not less than 6,500 lbs. of milk on an average of two or more consecutive years of a milk-recording society's year of operations.

The Dairy Shorthorn Association reserve the right to inspect all milk records before a cow is finally accepted for registration.

For the purposes of identification, all foundation cows accepted must be marked in such manner as the Dairy Shorthorn Association shall approve.

Coates' Herd Book I might explain, is the Herd Book of the English Shorthorn Society. So these big-framed robust dairy cattle which thrive on the hills of Northern England are to go into the "Peerage" of Shorthorn cattle.

ALBION.

## Distribution of Tobacco Seed.

A sample of choice seed, in ¼-ounce packages, of one of the following varieties of tobacco: White Burley, Warne, will be sent free to any tobacco grower of Southern Ontario who applies for same to the Tobacco Division, Central Experimental Farm, Ottawa, before the 15th February next. This quantity of seed is sufficient to sow 150 square feet of seed bed, and to plant one acre and a half.

The supply of seed being limited the growers desirous of securing seed should send in their application at an early date, as all requests will be classified in the order received.

No applicant will be supplied with more than one sample of seed.



## "Morale"

*In Life's Battle*

**WHEN** the fighting armies face a supreme crisis, the dispatches from the front reflect the confidence that never fails regarding the "morale", or fighting spirit, of both armies and people.

The General knows that the soldier fights best when his spirit is fired by enthusiasm. Nothing is left undone to maintain this supremely important fighting quality unimpaired.

A soldier's enthusiasm is at its best when he knows that provision has been made for his family.

And likewise, in the battle of life, the confidence resulting from a knowledge that his loved ones are provided for, come what may, has inspired many a man to win success out of defeat.

A Mutual Life Insurance policy benefits both the holder and his dependents, who in their turn will face the difficulties of life with a sense of security. The policyholder shares with the beneficiary in the blessing of protection.

The Mutual Life of Canada issues policies on every approved plan of life insurance—life, limited payment, endowment, monthly income, etc. There is a Mutual Policy to meet your particular requirements. Write for booklet entitled "Ideal Policies."

## The Mutual Life Assurance Company of Canada

Waterloo, Ontario

## NORTHERN ONTARIO

Millions of acres of virgin soil, obtainable at 50c. an acre in some districts—in others, free—are calling for cultivation.

Thousands of farmers have responded to the call of this fertile country and are being made comfortable and rich. Here, right at the door of Old Ontario, a home awaits you.

For full information as to terms, regulations and settlers' rates, write to:  
**H. A. MACDONELL, Director of Colonization, Parliament Buildings, Toronto, Ont.**  
**Hon. G. H. Ferguson, Minister of Lands, Forests and Mines.**

## LINCOLNS C. NICHOLSON

of Horkstow, Lincolnshire, England

has for sale, Pedigreed Lincoln Long Wool Rams and Ewes from his world-famous flock of ALL DUDDING-BRED SHEEP. By winning the CHAMPION and "ALL" the prizes in the two-shear and yearling ram classes at the Royal Show of England, 1915, all previous records were broken. Coates Shorthorns and Lincoln Red Shorthorns also for sale.

STATION—BARNETBY

**"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 Ramsdens.

**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**

## ENGLISH LARGE BLACK PIGS

We have for sale at present some young pigs of a breed new to Canada, but standardized and very popular in England, from our pure-bred, imported **LARGE BLACKS**. Stock excellent for crossing with other breeds. Their English reputation is that they grow large and fast. Also for sale, pure-bred English Berkshires.  
**Lynnore Stock Farm, F. Wallace Cockshutt, Brantford, Ont.**

**BERKSHIRES**  
 My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Salls, the best strain of the breed, both sexes, any age.  
**Adam Thomson, R. R. No. 1, Stratford, Ont. Shakespeare Station, G.T.R.**

# Hog Prices 12 Months Hence

Canada and the United States are asked to increase their hog production as greatly as possible in order to help meet the grave shortage of meat in Great Britain, France and Italy.

The shortage in Europe is the best guarantee of the stability of the hog market during the next twelve months. There are 115,000,000 fewer stock animals in the herds of Europe than before the war. The hog shortage alone is 32,425,000 animals—about ten times the total number of hogs in Canada to-day.

In the United States, there are to-day ten per cent. less live hogs than there were a year ago. Further, the American Packers' cellars have never been so bare of hog products at the inception of a winter packing season as this year. During October, 31,000,000 pounds of meat were taken out of Chicago warehouses alone, and a similar raid was made at other points.

## Hog Receipts Decreasing

Another indication of the decrease in hog production is in the receipts of hogs at Stock Yards in the United States:—

To the end of October, 1916, they were 33,035,831 hogs.

To the end of October, 1917, they were 28,314,598 hogs.

This shows the great decrease in 1917 of 4,721,233 hogs.

Taking the month of October alone the receipts in 1916 were 3,592,016 hogs. For the month of October, 1917, the receipts were 2,498,244 hogs. This shows a decrease of 1,093,772 hogs for the last month for which we have figures.

In Canada, the receipts at Stock Yards from the first of January to the end of November, 1916, were 998,131 hogs. For the same period in 1917, the receipts were 868,196 hogs. This shows a decrease in Canada of 129,935 hogs.

While the supply of hogs in Europe and America has been rapidly decreasing, the consumption of bacon and hams overseas has in-

creased enormously since the beginning of the war. Here is the statement of the British Imports:—

In 1913 they were	638,000,000 lbs.
In 1914 they were	664,000,000 "
In 1915 they were	896,000,000 "
In 1916 they were	1,006,000,000 "

With the enormous shortage of hogs and other stock animals in Europe, and a marked decrease in the number of live hogs in North America, there appears to be no reason why there should not be high prices and a stable market for hogs during the next twelve months and longer.

## Government Action

The Government's announcement of control and limitation of Packers' Profits will establish confidence and further stabilize the hog market. The official announcement in brief is as follows:

"1. No packer shall be entitled to a profit of more than 2 per cent. of his total annual turnover, that is his total sales during any one year.

"2. If the 2 per cent. on annual turnover exceeds 7 per cent. on the actual capital invested in the business, the profits shall be further restricted as follows:

"(a) Up to 7 per cent. on capital the packer may retain the profits.

"(b) If the profits exceed 7 per cent. and do not exceed 15 per cent. one-half of the profits in excess of 7 per cent. shall belong to the packer and one-half to the Government.

"(c) All profits in excess of 15 per cent. shall belong to the Government."

## United States Action

In addition to the action of the Dominion Government, Herbert Hoover, the United States Food Controller, states in a Government Bulletin:—

"I therefore wish to make this positive statement: that, so far as the United States Food Administration is able, through its influence on the purchase of pork and its products for exportation, it will do all within its power to see that prices of pork are

maintained in a ratio to feed prices that will cover not only costs of production, but proper remuneration to the producer.

"By a system of license control of manufacturers and distributors the Food Administration will further help the producers. This system will tend toward the abolition of speculation, the punishment of profiteering, and the assurance that the consumer receives the product at a fair ratio of the producer's price, and that, vice versa, the producer receives a fair interpretation of the consumer's payment."

This decision of the United States Government to support the American hog market will have a stabilizing effect on the Canadian hog market, because whatever influences the American live stock market will act to pretty nearly the same extent on the Canadian market.

The action of the Dominion and United States Governments, considered in association with the figures showing the tremendous decline in the European and American hog production, and the figures showing the vast increase in British ham and bacon imports since the war, establishes confidence in the stability of the hog market for the next year.

## Save the Young Sows

Young sows which are slaughtered now only produce about 150 lbs. of meat per sow. By breeding them, many times that quantity of meat can be produced ready for market in ten to twelve months. Every pound of pork that can be raised will be needed.

Bacon is a military necessity. It is the most compact form in which meat can be supplied to the armies. It is about 50 per cent. fat, and fat is worth twice as much as starch as a producer of energy and stamina.

Bacon is the great "fighting" food. The armies of the Allies must be supplied with hundreds of millions of pounds of it, and they look to Canada and the United States to supply it. That means a tremendous increase in hog production in 1918 is, a vital necessity.

Dominion of Canada Department of Agriculture

LIVE STOCK BRANCH  
OTTAWA

# Apply now to attend one or more.



FARMERS AND FARMERS' SONS FROM EVERY COUNTY—(a) attending the live stock judging classes; (b) in the seed-judging classroom. At very small expense they acquired practical information that has added many dollars to their incomes.

## These Valuable Agricultural Short Courses Are Held for the Special Benefit of Farmers and Farmers' Sons by The Ontario Agricultural College, Guelph

They are entirely free—no fees, no books, no examinations required, while railway fare may be secured at reduced rates. Study this calendar carefully, decide which courses will be most valuable to you, then make plans to attend. You are cordially invited to be present at as many as you can, at a season when it is most convenient for you to get away for a short period.

### Factory Dairy: January 2nd to March 22nd, 3 months.

This prepares young men to become managers of cheese factories and creameries. The college dairy is furnished with all modern appliances and a first-class dairy herd is maintained. There is a steady demand for men, at good salaries, with the knowledge and practice this course gives.

### Stock and Seed Judging: January 8th to 19th, 2 weeks.

For farmers engaged in mixed farming this course is especially valuable. The best up-to-date instruction is given in the judging, feeding and management of all kinds of live stock; the purity, germination, cleaning, varieties and best cultural methods of all Ontario field crops; and the identification and eradication of weeds. The college has the finest of equipment for this work and the course is among the most popular and profitable of all.

### Poultry Raising: January 8th to February 2nd, 4 weeks.

Both men and women attend this course. All problems of the poultry raiser are considered and the student gets practical instruction in building poultry houses, feeding laying hens, fattening and dressing, operating incubators, candling eggs, principles of breeding, judging, hatching and rearing, profitable feeding, etc. Accommodation for this class is limited and applications should be made early.

### Bee-keeping: January 8th to 19th, 2 weeks.

Instruction given in this course includes: management of bees during every season, bee diseases, requeening, preparation of supplies, wax rendering, and every other possible phase of the industry. As some of the instruction cannot be given efficiently in the winter a summer course is also held the second week in June. As bee-keeping is an especially profitable industry these courses are receiving an ever widening recognition.

### Drainage & Drainage Surveying: January 8th to 19th, 2 weeks.

This course trains any farmer to do his own surveying, ditching and laying of tile. An especially strong feature is the complete course of instruction given in operating the traction ditcher and other ditching machinery. As hundreds of thousands of acres of low-lying land in this province may be made immensely more productive and profitable by underdrainage this course has attracted much attention and is well attended.

### Business and Marketing: January 8th to 19th, 2 weeks.

Instruction in these subjects is given at night only so all students attending other courses may take advantage of it. Bookkeeping, banking, co-operative buying and selling and farm business problems generally are thoroughly discussed. The vital necessity of the best business management in farming is now so widely recognized that this course will be among most patronized of all.

For an illustrated short-course calendar explaining all details of each short course, write the Secretary, Ontario Agricultural College, Guelph.

ONTARIO DEPARTMENT OF AGRICULTURE, Parliament Bldgs., Toronto

SIR WM. H. HEARST  
Minister of Agriculture

DR. GEO. C. GREELMAN  
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