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THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

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VOL. LII.

LONDON, ONTARIO, AUGUST 2, 1917.

No. 1297

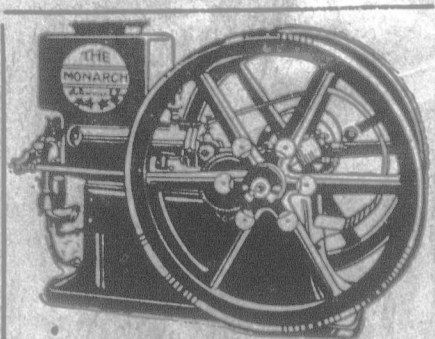
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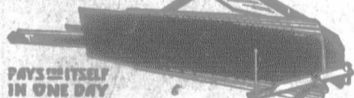
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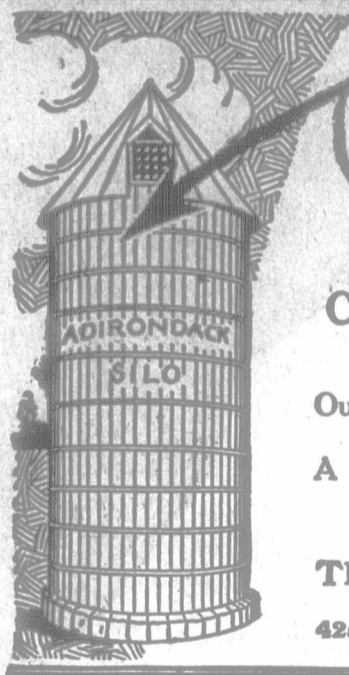
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ensure perfect digestion and more feeding value from your grain—and prevent live weed seeds from passing through into the manure.

Low-down construction, weight, strength, patented feed and plate control and relief springs ensure fast, even grinding and long wear. 19



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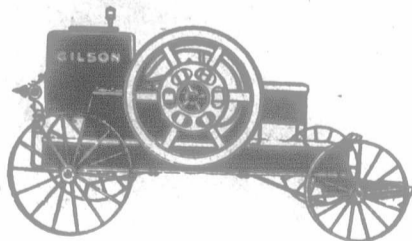
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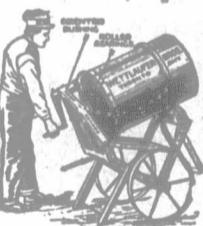
for potatoes. All growers know that it pays to use diggers even on five acres—they save valuable time, save all the crop in good condition, at less expense.

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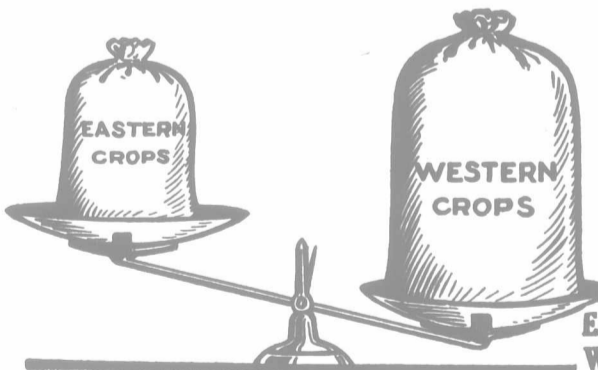
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The Average Yearly Revenue from all field crops of each Farmer:

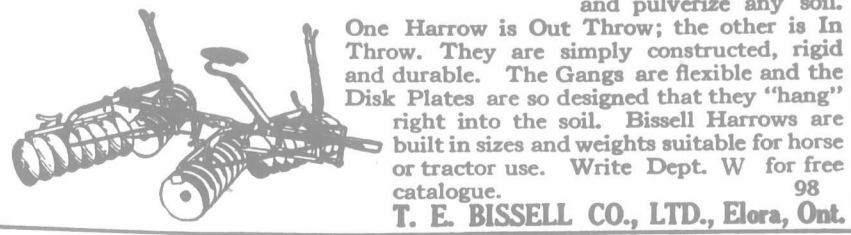
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T. E. BISSELL CO., LTD., Elora, Ont.

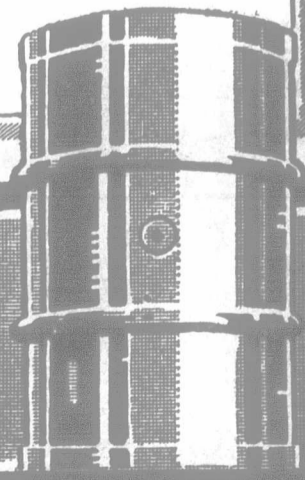


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All our oils are supplied in steel barrels and steel half-barrels—convenient, economical. No waste. You use every drop you pay for.

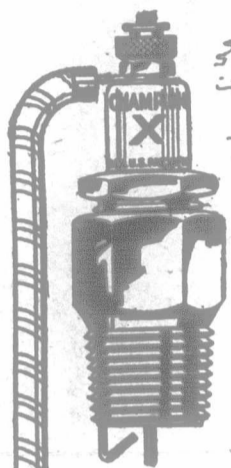
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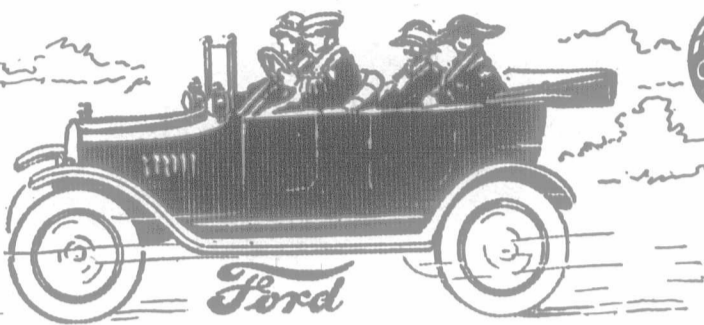


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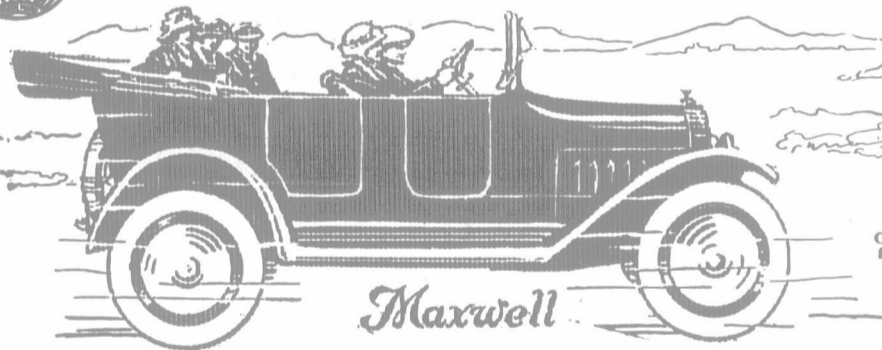
Dependable Spark Plugs

Have been chosen as factory equipment by over one hundred motor car manufacturers with a combined output of eighty per cent of all automobiles made. Be guided by the selection of the engineers who made your motor when replacing the Spark Plugs in your Ford or Maxwell.

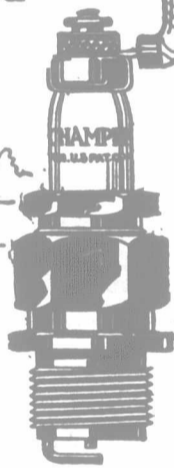
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See the nearest De Laval agent right away and let him show you what the De Laval will save for you. If you do not know the De Laval agent, write direct for any desired information.

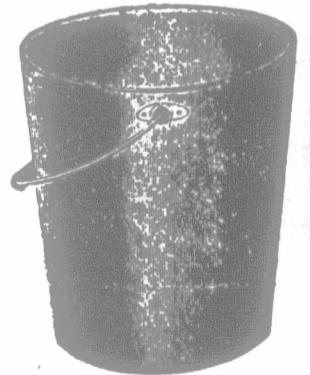
The De Laval Company, Ltd. Largest Manufacturers of Dairy Supplies in Canada MONTREAL WINNIPEG PETERBORO VANCOUVER

Do you belong to the Better Milk Brigade?

Are you striving to do "your bit" by providing more and better milk for the babies of Canada, who will one day take their places in the affairs of the world?

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Indurated Fibreware



The ware which does not transmit taste—is easily cleaned—light to handle and of wearing qualities unsurpassable. Write for particulars of our Indurated Butter Tubs, Milk Pails, Milk Pans, etc.

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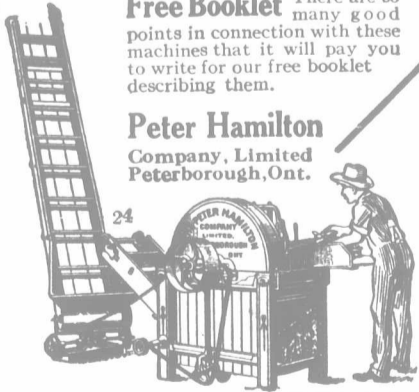
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If you have a gasoline engine, why not fill your own silo and cut your own feed? We have a machine which your engine will run in an efficient manner, and which will answer all your feed-cutting requirements.

PETER HAMILTON machines have tremendous strength and great capacity. They will cut up an enormous pile of feed in a day, and because of their shearing method of cutting only a small amount of power is required.

Free Booklet There are so many good points in connection with these machines that it will pay you to write for our free booklet describing them.

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than any country in the world. But for this they would have been starved out before the end of the second year of the war.

Let Us Learn Even From Our Enemies

The Motherland is calling on her daughter, Canada, to send her more wheat.

Sydney Basic Slag

will help Canadian farmers to grow bumper crops. The increased yield will pay for the fertilizer and leave a handsome profit.

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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:—

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The Farmer's Advocate and Home Magazine

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LII.

LONDON, ONTARIO, AUGUST 2, 1917.

1297

EDITORIAL.

Corn will not grow well without cultivation.

The demand for good horses is increasing.

Did you spend your holiday in a hammock or a hay-mow?

The women who can't can learn to can. Let nothing go to waste.

Those who have profited most from the war should be called upon to pay now.

Keep the good breeding stock, but sell the cull calves and lambs, as usual.

Canada has plenty men who can make a big noise, but not so many who are real thinkers.

No one will complain about the harvest being a little late if the weatherman only sends good weather.

The surest factor in increasing production and ultimately lowering prices is high prices themselves.

You can work wonders with the show stock during the next few weeks. Bring everything out at its best.

The man who starts the plow as soon as he has a field cleared will be in the best position for the necessary big crop in 1918.

Food Controllers can never attain their objects by setting prices so low that a fair margin of profit on production is eliminated.

If there are many more party splits at Ottawa, Canadians may be fooled into thinking they have a national government.

The man who believes in signs doesn't know whether to blame the wet weather on the moon, or eclipses, or the big guns in Europe.

At war for three years and determined to go on until autocracy crumbles is the position of the Allies whose forces gain strength daily.

Train the boys and girls to observe what is round about them. All their education must not be left to the little red schoolhouse.

We must not forget the importance of farm implements and machinery in production. Are they as easily available as possible?

If Austria's love for Germany is turning to hate as fast as some reports would indicate, the Kaiser will soon be in a tighter corner than ever.

The appearance of potato diseases emphasizes the need of following spraying instructions as published in a recent issue of this paper.

Some say there is much money in curing bacon as carried on in big packing plants and others say there is little. However, there are more titled curers than producers of bacon hogs.

The man in almost any other business but farming knows what he is going to get for his goods or his labor. The farmer gets what the other fellow gives him. Is there any wonder the farm boy fits himself for some other work?

Get the Granary Ready.

Harvest is near. The threshing machine will soon be humming on every concession in Old Ontario. Crops with fine weather for harvest, promise big yields. Grain is needed in abundance this year and prices are likely to be good. It is essential that all be saved and well taken care of. The granary is important. A clean, tidy granary is an indication of a careful and thrifty farmer. A granary where all kinds of chaff, old bags, implements out of place and mouse-eaten oat hulls are allowed to accumulate is an indication of bad management and waste. Clean up now. Take the old broom away from the back steps, if one is not kept at the barn for the purpose as it should be, and sweep down all the bins. Clean out all the waste. Tack some tin over any rat or mouse holes in the bins. Stop the leaks. Thousands of bushels of grain are lost each year by being dumped into bins which have not been cleaned out and repaired. Every kernel of grain that trickles through the rat holes is that much loss to the farmer, to the consumer and to the Allies. Put on a campaign against mice and rats before the grain comes in. Get a cat or two, or, better yet, place some prepared poison in the granary and close it up so none of the farm poultry, stock, or the children can get in. Be ready for threshing and be ready to save all that is produced.

Scrap the Junk.

The other day as we drove through the country we noticed many an old binder, mower, cultivator and other farm implement and machine rotting and rusting under nature's broad canopy, which at best does not make a very satisfactory covering for expensive implements and machines. Most of these were beyond repair. They were scrap. Nearly every farm has its accumulation of worn-out rigs, implements, machines and so on. They are unsightly reminders of former carelessness, or of days of hard work. They should be cleared away and why not now? There is plenty of bad weather to permit of time taken to break them up. The wooden parts not suitable for repairs for other machinery could be broken into wood, for fuel is scarce and likely to be more so. Any sprockets or other metal parts which might come in for use on newer machines of the same or other makes should be saved and all the remainder scrapped. Never within your memory, Mr. Reader, was scrap iron so much in demand. Now is the time to break up the worn-out machinery and put it to the best use. Such a practice will be doubly beneficial. It will beautify the farm and return a few dollars as well.

Why They Don't Want to Farm.

Since the first company of returned soldiers landed in Canada we have heard and read considerable of the plans of politicians and others to place these men on the land. Some of the plans have considerable merit, and others are useless. However, at the first the whole thing seemed to be settled without consulting the men themselves. Fine tracts of land in new districts were selected and easy terms of ownership made out, when all at once someone realized that the men were not anxious to farm and particularly to homestead in the woods of the North, or on the far-off prairie. Why did they not want to farm? The question was answered by Dr. T. R. Adams, on the Conservation Committee, Ottawa, in an address before the public health session of the Canadian Medical Association Convention, recently held in Montreal. A report of his speech contains the following significant statement: "The soldiers do not want to go on the land, not so much because they object to farming, but under present conditions farming does not pay and most areas available for settlement are too remote for the markets."

This is a good answer to the man who complains that farmers are making more money than they should. Surely, too, the returned soldiers have earned a better future than farming too far from markets to make the venture profitable and congenial. If farming does not pay, it is high time our legislators got busy with their legislation. It cannot be made pay by lavish expenditures upon increased numbers of government officials. The situation demands action.

Get Full Light on the Bacon Industry.

Producers of the bacon hog and consumers of bacon were recently startled by the report of the findings of the Cost of Living Commission on the bacon industry. Producers have long been suspicious that the packer manipulated the price of hogs and bacon to suit his own convenience. Consequently the statements in the report showing enormous profits for the packing trade which have been accelerated by present war conditions tended to confirm this suspicion. However, it developed later that the report was considered incomplete, that all the figures dealing with the business under investigation were not gone into at that time, and that it was gross profits that were given. Investigations are a good thing but they should be thorough and a complete report given to the public. In this case where the Government was conducting the investigation it would have been less disquieting to both producer and consumer had they been ready to apply a remedy if an evil existed. This would have tended to retain the complete confidence of the people in this important industry at the time when an effort is being made to build up a large export trade in bacon after the war. An incomplete report oftentimes leaves the wrong impression. Undoubtedly the Department of Labor, under which the Commission was working, felt justified in revealing the state of conditions as found by the investigation, but evidently they did not go below the surface and consider the effects such a report might have on the producer. It is an injustice for illegitimate profits to be made in any line by the few at the expense of the producer and consumer and an effort should be made to make it impossible for it to occur. In justice to all concerned a thorough and complete investigation should, and we believe will be, made. In the meantime the producer and the Department of Agriculture should not relinquish their efforts to build up a large export trade in bacon.

A Better Fair.

The fall fair which does not make a strong feature of live stock and agricultural products is a failure. Any fair which hopes to continue to draw crowds and hold interest year after year must have a uniformly high-class display of educational features, and live stock and the products of the farm are chiefest of these in most places. Down in Kansas the officials of a number of fall fairs were questioned as to the exhibits of outstanding excellence and of those who answered 28 said that live stock was one of the leading exhibits; 13 said that agriculture was one of the leading exhibits; 9 said that automobiles was one of the leading exhibits; 9 said that machinery was one of the leading exhibits; 9 said that education was one of the leading exhibits; 8 said that woman's department was one of the leading exhibits; 7 said that horticulture was one of the leading exhibits; and 6 said that babies was one of the leading exhibits.

There is a good point in this for those in charge of rural fall fairs in Canada. Live stock and agricultural products should receive most attention for they are what the people who attend the fair are interested in. It is a mistake to leave these departments to chance. Facilities should be completed so that live stock and the

The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE
DOMINION.

Published weekly by
THE WILLIAM WELD COMPANY (Limited).

JOHN WELD, Manager.

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

1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers, of any publication in Canada.
2. TERMS OF SUBSCRIPTION.—In Canada, England, Ireland, Scotland, Newfoundland and New Zealand, \$1.50 per year, in advance; \$2.00 per year when not paid in advance. United States, \$2.50 per year; all other countries, 12s., in advance.
3. ADVERTISING RATES.—Single insertion, 25 cents per line, a gate. Contract rates furnished on application.
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13. ADDRESSES OF CORRESPONDENTS ARE CONSIDERED AS CONFIDENTIAL and will not be forwarded.
14. ALL COMMUNICATIONS in reference to any matter connected with this paper should be addressed as below, and not to any individual connected with the paper.

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judging of the different classes would be educative. All stock should be in stalls or pens. All cattle and horses should be shown haltered, on a line or in harness as the case may be. Turning all the cattle loose in a corner of the grounds as is sometimes done affords no education to those in attendance, and fairs so managed have little cause for existence. The products of field and orchard should be well arranged on tables, each class by itself. If the fall fair is to fulfil its mission it must plan to educate and it cannot educate unless exhibits are well arranged. Plan better things for your fair this fall.

Nature's Diary.

A. B. KLUGH, M. A.

A weed in regard to which I have recently been consulted is the Black Henbane, (*Hyoscyamus niger*). This plant is from eighteen inches to two and a half feet in height, is sticky and covered with long hairs, and has an unpleasant odor. The leaves are rather deeply notched and the upper ones clasp the stem. The flowers have a tubular calyx with five spiny teeth, and a funnel-form corolla, greenish-yellow in color with purple veins, and with five spreading lobes at the top. The seed-capsule is globose-oblong and is enclosed in the calyx. This plant is poisonous and the dried leaves and flowering tops collected while the plant is in flower are official medicinally under the name *Hyoscyami folia*.

As a weed this plant is not a serious menace as far as my experience goes, as I have known of its occurrence in some localities for ten years without its having spread to any marked extent. The Black Henbane belongs to the Solanaceae, the same family to which also belong the Potato, Tomato and Tobacco.

Another weed belonging to the same family is the Thornapple or Jimson Weed, (*Datura stramonium*). This species grows from two to five feet in height and has leaves from three to eight inches in length which are deeply and irregularly toothed. The flowers are large, white, and borne singly in the forks. The calyx is tubular and the corolla is funnel-shaped and five-lobed. The seed-capsule is about two inches in length and is covered with prickles, hence the common name of Thornapple. It blooms from June until September. This species like the Black Henbane is a native of Asia which has become naturalized in America. It is often quite abundant in waste land, but as far as I have observed is not troublesome in cultivated land.

The dried leaves of the Thornapple collected when the plant is in flower are the *Stramonii folia* of the British

Pharmacopœia. They should be dried at a temperature of 100 to 110 degrees F., and sell for from sixteen to twenty-five cents per pound.

A weed closely related to the Jimson Weed is the Purple Stramonium or Purple Thornapple, (*Datura tatula*). It differs from that species mainly in having flowers of a violet or lavender color and a purple stem. It has been naturalized from tropical America, and is often common in waste land. In the Solanaceae, as in many families of plants, we find some species which are well-known for their edible qualities, and others which are highly poisonous, in fact this relationship of esculent and poisonous plants is a very common one.



Black Henbane.



Thornapple.

Give the Hired Help Some Responsibility.

BY SANDY FRASER.

About a week ago I was lookin' through the "Questions and Answers" department o' the Advocate an' I saw where some farmer chap wis wantin' tae ken what he could dae to his hired man, or at least tae the man he had hired, an' wha had gone an' left things. He had promised tae gie this mon a certain amount o' oats for his horse ilka day, an' one time when the chap wis gaein' awa' for a drive, he pit a gallon o' aits in the buggy tae feed his horse while he wad be gone. But the boss came along and took the aits oot o' the rig an' pit it back in the granary. This made the ither chap mad, an' he up an' left, an' noo the boss, havin' been lookin' around for trouble until he found it, doesna' like it, an' he comes tae the auld Advocate for some free advice as tae how he can mak' the mon he hired sweat for gaein' an' leavin' him in sic' a hole, wi' the hayin' comin' on, an' everything else in the way o' farm extras tae be done as weel.

Noo, it may be doesna' show a vera guid spirit tae tell a mon in trouble that what he is gettin', serves him right, but gin I could see this chap wha is lookin' for law, I think I'd be inclined tae let him understand that I thocht he wis gettin' vera little mair than he deserved. As they say, "he made his bed, sae let him lie on it."

The hired help problem is about as auld as any o' the ither problems that ha'e been worryin' mankind in past ages, for gae as far back as ye like ye will find that the tendency wis for one mon tae get anither tae dae his wark, gin he, by ony means, could coax or compel him tae it. An' mony a time when one mon could mak' a slave o' his brither mon he wisna' slow tae tak' advantage o' the fact. We're gettin' a wee bit past that stage in the world's history, an' it's a guid thing too, but there's ower muckle o' an inclination on the part o' a guid mony men tae act the slave-driver yet. What they have not a'thegither learned is that "Jack is as

guid as his master", an' that they ha'e no' moral richt tae treat ony mon wi' less consideration or respect because o' the fact that he is in their employ, an' is expected tae obey their orders. Gin the hired mon gets guid money frae his boss, he gives the strength o' his muscle in exchange for it, sae there is no obligation on either side, an' one mon should be juist as guid a mon as the ither, sae far as their business relations are concerned. Each owes tae the ither respect an' consideration. The idea on the part o' some farmers that their hired men are a' the time tryin' tae get the better o' them, has a tendency tae react on themselves, because it pits the same notion intae the ither chaps heid, an' sometimes mak's a rascal oot o' an' otherwise honest mon. The surest way tae get intae trouble is tae keep expectin' it, an' the quickest way tae send a mon tae the bad is tae show yer lack o' confidence in him. The farmer that we mentioned, that took the oats oot o' the buggy, might juist as weel have told the ither fellow in sae many words, that he wis a thief. An' the only mon that would stand for that would be one that had lost a' his self-respect an' didna' care what his boss called him.

Another reason I've noticed for lack o' success in handlin' hired help, is the habit some men ha'e o' bein' too familiar wi' them. I ken one young farmer that is a' the time 'chewin' the rag', as he calls it, wi' his hired mon. It's a' meant as a joke, an' taken in the same way, but the result is that he does not get the best wark oot o' his men, for they get to ha'e a sort o' contempt for him, that mak's them careless aboot his orders or interests. An' mair than once I've seen this sort o' familiarity end in a row that made a change o' relations advisable for a' concerned.

I heard a married woman say once that the only way she and her man found they could get along together wis tae be as polite tae ane anither as if they were next thing tae strangers, an' I'm thinkin' her plan will wark unco' weel wi' oor hired help, or silent partners, as one I knew called them. I ken they're no always silent, but as a rule they ken their place when the boss kens his. An' the idea o' partnership is no' a bad one when ye come tae think o' it. Baith parties tae the contract are makin' a livin' oot o' the business, an' it should be tae the interest o' baith alike tae see things gaein' along smooth-like an' prosperous. An' it has been my experience that in nine times oot o' ten, when the hired help are treated right, they tak' an interest in the farm wark that is worth mair tae the owner than anything he could force oot o' them by hard words.

About the best an' easiest way tae pit yer help on their good behavior is tae gie them some responsibility. Maybe not ower muckle at first, but mair o' it as fast as ye see they can stand it. It's no' the sign o' a good boss tae see him daein' a' the maist particular wark, an' the hired mon daein' juist that which requires plenty muscle, but na brains. One mon has a heid as weel as the ither, an' he should be given a chance tae use it. The far seein' business manager kens pretty weel the value o' pittin' a feelin' o' responsibility on the heads o' the different departments o' the store or factory, an' the principle is juist the same on the farm. Gie yer mon a chance tae bring the coos through the winter in guid shape, or gin he's mair interested in horses, let him be responsible for their welfare an' appearance. An' dinna' jump on to him wi' baith feet gin he mak's some mistake, or even gin he is a wee bit careless at times. There's another way. I ken one man that has mair effect on his hired help, juist through the way he looks at the wark they ha'e done, than the average mon would wi' a regular callin' doon. They ken what his silence means, but there's naething they can say, as naething has been said by the boss. But they dinna' let the same mistake occur the second time, I've noticed. They've had a man's treatment frae a mon that they respect, an' they feel noo that it's "up tae them". It seems tae me that the secret o' this whole problem o' keepin' on a guid footin' wi' yer help is in showin' them the consideration that ony man has a richt tae expect frae anither, an' which you expect frae them. An' gin ye are managin' what ye might call a "going concern", that is, a farm that shows the result o' a policy o' "progressiveness and efficiency", that we hear sae muckle aboot these days, an' which the mon o' ony pride is always glad tae be connected with, then ye ha'e fulfilled aboot a' the conditions that the situation calls for.

The day is comin' when there will be neither masters nor servants, an' when a man will be respected for what he is, an' not for what he has in the way o' cash or credit. Then when we ask what ony mon is worth it will mean that we want tae ken what he is guid for. That will be the day when wars, big an' little, on the battle-field an' on the farm, will be at an end, for man will ha'e learned the lesson o' giving as weel as getting, or treating his fellow-man as he wad want tae be treated himself.

"Then let us pray that come it may—
As come it will for a' that—

When sense an' worth, o'er a' the earth,
Will bear the gree, an' a' that.

For a' that, an' a' that,
It's coming yet, for a' that,
When man to man, the world o'er,
Shall brothers be for a' that."

Fall cultivation makes the crop. The other day a young farmer called at this office and in the course of conversation remarked that the best piece of spring grain he had this year is growing on land which was cultivated in preparation for fall wheat last fall, but owing to the drouth the wheat was not sown.

THE HORSE.

Bone Diseases of Horses—II.

Splint.

Splint is a common and sometimes quite an alarming disease in young horses, and occasionally in horses of any age. It is rarely seen in the hind limbs. In order to understand and appreciate the trouble it is necessary to have an intelligent idea of the bony anatomy of the horse from the knee and the hock to the fetlock joint. This part is usually called the cannon, and consists of three bones, one large cannon bone extending the whole distance from the knee in the fore and from the hock in the hind limb to their respective fetlock joints. The posterior surface of this bone is rather flat with a roughened portion on each edge with a comparatively smooth portion between them. To the roughened portion on each edge there is attached by ligamentous attachment a small, somewhat triangular-shaped bone, of considerable size above, where it articulates with the bones of the knee joint, and gradually decreasing in size as it extends downwards, becoming quite small and terminating in a small nodule, somewhat pea-shaped, a little more than two-thirds down the large bone. These nodules can be easily felt, one on each side of the large cannon bone, a few inches above the fetlock. In fine-boned horses without long hair on their legs, they can sometimes be seen, and are occasionally mistaken for splints, by those not familiar with the anatomy of the part.

A splint consists in bony union between the large and small bones. Inflammation is set up between the bones, usually by concussion during ordinary travelling, especially on hard roads. As a result of the inflammation an exudate is thrown out, which is, of course, soft at first but later on becomes converted into bone, and thereby unites the large and small bones by bony union. An enlargement of greater or less size is noticeable, which, in most cases, gradually disappears by absorption until nothing can be noticed. At the same time the ossific (bony) union between the bones continues. We often hear people say that "a horse over seven years old never had a splint." This statement arises from the fact that the visible enlargement has usually disappeared by the time the animal has reached that age, but, as stated, the union of the bones is permanent. This absorption does not always take place, and it is not uncommon to observe well-marked splints in horses of all ages. In some cases the splint is double—that is, an enlargement is noticeable on each side of the leg—and, in such cases there is generally a bony deposit extending across the posterior surface of the large bone, from one splint to the other. This often causes an irritation to the suspensory ligament, which passes down this surface, and this may cause permanent lameness.

Except in cases of this nature, and in those in which the splint is so high that the knee joint is involved, splints seldom cause persistent or permanent lameness. **Symptoms.**—In many cases there is no lameness. The first intimation of the presence of splint is the appearance of the enlargement, which gradually disappears. At the same time splint lameness is often seen. The symptoms are usually quite characteristic. A horse lame from splint will usually stand and walk sound, but if asked to go faster than a walk will show well-marked lameness, the head dropping decidedly when the foot of the sound leg comes in contact with the ground. Lameness is often noticed before there is any visible enlargement. When a horse, especially a young one, shows this peculiarity of lameness, splint may be suspected. Manipulation will usually discover the seat of the trouble. By pressing with the thumb and finger, the line of attachment between the large and small bones from the knee to the termination of the splint bone, the seat can be detected by the horse flinching and lifting the leg when pressure is exerted on the affected part. If severe pressure be exerted he will probably rear on his hind legs. The usual seat of splint is the inner surface of the fore cannon, but it may be on the outer or both surfaces. The hind limb is seldom affected, but when it is the seat is usually on the outer surface. Splint lameness sometimes appears very suddenly. A horse may be driven a journey and go perfectly sound, and after a rest when taken out to drive home may go very lame when trotting. When we know the peculiarity of the lameness and the manner of locating it, there should be little difficulty in diagnosing.

Treatment.—Lameness is usually shown only during the inflammatory stage. When the exudate becomes ossified (converted into bone) the inflammatory action ceases and lameness disappears, unless the enlargement is of sufficient size and so situated that it causes irritation to the suspensory ligament, or involves the knee joint. Treatment should be directed to allay the inflammation. Of course, the patient should be given rest. The seat of the splint should be well showered several

times daily with cold water for two or three days, or if pounded ice can be kept to it, still quicker results will be noticed. This is often all that is needed. The horse then goes sound, and after a time the enlargement becomes noticeable. In other cases lameness is more persistent, and it becomes necessary to apply a blister. A second or third blister is sometimes necessary, and in some cases it is necessary to have the splint fired by a veterinarian. In rare cases the lameness is persistent and a long rest is necessary, and, as stated, lameness may be permanent. When lameness does not exist it is seldom necessary to treat. Friction or blistering has a tendency to hasten absorption of the enlargement, but in most cases nature effects this without extraneous interference. As a simple matter of fact, there are few horses that have done considerable road work that are free from splints, although they may never have gone lame, and there are no visible enlargements. Unless a splint is large, double or very close to the joint, it is not generally considered an unsoundness. W.H.P.

Overgrown Hoofs.

The hoofs of various animals grow with more or less speed, according to the conditions under which they are kept. Horses kept out in the fields and doing a lot of walking do not often develop superfluous hoofs, but they grow fast on animals in yards and stalls. They are always an impediment, and often a danger as they interfere with easy walking, and may trip or impede the action. Overgrown hoofs are very objectionable on the horses. The attending dangers are stumbling, broken knees, broken shafts, or a broken neck. Whenever the hoofs grow over and extend beyond the shoes, it is undesirable. The shoes may not be worn out, but they should be removed, the hoofs reduced, then the shoes put on again if good enough. Guidance when to cut back is not got from the durability of the shoe, but the length of the hoof. There are other objections besides those stated. Overgrown hoofs in horses are very apt to split or crack, and this is crip-

Prevent Loss in the Flock.

August is considered the most critical month for lambs. It is when the weather becomes hot and the pastures parched that internal parasites commence to play havoc with the flock. Weak lambs in particular suffer from attacks of stomach worms. The general symptoms of trouble from this source are loss of flesh, dullness, failing appetite, thirst, sometimes colic and an anaemic condition in general. Prevention of attack should be followed as far as possible, which may be done by keeping the digestive organs in good condition by the use of plenty of succulent feed, both winter and summer. This necessitates frequent changing of pasture during the summer or else feeding rape, turnips or other green crops when grass is dry and short. If possible avoid feeding on infested land. The old sheep harbor the parasites and spread them over the pastures in the excrement. The eggs hatch on the ground, particularly in wet, muddy places, the worms grow, and are swallowed by the lambs and sheep. Thus it will be seen that using the same pasture year after year is likely to increase the trouble once it makes its appearance. If lambs must be pastured on infested land, they should be given only a small area to graze on at once and moved to fresh grass at least every ten days. In this way the flock is moved before the eggs hatch. One remedy which has been effective is two ounces of copper sulphate dissolved in one gallon of water and two ounces of the solution given to a mature sheep, less to a lamb, depending on age. Withhold feed and water from the flock for about twelve hours before treatment and for a few hours afterwards.

Tapeworm and "Gid" are also two parasites which should be guarded against by sheepmen. Fresh pastures at frequent intervals will go a long way towards keeping the flock thrifty and the parasites in check. The flock should always have access to clean water and salt. Forcing the sheep to depend on water from stagnant pools to slake their thirst is frequently followed by loss. Sheep are too valuable a class of live stock to neglect in any way.

Pasture the Hogs This Fall.

The hog is generally looked upon as an animal that requires grain and grain only for its diet. True, its digestive system is not constructed to handle roughage like cattle and sheep, but a limited quantity may be fed to advantage, especially to growing and breeding stock. When it comes to finishing for market a heavy grain ration is necessary. For the next two or three months the shoats can gather considerable of their living in pasture and stubble fields. They should be fed a little grain but where the pasture is good it need not be much. It pays to have paddocks near the piggery where rape, clover, or alfalfa, can be grown and the pigs can be turned in them as the different crops develop. This requires a little extra fencing, but it is believed that it would result in a saving in the cost of production of a hundred weight of pork. On comparatively few farms are these special permanent forage crops grown for hogs, consequently they are closely housed the greater part of the time owing to some of the fences not being hog-proof. Where these conditions prevail it may be found profitable to cut green feed, as clover, peas, rape, vetch, oats, etc., and feed to the growing pigs in the pen. They will consume a large quantity of green stuff at a saving in high-priced grain.

Some stockmen have small movable yards in which they confine the pigs in the field so as to prevent them from roaming in forbidden places. We recently saw four pigs weighing about one hundred pounds each yarded in this way in a field where the clover was about eighteen inches high. The pen was ten by twelve feet and was moved each day as the four pigs cropped off 120 square feet of clover every twenty-four hours. At the end of a couple of weeks there was good picking where the hogs had first pastured. This system while economical of pasture entails a good deal of work.

As soon as the grain crops are garnered the growing hogs may be given the run of these fields. It is surprising the amount of grain they will pick up and turn what would otherwise be waste into pork. The second growth of clover or the rape field will also furnish excellent picking for the porkers. If the corn field is separate from the roots, there will be many ears for the hogs to pick up after the corn is ensiled. It may require a little work and patience to induce the hogs to pick in these fields until they find out that there is good feed there for them. However, it can be done. When the pigs run on pasture from the time they are weaned there is little trouble in starting them on the stubble.

Henry and Morrison, in their book on "Feeds and Feeding", state that "through the use of suitable forage and pasture crops pork may be produced at a much lower cost than where pigs are maintained on dry lots on expensive concentrates alone. Spring pigs will thrive amazingly on good pasture supplemented by a limited allowance of concentrates. Not only do pigs on pasture make cheaper gains, but the succulent feeds and the exercise they obtain are important aids in keeping them thrifty and in good health. By the use of pasture crops throughout the growing season and legume hay during the winter the cost of maintaining brood sows may be materially reduced". Another point to be considered is that there is less loss of fertility when the pigs run on pasture than when housed or kept in dry lots. Numerous experiments have been conducted to determine the amount of concentrates necessary to feed the pigs on pasture. Results show that pasture effects a saving of about fifteen per cent. in the grain required to produce one hundred pounds of gain. Pigs on pasture, fed a limited grain ration, usually make more



Speeding Up Production by the Four-horse Hitch.

plung. It spoils the hoofs and disfigures the horse.—Farmer and Stockbreeder.

LIVE STOCK.

Precaution Necessary When Turning Sheep on Rape.

Rape is an excellent feed for sheep and it is greatly relished by them. Experiments have shown that they make rapid gains on it. It is a crop which is easily grown and where sheep and feeding cattle are kept it will be found advantageous to have a few acres of this succulent feed. As a rule it is pastured off but it is also a valuable soiling crop for sheep. When the pastures become a little dry, rape may be cut and drawn to the sheep. A little of it will go a long way in preventing the animals from running down in condition. However, as a rule it is pastured off and proves valuable in keeping the lambs in condition after being weaned and in toning up the breeding stock. There are a few precautions, however, which must be observed in order to avoid loss. It is a feed which readily causes scouring and bloating if care is not exercised at the first. Turn the flock on in the middle of the afternoon the first time or two when the rape is perfectly dry. After a few days sheep may be left on it continually, but there should be grass pasture near the rape field to which the sheep have free access. This will tend to avoid feeding to excess on rape. If bloating should occur a pint of strong salt solution is a simple remedy which has given good results. One ounce of oil of turpentine in ½ pint raw linseed oil given as a drench is an excellent remedy. When the sheep are on rape or any fresh pasture they should be seen every day or two so that if any happen to be ailing treatment could be applied in time to save the animal. When rape is sown in rows loss has occurred from lambs getting on their backs between two rows which prevented them from rising. When regular attention is paid to the flock, death from this cause is not likely to occur.

rapid gains at less cost when put on full feed for finishing for market than do those fed a full ration of concentrates from the start. On good alfalfa pasture pigs have made satisfactory growth when fed two pounds of grain per hundred pounds live weight. Red clover also makes a valuable pasture crop for hogs but does not furnish quite as constant a supply of feed. Sweet clover is a good pasture crop, as are also peas, oats and peas, or vetch. For fall pasture rape is unsurpassed; in fact, it may be sown quite early in the season and then again later so as to extend the feeding period. It is a crop that if not pastured too closely will continue growing up until the frost comes. A very good system is to have two paddocks sown to rape at different dates. Turn the pigs on one when the crop is ten or twelve inches high, then when it is picked off turn on the other one. On most farms there is excellent picking for the hogs at this time of the year and considerable forage which would otherwise be wasted can be turned to good use by allowing the hogs to pick a part of their living.

World Records for Milking Shorthorns.

A new world's record for Dairy Shorthorns was established on Thursday, June 21st, at Wrest Park, Ampthill, Bedfordshire, where the herd of the late Lord Lucas was offered by John Thornton & Co., and 92 head made £187 11s. 8d. apiece, or some £63 each, more than the previous record established at the dispersal of the Tring Park herd. Lord Lucas' 92 now made a full total of £17,647.

The chief buyer was J. Watson, Wetherby, in Yorkshire, who spent 3,710 guineas on six head. They were the cows, Charity 23rd, (1905), 710 guineas; Primrose Gift (1906), 750 guineas; Gossiping Maid (1910), 320 guineas; Primrose Dairy Maid (1912), 810 guineas; Dora Wild Eyes (1913), 410 guineas, and the bull Premier Gift (1915), 710 guineas.

Twice a Royal champion, Primrose Gift, despite her 11 years, looked a perfect picture. Her record is a capital one, both in the show-ring and on performance. She gave 10,600 pounds of milk in 1915; 10,224 pounds in 1916, and had yielded close on 9,000 pounds for her 1917 record when offered for sale. The top price cow, Primrose Dairymaid, is a five-year-old daughter of Primrose, and she has been reserve champion to "mamma" on two occasions at our Royal Show, where in 1916 she caught a chill and went off her milk, albeit from June 4th, 1916 to Jan. 30, 1917, despite the chill she yielded 4,881 pounds of milk. Other stock made 400 guineas as easily as winking, and it is clear the milking Shorthorn is in for a big and a good time in England.

T. A. Buttar, Corston, Coupar Angus, Scotland exported 25 shearing Shropshire rams and 80 ewes to Mr. John Miller, Ashburn, Ontario; 15 rams and 20 ewes to F. W. Harding, Anoka Farms, Wisconsin; and 10 rams and 30 ewes to Messrs. George Mackerrow & Sons, Pewaukee, U. S. A.

George Hoyles, Skidby Manor, Hull, tells me he has sent 25 shearing Lincoln Long-wool ewes and 15 rams to a Canadian buyer—but he nameth him not! F. S. King, Wyoming, has bought six yearling South-Devon ewes and two yearling rams from E. H. Hoskin, and E. W. Body, breeders at Liskeard, England.

Lieut. Clifford Nicholson, has sold to A. J. Knollin, Chicago, 50 yearling Lincoln Long-wool ewes and five yearling rams. These stock are replete with Dudding blood.

ALBION.

Alternate Pastures.

The abundance of rainfall this summer has been instrumental in keeping the pastures up to a good state. From now on more heat and possibly more dry weather may cause them to become shorter towards fall. Last year pastures were good at first, but very short later in the season. Better results would generally be obtained if more alternating of fields were practiced in handling the stock, or if a temporary fence were used so that one-half the pasture field might be used for a time and then the other half later on, while the first portion was allowed to recuperate. When the stock are allowed to roam over a number of fields at once, or over an entire pasture field, they tramp down, trample or otherwise destroy considerable of the grass and the pasture will not go as far as if they have a part of the area for a time and are then removed to the remainder and kept off the portion first pastured until it has required a measure of its luxuriant growth. After the hay is off more fields will be available and it would be advisable, in some cases at least, to allow the stock the run of the meadow after it has grown up and to shut them off the old pasture for a time. In these times of stress it is necessary to get everything possible out of the land and to handle even the pasture fields to the best advantage.

A Subscriber Over Fifty Years.

EDITOR "THE FARMER'S ADVOCATE":

I take pleasure in writing to say how much I appreciate your excellent paper which I look forward to each week. When I first subscribed for the paper it was 4 leaves, 8 pages. Just a pamphlet compared to its size to-day. I have been a subscriber now for fifty-two years which must make me one of your oldest subscribers you have on record. The Advocate is a paper that cannot fail to be a valuable source of assistance to every farmer who reads its pages diligently.

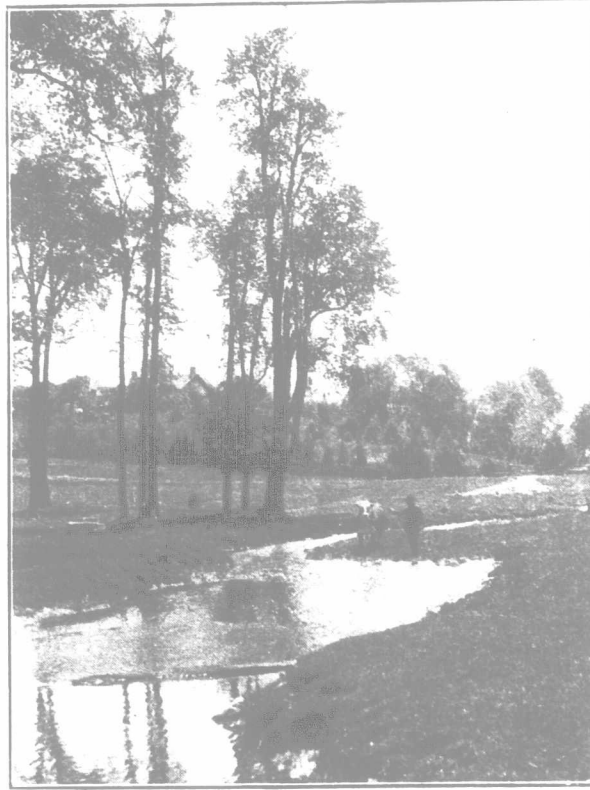
Perth Co., Ont.

WM. REDFORD.

THE FARM.

Safety First.

The sign "Safety First" is seen on many buildings, especially along the railroad, and it serves to remind the traveller of impending danger to himself or those depending upon him. While the railway employees are warned to exercise care, the traveller should take the warning to heart, as a little carelessness on his part may result in injury or loss of life. If more care were taken there would be fewer accidents at railroad crossings, with automobiles, etc. There appears to be that something in man which incites him to take a risk. The driver of rig or auto thinks he can make the crossing ahead of the train and possibly he does time and again, but the time may come when he misjudges distance or something goes wrong with his car and he is hit by the train. Likewise some men, and women too, like to take the corners of the street or read a little faster than the law allows and it is surprising how many succeed in doing it safely. However, there are the few who through miscalculation or inability to control their machines either maim a pedestrian or are themselves injured. Accidents happen every day which might be avoided if reasonable care were exercised and the sign "Safety First" heeded. Only recently a driver of a car was allowing his machine to glide down a hill on which there was a turn at the bottom. When the bottom was reached the car was going too fast to make the turn and keep on the roadway. Luckily for the driver and the occupants of the car the ditch was not deep, and a bad accident was avoided. By going down the hill slowly, as a driver should, the risk would have been eliminated. Another case of thoughtlessness which came under our observation was of a



Amid Pleasant Surroundings.

young man at a gathering where there were numerous autos and rigs packed in a small yard. When leaving for home he rushed his horse past others, instead of getting in line and waiting his turn; the result being that a backing auto frightened his horse, causing it to back into another rig, resulting in a demolished buggy, and all because he did not think of "safety first." Every day such accidents happen; lives are lost, or men, women and children are maimed because someone was careless.

On the railroad, in the city, or motoring or driving on the public highway is not the only place where these words apply. They are applicable on the farm as well as anywhere else. Too frequently the team is left standing in the field or yard while the driver goes a few rods for something. Nine cases out of ten the team stands, but there is always the danger of something frightening the horses, no matter how trusty they may be and causing them to run away, resulting in a broken implement or probably loss of an animal. When using binders, mowers, hay loaders, disks, rollers, etc., extra precaution should be taken. Hardly a season passes but some bad accident is reported in the paper. Unhitch the team before getting in front of the mower or binder knife, and don't crawl under the hay loader to adjust a slat, fix a rope or straighten a hook that has caught in the hay, while it is attached to the wagon. Only a few steps of the team and your body may be pierced by the hay-loader teeth. An awful death, you say, and one not likely to occur, but yet it has happened. No one who takes the risk is free from the danger. But to save or gain a few minutes thousands take great risks every day. If "Safety First" were adhered to there would be fewer fatal accidents to report. Before taking the implements to the field see that they are in repair and then if they must be tinkered with during the day, unhitch the horses first.

a

On most farms labor-saving devices are used for unloading. The hay fork, rack lifter and slings are commonly used, but if every rope and attachment is not perfectly sound the operator is running a risk. Many accidents have happened because the trip rope was too frail. It broke when pulled upon and the man fell backwards off the load. There are men who are crippled to-day owing to the trip-rope breaking. If in doubt about it being strong enough to stand the strain, put in a new one and see that it is properly attached to the hay fork or slings. Many take risks when climbing to the peak of the barn to change pulleys or adjust the car, when a strong, permanent ladder might easily be built up the end of the barn. A few hours spent in preparing for safety may save months of suffering later on. At this season of the year when machinery is in use more than at other seasons, every care should be exercised to avoid a mishap. True, accidents will happen even where the greatest care is taken, but by always aiming at "Safety First" they will be reduced to a minimum. One cannot be too careful when handling stock, driving the team or car, or when running machinery. A little carelessness may not only injure yourself but jeopardize the lives of others.

Sweet Clover Silage.

EDITOR "THE FARMER'S ADVOCATE":

A few weeks ago when the plant had reached a strong growth and was partly in bloom a field over six acres in extent of sweet clover on the farm of Dr. C. A. Cline, Middlesex Co., Ont., a few miles east of London, was put into the cement-concrete silo for summer feeding of the herd of dairy cows. The crop was cut with the self-binder, 35 lbs. of twine being used and run through the ensilage cutter into the silo. Tying the clover into sheaves was considered to be a more efficient and economical method than attempting to handle the fodder loose. It was run into the silo as rapidly as possible after cutting, and owing to the almost continuous rains was naturally very sappy and considerable water also fell into the uncovered silo. For a time, juice flowed freely from the bottom through the drain. The herdsmen began feeding the silage as soon as the crop was in and the cows were given two feeds per day with a sprinkling of cottonseed meal. Though the pasture grass was luxuriant the cows looked for the sweet clover ration and left little in the mangers, and the milk flow was very well sustained though others in the district on grass alone were falling off seriously. Any silage that an odd cow did not eat was turned over to the hogs. It was considered that the trial meant the saving of the crop, which because of wet weather could not have been dry-cured. At the time of the writer's visit the silage had not developed the characteristic silage acidity but had a heavy, sweetish flavor and at the edge there was some decay. A question arising yet to be figured out is the comparative economy of the foregoing plan with the alternative one of allowing the cows to pasture off the clover.

Middlesex Co., Ont.

W. T.

What is the Best Kind of Silo?

EDITOR "THE FARMER'S ADVOCATE":

The silo is every year becoming more popular in all the mixed farming and stock farming districts of Ontario. A great many farmers put in five or six acres of corn with the intention of building a silo this summer. Some may be in doubt as to the best kind to build. There are several kinds to choose from, the stave silo being the most common with concrete in either solid wall or hollow block style second. There is also the silo built of vitrified clay blocks. It would appear that the latter makes almost an ideal silo, the only objection being that it is rather expensive. The price of any one of them, however, puts it within the reach of any one if they buy in the right place. A manufacturing firm sent an agent through this district three years ago. They put up very good silos and sent experts out to erect them. All the farmer had to do was to haul the material (which was all ready cut to fit) from the railway siding. These silos cost from one hundred to one hundred and fifty dollars more than the ordinary stave silo would have cost had the farmers bought the material and hired the work done.

Other farmers ordered material from their local lumber dealers and got first-class hemlock for 25 dollars per M, and with the help of a carpenter or two got a good silo for \$100. Some firms in the silo business are very reasonable in price, and where they furnish good material and do the work at a reasonable rate it certainly saves some time and worry. A good method is to get prices from your lumber dealer, and foundry man for the hoops, and compare prices with the ready-made silo manufacturers.

The stave silo, however, has one fault, and that is that unless well sheltered and braced there is a danger of its getting caught in a cyclone. Where barn room permits they should be put inside as they will then be safe from wind storms, and when they are put in a straw mow it is possible to pack around them with straw which helps to keep the corn from freezing, but if they have to be built outside, the hoops should be kept tight, especially the first two or three years. They should also be well stayed with guy wires outside and braced inside with rails or scantling cut an inch or so longer than the diameter of the silo. If a cleat is nailed under one end, the other end braced against the oppositeside, it stays there of its own weight. These inside braces are very important as a silo always collapses inwardly.

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A more substantial silo, and where gravel can be had within reach not very expensive, is concrete, which can be built of hollow blocks or solid as desired. The solid wall requires much less work and can be built quicker than the block style. Contractors building this silo with up-to-date curbs and mixers usually charge about \$3 per foot for a 12, 14 or 16-foot silo, as they claim the small diameter silo requires just as much work as the larger ones. This price, of course, is just for the work.

The hollow block structure makes a nicer looking silo and is not so subject to freezing as the solid wall. We built a block silo on our own farm last year. We had an old stave silo which blew down about three weeks before the usual time for filling. It was too old to put up again, so we had to make preparation for a cement silo which we would have done anyway but for the scarcity of help the year before, so we were forced to let everything else go. We had intended building a hollow block silo but I was strongly advised not to attempt it as blocks would have to be made at least six weeks before being used, as they would not be seasoned enough to be handled without danger of breaking. I then tried to get a contractor to build a slop-wall silo, but while there were three of them within reach they all had all the work they could do. Prospects of getting a silo up looked small at this point, when I heard of a man who said blocks could be made by using a little more cement that would be hard enough to handle in a week. This was the best offer we had so we accepted it. We began at once making blocks. There were three men making blocks while one team drew gravel.

I give herewith the total cost exclusive of our own work. This silo was up exactly three weeks and one day from the time the old one blew down. The size was 13 feet by 33 feet.

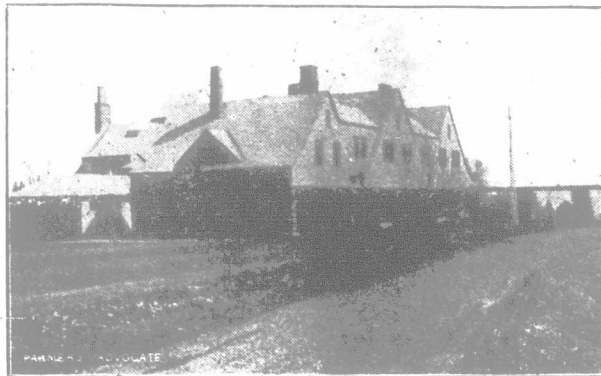
Cost of man making blocks	\$ 35.00
Masons building silo	44.00
39 bbls. cement at \$1.55	60.45
Lime, reinforcing wire, etc.	10.00
	\$149.45
Estimate of roof	20.00
Total	\$169.45

Victoria Co., Ont. JOHN CURRIE.

[Note.—This is an interesting letter on silo building. Our correspondent evidently forgot to take into consideration the difference between some of the manufacturer's stave silos and the ordinary stave structures. As a general thing the companies manufacturing stave silos put up a more substantial structure than the ordinary stave silo, and the material is treated with a preservative which makes the whole a lasting structure. We may say that we have both a slop-wall cement silo and a manufactured stave silo on our farm, Weldwood, and we like both and think that in construction the stave was just as economical as the cement.—Editor.]

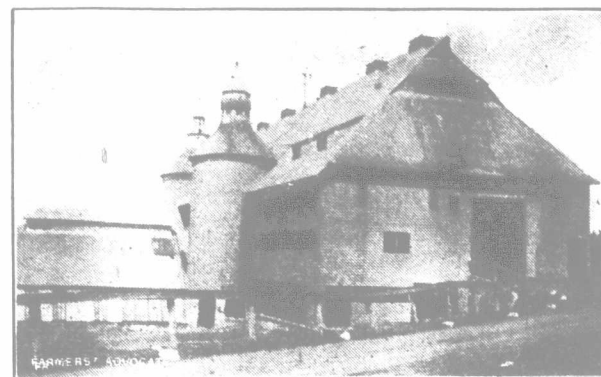
Sir William Van Horne, Farmer.

At this, the busiest season of the year for the farmer, when he sees almost everyone taking a vacation but himself, it should be of interest to him to read of a man who, though engaged in several other pursuits, took up farming as a recreation and found in it pleasure and a source of interest, where many others have found only hard work.



The Bungalow on Sir Wm. Van Horne's Farm.

William Van Horne was born in Chelsea, Illinois, in 1843. In 1857 he began his career as a telegraph operator, and after serving several railroads he became General Manager of the Southern Minnesota. In a short time he became its President. In 1881 he was chosen by the directors of the Canadian Pacific as General Manager of that Railway. His capacity,



The Barns on Sir Wm. Van Horne's Farm.

energy, personality and ready grasp of all railway problems, made him one of the foremost men at that time in his line of business.

One of the greatest undertakings Canada has ever witnessed was the building of the C. P. R. Heavy grades, long stretches without population, subsidies that

were soon exhausted and countless other difficulties made the contract one that was calculated to discourage anyone who knew the meaning of the word. But William Van Horne had the faith that moves mountains, and many a one he did move before he reached the Pacific coast.

This work was his crowning achievement, and it is a question if Canada does not owe more to the ability of this man, to-day, than to that of any other of her many "Empire Builders". In a country like this, progress as we know it, would have been impossible without the railway.

But he had other interests, as might be expected from one of his activity of mind. He was the Dominion's greatest authority in the pulp-wood question. He was prominent in several large mining and steel manufacturing enterprises. He was an artist and a collector of the paintings of the old masters, which his natural taste for the beautiful led him to take an extraordinary interest in.

But it is in his work as a farmer that we are chiefly concerned and interested. On Minister's Island, St. Andrews, N. B., is the farm once owned by Sir William Van Horne, and still in the possession, and under the care of his family. In fact the whole island was bought by Sir William, and it is known as one of the beauty spots of Eastern Canada. In laying out the estate Sir William managed to cut out all the ugly features while allowing Nature to have her way to the largest extent possible. In this respect he should be an example to a great many of the rest of our farmers who undertake the improvement in appearances in their home surroundings.

His gardens, which covered many acres of ground, showed the hand and eye of the artist, and the wild and cultivated have been so blended that the impression one gets is of the greatest harmony. Attention has also been given to the growing of grapes and peaches, which are often of unusual size and quality.

The barns, which were built in 1897, have been remodeled, and a new ventilating and heating system installed. Anything short of perfection never satisfied Sir William in the arrangement of his farm buildings, and in fact every detail in every department had to reach the same standard. In 1895 a herd of dairy cattle was purchased. These were of the breed known as the Dutch Belted. Then a herd of French-Canadian cattle were bought but were later replaced by Ayrshires. This live-stock was Sir William's particular pride and they are still being bred and developed by the Superintendent of the farm, T. E. Sharp.

Such men as Sir William Van Horne have, to a certain extent at least, given us an illustration of the possibilities of farming, and they have very clearly indicated the tendency of mankind to get back to nature, and the simple life as soon as the individual has been educated up to the point where he realizes the true comparative value of things. Work, the success of which is measured by our co-operation with Nature, will never take a second place in any category of occupations.

Glengarry Co., Ont. J. E. McINTOSH.

Canada's Young Farmers and Future Leaders.

Making a Sheaf For the Fair.

Judging from the appearance of some of the sheaves exhibited at local fairs many have not yet learned the art of preparing a sheaf of grain so that it will appear to best advantage. The trouble is that too many wait until a few days before fair time before commencing to prepare their exhibit, and then they must go to the mow and hunt for straw of the desired length carrying a good head. Excellent sheaves have been made picking over the bundles in the mow, but they are not what they would have been had they been taken right from the field. Length of straw, brightness of straw, number of kernels to a head and neatness are things to keep in mind. Select a place in the field where the crop comes up to your ideal and cut the straw close to the ground. Lay the heads on a level and make a bundle at least four inches in diameter for a large sheaf and bind it tightly. This will serve as the core of the sheaf. Then keep adding to it until the desired size is reached. The heads should be arranged to make a slightly rounding top to the sheaf, and the butt can be levelled off after the straws are all in place. It practically means the handling of every straw separately, and it requires considerable time to make a creditable looking sheaf. The leaves, on the outside in particular, should be trimmed off in order to show only the clean, bright straw; leaves give a ragged appearance. The sheaf is now ready to be tied just below the heads, in the centre and again near the butt. While the straw is still a little tough hang the sheaf up, head downward, in an airy place. It will dry and the heads will appear better than if dried in any other position. Some bind the grain in small sheaves at time of cutting and hang these up to dry, then make up the big sheaf during a slack time. If shipping the sheaf any distance, pack it in a box sufficiently large to prevent crushing the grain. A block may be fastened in the box just behind the heads to carry the weight and prevent them being pressed out of shape. If intending to exhibit a sheaf select the grain in the field and you will be able to make a better showing than if you delay making it until the crop is in the barn.

Many dilapidated looking sheaves have been shown in the past at school fairs by the boys and girls. As

the size is only three or four inches in diameter, choice exhibits could be put up if a little care was taken and the sheaves made at the right time. If exhibiting at your school fair this year, cut the longest straw with the best heads before the main crop is cut and hang your sheaf up where birds and mice will not get at it. If the leaves are trimmed off when the straw is cut it will make a neat, attractive sheaf.

A High School Student on the Farm.

EDITOR "THE FARMER'S ADVOCATE":

Here I am back on the farm for two months after spending ten months on that hard-wood seat and under the charge of that old-fashioned, harsh school-master, who holds me down to those hard lessons which would have become very monotonous if it were not for the promising future in view. The nearest part of the future that gives contentment is having the opportunity of working on the farm under a good and fair employer, by which means I am able to help myself, the farmer and my country. Many from our schools have donned the khaki—all honor to our brave lads—but we students of the lower forms are waiting our chance, and in the meantime we are striving for a higher education and helping on the farm. I remember reading in a history about Abraham Lincoln's idea of the value of a good education when he was only a small schoolboy. Abraham was asked what he was going to do for a living. He answered: "I will get an education first and my chance will come." He got an education and did his his chance come? Yes. So will it be in this and the generations to follow.

It has been a pleasure to me to be on the farm for the past two weeks. Just to think although I am just a boy I am able to help win the war by aiding in greater production! I think in this great hour of need it is the duty of all parents to obtain work for their children which will in no way injure their health, and by doing so they will be helping to win the war, and at the same time be getting their children trained to be industrious and regard idleness as a disgrace.

I am not finding fault with any farmer of any farmer's child, but I am just expressing my own thoughts. Now one important part of the game lies with the employer. Is he going to use you as one of his own equal, or is he going to be set and strict in every respect, or, in other words, is he going to be "bossy"? Many employers plan to get as much work for as little money as possible. This is sure to cause discontent on the boy's part when he finds out what his fellow students are being paid.

I think to be sociable with a hired man or boy is half the business. Let him know your plans as to the work as far ahead as possible. Ask him about different things. Get his opinion and if you do not agree with it give your reasons and explain the inconveniences it might put you to. But do not command him as you command your horses.

York Co., Ont. M. H. S. STUDENT.

Making Baby Beef.

EDITOR "THE FARMER'S ADVOCATE":

As baby beef has become an important item on the menu of the wealthy class it is necessary for the farmer to cater to the demand of this special product, and in order to make this class of beef profitable it is necessary to follow out certain lines in care and handling from the time the calf is dropped until it is ready for the block. In the first place it is necessary to select a strong, lusty calf with indications of a strong constitution that would tend, with proper care and feeding, to make a rapid growth. We prefer to have them dropped from the first of September to November. We also want a cow on which to rear the calf that will respond to liberal feeding and give a heavy flow of milk. If the calf is dropped at this season you have ample time during the winter to properly feed and care for it. By the time winter sets in the calf is old enough to eat hay and a little grain and roots. As the calf grows older the quantity of feed can be increased. We figure on marketing about Easter. We have our calves at six months weighing on an average of six to seven hundred pounds. The feed consists of alfalfa hay, rolled oats, bran, corn, turnips and stock molasses. Some calves

will clean up more than others, but by the time they are six months old they will eat about a shovelful of silage and turnips, about two quarts of rolled oats, two quarts of bran and a cup of molasses twice a day and a

little alfalfa three times per day. They are allowed to suck the cow twice daily. Sometimes a little ground flaxseed is added to the grain ration. A calf six or seven months old, properly reared and marketed at

this time when there is a special demand for this particular class of beef will bring as much money as the average two-year-old steer and sometimes more.
Simcoe Co., Ont.
I. McMAHON.

Automobiles, Farm Machinery and Farm Motors.

From Farmer to Farm.

The automobile news of the past few days indicates the tremendous efforts that are being made by manufacturers to interest the agriculturist in gas motive power. At last the great capitalists and all those concerned with them, have realized that in order to make any movement a complete success, the assistance of the farmer must be secured, and that the greatest measure of his co-operation can be gained when the interests at stake vitally affect his farm. It is not a far cry to the days when residents of the country viewed with anger the approach of autos from urban districts, but as soon as the farmer himself saw the real transportation value of the automobile, he allied himself with the city man in a great campaign for better roads. It is true that in some sections of the country there is still a slight trace of suppressed enmity, but nevertheless the day is not far distant, when every farmer will realize that the automobile has done wonderful work in producing better roads through the elimination of mud holes, culvert ruts, steep grades, dangerous slopes, etc. The government is also recognizing the mighty factor of the farmer's influence, for recent legislation points very clearly to the fact that the new laws have in view the overcoming of those dangers that threaten pedestrians and vehicular traffic upon country highways. Prohibition of spot or reflecting search lights, which were usually mounted upon the windshield of an auto, is being brought into effect, because these contrivances were found to result in many accidents, owing to careless use by reckless or indifferent drivers. A spot light is excellent when confined to the location of signs or lanes, but when it is used to conflict those approaching, it constitutes a very real menace. Furthermore, the old legislation that one light on the front of the car was sufficient from dusk till dawn is being changed and the two lights must be burned constantly. This is going to give a better idea of the location of each machine and enable motorists to pass each other with maximum safety. The search lights located upon the frames, or fenders of cars, are also being altered by law so that no conflicting beams or lights are discernible 42 inches from the surface at a distance of 75 feet from the front of the machine. Now that the warm weather is upon us, the newspapers are constantly filled with reports of collisions due to extreme lighting.

The final effort in the winning over of the farmer to the motor industry, will come when tractors, suited

to the tilling of the soil and harvesting of crops, are so standardized that the question of parts will be an easy one. A great many farm tractors are now in use, particularly in prairie countries, but their adoption in the more settled areas has not become an accomplished fact, due to the differences in design. It is true that the majority of the motors have four cylinders, but it is also a fact that horizontal and verticle engines, power plants mounted lengthwise and crosswise, frames supported by two, three or four wheels, and numerous models of unique design, conflict the ideas of the buyer. Great efforts are being made to render uniform the different designs of construction in order that farmers may make comparisons readily, and feel assured that the purchase of a tractor is a matter of exact science rather than an experiment. It may seem a glimpse into the future when we predict that sooner or later the last phase in the evolution of the motor car will come with a combination that can be used for work on the road or labor in the fields. Perhaps everyone is familiar with the fact that pleasure cars have more than once given their power plants over to the pumping of water and grinding of roots, as well as the sawing of wood. Advancing a step farther, it is reasonable to say that the day is not far distant when a power plant will be placed upon the market that will be adaptable to accessories calculated to make the machine a pleasure for the farmer's family, with means of transportation for his products, and also an instrument for tilling and harvesting on his farm.

Any great development that is to result in country-wide interest must inevitably depend upon a complete co-ordination of agricultural and city interests. There can be no doubt that the gas engine has not yet given us all of its resources. By an earnest study of its possibilities, we can not only bring it to greater efficiency, but in doing so give the country better roads, a finer system of traffic legislation, cheaper transportation and a lower cost of living.

AUTO.

Moderate Rate of Speed Should be Enforced.

EDITOR "THE FARMER'S ADVOCATE":

In the July 12 issue of the Farmer's Advocate there was an article on "Careless Driving", which I consider contained a bit of good, sound advice. The writer

told of an exciting and dangerous accident. Many of the same kind happen on the King's highway each day. I live within two miles of a small town on one of the leading roads to Toronto. There are a number of car owners along this road and in the town; between them and the city folk being out with their cars, it is scarcely safe for one to walk or ride a bicycle on this road. About three weeks ago I was walking south along the west side of the road, on the sod, but fairly close to the track. Immediately to my right was a deep ditch. A car came from the rear and the driver was within a few rods of me before blowing his horn, and then went past at such a high rate of speed that I could distinctly feel the air motion on my body. The road was practically lined with rigs, but this particular driver kept on tooting his horn and going right through. Forty rods farther on he swerved out for a horse and buggy but hastily switched back, hitting a fourteen-year-old boy who was on a bicycle, knocking him into the ditch injuring him and wrecking the wheel. However, the driver never even slackened speed to see whether the boy was hurt or not.

We frequently read of men being fined heavily for driving a car while under the influence of liquor, but what better is a careless and reckless driver? The penalty for the intoxicated man should be applied to the sober, yet reckless, driver. Wealthy men only laugh at a fine of twenty-five or thirty dollars. Why not fine them two hundred dollars, the same as men get for keeping liquor in an illegal place? If that does not hurt them, give them a term in jail. No doubt when men get in a hurry and have plenty of power to furnish the high rate of speed, it is a temptation to turn on a little more gas, but each and every pedestrian on the highway has a certain right. There should be an endeavor made to stop speeding on all roads.

York Co., Ont.

E. T.

Faulty Engine.

What is the cause of an auto engine giving sharp, snapping sounds and getting rather warm after being run a while? Ordinarily the engine runs very smoothly and appears to have plenty of power.

A. S.

The information given regarding faulty operation of your engine is very indefinite, but in all probability new pistons and new piston rings that are over sized 4/1000 of an inch will remedy the difficulty.

THE DAIRY.

Ice House Construction.

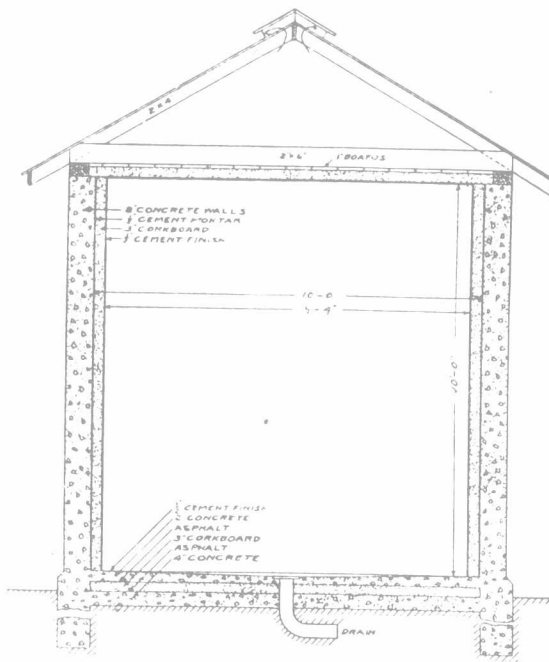
I desire information regarding building an ice house to store and keep ice for the farm dairy. What material is best to use in the building and what plan is recommended? I wish to keep the ice for summer use without having to pack it in sawdust. What should be the dimensions of a building to hold a liberal supply of ice for cooling milk from an average herd?

Dundas Co., Ont.

R. E.

On comparatively few farms is there a supply of ice for use during the hot summer days. The reason is partly due to failure to appreciate the value of ice for keeping dairy products, preserving meats, fruits, etc., and the making of many refreshing desserts for the table. Shortage of labor and considerable distances to haul the ice is also a handicap. However, the biggest difficulty is believed to be in preparing a suitable place for storage. The storing of ice is not generally thought of until the ice crop is about ready to harvest. If the building is already constructed it does not take long to lay in a supply of ice. However, lack of a building to store the ice in, dampens the spirits and the conclusion is generally arrived at that we can do without ice for another year, as it is rather difficult to erect a building in mid-winter. There may be odd days through the summer in which a little time could be spared to erect a structure in which ice could be kept. Planning now to store next season's ice crop by erecting a building is more likely to see a few tons of ice stored away on the farm than if the construction is left until late in the fall.

There are several factors which must be borne in mind when planning to build an ice house. In the first place it should be as much as possible out of the sun and convenient to the house and dairy. The orchard or north side of the building is a very suitable place, provided adequate drainage can be secured. No matter how well the ice is stored there is bound to be a certain amount of melting and this water must be allowed to drain away in order to prevent it causing a further waste of ice. Loose, gravelly soil will usually furnish sufficient natural drainage, but on heavy soil it is advisable to make an excavation and lay three-inch tile, then fill the trench with stones or gravel. Have the floor of the excavation sloping slightly towards the drain. It is necessary to provide for circulation of air through the top of the ice house. Failing to do this permits the stagnant air to become quite warm which will cause heavy waste of the ice below. A



Sectional View of Concrete Ice House.

ventilator in the roof or a latticed opening in each gable will provide ventilation. The bottom of the ice house should be banked with earth to keep warm air from gaining access beneath the ice. Some material must be used to provide insulation, or, in other words, to ward off the direct rays of the sun and to prevent the heat radiating towards the ice. To erect a building with properly insulated walls, which will avoid the necessity of using insulating material around the ice, is very expensive. It requires several thicknesses of lumber, building paper, a dead-air space and a space filled with finer shavings or similar material. Where sawdust is used around the ice the building need not be elaborate.

A cheap type of ice house can be built with a few cedar posts and some rough lumber. Place the posts about six feet apart and three or four feet in the ground. The boards may be nailed on the inside or on the outside as desired. A gable roof can be made by using two layers of boards lengthwise so that the cracks between the lower boards are covered. This will shed the rain fairly well. However, the roof should be good on an ice house, as rain getting through will soon destroy

a large quantity of the ice. If an opening is left at the eaves and a ventilator placed in the ridge of the roof circulation of air will be provided for.

A costly building is not necessary if the principles previously mentioned are adhered to. The amount of ice required for a season depends upon the number of uses to which it is put, the size of the herd and the intensity of the heat during the summer. It is advisable to have about one and one-half tons of ice per cow. If it is to be used for other than cooling milk a larger quantity than this should be figured on. A ton of ice will occupy forty cubic feet; therefore, for a herd of ten cows about 700 cubic feet of space would be required for ice alone, or a building 10 by 9 by 8 feet would be large enough, provided it was not necessary to leave space for sawdust or planer shavings to provide insulation. At least one foot of insulating material should be allowed for on the top, bottom and four sides of the ice where a single-ply board wall is used.

In Bulletin 207, on Ice Cold Storage on the Farm, a combined ice house and cooling room is illustrated and described. The ice house is 10 feet square and 10 feet high; 2 by 4 inch scantling are doubled for sills, and on this 2 by 4 inch studding is erected at 24-inch centres, and a plate made of the same material placed on top to carry the joists. Two by four-inch material placed at 16-inch centres is used for rafters. The sides are boarded on the outside with drop siding and the space between the studding filled with sawdust. Allowing room for the sawdust on all sides, twelve tons of ice can be stored quite conveniently. If the studding were boarded on the inside and the space packed with dry shavings, a layer of building paper applied and then a layer of matched lumber, it would be possible to dispense with sawdust, or at least very little would be needed around the ice. Without the sawdust the building would hold twenty tons of ice. When building an ice house a small cooling room could quite easily be built in conjunction with it. The walls could be insulated and the cold air from the ice allowed to circulate through the cooling room. However, unless the walls were properly insulated there would be a considerable waste of ice, although probably no more than where the ice is taken out each day.

Where no sawdust or shavings are used with the ice, what is known as the Hanrahan system of cold storage gives very good satisfaction. The insulation of the walls given in Bulletin 207 is as follows: The studding is first strapped with 2 by 2 inch put on horizontally and spaced, to which inch-matched boards are tightly nailed and each joint covered with a 2-inch bevelled batten. The inside of the studding is sheathed with one-inch matched lumber, to which is tacked a layer

POULTRY.

Rations For Hens and Chicks.

At Macdonald College, Que., Prof. Jull has had particularly gratifying results with his poultry this spring. Egg production throughout the winter ran well over fifty per cent., and in June it was up to sixty-five per cent. Considering the large flock on hand this is a very good egg yield. While large open-front houses are generally used for laying stock, the colony houses are also made use of. Although low temperature prevailed last winter the hens were healthy and made good records in the open-front houses, showing that warmth is not an absolute necessity for egg production, providing the birds are housed in a dry building which has proper ventilation. The colony houses most in use are 8 by 12 feet in dimensions. They are grouped during the winter to facilitate feeding the hens, but are drawn out on the range for rearing chicks in the summer. They have gable roofs, and are so constructed that a straw loft can be put in for wintering the hens. This tends to keep them drier than if there were an absence of straw. A house of this size will accommodate twenty-five hens, or is sufficiently large for brooding about two hundred chicks.

The laying hens are fed a mixture of two parts wheat, two parts corn and one part oats twice a day. They are also given one feed of wet mash and have dry mash in the hopper. The grain is fed in a litter. During the summer the birds run on an alfalfa range. Both wet and dry mash consists of a mixture of 200 pounds bran, 100 pounds cornmeal, 100 pounds middlings, 100 pounds oatmeal or ground oats, 50 pounds beef scrap, 20 pounds charcoal, and a pinch of salt.

Twenty-five hundred chicks are being raised this year, and so far the mortality has been exceptionally low. Eggs were hatched in an incubator and the chicks were placed in the colony houses where heat was supplied to the brooder by oil stoves. The first feed consists of bread and hard-boiled eggs. After a few days cracked grain is given and the bread and eggs substituted by a mash which consists of a mixture of 35 pounds bran, 20 pounds cornmeal, 20 pounds oatmeal or ground oats, 10 pounds middlings, 10 pounds beef scrap and 5 pounds charcoal. This mash is fed in a hopper and two feeds of it are given wet; one in the middle of the forenoon and the other in the afternoon. Grain is fed night and morning. Under this system of feeding the birds are making rapid growth. As the birds are on free range they are able to secure a liberal amount of green feed.

Poultry Feed High in Price.

During the week ending July 24 the egg market became considerably firmer. Freshly-gathered eggs are reported to be very scarce, and indications are that prices will further advance. Extra-quality eggs were selling to consumers in Toronto at from 43 to 44 cents; the week mentioned; in Montreal, 42 to 45 cents; Winnipeg, Calgary, and Regina, 35 cents; Vancouver, 45 cents; and Ottawa, 38 to 40 cents. At country points the price was considerably below this. Arrivals of live and fresh-killed poultry were lighter and the market a little firmer. The only varieties selling at the present are fowl, broilers and spring ducks. At some points fowl have dropped considerably in price, from 11 to 13 cents being paid. The export outlook for eggs has improved. Enquiries and offers have been received from Britain both for immediate and fall shipments. There is, however, no fresh-gathered surplus at present available.

Reports this week show no improvement in the feed situation. Corn in many parts is virtually off the market. Feed wheat is available in most parts, but has advanced from 15 to 20 cents per cwt. in Eastern Canada. In Saskatchewan district farmers were receiving from \$1.00 to \$1.35 per bushel for feed wheat, depending upon the quality. They are able to meet the local requirements, but no surplus is recorded in sufficient quantities for shipment to other parts.—Egg and Poultry Markets Report, Live Stock Branch.

The Broody Hen.

When calling at a place recently we counted fifteen broody hens out of a flock of about fifty, or nearly a third of the birds kept were spending their time in idleness and becoming thinner every day, besides furnishing an excellent place for vermin to propagate. Once a hen goes broody it is an indication that laying has ceased for a few weeks, probably for the season unless means are adopted to check the broodiness. If the hen is placed in a wire-bottomed coop that is suspended a little above the ground as soon as she goes broody the broodiness will be broken up in a few days, and if fed heavily the hen will commence laying in two or three weeks. But, instead of going to this trouble many leave the hens alone, and the egg yield continues getting smaller as the season advances.

It would be more profitable to sell the hens as soon as they go broody, or around the first of July when prices for fowl are generally fairly good. From then on the price lowers as young stock are marketed until low-water mark is reached by October. There would be a saving of feed and a higher price for the birds if they were disposed of before young stuff is ready for sale. Either sell the broody hen or place her in a wire-bottomed coop for a few days. Non-producers at this time of year bring down the average of the good birds.

of paper and 2-inch dressed battens at 18-inch centres. Over these put another layer of paper, then sheet with matched lumber fixed vertically, and on the inside of this 2 by 1-inch battens are placed vertically at 18-inch centres from floor to ceiling. The spaces between the studding should be packed firmly with dry sawdust or planer shavings. It will be seen that a building of this nature requires a large amount of lumber.

Very satisfactory ice houses have been constructed of solid concrete or concrete blocks. These are more permanent than a wooden structure. The accompanying illustration from Farmer's Bulletin 623, United States Department of Agriculture, gives an idea of the method of construction. The foundation trenches should be dug about two and one-half feet deep and ten inches wide and filled with concrete, in the proportion of one to seven or eight. Above the ground concrete blocks may be used if desired, or forms can be made and the slope-wall built up. Reinforcing rods should be used in the walls and it is advisable to space them about 18 inches apart, placing part of them about three inches from the outside of the wall and the other half three inches from the inside of the wall. It will be necessary to place bolts in the soft concrete for holding the plate and the door frame. From the illustration it will be noticed that there is a 4-inch layer of concrete, then a layer of asphalt, cork board, more asphalt and then concrete. The cork-board insulation should be erected on the walls and ceiling in a half-inch bed of cement mortar mixed in the proportion of one part of cement to two parts clean, sharp sand. The interior finish is made by applying one-half inch of cement. Where gravel does not have to be hauled for the expense of a cement ice-house is not great. The size can be increased according to the number of cows in the herd. It is not advisable to erect a smaller house. The larger the bulk of ice the less the percentage waste. A pile of ice about ten feet square and ten feet deep does not waste away very quickly if properly insulated. There are many uses for ice on every farm. A supply on hand prevents the souring or spoiling of many products. It is generally believed that ice is of greater economic importance in the country home than in the city home, as city folk are able to buy perishable goods as required which country people are unable to do. If time permits erect an ice house this fall and be prepared to store a portion of this winter's crop.

Keep the Cows Free From Flies.

Flies are a nuisance in the dairy and cause a considerable loss in the milk flow every year. It is unreasonable to expect a cow to give as much milk when she is tormented with flies as she would if kept free from these pests. There are a number of good fly repellents on the market which if applied frequently will go a long way towards keeping the cow's body free from this nuisance, but a good deal can be done by destroying the breeding places of the pesky things. Flies breed and feed on the manure pile and decomposing material. Therefore, if the barnyard and stable were kept clean flies would not be so numerous. It is not always possible to keep the yard clean during summer as the field on which the manure is to be spread is generally in crop, consequently the manure remains in the yard until after harvest. However, the cleaner the surroundings the freer the stock will be of flies. Besides the commercial fly repellents it is possible to mix up a very good repellent by using one-half gallon of fish oil, one-half pint of coal oil and four tablespoonfuls of crude carbolic acid. Mix thoroughly and apply to all parts affected with flies. A mixture of ten parts lard and one of pine tar, thoroughly stirred together and applied with a brush a couple of times a week, will keep flies away. Avoid using material that might taint the milk.

Where the cows are milked in the stable the windows should be darkened, as it will tend to keep the cows free from flies during milking. Strips of cloth might be hung down from the top door-jam so that they will touch the cows and brush off many flies. As the loss due to flies is believed to be greater than the average person estimates it to be, every effort should be made to reduce their numbers or at least prevent them from tormenting the stock.

Not only do the cows suffer but calves do not do well when bothered with flies. Some means should be adopted to keep the flies off them, as it is essential that the young stuff be kept thrifty. Cool, clean, partially darkened stalls is the ideal place for young calves during the hot days, and under these conditions flies will not be numerous on their bodies. The bull also requires protection, and some have found that a light sheet is a good thing to use to keep the flies from drawing blood. From now until cold weather sets in is fly season, and the breeders who protect their stock from these pests will no doubt have better animals, and their returns will be larger than those who allow their herds to fight for themselves.

Plan For Letting Out Cattle.

There is a breeder living in Appleton, Wis., who gives farmers stock on a five-year contract. The farmer is to feed the cow and raise all the heifer calves during this time and the bull calves until they are nine months old. At the end of nine months this breeder takes them. He gets all the bull calves. The breeder also changes the bull every two years without expense to the farmer. At the termination of the five years the breeder takes his fifteen or the original lot, (fifteen is the smallest number he lets out) and the balance are divided between the farmer and this breeder equally. The farmer gets all the milk for this term of his contract. He also gets a certificate of registration with each of his cows and heifers.—The Ayrshire Quarterly.

There may be birds in the flock that are as unprofitable as the broody ones. It is rather difficult to pick them out, but one indication that a bird is taking good care of herself is the color of the shanks and ear-lobes. Bright, yellow shanks on a hen tell in almost as many words that she has laid very few eggs. The same may be said of the light breeds when the ear-lobes are a rich creamy white. While it might have paid better to have culled the flock a month ago, it is advisable to do it now rather than wait until fall. There would be more money in poultry if culling were practiced three or four times a year.

Records of Flocks in Competition.

The end of the thirty-sixth week of the International egg-laying competition, at Newark, found a large number of the 101 pens still making high records. From 25 to 30 eggs a week, from a pen of five birds, was quite common, and several pens made as high as 34 eggs the week beginning July 4. This means that only one hen missed one day. A pen of White Wyandottes, entered by the Pennsylvania Poultry Farm, stood second to Tom Barron's pen of Wyandottes, they being only 32 eggs behind and going strong. One pen of White Leghorns laid 798 eggs in the thirty-six weeks, and Columbian Rocks got as high as 781 eggs. The record of the highest pen to date mentioned was 867 eggs. The 505 birds laid 59,650 eggs in the thirty-six weeks.

HORTICULTURE.

Raspberry Cane Borer.

I am sending a stem of a raspberry bush which has been injured by some insect. How can the plant be protected against it? I find the injury only on young shoots, about six inches from the top. Will it spoil the bushes for next year's crop? We have broken off and burned the ones affected; should anything more be done? What is the life history of this grub?

Brant Co., Ont.

R. H.

The cane was injured by the raspberry-cane borer, which at times does considerable damage. The insect makes two girdles around the cane about a half inch apart and between these the eggs are laid. When the larvæ bores down in the pith of the cane causing the injured portion to wilt and die. Control measures are to cut off and destroy the wilted parts a short distance below the bottom girdle. This injury is caused by what is known as the long-horned beetle. The beetles appear during the month of June and the female deposits the eggs in the singular manner previously mentioned. The girdles impede the flow of sap, causing the upper portion of the plant to wither. The young larvæ drill down the centre of the stem, consuming the pith. It is full grown by about the end of August and it remains in the cane during the winter. The full grown beetle gnaws its way to liberty the following June. They are liable to cause a considerable reduction in the crop owing to the destruction of the canes. However, it is possible to keep them under control by cutting below the lowest ring as soon as it is noticed. This will ensure the destruction of the eggs. Later in the season it will be necessary to cut considerably lower down in order to get the grub.

Storage Place For Vegetables.

I desire to store a quantity of vegetables, potatoes, cabbages, apples, etc., and would like to have some information regarding the construction of a storage place. My idea was to put a good deep cellar in the ground with cement walls and roof. What ventilation would be required? How thick should the walls be, etc?

Wentworth Co., Ont.

F. W. B.

A number of people are resorting to the concrete root cellar built separate from the house for the storing of fruit and vegetables. Root-houses have been made of lumber, split logs or sawn slabs set on end with a spread of about 8 feet at the bottom and coming together at the top. The structure was then covered with earth to keep out the frost. This form of root-house, while easy to build and proving efficient for a few years, rots out in time consequently it is advisable to use more permanent material. Sufficient warmth to prevent freezing and dryness to prevent rotting are two essentials of a root cellar. With a dry location an excavation can be made several feet deep; in fact, we have seen cellars built in a bank which eliminates the necessity of hauling earth for covering. However, all situations are not suitable for this and some are forced to build on the level and then bank with earth. The size will depend on the amount of material to be stored. It is advisable to have it wide enough as so to permit of a passageway with bins on each side. Make the excavation the desired size and then set up forms for holding the concrete during construction. A wall about six inches thick would be sufficient if made in proportions of one to seven or eight. If building above ground wire or iron rods should be used for reinforcing the corners. A passageway should lead in from one end and sufficient light can be admitted through glass in the door, or a window could be put in the opposite end. By laying iron girders on the walls and using woven wire, a flat roof could be put on. However, an arched roof is not difficult to build if you have some half-inch material which will bend readily. This is used to hold the concrete in place while it sets. Where a considerable

quantity of potatoes and roots are stored it is advisable to have openings in the roof for filling, but where only a small quantity of vegetables is to be stored they might be carried in through the door-way. Ventilation is necessary and may be provided by imbedding tile or lengths of sewer-pipe in the concrete roof. Galvanized tin hoods can be fastened on these to keep out the rain. The bottom opening of the ventilator should be adjustable so as to permit of keeping the temperature as near a certain point as possible. A four-inch concrete floor proves satisfactory. When building it may be necessary to put in pillars to support the roof. By inserting bolts or blocks of wood in these pillars you will have something to which to attach supports for the bins. Where the cellar can be put practically underground banking up is saved; where built above ground the thickness of earth to put around the walls will depend on the severity of the winter.

Vegetables Not Weeds.

It seems difficult to keep weeds out of the farm garden. They persist in growing up and choking out cultivated plants. Early this season the weather was particularly favorable to the growth of weeds, as the excessive rainfall has prevented man making a successful attack on them. The weeds found in the average garden are mostly annuals which could be eradicated if care were taken to prevent them seeding for a couple of years. However, with the rush of harvest and fall work the garden is frequently allowed to take care of itself, with the result that pigweed, purslane, chickweed, etc., mature and scatter their seeds to start a new crop the following year. A good deal of hoeing could be saved in the future if these weeds were kept from maturing seeds. This is not all, every weed takes moisture and plant food for its development and gives nothing in return. It takes well on to as much nutrient to grow a large branching pigweed plant as it does to produce a beet or a carrot. Weeds can be spoken of as robbers as they take valuable material from the soil and give little of value for it. In return, in fact they lessen the value of the garden by rendering it unsightly. Applying stable manure in the spring sometimes adds new weeds to the garden unless it has been thoroughly heated to destroy the germination of the seeds.

The most intensive farming on the place is done in the garden, and if properly fertilized and given attention during the growing season the land yields large returns. Too many do not appreciate the value of a farm garden and complain at having to spend a few hours hoeing and weeding, yet it is doubtful if the time could be utilized to better advantage. It is surprising the amount of stuff that can be grown on a few square rods of land properly worked. The radish, lettuce, carrots, beets, tomatoes, etc., used from day to day to say nothing of what is stored for winter use from the average well-kept farm garden, would bring a considerable sum on the market. One might do without such articles of diet if they were not grown on the place, but they tend to make a saving in preparing a meal and are considered healthful. A garden will produce many dollars' worth of wholesome food if properly looked after, but a full crop of vegetables cannot be expected if weeds are permitted to have full sway. Keeping the weeds down this year leaves fewer to hoe out next year. By all means have a garden, be it ever so small, but endeavor to keep the weeds in subjection.

New England Fruit Outlook.

EDITOR "THE FARMER'S ADVOCATE":
Recent estimates put the New England peach crop this season at between 1,000,000 and 1,200,000 baskets, equalling the enormous crops of two and four years ago. The peach growers association, lately organized, have undertaken to secure improved transport and distribution, and have started a peach canning campaign among housewives. The expectation is that the crop will be marketed at about 55 cents per basket. In contrast with orchard conditions here the prospects point to another big apple crop in New England. W. T.

FARM BULLETIN.

Three Million New Acres For England.

We are going on with our policy of breaking up 3,000,000 acres of grass land for harvest in 1918. The Government recognizes fully that the task of breaking up these 3,000,000 acres of grass in England and Wales, can only be accomplished by means of a greatly increased supply of labor, of horses and of machinery. All these matters are engaging its attention. Consideration is also being given to the necessity of securing adequate quantities of seed. In the meantime it is necessary to apportion to each county its proper share of the task. In preparing this apportionment an attempt has been made to equalize so far as possible the task set to the different counties, as it is recognized that many of the grass counties could not return at once to the conditions of 1872 without sacrificing a considerable quantity of dairy stock, and also that some of the principal arable counties may reasonably be asked to plough more land than would restore the area of arable in 1872. Consideration has also been given to such factors as the number of dairy stock kept in each county in proportion to the area of permanent grass; the custom in certain counties of leaving down temporary leys for several years; the extent to which the quality

of the land makes it specially suitable for producing good crops of cereals; and a general review of the local conditions of each county. It will be for the County Executive Committees, with the assistance of their District Committees, to apportion the increased area to be ploughed to the various districts and parishes, and ultimately to each individual farm. For this purpose it will be necessary to obtain particulars of the cropping, etc., of each farm, and to make a complete survey of the county in order to see that the land to be ploughed is rightly selected. The Board of Agriculture propose to arrange for the tabulation in parish schedules of particulars from the returns of the cropping and live stock of every holding over 20 acres in England and over 10 acres in Wales, and these schedules will be sent to the Executive Committees as they are completed.

In selecting the land to be ploughed, Committees have been told that they must constantly bear in mind that it will not be enough merely to secure their quota of grass land that is to be ploughed up. The task is to grow enough food to render ourselves independent of imported supplies, and for this purpose the land to be ploughed must be such that will produce at least average crops of corn and potatoes. It will not be sufficient merely to plough up the poor grass land, as such land will not produce good crops without fertilizers, and the supply of fertilizers is necessarily limited. Therefore, it will be necessary to plough up some of the good grass land. This country possesses in the good grass land the only reserve of fertility in Europe, and in the present crisis we must make use of it to produce the food which the nation needs. It will be necessary to retain sufficient grass to preserve the dairy stock, since the supply of milk must be maintained to the full; but in this connection every effort should be made to extend the system of arable dairying. With regard to other stock it will, owing to shortage of shipping, be necessary in the near future for both the army and the civil population to obtain a much larger proportion of their meat from home sources than has hitherto been the case, and for this reason, and also in view of the shortage of feeding stuffs, a large reduction of our flocks and herds will be essential in any event.

The case for a great increase of arable cultivation is overwhelming from all points of view. It is the earnest desire of the Government that the agricultural revolution should be a peaceful one, and they are confident that the appeal which is made to the farmers' patriotism, backed as it is by the guarantee against loss contained in the Corn Production Bill, will not be made in vain. The guarantee referred to is one of fixed prices for a number of years. In some counties there seems to be an idea that dairy cows and other cattle can only be kept when large areas of permanent grass land are available. At a recent meeting of the Essex War Agricultural Committee, various estimates were given of the number of acres of grass land necessary for each cow when the produce of arable land was used to help with their keep. The Hon. E. G. Strutt said that he found one acre per cow quite enough. Mr. Currie, who farms for cow-keeping, thought three-quarters of an acre sufficient. These opinions of practical agriculturists show what can be done with arable land. It must not be forgotten that the total food production of arable farming may be about four times as much as that from the area of permanent grass. By ploughing up grass, the same number of cows might be kept, and a large surplus of grain food for human consumption grown as well. Dairy farmers need not fear the new three million acres of ploughed land, when labor and horses and machinery are guaranteed them.

In view of the importance of providing seed wheat for the 1918 cereal crops the Government propose to acquire pure stocks of certain of the less plentiful varieties of autumn wheats. Crops in adequate quantity found after inspection to be suitable for seed will be purchased at a substantial premium above the milling price.

The County Executive Committees are already working on their task of preparing for 1918. Some farmers are "kicking" in a few areas. From what I am told, there are very few cases of obstructive tactics, and Mid-Cheshire is going to play its part in growing the 3,000,000 more acres of corn that the country needs to ensure our safety. There is one farmer in the Delamere area who has 75 acres under wheat—double last year's—and who intends to make it into a round 100 acres next year. Labor is the key to the whole trouble, but we are assured by Mr. Prothero, the Minister of Agriculture, that the work done on the land by soldiers has been a revelation. Relief is felt by farmers at the decision of the military not to disturb any more whole-time men.

ALBION.

High Quality Live Stock at Brandon Exhibition.

The weather was ideal for the Brandon Exhibition the week of July 16. It is estimated that over 100,000 people passed through the turnstiles to attend Manitoba's greatest annual agricultural event. The great pre-eminent feature of Manitoba's Provincial Fair has always been its live stock, and this year was no exception. The show received less support from Eastern and American herds than during past years; however, the gaps were adequately filled by studs, herds and flocks of Western breeders. The horse exhibit was not on the whole numerically as strong as last year; every breed showed more or less of a decrease in entries, due largely to the difficult feed and labor conditions that face the live-stock showman. While the entries were lighter seldom has the merit been of such remarkably high standard. There were 194 Clydesdale entries and 26 Percherons.

There was keen competition in all the cattle classes. There were seventy-four entries in Shorthorns, being twenty-six less than last year; seventy-five entries in Herefords, or eleven more than last year; and sixty-seven entries in Angus. The quality was of high standard, with Herefords commanding the keenest interest. Dairy cattle were out in greater numbers than at the Alberta shows. Higher finish has been seen in the show-ring, yet the entries were of genuine merit. All the breeds of sheep were represented, there being an increase of about seventy-five per cent. in entries which incited keen interest throughout the judging. The swine exhibit outclassed all others that Brandon has been privileged to witness.

There was an excellent display of dairy produce. In each class of butter there were fourteen to twenty-one entries and from four to eight in each class of cheese. Mr. Barr, who made the awards, claimed that he had never judged at any exhibition where so few poor samples were forward. The showing of butter was mainly from the three Western Provinces. Alberta took the lead in the top awards, while Manitoba and Saskatchewan did creditably with high-quality produce.

The Manitoba Agricultural College had an exhibit of sterling worth. It was artistic in its arrangement, was educative and was extensive. Each department of the College endeavored to lay emphasis upon a single important factor. An attractive display showed the comparative value of fertile and infertile eggs from the market standpoint. An exhibit which attracted a good deal of attention showed a miniature home, including trees, lawn and garden. Alongside of this was laid out a miniature farm inhabited by weeds and gophers. The weeds were shown in their natural state, which gave the farmer an opportunity of identifying them, and made it easier for the instructor to outline methods of eradication.

Live Stock Judges.—Robt. Graham, Toronto, Clydesdales and Percherons; Fred. Richardson, Columbus, Ont., Belgians; E. W. McLean, Winnipeg, Man., light horses; Leslie Smith, St. Cloud, Minnesota, Shorthorns and Herefords; Chas. Escher, of Botna, Ia., Aberdeen-Angus; Prof. A. M. Shaw, University of Saskatchewan, Holsteins and swine; A. J. Mackay, Macdonald, Man., sheep; W. F. Stephen, Huntingdon, Que., Ayrshires.

There were thirty-eight exhibitors of Clydesdales. Ben Finlayson secured the grand championship of his stallion Edward Garnet. Maggie Fleming won the grand championship ribbon for Thornburn and Riddle. The grand champion Percheron stallion was Alpine, exhibited by W. H. Devine. The champion female was Ruth from the stable of John Graham. Manitoba breeders were strongly represented in the Shorthorn classes. While competition has been keener in other years in a few classes, the stock was in good form and utility was in evidence in every class. J. A. Watt, of Elora, had a strong line-up and secured a share of the honors. The senior grand champion bull was Augusta Star, exhibited by J. G. Barron, with Excelsior, from the Watt herd, as reserve. Barron secured the junior championship ribbon on Master Missie, his senior yearling bull. Fairview Baroness Queen, exhibited by Barron, was the senior champion female, with Thelma 3rd, from the Watt herd, as reserve. J. A. Watt secured second place in the aged-bull class on Excelsior; first on junior yearling bull, Shenley Marquis; first on senior bull calf, Gairford Seal; third on junior bull calf, Gairford Stamp. In the female classes Watt secured third in the aged class; first and second on heifers two years old; second, third and fourth in senior yearling class; second in junior yearling; first in senior calf; first, third and fourth in junior calf.

L. O. Clifford, of Oshawa, was again successful in winning a fair share of the money. He had the junior champion bull in Brae Real 8th. The grand championship went to Arm River Stock Farm on Martin Fairfax. Clifford had the senior and grand champion female in Miss Armour Fairfax. Arm River Stock Farm had the junior champion female in Beauty Fairfax. The Ontario herd secured second and third in the aged-bull class; first in junior yearling; first and fourth in senior bull calf class. In the female classes first and fourth went to the same herd in the aged-cow class; second with a heifer two years old; first on junior yearling; first and third in senior-calf class.

The quality of the Aberdeen-Angus shown at Brandon this year was never higher. While a number of exhibitors were out, the main competition was between the herds of J. D. McGregor, of Brandon, and Jas. Bowman, of Guelph. McGregor had the grand champion bull in Black Abbott Prince, and the junior champion in Black Cap McGregor. Similar honors in the female classes went to the same herd on Majesty Queen and Pride of Glencarnock 3rd. The Ontario herd was second in the aged-bull class; first and second in class for bulls two years; second in senior yearling; fourth in junior yearling; second and third in senior calves, and first in class for senior bull calves; third and fourth in the class for aged cows; first and third in class for heifers two years; first and second in senior yearling heifers; third and fourth in senior calves, and fourth in junior heifer calves.

There was keen competition in the Holstein classes, there being many good individuals in every class. J. Laycock, of Alberta, had the senior and grand champion bull in Korndyke Posch Pontiac, while the senior and grand champion female was Ruby Nig, from the herd of Clark & Sims. The senior and grand champion Ayrshire bull was Burnside Lucky Sensier, from the herd of W. Braid, of Manitoba. The highest honors in the female classes also went to the same herd on Lochfergus Snowdrop.

Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending July 26.

Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price		Good Steers		Receipts		Top Price		Good Calves	
	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	5,930	3,222	5,203	\$11.00	\$ 8.65	\$11.25	858	798	954	\$14.50	\$12.25	\$15.00
Montreal (Pt. St. Charles)	553	668	708	10.75	8.75	11.00	619	760	882	12.50	10.00	12.50
Montreal (East End)	823	746	663	10.75	8.75	11.00	518	432	591	12.50	10.00	12.50
Winnipeg	2,691	2,544	2,424	10.00	8.35	9.90	187	213	189	12.00	9.50	12.00
Calgary		1,182	528		6.50	8.00					8.50	9.50

	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	Same Week	Week Ending	Same Week	Week Ending	
Toronto (Union Stock Yards)	4,274	7,008	6,329	\$16.00	\$12.15	\$16.25	2,326	1,990	2,143	\$14.50	\$14.50	\$16.25
Montreal (Pt. St. Charles)	1,180	840	1,122	16.25	12.25	16.50	708	1,155	515	14.00	11.50	*10.00
Montreal (East End)	869	496	903	16.15	12.25	16.75	554	818	350	14.00	11.50	*10.00
Winnipeg	5,617	7,578	5,479	14.50	11.00	15.15	43	731	155	11.00	10.00	12.00
Calgary		3,472	2,248		11.00	14.35		385	97		9.50	12.50

*Quotations per head.

Market Comments.

Toronto (Union Stock Yards.)

With 4,300 cattle on sale at the Yards on Monday and with a limited demand from packers and butchers, quotations were reduced on all classes of cattle by 35 to 50 cents per hundred. Trading was very slow throughout the morning, and very few cattle were weighed up by noon; twelve hundred head remained unsold at the close of Monday's markets and with receipts of 700 head on Tuesday, prices barely held steady. A further decline of 25 to 40 cents followed on Wednesday, when an additional supply of 800 head was received. Trading closed on Thursday with a weak undertone at prices 75 cents to \$1.00 lower than those prevailing a week ago. Two extra good steers sold on Monday at \$12 per hundred, while the top price for a straight load was \$11, this figure being paid for a load of heavy steers from Chatsworth, Ontario. On Tuesday an extra fine load in the same class realized \$12 per hundred, while on Wednesday \$10.50 was the top price paid on a medium quality load. The bulk of the sales of heavy steers was between \$11.25 and \$11. Quality was lacking in the lighter weights of butcher cattle and for steers of one thousand to eleven hundred pounds, \$10 to \$10.50 was the ruling range on Monday, while by Wednesday this was reduced to \$9.75 to \$10.25. Light butcher steers and heifers sold from \$9.50 to \$10.25 for choice, and common quality ranged from \$7 to \$8.50. Bulls were in slow demand at prices ranging from \$5.50 to \$8.50, while good cows sold from \$7.50 to \$8.25 and medium from \$6.00 to \$7.00 with canners and cutters bringing \$5.00 to \$5.75. The calf market suffered in sympathy with butcher cattle, and a decline of \$1.00 per hundred was noted during the week. Choice veal sold from \$13 to \$14 per hundred; medium calves from \$10 to \$12, and common from \$7 to \$9.

With 900 lambs on sale on Monday, trade was inactive and prices were lower by \$1.75 to \$2.00 per hundred, with \$14.50 being the top price paid, the bulk being weighed up at \$14.00 to \$14.25. With a liberal run on Wednesday a further reduction of 50 cents was made, and \$13.75 was the ruling price for choice lambs of 70 to 85 pounds, while culls and light lambs of 50 to 60 pounds sold from \$10 to \$12 per hundred. Light sheep brought \$8 to \$9 and heavy sheep \$6.50 to \$7.50, with common sheep selling at \$5 to \$6.

Hogs on the Monday market were weighed up at \$15.75 for selects, but packers' quotations were \$15.25 for the balance of the week. However, with the Buffalo market remaining fairly strong and with light receipts following, the buyers were unable to purchase at these prices. With three hundred hogs on sale Tuesday the prices varied from \$15.50 to \$15.75 per hundred for selects, while on Wednesday they advanced 20 to 25 cents, the bulk selling at \$15.75 to \$15.90. On Thursday, with only four hundred on sale, the market closed with a strong undertone at prices ranging from \$15.75 to \$16 for selects.

Of the disposition of live stock from the Union Stock Yards for the week ending July 19, Canadian packing houses purchased 600 calves, 84 butcher bulls,

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	15	\$10.75	\$10.25-\$11.00	\$12.00	10	\$11.00		\$11.00
STEERS good	576	10.38	9.50-10.75	11.00	104	10.40	\$10.25-10.50	10.75
1,000-1,200 common	35	9.28	8.50-9.75	9.75	18	9.65	9.50-9.75	9.75
STEERS good	1,204	9.75	9.25-10.25	10.50	29	10.00	9.50-10.40	10.40
700-1,000 common	423	8.22	7.75-9.00	9.00	65	9.00	8.75-9.25	9.40
HEIFERS good	256	9.92	9.50-10.50	11.00	17	10.00	9.75-10.25	10.50
fair	263	8.73	7.75-9.25	9.25	46	8.85	8.60-9.25	9.25
common	144	7.49	6.75-8.00	8.00	21	8.64	8.00-8.75	8.75
COWS good	943	7.71	7.25-8.25	8.50	16	8.50	8.25-8.75	9.00
fair	1,342	6.53	6.00-7.25	7.25	95	7.44	7.00-7.75	7.90
BULLS good	41	7.99	7.50-8.50	8.75	5	9.50	7.00-10.00	10.00
common	89	6.40	5.75-7.00	8.00	80	7.77	6.00-9.00	9.00
CANNERS & CUTTERS	111	5.53	5.25-6.00	6.00	37	5.65	5.25-6.50	6.75
OXEN					2	7.75	7.75-	7.75
CALVES	858	13.47	12.50-14.50	14.50	619	10.49	8.00-12.50	12.50
STOCKERS good	158	7.48	7.00-8.00	8.00				
450-800 fair	178	6.74	6.25-7.50	7.50				
FEEDERS good	144	8.43	8.00-8.75	8.75				
800-1,000 fair	8	8.00	7.50-8.25	8.25				
HOGS (fed and watered)	3,746	15.76	15.25-16.00	16.00	902	15.82	15.50-16.25	16.25
selects	94	15.65	15.25-16.00	16.00	12	15.50	15.50-16.00	16.00
heavies	283	14.52	14.25-15.00	15.00	125	15.57	15.50-16.00	16.00
lights	9	10.68	10.25-11.00	11.00	2	11.00	10.00-12.00	12.00
stags	142	12.61	12.25-13.00	13.00	139	12.80	12.50-13.25	13.25
sows								
SHEEP heavy	23	7.54	6.50-8.00	8.00	43	9.41	9.00-9.50	9.50
light	283	8.45	8.00-9.00	9.00	12	9.60	9.50-9.90	9.90
common	111	6.21	5.00-7.00	7.00	28	8.75	8.50-9.00	9.00
LAMBS good	1,640	13.68	13.25-14.50	14.50	86	13.51	13.00-14.00	14.00
common	269	13.07	10.00-14.00	14.00	539	12.81	12.50-13.00	13.00

176 heavy steers, 4,216 butcher cattle, 8,239 hogs, and 1,587 sheep and lambs. Local butchers bought 354 butcher cattle, 184 hogs, and 488 sheep and lambs. Shipments to country points totalled 25 stocker calves, 73 milch cows, 223 stockers, 19 feeders, 261 hogs, and 49 sheep. Shipments to United States' points were made up of 164 calves, 169 butcher cattle, and 66 stockers and feeders. The total receipts of live stock from January 1 to July 19, inclusive, were: 126,333 cattle, 30,299 calves, 19,615 sheep, and 264,084 hogs; compared to 131,978 cattle, 27,311 calves, 24,479 sheep, and 237,160 hogs, received during the corresponding period of 1916.

Montreal

Although the supply of butcher cattle during the past week was slightly below normal, it was evidently sufficient to meet the demand, and prices scarcely held at last week's level. Most loads of good heavy butcher cattle sold from \$10 to \$10.35 per hundred, with only a very few small picked lots above the latter price. One pair of choice heavy steers brought \$11 per hundred. Good light butcher steers and heifers sold mostly from \$9.50 to \$10 per hundred, while butcher cows sold at the wide range of \$6.75 to \$9. There were very few good bulls on the market and those offered sold from \$9.25 to \$9.50, while the bulk

of the common kind brought around \$8, with bologna bulls selling from \$6 to \$7. Calves were in fair demand early in the week and good veals sold up to \$12.50 per hundred, but later in the week prices declined about 50 cents.

Sheep and lambs were in good demand. Lambs sold up to \$14 per hundred for good heavy stock, while several sales of light eastern lambs were made at \$13. Sheep sold slightly above last week's quotations.

The hog market was somewhat unsettled and erratic. On Monday selects sold mostly at \$16.25 per hundred, off cars, but on Tuesday prices eased off nearly 50 cents per hundred and on Wednesday \$16.15 off cars, was about the top price. On Thursday there was more active buying and several lots sold at \$16.50. Packers seem inclined to make a greater reduction than usual for rough heavy hogs. More of this class are arriving than is usually the case.

PT. ST. CHARLES.—Of the disposition of live stock from the Yards for the week ending July 19, Canadian packers and local butchers purchased 635 calves, 30 canners and cutters, 103 bulls, 8 heavy steers, 494 butcher cattle, 1,122 hogs, 170 sheep and 345 lambs. Shipments back to country points were made up of 56 stockers. Shipments to United States' points totalled 247 calves.

The total receipts of live stock from

January 1 to July 19, inclusive, were: 20,171 cattle, 20,902 calves, 7,488 sheep and 37,986 hogs; compared to 23,347 cattle, 30,260 calves, 10,780 sheep and 50,372 hogs, received during the corresponding period of 1916.

EAST END.—Of the disposition of live stock from the Yards for the week ending July 19, Canadian packers and local butchers purchased 434 calves, 643 butcher cattle, 903 hogs and 350 sheep. Shipments to United States' points were made up of 96 calves.

The total receipts of live stock from January 1 to July 19, inclusive, were: 19,900 cattle, 31,973 calves, 7,800 sheep, and 24,543 hogs; compared to 18,404 cattle, 30,419 calves, 11,262 sheep and 30,496 hogs, received during the corresponding period of 1916.

Winnipeg.

The market for butcher cattle was slow during the forepart of the week, but closed on Thursday in a brisk condition. The receipts of butcher cattle were moderate during the week. Good butcher steers held steady but medium and common grades suffered recessions in prices, especially those of the female grades. The bulk of these were of common quality, and sold from \$7 to \$8 per hundred, although a few individual sales were made at slightly higher prices. While a few choice steers sold up to

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\$9.50 per hundred, and one at \$10, majority of them sold from \$8 to \$8.75. Good butcher heifers and cows were in demand at prices 25 cents per hundred below the closing quotations of last week, butcher cows selling from \$7 to \$8. Good springers and cows with calves at foot, under a good demand, maintained prices on a level with those of the previous week. Bulls and oxen were lower in price, and the eastern demand for these grades was slower. The best oxen sold at \$8.25 per hundred with the bulk of the sales ranging from \$6.50 to \$7.50; butcher bulls brought from \$5.75 to \$6.75, and the quality of this class was only fair. Good veal calves sold freely throughout the week at \$11 per hundred, while those of heavy weight brought from \$7.50 to \$10. The stocker and feeder market was slower at prices 25 cents below those of the previous week, choice quality realizing from \$6.50 to \$7 per hundred. Sheep and lambs were lower, lambs selling at \$11 per hundred and sheep at \$6.50 to \$8.

Select hogs sold on Friday at \$14.50 per hundred on an unsettled market, and suffered a recession in price of 50 cents per hundred over the week end. On Wednesday, however, there was renewed activity and under the influence of a good demand from both eastern and local buyers, select hogs advanced 25 cents per hundred. Heavy hogs sold at \$12 per hundred, lights at \$13.50, sows at \$11, and stags at \$10. The market closed unchanged on Thursday, with prospects of higher prices for the next week.

Of the disposition of live stock for the week ending July 19, Canadian packing houses purchased, 870 butcher cattle, 4,856 hogs and 16 sheep and lambs. Local butchers bought 67 calves, 375 butcher cattle, 126 hogs and 159 sheep. Shipments back to country points were made up of 70 stocker calves, 3 bulls, 872 stockers, 199 feeders and 371 hogs. Shipments to United States' points totalled 262 butcher cattle, 71 stockers, and 81 feeders.

The total receipts of live stock from January 1 to July 19, inclusive, were: 57,749 cattle, 3,641 calves, 1,299 sheep, and 195,429 hogs, received during the corresponding period of 1916.

Buffalo Markets.

Cattle.—Of receipts, totalling 5,500 head last Monday, better than 1,600 head were Canadians, running mainly to grass shipping steers, but including quite a few loads of mixed butchering stuff. Shippers from the Dominion maintained that prices of late have proven more satisfactory here than at some of the other markets, hence the liberal number. Last week was Jewish holidays, as a result of which the demand for shipping cattle was not so strong, and coupled with this situation were large runs in the West, resulting in prices on shipping steers declining from a quarter to half a dollar, the extreme decline being on the medium and fairish kinds of steers. Best Canadians sold from \$12.50 and \$12.65 to \$12.75, and sales on the plainer and less desirable grades were made on down to \$11.50. The record price of \$13.50 was paid for a baby heifer out of Canada. Best native steers, on the dry-fed order, sold at \$13.25, with yearlings making that price. On a fair and medium kind of butchering steers market was a quarter lower, while female stuff generally sold at about steady prices. Bulls sold a shade lower, with the tops \$9 to \$9.25, and

stocker grades running from \$6 to \$7. Milk cow and springer demand was strong and these moved at firm prices. Offerings for the week totaled 6,000 head, as against 4,825 head for the previous week, and 4,125 head for the corresponding week last year. Quotations:

Shipping Steers.—Choice to prime natives, \$13.25 to \$13.75; fair to good, \$12.25 to \$13; plain, \$11 to \$11.50; very coarse and common, \$10.50 to \$10.75; best grass Canadians, \$12.50 to \$12.75; fair to good, \$11.25 to \$12.25; common and plain, \$10.50 to \$11.

Butchering Steers.—Choice heavy, \$11.50 to \$12; fair to good, \$10.50 to \$11.25; best handy, \$11 to \$12; fair to good, \$10.25 to \$10.75; light and common, \$9 to \$9.50; yearlings, choice to prime, \$12 to \$13; fair to good, \$11 to \$11.75.

Cows and Heifers.—Best heavy heifers, \$10 to \$11; best butchering heifers, \$9 to \$10; fair butchering heifers, \$8 to \$8.75; light and common, \$7.25 to \$7.75; very fancy fat cows, \$9.50 to \$10; best heavy fat cows, \$8.50 to \$9; good butchering cows, \$7.25 to \$8; medium to fair, \$6.50 to \$7; cutters, \$6.25 to \$6.50; canners, \$5 to \$5.50.

Bulls.—Best heavy, \$9 to \$9.50; good butchering, \$8 to \$8.75.

Stockers and Feeders.—Best feeders, \$8 to \$8.50; common to fair, \$7 to \$7.50; best stockers, \$7.25 to \$8; common to good, \$6.50 to \$7.

Milchers and Springers.—Good to best, in small lots, \$90 to \$115; in carloads, \$70 to \$85; medium to fair, in small lots, \$65 to \$70; in carloads, \$55 to \$60; common, \$40 to \$50.

Hogs.—Prices, under light receipts, were on the jump every day last week. Monday, which was the low day, top was \$16.15, bulk sold at \$16, with commoner kinds going as low as \$15.75, but before the week was out, or on Friday, common hogs sold up to \$16.40, and the good ones reached \$16.50 and \$16.60. Throwout lights and pigs sold mostly from \$14.25 to \$15.50, good roughs ranged from \$15 to \$14.50, some fancy ones made \$15; thin sows went as low as \$7.50, and stags ranged downward from \$13. Last week receipts were 10,400 head, against 18,973 head for the week before, and 19,000 head for the same week a year ago.

Sheep and Lambs.—A steady trade from day to day was witnessed on sheep and lambs last week. Top lambs sold mostly at \$15.50, a few reached \$15.75, and culls went from \$13.50 down, some common light southern springers going as low as \$11.50. Good yearlings brought around \$13, with some for breeding purposes at \$13.50; wether sheep are quotable around \$10 and \$10.25 for the best, and ewes went from \$9.50 down. For the past week receipts were 2,200 head, as compared with 1,617 head for the week previous, and 3,900 head for the same week a year ago.

Calves.—Market the first four days of last week occupied a very unfavorable position, Jewish holidays and the hot weather being responsible for the mean trade. Monday, Tuesday, Wednesday and Thursday buyers landed top sorted lots down to \$14 and \$14.25, and but few culls reached better than \$12. Weighty rough, fat calves were not wanted by most buyers, and they had to take the range of from \$7.50 to \$10. Friday's market was considerably improved, prices jumped \$1 per cwt. over Thursday. Best veals brought up to \$15 and \$15.25, and culls went from \$13 down. Receipts last week were 2,200 head, as against 2,683 head for the week before, and 2,050 head for the same week a year ago.

Toronto Produce.

Receipts of live stock at the Union Stock Yards, Toronto, July 30, consisted of 85 cars: 1,808 cattle, 96 calves, 217 hogs, 277 sheep and lambs. Active market. Choice butchers 25 cents higher. Balance of cattle steady. Thirty loads extra choice steers sold at \$12.20; lambs and calves fifty cents higher; sheep strong. Hogs, \$16.25 fed.

Breadstuffs.

Wheat.—Ontario, No. 2, winter, per car lot, \$2.55, nominal; No. 3, winter, per car lot, \$2.52, nominal, (according to freights outside). Manitoba track, bay ports.—No. 1 northern, \$2.34½; No. 2 northern, \$2.31½, nominal.

Oats.—Ontario, No. 2 white, not quoted. Manitoba oats, No. 2 C. W. \$4½c.

Barley.—Malted barley, nominal. Peas.—According to freights outside; No. 2, nominal.

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

Rye.—No. 2, nominal. Flour.—Manitoba first patents, in jute bags, \$12.90; second patents in jute bags, \$12.40; strong bakers', in jute bags, \$12.00. Ontario, winter, according to sample, in bags, \$10.75 to \$10.85.

Hay and Millfeed.

Hay.—Track, Toronto, extra No. 2, per ton, \$11.50 to \$12; mixed, \$9 to \$10 per ton.

Straw.—Car lots, per ton, \$8 to \$8.50, track, Toronto.

Bran.—Per ton, \$35. Shorts.—Per ton, \$40 to \$41; middlings, per ton, \$44 to \$45.

Good feed flour, per bag, \$3.25.

Hides and Wool.

Prices delivered, Toronto: City hides.—City butcher hides, green flat, 22c.; calf skins, green, flat, 27c.; veal kip, 22c.; horse hides, city take off, \$6 to \$7; city lamb skins, shearlings and pelts, 60c. to 90c.; sheep, \$2.50 to \$3.50.

Country markets.—Beef hides, flat, cured, 20c. to 21c.; deacons, or bob calf, \$1.75 to \$2.50 each; horse hides, country take off No. 1, \$6 to \$7; No. 2, \$5 to \$6. No. 1 sheep skins, \$2 to \$2.50; horse hair, farmers' stock, \$37.

Tallow.—City rendered, solids, in barrels, 13c. to 14c.; country solid, in barrels, No. 1, 12c. to 16c.; cakes, No. 1, 15c. to 17c.

Wool.—Unwashed fleece wool, as to quality, fine, 58c.; coarse, 56c.; washed wool fine, 70c.; coarse, 65c.

Country Produce.

Butter.—Butter declined slightly on the wholesales during the past week, selling as follows: Creamery, fresh-made pound squares, 36½c. per lb.; creamery solids, 36c. per lb.; dairy, 30c. to 32c. per lb.; separator dairy, 33c. per lb.

Eggs.—New-laid eggs firmed, and were quite scarce, selling at 42c. per dozen wholesale.

Cheese.—The cheese market kept about stationary. Old cheese selling at 30c. per lb.; new at 23c. to 24c. per lb.; and new twins at 24c. per lb.

Poultry.—Fowl of all classes kept practically unchanged being quoted as follows: (live weight) spring chickens, 20c. to 22c. per lb.; spring ducks, 15c. per lb.; roosters, 14c. per lb.; fowl under 5 lbs., 16c. per lb.; fowl 5 lbs. and over, 19c. per lb.; turkeys, 18c. per lb.

Beans.—The bean market is very slow at the present time, very little being sold—the prices, however, kept high at \$9.50 to \$10.50 per bushel, according to quality—Lima beans selling at 18c. to 19c. per lb.

Honey.—There is very little on the market to offer; prices remaining unchanged.

Wholesale Fruits and Vegetables.

Apples arrived quite freely during the past week and were mostly from Delaware—selling at \$2.25 to \$2.50 per hamper.

Bananas declined as they too were received in larger quantities, selling at \$3 to \$3.50 per bunch.

Cantaloupes, have been rather scarce, and as the demand was heavy, the price advanced: Flats selling at \$2.25 and twins at \$3.75 per case. They are coming from both California and Arizona.

Cherries.—Sweet cherries have been quite scarce, and the bulk have showed waste, but there has been an improvement in the quality the past couple of days. They now sell at 60c. to \$1.25 per 6-qt. basket, a few extra choice bringing \$1.50. Sour cherries came in fairly well, selling at 30c. to 50c. per 6-qt. basket, and 60c. to \$1.25 per 11-qt. basket.

Currants.—Black currants varied greatly in quality and sold at \$1.25 to \$2 per 11-qt. basket, and 75c. to \$1 per 6-qt. basket. The red variety came in freely and sold at 30c. to 60c. per 6-qt. basket and 45c. to 75c. per 11-qt. basket; also at 5c. to 7c. per box.

Gooseberries kept about stationary in price at 30c. to 60c. per 6-qt. basket and 50c. to \$1.25 per 11 qts., also at 6c. to 8c. per box.

Lemons advanced. The Verdillis selling at \$6, \$6.50 and \$7 per case.

Oranges weakened somewhat; the price ranging from \$4 to \$4.75 per case.

Peaches.—California peaches have been rather scarce, selling at \$1.35 per case; the Georgias have generally been of splendid quality selling at \$1.50 per 6-basket crate.

Peas.—California peas of choice quality were received and sold at \$3.50 per case.

Plums.—California plums proved a ready sale at \$2 to \$2.75 per 4-basket case.

Raspberries.—The raspberry shipments steadily increased and at last the price weakened—some poor quality selling as low as 13c. per box, the others ranging from 16c. to 22c. with some exceptionally fine ones bringing 25c. per box.

Strawberries are gradually waning, towards the end of the week the price declined to 10c. to 15c. per box.

Tomatoes came in in greatly increased quantities and sold at \$1.75 to \$2.25 per 11-qt. basket for No. 1's and \$1.25 to \$1.50 per 11 qts. for No. 2's. The hot-house selling at 20c. per lb. for No. 1's and 13c. to 15c. for No. 2's.

Watermelons have not been quite so plentiful—ranging from 40c. to 75c. each; a few extra large ones going at \$1.

Vegetables generally have been in very poor demand the past week. Beans came in like an avalanche and dropped from \$1 to \$1.25 per 11-qt. basket down to 25c. to 50c. per 11-qt. basket in a few days. Cabbage has absolutely no call for it, and is rapidly glutting the market. Carrots and beets brought from 15c. to 20c. per dozen bunches.

Cauliflower continued to be shipped lightly, selling at \$1.50 to \$2.25 per case.

Celery.—Some very fine home-grown celery brought \$1.25 per dozen bunches—while that from Kalamazoo sold at 40c. to 50c. per dozen.

Cucumbers increased in quality and declined in price, selling at \$1 to \$1.50 per 11-qt. basket.

Peas firmed during the early part of the week and became almost unsalable at the close, selling at 35c. to 40c. per 11-qt. basket.

Green peppers are gradually increasing, and now sell at 50c. to 75c. per 6-qt. basket, and \$1 to \$1.50 per 11-qt. basket.

New potatoes declined—the imported barrels selling at \$5 to \$5.25, and home-grown 11 qt. baskets at 60c.

Vegetable marrow continues to be shipped in—in increasing quantities and is now selling at 40c. to 90c. per 11-qt. basket according to pack.

Montreal Produce.

Horses.—Last week there was practically no demand for horses. This was doubtless due in large part to the hot weather and the general tendency to defer until a more agreeable occasion any business which can stand over. Prices were unchanged being as follows: Heavy horses, weighing 1,500 to 1,700 lbs., \$225 to \$275 each; light draft, 1,400 to 1,500 lbs., \$175 to \$225; small horses, \$150 to \$200 each; culls, \$75 to \$125; and choice saddle or carriage horses, \$200 to \$250 each.

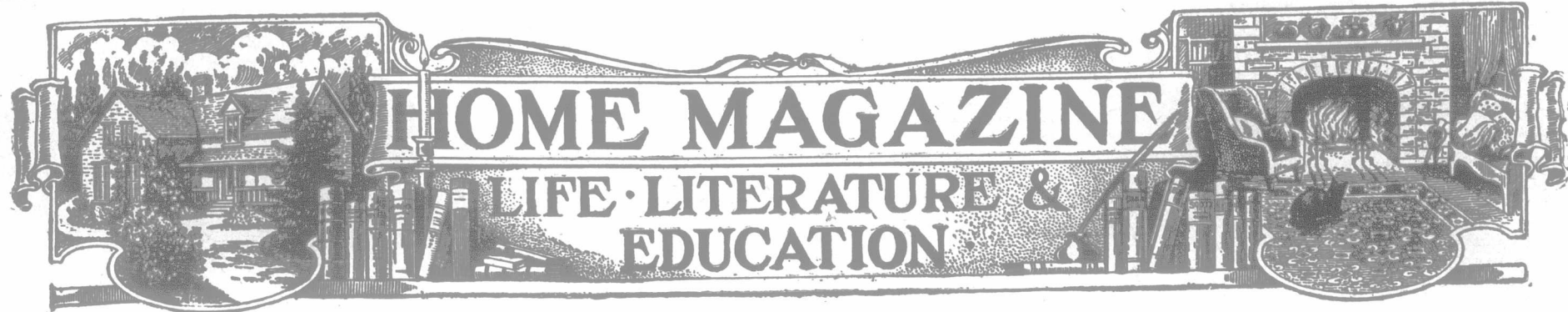
Dressed Hogs and Provisions.—The market for dressed hogs was not particularly active last week. The price showed little change, being a little lower than a week ago, at 23c. per lb. for abattoir, fresh-killed. Hams and bacon were in moderate demand, and prices were about steady, at 37c. to 38c. per lb. for Windsor selects, and 39c. to 40c. for boneless, breakfast bacon selling at 33½c. to 34c. Small hams sold at 30c., mediums, weighing from 20 to 25 lbs., 28c., and heavier, 26c. Cooked hams sold at 26c. 28c. per lb. Barreled pork sold at \$51 to \$52 per bbl. for family pork, and mess pork at \$48 to \$50 per bbl. Lard was steady at 25c. to 25½c. per lb. for pure.

Potatoes.—The market was on the verge of declining to prices based on a fair crop, it was declared. The receipts of Canadian grown potatoes were quite light but are expected to increase right away. Prices were \$4 to \$6 per bbl. for new. A few old potatoes were going a'begging at \$1.50 per bag of 80 lbs.

Maple Syrup and Honey.—There was practically no activity in the demand for either honey or syrup. A fair quantity continues to be dealt in in the aggregate. New business of volume will probably await the passing of the hot spell. Honey was 15c. per lb. for white clover comb and 13c. for extracted; brown clover comb was 13½c. and buckwheat honey 11c. Maple syrup, choicest, was about \$1.70 per gallon tin. Good syrup about \$1.35 per gal. and lower grades, \$1.25. Sugar was 15c. per lb.

Eggs.—Fresh eggs are very hard to get in the country even at the advanced prices. On the other hand, demand is active. As a consequence, the market

Continued on page 1238



At the End of the Road.

BY MADISON CAWEIN, in *The Bellman*.

This is the truth as I see it, my dear,
 Out in the wind and the rain:
 They who have nothing have little to fear,
 Nothing to lose or to gain.
 Here by the road at the end o' the year,
 Let us sit down and drink of our beer,
 Happy-Go-Lucky and her Cavalier,
 Out in the wind and the rain.

Now we are old, hey, isn't it fine,
 Out in the wind and the rain?
 Now we have nothing, why snivel and
 whine?
 What would it bring us again?
 When I was young I took you like wine,
 Held you and kissed you and thought you
 divine—
 Happy-Go-Lucky, the habit's still mine,
 Out in the wind and the rain.

Oh, my old Heart, what a life we have
 led,
 Out in the wind and the rain!
 How we have drunken and how we have
 fed!
 Nothing to lose or to gain.
 Cover the fire now; get me to bed.
 Long is the journey and far has it led.
 Come, let us sleep, lass, sleep like the dead,
 Out in the wind and the rain.

Yarrow.

The Yarrow's beauty; fools may laugh,
 And yet the fields without it
 Were shorn of half their comfort, half
 Their magic—who can doubt it?

Yon patches of a milky strain
 In verdure bright or pallid
 Are something like the deep refrain
 That times the perfect ballad.

The meadows by its sober white—
 Though few would bend to pick it—
 Are tempered as the sounds of night
 Are tempered by the cricket.

It blooms as in the fields of life
 Those spirits bloom forever
 Unnamed, unnoted in the strife,
 Among the great and clever.

Who spread from an unconscious soul
 An aura pure and tender,
 A kindlier background for the whole
 Between the gloom and splendor.

Let others captivate the mass
 With power and brilliant seeming;
 The lily and the rose I pass,
 The Yarrow sets me dreaming.
 —ARCHIBALD LAMPMAN.

Travel Notes.

(FROM HELEN'S DIARY.)

Vevey, June 12, 1917.
 What a wretched night I had!
 Interesting to look back upon, but
 anything but agreeable at the time.
 Uncle Ned fairly shook with laughter
 when I related my nocturnal experiences,
 but Aunt Julia looked quite scandalized.
 To begin at the beginning I went to
 Fribourg to see *La Fete-Dieu*—a great
 religious procession which takes place
 there once a year. Fribourg being a
 Catholic city in a Catholic Canton,
 crowds of the faithful flock to the city
 for this event, which also attracts throngs
 of sightseers.
 As the procession takes place early
 in the morning I went to Fribourg the
 night before so as to be up with the lark
 and not miss anything. I was up with
 the owls and the nighthawks too—but of
 that later.
 I engaged a room by telephone and
 arrived at the hotel about 11.30 p. m.
 The office was full of people clamoring
 for rooms. Some got them, some didn't.
 I was one of the "didn'ts".

"But I engaged a room by telephone,"
 I said to the concierge.
 "Never received it," was his laconic
 reply.
 "But where am I to go?" I demanded
 hotly, "I can't walk the streets all night."
 He looked at me as if he were sizing me
 up, lifted his gold-trimmed cap slowly
 and scratched the top of his head re-
 flectively.
 "I might possibly get you a room
 some place. I'll see what I can do."
 He disappeared—reappeared—dis-
 appeared again. Telephoned. Conferred
 in low tones with a swarthy, dark-browed
 piratical-looking porter, and then turning to
 me said:
 "I can give you a very good room in
 a house near by."
 I hesitated.
 "A front room" he continued, "from
 which you will have a fine view of the
 procession".
 That clinched the matter. "I'll take
 it," said I promptly, feeling that after
 all Fate was giving me a reserved seat
 in the front row.
 The swarthy porter slouched over,
 picked up my bag and indicated by a
 jerk of the head that I was to follow him.
 He also nodded to a man who was
 sitting there. The man picked up his

went on and on, and turned this way and
 that, and at last I began to wonder if—
 And just then the porter dodged into
 a black crack between two high houses.
 In the crack was a stone stairway and
 up this stairway we stumbled. I couldn't
 see anything—not even the sky.
 The porter stopped. A bell jangled.
 A light flashed—a door was opened by
 a haggish-looking old woman rolled in a
 red shawl. The light streamed through
 the door and lit up the face of the man,
 and I recognized him instantly as being
 the same person who had sat opposite
 me in the train that evening.
 The porter and the old woman ex-
 changed words in some incomprehensible
 dialect. She turned and peered at me
 curiously and then looked at the man.
 I began to feel as if I were being led into
 a trap. Then my eyes fell upon my bag
 which the porter had placed on the floor
 by the door. While their heads were
 turned I grabbed the bag and bolted.
 How I got down the steps I do not know,
 or where I went when I got down. I
 walked and walked. The bag began to
 feel as if it were filled with bricks, and
 all at once, I realized that I was tired
 and wobbly. Then by a stroke of luck
 I "hit the trail" of the street car track.
 That gave me an inspiration. The name

blinked at me. No. There wasn't a
 vacant room left, he said, yawning. The
 salon? No. It was locked. Wasn't
 there a sofa any place I could have? No,
 (yawn). Wasn't there any place I could
 rest? No. (yawn, yawn).

"Then", said I, "I'll stay here".
 He nodded his head, yawned, stumbled
 away behind a screen. Then I heard
 a flop, and in two minutes a snore—he
 was asleep.

In that entrance hall I sat all night.
 A most depressing place it was—a high-
 ceilinged room with a stone floor, and
 six inhospitable cane chairs. A dim
 light was burning by the stairway,
 and all the shadows seemed to be alive.

Those six chairs! I changed from one
 to the other in the vain hope of finding
 one that was less uncomfortable than the
 others, but they were all equally rigid.
 No one who has not tried to sleep in a
 straight-backed cane chair can possibly
 realize what a thing of torture it can
 become on a too-intimate acquaintance.

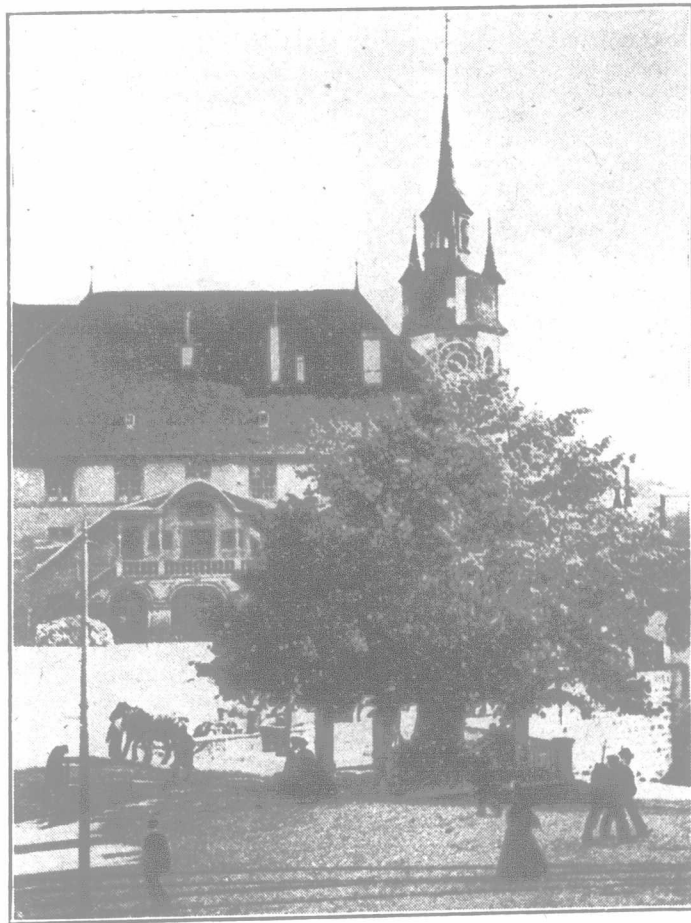
At intervals up till 2.30 a. m. the bell
 would tinkle, the sleepy porter would
 reappear—yawning, and open the door
 for some late-returning guests. Men, of
 course. The way they looked at me
 made my temperature rise. Rage is a
 good stove. The night became very cold
 —so cold that I shivered in my light
 summer suit. I began to long for more
 late arrivals so that I could get warmed up.

And the noises that emanated from
 behind that screen! Blood-curdling
 they were. After hours and hours of
 this agony I heard the joyful twitter
 of birds and knew that it was dawn.

Then I must have dropped off to sleep,
 for when I opened my eyes I was falling
 off the chair and had an awful crick in
 my neck. A new wide-awake porter was
 hustling energetically around with a
 broom. I pulled myself together and
 got up, quite stiff with cold. I went into
 the dining room and thawed myself out
 with a cup of hot coffee and after that
 the unpleasant adventures of the night
 faded from my mind like a bad dream.

Having nothing else to do I sallied out
 to explore. I followed the main street
 along to the point where it commits
 suicide. It is a street of great variety.
 It starts off from the railway station in
 most business-like and proper way and
 proceeds thus for several blocks, but as
 soon as it reaches the old part of the town
 its character completely changes, it
 becomes whimsical and moody; it
 meanders down hill this way and that
 as if it didn't know its own mind; it
 spreads out into little, open, sunny
 spaces, and then closes up again into
 gloomy canyons—dark, narrow, chilly.
 When it reaches the Cathedral it get
 into such a tangle that in a fit of des-
 peration it darts suddenly down hill
 to the edge of the bluff, gathers itself
 together determinedly, and leaps into
 the lower town.

Fribourg is wonderfully picturesque.
 It is perched on the top of a long, narrow
 peninsula around which sweeps the
 river Sarine. On either side of the
 river are high precipitous bluffs. A ring
 of hills of varying heights encircles the
 city, and over their verdant slopes
 clammers the old wall, with its curious
 medieval towers and gates. Beyond the
 hills and far away gleam the giant snow-
 peaks of the Bernese Alps. Fribourg
 is a very, very old place. It has been
 a town since 1178. The tower of the
 Cathedral was completed in 1492, the
 year Columbus and America met. But
 there is a famous tree in the city which
 antedates even that. It is a linden
 tree, planted in 1476. The history of
 this patriarch is so interwoven with that
 of Fribourg that on all important public
 occasions it is decorated and honored.
 According to the legend a young soldier
 was sent to Fribourg with news of a great
 victory. Exhausted, he fell to earth
 and died. Tightly clutched in his hand



The Historic Linden Tree in Front of the Town Hall of Fribourg.

bag, rose up and followed us. The por-
 ter evidently thought we were together.
 I glanced at the clock as I was passing
 out. It was half-past twelve.

Dark! The street was like the inside
 of a cave. No street lights, and the
 moon sulking under a heavy cloud.
 I had never been in Fribourg before,
 but I knew by the narrow streets and
 the way the buildings were huddled
 together that we must be in the old
 part of the town. It was really quite
 thrilling poking along in the darkness
 with a piratical-looking porter and an
 unknown man, and not know where
 I was going. Blacker and narrower
 and spookier became the street. We

"Terminus Hotel" flashed into my mind.
 I would follow the track to that hotel
 which was near the station. But which
 way? I struck out blindly and for-
 tunately chose the right direction.

When I reached the hotel it was dark
 and silent. Not a gleam of light any
 place.

I rang the bell.
 No answer.
 I rang again.
 Still no answer.
 I rang again furiously; I pounded on
 the door with my umbrella; I even kicked
 it in my eagerness to get in.

At last a sleepy-looking porter opened
 it. I went in. He rubbed his eyes and

was a branch of linden. This branch was planted on the spot where the young soldier fell, and it grew to be the giant tree so much revered by the populace. But it is a giant no longer, it has dwindled down to be a rather squat affair and has to be propped up on stone pillars.

Fribourg is not far from Berne, only an hour by train, but the character of the two towns is quite different: Fribourg is French and Catholic; Berne is German and Protestant. When Berne and Geneva and many other Swiss cities were swept by the wave of the Reformation, Fribourg resisted and clung to its old faith. Today it is the stronghold of Catholicism in Switzerland. It is full of churches, old and new; there are monasteries and convents, and Catholic schools of all sorts. There is also a fine University where courses are given in four languages.

The great procession which I went to see was quite worth a night's discomfort. The narrow streets, the curious medieval architecture, the glimpses of the high mountains beyond, and the cloud-flecked summer sky above, supplied just the proper setting for such a pageant. All along the route of march the buildings were ablaze with flowers and flags and tapestries, and signs and symbols of a religious nature. At the door of each house rose a young beech tree. These trees were in reality hugh boughs brought from the forest, planted in pails and wired to the houses. This is one of the old-time customs. At various open places on the route were beautiful shrines glittering with silver and gold and candles. Back of the shrines, stretched on the walls of the buildings were marvellous old tapestries brought from the convents and monasteries of Fribourg for the occasion.

The procession took an hour and a half to pass. There were 56 divisions, and sub-divisions innumerable. The various groups represented all classes of the population; civil and religious. It seemed to me there were miles and miles of black-robed priests and seminarists; and miles of black-gowned nuns and white-garbed girls in flowing veils; and miles of school children walking six abreast. All the societies of the town were there flying their banners; the university students were out in full force, groups of them in gorgeous medieval costumes, with gay caps and feathers and swords. There was a group of Polish people with bright red handkerchiefs on their heads; there were hundreds of French *internes* in blue-gray uniforms, and a group of English "Tommys" in Khaki; and there

were priests and bishops in magnificent vestments. Before each shrine there was a benediction and three beautiful chants were executed by a choir of seminarists.

A most charming and fascinating picture it made. It was just as if one of those treasured, old, historic paintings in the museums had come to life. I had to pinch myself to assure myself that I was not dreaming.

After the procession was over the cafés filled and all was life and gaiety. Feeling rather wabby I entered a café to get some coffee. Not a single vacant seat. Tried another—the same. Another—no luck. Discouraged I got in a street car and went back to the hotel, and who should be sitting directly opposite me but the man of the night's adventure. I recognized him instantly. I got out at the hotel. So did he. I went immediately to the dining-room. So did he. But I finished first and disappeared into my room and bolted the door.

But at the organ concert at the Cathedral in the afternoon, there he was again right in front of me. I wondered if he knew I was there. Was it just a coincidence? Was he following me? Was he perchance a spy? I studied the back of his head leisurely—he had very pretty grayish hair with a fascinating kink—and I noted that he had an extremely good profile. But it isn't safe to admire an unknown person these days, because he might turn out to be a Hun, and one doesn't want to be guilty of admiring a Hun.

Then the organ burst forth and I forgot all about the man—for the time being.

The organ in this Cathedral is said to be one of the marvels of Europe. The last number on the program was "The Storm", that show-off piece one hears so frequently in Swiss Cathedrals, selected apparently to show what the organ can do. It begins melodiously in a way suggestive of blue skies and flowers; one hears the Alpine horns calling across the valley and the answer from far away; one hears the church bells ringing and the chanting of hymns, (these organ storms always seem to take place on Sunday mornings). Then come the tinkling of bells, the cattle skurrying to shelter; the first rumblings of distant thunder; the approach of the storm; the rain, the storm breaks in all its fury—thunder, lightning, crash, bang, boom, then it dies away; the sun reappears, the Alpine horns call joyfully across the valleys, and the



The Alpine Horn.

people lift up their glad voices in a hymn of thanks.

After the concert I went to see the great suspension bridges which are one of the features of Fribourg, and which no visitor would think of missing.

The Man went too.

But that is another story.

Among the Books

"Confederation and Its Leaders."

[*Confederation and Its Leaders*, by M. O. Hammond. Price \$2.50. McClelland, Goodchild & Stewart, Publishers, Toronto.]

In many homes of Canada there hangs on the wall a copy of a painting by Robert Harris, entitled "Members of the Quebec Conference, October, 1864". The picture is realistic as well as historic. Against a background of three windows are grouped the members of the conference, Sir John A. Macdonald, standing, as the central figure, George Brown seated in the foreground, with Lilley and Tupper, Galt and McDougall, Cartier and Peter Mitchell, Mowat and Thomas D'Arcy McGee among the most prominent of a group made up of thirty-three men. These were the "Fathers of Confederation," the men out of whose deliberations—yes, and wranglings, too—grew the British North America Act of 1867, the famous Act that, just 50 years ago, drew the provinces of Ontario, Quebec, Nova Scotia and New Brunswick into the substantial nucleus of the great aggregate now known as the Dominion of Canada.

Recognizing the great possibilities of so stirring a story, and also the fact that all history is but a record of outstanding personalities, Mr. M. O. Hammond of Toronto has taken pains to draw together into one volume of 330 pages, *Confederation and Its Leaders*, a series of biographies of great Canadians during those momentous years of half a century ago.

The style and content of that famous series of sketches by A. G. Gardiner, embodied in "Prophets, Priests and Kings," "Pillars of Society," and "War Lords." What Gardiner has done for England in these books, Hammond has done for Canada in *Confederation and Its Leaders*. Under his pen live again: the famous old Conservative chieftain,

Macdonald, with all his winning personality and mastership of men; the scarcely less famous George Brown, "a powerful and tireless campaigner, holding his audiences far into the night with long speeches replete with chastisements of his opponents"; Sir Oliver Mowat, "a little, round-faced, earnest man always on the job"; William McDougall, nation-builder in the West; John Sandfield Macdonald, "financier"; the fiery Tupper and not less fiery Cartier; Dunkin of the "Dunkin Act"; Joseph Howe, the great Nova Scotian; and so on through the long list of men whose names, once household words throughout the Dominion of Canada, still echo as the years go on.

It is, perhaps, necessary that those who build the history of the present and the future shall know the history of the past. And—a point too often forgotten—the men and women who are building the events of to-day are just the "you and me" of these troublous yet wonderful days of the Twentieth Century. It is for this reason that we recommend Mr. Hammond's book. History is not "hard to take" when presented in the guise of the life-story of interesting and outstanding men, and in this fine book one can become absorbed as in a work of fiction—fighting old battles, meeting old doubts, scoring old triumphs. Nor has Mr. Hammond forgotten to record the little quips and sallies, the thrusts of wit—now humorous, now caustic—that made our parents and grandparents laugh fifty years ago.

Confederation and Its Leaders is one of the books which one will wish to keep in one's library, and re-read as the years go on. As a volume of reference, also, it will prove valuable.

[Note.—A copy of the picture spoken of at the beginning of this review appeared in these pages in June 28th issue.]

Up the Hill and Over—Fiction readers will be pleased to hear of a new Canadian novel by the Canadian writer, Isabel Ecclestone MacKay. A story of an attractive doctor and a winsome girl, two very-much alive children, a half-witted aunt and a mystery, contains enough possibilities to enchain the interest of the devotee of fiction, or, indeed, of the more studious, who wish to pass away, interestedly, the hours of a summer holiday.—The book is published by McClelland, Goodchild & Stewart, Toronto; price \$1.35.



Fribourg Costumes of 1830.

Hope's Quiet Hour

Written in the Books.

I saw the dead, small and great, stand before God; and the books were opened: and another book was opened, which is the book of life; and the dead were judged out of those things which were written in the books, according to their works—Rev. 20:12.

St. John was "in the Spirit" when he saw that great vision of the Day of the Lord—the Day of Judgment. The loved and loving Seer looked through the veil of the visible and saw spiritual and eternal realities which are invisible. In these tremendous days even the most thoughtless are sometimes constrained to look away from the things they can see with the eyes of the body, and follow—with the eyes of the soul—those young men who press in thronging hosts through the gates of death. Where are they now? What do we know of the life beyond the veil?

The Bible is the one authoritative book, which speaks with quiet certainty about the continuity of life. It tells us we shall be the same people there as here. The thoughts, words and actions of this life may seem to be fleeting and transitory, but their fruit will appear in due time. They are like seeds, which drop into the ground and may be forgotten—but the fact that we can't see them does not prove that they will not rise up again and face us.

Thoughts may be hidden within our own hearts, for a time, but they will sooner or later make their presence known in words and acts. Even when they are only "thoughts," they are not as secret as we imagine. Everyone is, to some extent, a "thought-reader"; and thoughts have a way of expressing themselves in bodily shape. I remember how I once said to a friend: "I did enjoy that sermon so much on Sunday morning." She remarked calmly: "Yes, I know you did. I could tell by the look of your back."

However, though it may sometimes be possible to hide one's thoughts from men, they are always open to God. The Psalmist declares that his troubles are noted in God's book. The prophet

Malachi says that God hears those who fear Him and talk together about Him, and their thoughts about Him are written in His book of remembrance.

Our Lord has warned us to be careful about "words", because by them we shall be justified or condemned.—S. Matt. 12:37. He has also solemnly declared: "Every idle word that men shall speak, they shall give account thereof in the day of judgment."

Then we turn to our text and find that on the judgment day God's records shall be produced, and bear witness for or against us.

We see something with our eyes or hear something with our ears, and it is at once recorded in the memory. Perhaps it is indelibly recorded; for it may be that we never entirely forget anything. It has often been said that men who are drowning see their past life in a moment of time. Perhaps God's record for each person is written on the tablet of that person's own memory. We may try to forget, and may even seem to succeed, but memory is not easily drugged. The thought which is buried out of sight under a crowd of other thoughts may suddenly rise up and confront us. The sin which is not bravely faced and brought in humble repentance to Him who can cleanse from sin, is like an ugly stain on the whiteness of the soul.

"Come unto Me", says our Saviour, "and I will give you rest". There is no rest possible to one who tries to hide, instead of confessing, his sin. No matter where he may travel he cannot escape from his own conscience, nor blot out the record of accusation which conscience—in severe faithfulness—holds up before his shrinking eyes.

Moses loved his wayward people, and—when pleading that God would forgive their idolatry—he said: "If not, blot me, I pray Thee, out of Thy book which Thou hast written".

But this unselfish desire could not be gratified: "The LORD said unto Moses, whosoever hath sinned against Me, him will I blot out of my book".

No one can make restitution for sin—his own sins or the sins of another—"for the redemption of their soul is costly, and must be let alone for ever." All the wealth of the world could not pay the price of one sin or blot it out.

We all need the Fountain once opened for sin and for uncleanness—that most costly ransom: The life-blood of our Lord

Jesus Christ, which has power to cleanse from all sin.

Have you any sins which spoil your peace? Have you tried to get rid of them by your own efforts—by forgetfulness, or by good works? Have you succeeded in washing out the ugly stains, or do they reappear in spite of all your care?

There is One who can give peace to weary and heavy-laden souls. I only know of One. Have you found another who can save from the power and deilement of sin?

When Pilate condemned to a terrible

call "little"—are recorded in the Book of God. The handwriting that was against us may be blotted out, (Col. 2:14), but only if we repent, confess and fight against our sins (Isa. 1.)

But there are many things recorded in God's Books which shine like gold in the sight of Him who loves His children.

"The look of sympathy, the gentle word Spoken so low that only angels heard, The secret act of pure self-sacrifice Unseen by men, but marked by angels' eyes—

These are not lost."

If many deeds of horror have blackened the pages of the great Record, since this war began, the recording angel must have written with lightning speed to inscribe all the deeds of beautiful kindness. We smile over some of them—how much joy there must be in heaven as the golden letters are written in the Book of Love.

Here is one story which made me smile as I read it yesterday.

"Three British soldiers, back from Mons with slight wounds, were taking the air on a bus. They offered their pennies, between war-like cries of, 'Are we down-hearted? No!' The conductor would not take the coppers, saying, 'You have a joy-ride, my boys.' Then he went to collect the fares of a stranger man, his wife, and their two children. It appeared they were Belgian refugees, and instantly the Tommies held up the conductor with, 'You've got to have our pennies for them. Are we down-hearted? No!'"

One of our Canadian "nursing sisters" in England, writing about the possibility of danger from air-raids, said: "I doubt if we could save many of our dear boys if the hospital is struck." Evidently she had entirely forgotten herself and her own danger. We may not be able to nurse wounded soldiers, but we may—if we will—put our own interests aside, as of little importance, and look for chances of helping others who are in need.

About 16 children were killed by bombs dropped on a school in London. The caretaker of the school was helping to carry out the dead. The third child he carried out was his own. He laid the body beside the others and went quietly on with his work.

How many people in these days are quietly putting aside their own anxieties



General Korniloff.

One of the great Russian leaders commanding the Russian armies in Galicia. He was born in a peasant home, and served in the Russo-Japanese war, when he was decorated for valor.

death the Prisoner he had openly proclaimed to be faultless, it was a mockery to try and wash off with water the innocent blood which stained his hands. If you had committed one of those deeds of "frightfulness," which have made the world shudder with horror in this 20th century, could any amount of of water wash the guilt from your soul, or make your hands clean?

Some sins look hideous to us, while we think little of unkind words or covetous desires. But let us remember that all sins—even those which we venture to



The Fathers of Confederation—Canada was 50 years old July 1 (See "Among the Books.")

- | | | | | | | | | | | | |
|----------------|--------------------|---------------|----------------|--------------------|-------------------|-----------------|-------------------|----------------|---------------------|---------------|----------------|
| Dewitt Barnard | W. A. Henry | E. Palmer | Ambrose Shea | F. R. T. Carter | John A. Macdonald | Geo. E. Cartier | Thos. H. Haviland | Peter Mitchell | R. B. Dickie | W. H. Pope | J. M. Johnston |
| W. H. Steeves | Charles Fisher | J. C. Chapais | E. B. Chandler | Adams G. Archibald | E. P. Tache | Alex. T. Galt | J. Cockburn | J. H. Gray | A. A. McDonald | Wm. McDougall | J. McCully |
| Edward Whalen | Col. John Hamilton | Gray | Geo. Coles | Alexander Campbell | Hector Langevin | Geo. Brown | Oliver Mowat | Charles Tupper | Thos. D. Argy McGee | | |

and sorrows, forgetting themselves in the determination to "do their bit for humanity! Are not these things noted in God's Book? He will never forget a cup of cold water given in the Name of Christ.

The remembrance of God's unailing Record both warns and inspires. It is a solemn thing to know that no thought is too secret, no omission of duty too trifling to be noted. And it is an inspiration to know that God notices and remembers the sunny smile and cheery word which make hearts grow lighter, and the little acts of kindness which brighten the home like sunshine. You may forget, others may not notice, but nothing is too small to be recorded in God's Book of remembrance.

"The kindly plans devised for others' good, So seldom guessed, so little understood, The quiet, steadfast love that strove to win Some wanderer from the woeful ways of sin—

These are not lost".
DORA FARNCOMB.

The Fashions.

How to Order Patterns.

Order by number, giving age or measurement as required, and allowing at least ten days to receive pattern. Also state in which issue pattern appeared. Address Fashion Department, "The Farmer's Advocate and Home Magazine," London, Ont. Be sure to sign your name when ordering patterns. Many forget to do this.

See under illustrations for price of patterns shown in this week's issue.

When ordering, please use this form:—
Send the following pattern to:

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Post Office.....
County.....
Province.....
Number of Pattern.....
Age (if child or misses' pattern).....
Measurement—Waist..... Bust.....
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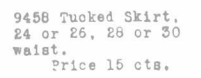
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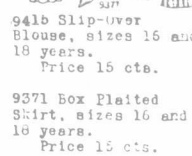
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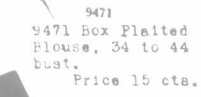
9464 Cape with Vent, one size.
Price 15 cts.



9438 Four-Piece Skirt 24 to 32 waist.
Price 15 cts.



9438 Four-Piece Skirt 24 to 32 waist.
Price 15 cts.



9471 Box Plaited Blouse, 34 to 44 bust.
Price 15 cts.



9432 Tucked Dress, sizes 16 and 18 yrs.
Price 15 cts.

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 for questions to appear.]

A Modern Development.

A few years ago the majority of city people would have been much surprised if anyone had stated authoritatively that "the country" had anything to teach them. Yet such is proving to-day to be the case. The Department of Agriculture is actually sending missionaries to the city—and the city is flocking, with willing ears, to hear. The other day I sat in a large room crowded with city women—who listened quite as interestedly as the audience at a Women's Institute meeting, too. The speaker was a young woman sent out from the agricultural headquarters at Guelph. She talked about canning vegetables and meats in the most approved, because most scientific way. Later will come demonstrators in canning fruit, and lecturers on scientific gardening.—The very things, my sisters, that you have long listened to in your Women's Institutes. It seems to me that eventually this is going to be a great bond between city and country, a thing that cannot come too soon, for each has much to give the other; and, anyhow, why should we not all be sisters? Why should there be divisions anywhere?

Why should we not live to pull ourselves and all others up to higher planes?

Below will be found the substance of Miss Powell's demonstration.

JUNIA.

The Mystery of Canning.

In the demonstration room (a well-lighted room in one of the schools) Miss Powell had ready all the necessary utensils for canning—jars, measures, vessels for washing, a wire basket for dipping, etc., also a supply of asparagus, beans and tomatoes. The blackboard behind the tables was covered with information in regard to important details in regard to canning in general.

As a preliminary she explained that the prime necessity in all canning is absolute sterilization and sealing—the sterilization achieved by such application of heat as will kill all the invisible bacteria, yeasts and other spores on the vegetables or fruit, jars and jar-tops; the sealing accomplished by using new rubber rings, having the jars absolutely filled with the boiling hot ingredients, and screwing or snapping the tops down while everything is still boiling hot.

In course of the demonstration it was shown that some things require longer boiling than others to kill all the germs that might set up ferment activities. Also it was pointed out that dish-cloths, which, even at the cleanest, may harbor some bacteria, should never be used about the jars after they have been sterilized.

Miss Powell gave two methods of canning—the one-day method, requiring

	Time for Blanching	Sterilizing	1-day Method
Asparagus	10 to 15 mins.	30 mins. on 3 days	60 to 90 mins.
Beans	5 to 10 "	30 " 3 "	120 mins.
Corn	10 to 15 "	30 " 3 "	120 "
Peas	5 to 10 "	30 " 3 "	120 "
Tomatoes	5 to 10 "	15 " 3 "	90 "
Beets	3 to 5 "		60 to 75 "
Carrots	3 to 5 "		60 mins.
Spinach, etc.	5 to 10 "		90 "
Cauliflower	5 to 10 "		60 "
Chicken			250 "
Fish			200 "

long boiling while in process, and the intermittent, three-day method. As this last is the most reliable, practically ensuring the killing of all spores, if properly carried out, it is the only one given here.

Roughly the method for all scientific canning consists of the following steps:

1. Have jars sterilized by thorough washing and boiling in clear water, tops and tin rims (the snap-down jars are better) also. Have jars provided with new rubber rings dipped in boiling water before they are put on.

2. While jars are sterilizing prepare fruit or vegetables.

3. If vegetables, blanch by keeping a short time in boiling water to remove the sliminess that may otherwise develop. After blanching, plunge into cold water to restore the crispness. A wire basket will be found useful here.

4. Pack into the jars and place in boiler, which should be provided with a rack to prevent jars from knocking.

5. Pour water into the boiler until it almost reaches the tops of the jars upon which the covers have been placed loosely. Put on cover of boiler. Let water come to a boil and boil the required length of time.

6. Tighten tops of jars and remove from the boiler, putting jars upside down.

7. Next day loosen tops and repeat the whole boiling process.

8. Third day loosen tops again, and repeat. Finally, when jars are cool put them away in a cool, dry, dark storing-place. If any of jars seem shrunken in contents it may be necessary to fill with boiling water, or from the contents of one of the jars before the final sealing.

In preparing the asparagus, Miss Powell cut the sprouts into even suitable lengths. The next point was to blanch them 5 to 10 minutes in boiling water. They were then lifted out, still in the wire basket, and given a cold dip, then they were packed neatly in the jars, and the jars filled with boiled water and put to boil.

The cauliflower was placed head down in water to which a little vinegar and salt were added, to remove all slugs and other insect life. The heads were then broken in pieces of convenient size, and blanched

5 to 10 minutes, then packed in jars, the jars were filled with boiled water and the boiling finished as above.

Miss Powell's method for peas was as follows: Wash before podding. Pod and blanch 5 to 10 minutes. Give cold plunge. To 10 cups peas allow scant 1/4 cup salt and 1/2 cup sugar. Cover with boiling water and boil 20 to 30 minutes. Before removing add 1 tablespoon lemon juice to each jar.

Beans.—String well and sort in even lengths or break in pieces. Blanch 5 to 10 minutes, and proceed exactly as for peas. Both peas and beans may be packed in the jars before boiling, the jars being filled with boiled water, or they may be first cooked in a kettle and then packed in jars.

Tomatoes.—May be stewed and put in jars, or may be placed in jars cut in two, without being peeled. When cooking anything in a kettle a few marbles placed in bottom will roll about and help to prevent burning. Tomatoes present very little difficulty in canning, as they keep well with half a chance. The one-day method is sufficient, if jars and fruit are both sufficiently sterilized. A little salt may be added.

Paraffined Tomatoes.—Whole, sound, ripe tomatoes may be kept two months fit for slicing by dipping them in melted paraffine. If any spot is uncovered it must be covered by more paraffine applied with a brush. Pack in a crock and keep in a cool, dry place. Miss Powell advised that the tomatoes for this be prepared not later than the third week in September.

The following table was on the blackboard, and may be found useful:

It will be noticed that only the one-day method is given, in this table, for beans, carrots, spinach, etc., but if one is nervous about the keeping qualities, one can use the intermittent, 3-day method, with about half an hour's boiling each day, more in the case of chicken and fish; 90 minutes is given as the length of time for boiling tomatoes for the one-day method. Most people, however, find half an hour sufficient unless they are done whole.

"Junia" would be very pleased to hear from anyone who has had successful experience in drying vegetables.

By the way, bulletins on canning may be obtained from the District Agricultural Representative in your district. These have been prepared by the Government, at considerable expense, for your use. You will do well to avail yourself of them.

Salmon—Mustard.

Dear Junia.—Still another coming for your kind help. Please tell me can I can salmon at home for home use, and how will gem jars do? Is it only ripe tomatoes that are canned? And how is the "made mustard" made? I have seen recipes that called for "made" and "French" mustard, but never knew what ingredients were in them.

New Glasgow, N.S. Mrs. W. H. M.

If you follow the directions given above for canning, exactly, you can do fish in this way at home. But remember; sterilization and sealing must be perfect. Skin the fish by slipping a knife under the skin, and remove the bones, then pack in solidly and use enough salted water to fill up completely. See directions above for time of boiling. I have heard that meat and fish may be fried and kept in crocks completely covered with melted lard, the lard to be melted off before using. It seems to me this is a somewhat greasy method but some might like it.

I have never heard of canning green tomatoes—they are made into pickles—but, of course, you may can them if you choose.

French Mustard.—Beat together 1 egg, 1 teaspoon sugar, 1 teaspoon mustard, 1/2 teaspoon flour. When creamy add 1 tablespoon vinegar, put on the stove and stir until it thickens.

"Made" Mustard.—Beat well together

8 tablespoons mustard, 4 of sugar and 4 of butter, a scant half teaspoon of cayenne pepper, juice of an onion, and vinegar to make into a paste.

Cottage Cheese.

Dear Junia.—Seeing in your last issue that cottage cheese could be made from skim-milk, I would like you to publish the receipt in "The Advocate" when convenient.

Put thick, sour milk on the stove and let simmer until it resolves into curd and whey. Take the curd out in a colander, and drain and press as dry as possible. Mix with it a little salt, and, just before using, if liked, a little sweet cream.

A more professional way is the following:

Take separated milk as it comes from the separator and cool to 75 degrees F. Add some buttermilk, about 1/4 per cent. to 5 per cent. of quantity, depending on sourness. When acidity is developed, (say in the afternoon, if the buttermilk has been added in the morning) add rennet extract; a very little will be required as 1/4 ounce is enough for 500 lbs. milk. Leave undisturbed until the curd is firm and begins to separate from the whey. Now drain in a cotton bag.

Cottage cheese curd, after salting, may be made into balls or cakes and wrapped in paraffined paper. It will keep 2 weeks or even more in a cold place.

Army Rank—Bride's Linen, etc.

Dear Junia.—Will you please answer through the Ingle Nook the few following questions:

What are the ranks of the army in their respective order?

Should a bride-to-be's linen be marked with the initials of her present or future name?

Is there anything that can be put on a border garden to keep the grass down when the shrubs are planted in sod?

Why are swans not kept more? Do they take any special care? Where could one procure some, and at what price?

Is there any way to rid the hair of oil when washing will not do it, and it has always been oily?

Thanking you very much, in advance, for your kindness. Sincerely yours, Muskoka.

The Army Rank in Canada is as follows: Field Marshal, General, Lieut.-General, Major General, Brigadier General, Colonel, Lieut.-Colonel, Major, Captain, Lieutenant, Sub-Lieutenant. Among non-commissioned officers are: Lance Corporal, Corporal, Sergeant.

Do not know any way of keeping grass down about shrubs except by hoeing and digging it out.

A "bride-to-be" marks her maiden initial on her linen. This is the rule, but I think it a very silly one, likely to lead to confusion in case it ever has to be sent out to a laundry. A wiser plan is to leave the linen unmarked until after the wedding, then work the "married" initials. There is usually plenty of time.

I really do not know why swans are not kept more. I suppose because roast swan has not become fashionable, and ducks, geese and turkeys pay better. Perhaps some reader can tell Madge where these birds can be bought.

Very oily hair should be washed very frequently, once every week or two. If it becomes greasy looking in the meantime dust it with powdered orris root or dry cornmeal and brush out thoroughly.

Cleaning Ostrich Ruff.

For Annie E. McL.—The ostrich neck ruff may be cleaned fairly well with dry starch and borax, powdered together and well rubbed in. Leave over night, repeating until clean. Flour or dry cornmeal may be used if preferred. If the ruff is very badly soiled it may be necessary to wash the strands very carefully with a lather of Ivory Soap, drying by hanging in an open window, and curling with the back of a knife. It might be better and safer, however, to send it to a professional cleaner.

Pictures.

Some time ago you gave the addresses of two houses where one could get copies of the world's most famous pictures at a very small cost. Would you kindly publish the addresses in your paper as I would

like very much to get some? Is a bread-mixer a satisfactory device?

Kindly answer these questions under the initials J. D., and you will greatly oblige.

Elgin Co., Ont.

J. D.

Very beautiful pictures may be got, at a very reasonable price, from the Perry Pictures Co., Malden, Mass. Write to them for a catalogue and prices.

A bread-mixer is very satisfactory when one has become used to it.

The Windrow

Emma Goldman, the anarchist, who lives in New York, has been sentenced to two years in penitentiary and a fine of \$10,000, for engaging in a conspiracy to obstruct operations of the selective draft law.

Plans are already mentioned for rebuilding the ruined cities of Europe. All modern improvements, according to scientific lines, will be introduced, including landing-places for airplanes.

A motor-car grocery store is one of the features of the farming country about Pine Bluff, Arkansas. It is 16 feet long, 6 feet wide, and 6 feet, 2 inches high.

Forty or more years ago the passenger pigeon filled the forests of America in millions—a living wonder of the New World. To-day can anyone find even a single nesting? For some years this question has been asked in vain, although backed for some time by a reward of \$1,000 to the one who first reported a pigeon's nest. Many reported the "find", but in every case the bird has proved to be the mourning dove. If this splendid species is gone, it will be the saddest case of wanton extermination in the history of bird-life in America. When the bird was plentiful so little care was taken of it that often only the breasts were used for food, the rest being wasted.

"At the end of this war it will probably be a quite demonstrable proposition that all nations have been immensely the losers economically from going to war and preparing for war. It is also indisputable that if all countries would abandon tariffs no trader in any nation would have anything to gain from wars for the conquest of the territory in which he desired to trade; it is true to triteness that if nations had no angry passions, no excessive populations, and no desire to monopolize anything, it would be quite unnecessary for any of them to quarrel with their neighbors, and that the resulting state of peace and amicable intercourse would be far more profitable economically to the individuals in each of them than the system of war and warlike rivalry in which they have lived in recent times."—From review of Mr. Lowes Dickinson's book, "The Choice Before us", (George Allan and Unwin, London, Eng., 6s.)

A process has been perfected in Sweden for the manufacture of a strong cloth fabric from peat fibre.

Mr. Philip Gibbs, the most frequently quoted, and in some respects perhaps the best, correspondent "doing" the war, tells, in his book, "The Battles of the Somme," some of the secrets of his calling. "Some people imagine," he says, "and some critics have written, that the war correspondents with the armies in France have been 'spoonfed' with documents and facts given to them by General Headquarters, from which they write up their despatches. They recognize the same incident, told in different style by different correspondents, and say, 'Ah, that is how it is done!' They are wrong. All that we get from the General Staff are the brief bulletins of the various army corps, a line or two of hard news about the capture or loss of this or that trench, such as appears afterwards in the official communiques. For all the details of an action we have to rely upon our own efforts in the actual theatre of operations day by day, seeing as much of the battle as it is possible to see (sometimes one can see everything, and sometimes nothing but smoke and bursting shells), getting into the swirl and traffic of the battle-fields, talking to the walking wounded and the prisoners, the men

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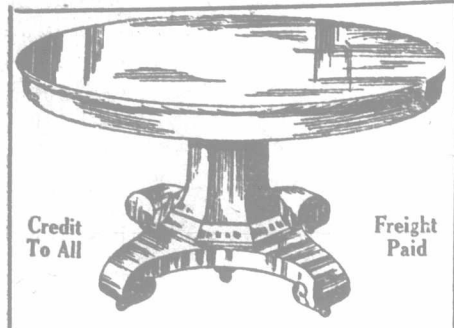
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going in and the men coming out, going to the headquarters of brigades, divisions, and corps for exact information as to the progress of the battle from the generals and officers directing the operations, and getting into touch as soon as possible with the battalions actually engaged. All this is not as easy as it sounds. It is not done without fatigue, and mental as well as physical strain. It takes one into unpleasant places from which one is glad and lucky to get back. But we have full facilities for seeing and knowing the truth of things, and see more and know more of the whole battle-line than is possible even to divisional generals and other officers in high command; for we have a pass enabling us to go to any part of the front at any time and get the facts and points of view from every class and rank, from the trenches to G.H.Q. Because the correspondents sometimes tell the same stories it is because we tell them to each other, not believing in professional rivalry in a war of this greatness. Our only limitations in truth-telling are those of our own vision, skill and conscience under the discipline of the military censorship. I have no personal quarrel with that censorship—though all censorship is hateful. After many alterations in method and principle, it was exercised throughout the battles of the Somme (and for months before that, when there was no conspiracy of silence, but only the lack of great events to chronicle) with a really broad-minded policy of allowing the British people to know the facts about their fighting men, save those which would give the enemy a chance of spoiling our plans or hurting us. If there had been no censorship at all, it would be impossible for an honorable correspondent to tell some things within his knowledge—our exact losses in a certain action, failures at this or that point of the line, tactical blunders which might have been made here or there, the disposition or movement of troops, the positions of batteries and observation-posts. These are things which the enemy must not know. So I do not think that during the whole of the Somme fighting there was more than a line or two taken out of one or the other of my despatches, and with the exception of those words they are printed as they were written."

The Beaver Circle

Little Bits of Fun.

"I guess my father must have been a pretty bad boy," said the youngster.

"Why?" inquired the other.

"Because he knows exactly what questions to ask when he wants to know what I have been doing."—Washington Star.

A certain Sunday school class in Philadelphia consists for the most part of youngsters who live in the poorer districts of the city. One Sunday the teacher told the class about Cain and Abel, and the following week she turned to Jimmie, a diminutive lad, who, however, had not been present the previous session.

"Jimmie," she said, "I want you to tell me who killed Abel."

"Ain't no use askin' me, teacher," replied Jimmie; "I didn't even know he was dead."—Harper's Weekly.

Katharine and her little friend Margaret found themselves seated next to one another at a party, and immediately became confidential.

"Molly told me that you told her that secret I told you not to tell her," said Margaret.

"Oh, isn't she a mean thing?" gasped Katharine. "Why I told her not to tell you!"

"Well," returned Margaret; "I told her I wouldn't tell you she told me, so don't you tell her I did!"

Senior Beavers' Letter Box.

The Autobiography of a Horse.

I'm a very pretty horse of a beautiful ebony color, only four years old, and so far my life has been very pleasant. My master called me Black Aster, and I wish to give you a clear description of all my adventures.

When I was a young colt only six months old, I was put in a pasture field with my mother and a great many others.

One day when I was frolicing about with my playmates, my attention was attracted towards a very pretty and interesting scene.

Away across the field I could see a road and a large battalion of soldiers parading. Most of the men were on foot, but ahead of them went four men on horseback and the horses were black like me, which made me happy. They were almost wild, and jumping around as if they felt very happy.

Just then my mother called to me and said, "This is a sight which you have never seen before. Perhaps some day you'll be going to the same place as those horses are."

I said, "Where are they going?"

My mother answered, "They are going to fight in a great battle."

I noticed that from one end of the battalion to the other it was almost three-quarters of a mile.

Not long after, when I was four years of age, I was sold as a war horse. Just then I thought of the others which I had seen that were so happy, so I thought that maybe I was going to fight in a battle, so I wondered what was in store for me.

For many days other horses and I drilled for the war. On July the twenty-fourth, nineteen hundred and sixteen, I was put on board a ship, and for about one week we travelled across the ocean. When the ship stopped I landed on French soil.

Shortly after that I reached the firing line. I shivered and shook with fright as the bullets whistled over my head, I even stopped and did not want to go on, but my master urged me, so I dashed straight ahead and carried my master so bravely that he praised me. There we had a terrible fight. My master was shot and then I was left without an owner, and it was a dreadful sight to look around me and see wounded, dead and dying soldiers and horses. It almost made my heart ache.

I looked a little way across the field and there I saw a man without a horse, he saw me and at once came to me, and again I had an owner, and I was glad. We charged at the enemy with fierce madness, but I was forced back, because a bullet hit my leg and broke it. I lay on the battlefield almost a day, well until that fight was over. Then a farrier came and looked at me and said, "that I might be brought back to Canada and be used as a cart-horse, as I was not fit for anything else. This was the only time of my life that I did not enjoy, but, of course, you cannot live all your life in enjoyment." EDITH SMIBERT.

Dear Puck and Beavers.—I wrote once before, and though not seeing my letter in print I got courage enough to write again. I wrote another piece of poetry a long time ago, so I am writing another hoping to see it in print.

A Day in June.

DAWN.

The robin sings his song for breaking day,
The apple blossoms fragrance scent the air,

The dandelions blossom by the way,
No other morning e'er could be so fair.

NOON.

The world is quiet now for it is noon,
The bees have stopped their busy humming sound;
The robin has forgotten his sweet tune;
So silence reigns in all the country round.

EVENING.

The sun is sinking low in western skies,
The frogs are chanting now a merry tune;
And from a nearby swamp a night bird cries,
Sounding the close of a day in June.

Hoping the w.-p. b. has gone to the woods to pluck flowers.

EVA TAYLOR.

Bobcaygeon, Ont.

Dear Puck and Beavers.—This is my third letter to your interesting circle, and I saw both my letters in print. I tried my junior High School examinations on June the twentieth to the twenty-second, and think I was successful in everything but arithmetic and geography, which I thought were very hard.

We are going to move into our new school after summer holidays, which is

That Coupon below is your chance to prove you are with us in upholding the farmers' interests!

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Shall we send you some sample copies?

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COUPON

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New Subscriber: R. R. No. _____ Town _____

Signed _____

R. R. No. _____ Town _____ Province _____

AUGUST

two mile house w... failed in did not. I am summer, pose girls this terric and pick I am read the Books," reading i and find ter is get Beaver C

Dear... letters o to your too. I a my aunt Farmer's Wm. E. worth, O I live in a great mother a an older cook for yesterda read " Books," others, classes, y sixth gr close as Address

I wish me. Y

Lloyd

Dear... first lett father h cate" e have 7 l named B books. is a very close. I w.-p. b. Wood

Dear... I have se it would to take spring, very I passed I have h close wi What of medi Ans.—O the othe taken. Will s

Learni

Dear... first lett father h cate" fo read the little gir every c Kenneth and a l about cl most clo long. W success.

St. TH

two miles from here, and the old school-house was just across the road from our house. I do not think I will go unless I failed in my examinations, and I hope I did not.

I am learning to milk the cows this summer, and I like it very well. I suppose girls have to work on the farm during this terrible war. I would rather stomp and pick up roots than milk the cows. I am very fond of reading. I have read the "Elsie Books," the "Bessie Books," and "Mildred Keith." I am reading the "Odds and the Evens" now and find it very interesting. As my letter is getting long I will close, wishing the Beaver Circle every success.

ESTELLA NELSON.
Heaslip, Ont. (Age 13.)

Dear Puck and Beavers.—I saw some letters other boys and girls had written to your Circle, and I decided to write too. I am a Yankee and am visiting at my aunts. One of my uncles takes "The Farmer's Advocate." His address is Wm. E. McComb, R. R. No. 1 Chatsworth, Ont. My name is James McCrae. I live in the United States. I am having a great time here on the farm. My mother and I were all that came. I have an older brother who stayed at home to cook for father. I got a letter from home yesterday. I am a great reader and have read "Lion of the North," "Alger Books," "The Lost Heir," and many others. In the States we don't go by classes, we go by grades. I will be in the sixth grade next year. I think I will close as my letter is getting rather long. Address all letters:

JAMES McCRAE,
Care of Wm. E. McComb,
Chatsworth, Ont., R. R. No. 1.
I wish Willie Trimble would write to me. Your friend,
JAMES McCRAE.

Junior Beavers' Letter Box.

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" for a long time, and I enjoy reading the letters. I am eight years old and am in the junior second class. We play base ball at school and many other games. We had a school fair at Kettleby last year. I had some chickens but I didn't get any prize for them. Well, I will close now. Yours very sincerely,

FARNA DAVIS.
Lloydtown, Ont. (Age 8.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" ever since I can remember. We have 7 little lambs. We have a pet dog named Rover. I have read a number of books. I think the "Wide, Wide World," is a very nice book. Well, I had better close. I hope this letter will escape the w.-p. b.

RUTH THOMAS.
Woodville, Ont. (Sr. III. Class, Age 13.)

Dear Editor.—This is my first letter. I have seen other letters in, and I thought it would be nice to write. We started to take "The Farmer's Advocate" this spring, and I enjoy the children's letters very much. I go to school every day. I passed into the junior third at Easter. I have had my letter quite long, so I will close with a riddle.

What is the difference between a bottle of medicine and a troublesome boy?
Ans.—One has to be taken before shaken, the other has to be shaken and then taken.

Will some of the Beavers write to me?
JUNIATA REIVE.
Leamington, Ont. (Age 10.)

Dear Puck and Beavers.—This is my first letter to your charming circle. My father has taken "The Farmer's Advocate" for a number of years. I like to read the letters about the Circle. I am a little girl seven years old. I go to school every day. I have a little brother Kenneth three years old. I have a mile and a half to go to school. There is about thirty go to our school. Well, I must close as my letter is getting rather long. Wishing the Beaver Circle much success.

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

Dear Puck and Beavers.—This is my first attempt to write to the Beaver Circle. I am nine years of age. I go to school every day. I like to go to school very much. I like my teacher; her name is Miss Violet Morris. I am in the senior second class. My father has taken "The Farmer's Advocate" for a number of years. I like reading the Beavers' letters as I am fond of reading myself. I think I had better close for my letter is getting quite long.

Kingsmill. LORENA BROWN.

P.S.—If some of the Beavers will write to me I will try and answer. I hope the w.-p. b. is not hungry when this arrives.

Dear Puck and Beavers.—Here comes another leaf to join your Club. For pets I have a dog named Bounce, a cat named Topsy, and a sheep named Dimple. I have a batch of little chickens. I am an English girl. I came from England six years ago, and now I live in Ontario and like it fine. My father has three cows, one calf, four sheep and some pigs. We have fifteen hens. My father has taken "The Farmer's Advocate" for four years and could not do without it. I would like if some Beavers my own age (ten) would write to me. I hope to see my letter in print. I will close.

ELSIE C. BARTON.
Valley Farm, Widdifield Stn., Ont.

Dear Puck and Beavers.—This is my first letter to your Circle. I hope to see my letter in print. For pets I have a cat named Teddy. I am fond of reading, I read two books, "Little Chatterers" and "My First Book of All." I am going to school every day. I am in senior second class in English and third reader in French. My teacher's name is Miss Reine Boissonnault from Haileybury. I live half a mile from school. My letter is rather long. Wishing the w.-p. b good health.

Bonfield, Ont. EVA BOWIN,
(Age 10.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. My father has taken "The Farmer's Advocate" as long as I can remember, and I enjoy reading your letters, and especially the ones with riddles. We had a school fall fair at Udney last summer and two years ago. I won some prizes. We had a good time. Our school took first prize two years ago, and second this time. I go to school and I am nine years old, and I was promoted at Easter to take third class. Our teacher's name is Miss Walsh, and I like her fine. Hoping to see my letter in print I will close with a riddle.

As I was going through a gap whom did I meet but Bill Blue Cap. A stick he held tight in his hand and a stone in his throat. Tell me that riddle and I will give you a goat.

PATRICIA McINTAGGERT.
R. R. No. 1, Ontario.

Hoping some one of my age will write to me (age 9).

The Dollar Chain

The fund for establishing the Farmer's Advocate Readers' Ward in Byron Hospital for Tubercular Soldiers has now been over-subscribed by \$19.85, hence no more will be required for that purpose. The Dollar Chain opportunity, however, still stands widely open, as there is no cessation in the need for Soldiers' Comforts and Red Cross supplies, and relief work of all kinds.

Contributions from July 20 to July 27 were only two in number, both for Byron Hospital: H. P. Wilson, Dundas, Ont., 50 cents; Mrs. J. H. Patton, Clandeboye, Ont., \$1.00.

Amount previously acknowledged.....\$4,800.40
Total to July 27th.....\$4,801.90

Artillery Horses Wanted

Age 6 to 9 years, height 15.2 to 16 hands, weight 1,200 to 1,350 pounds and 1,500 pounds and stand 16.1 hands.

COLORS

Any except light grey, white or light buckskin. All horses must be sound, of good conformation, free from blemishes, and broken to harness or saddle.

INSPECTION POINTS AS ARRANGED BY THE COMMITTEE:—

TORONTO: Burns' repository every Monday; Union Stock Yards every Tuesday; McGregors, Hayden Street, every Wednesday.
LONDON: July 26th and alternate Thursdays. Apply to James McCartney.
BRAMPTON: July 19 and alternate Thursdays. Apply to E. J. Jones.
PETERBOROUGH: July 20th and alternate Fridays. Apply to L. Green.
ST. MARY'S: July 27th and alternate Fridays. Apply to H. M. Robinson, Toronto.
COMMITTEE:—E. C. H. Tisdale, Beaverton; Wm. Smith M.P., Columbus; Robert Graham, Toronto; E. J. Jones, Brampton; C.F. Bailey, Assistant Deputy Minister of Agriculture; H. S. Arkell, Acting Live Stock Commissioner, Ottawa; Lt. Col. G. A. Carruthers, Montreal; H. M. Robinson, Sec., 883 Broadview Ave., Toronto.



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Current Events.

8,910 Canadian soldiers have been returned to Ontario from the front.

Sir William Hearst has issued an appeal for harvest help for Ontario crops.

The Conscription Bill passed its third reading at Ottawa by a vote of 102 to 44.

An important conference of representatives for the Allies opened in Paris on July 25.

The first United States draft of men for the fighting lines will number 1,000,000. The first mobilization will consist of 1,152,985 men in addition to the regular army.

The U. S. House of Representatives passed appropriations for \$640,000,000 for the construction of a great fleet of airplanes.

Lord Rhondda, British Food Controller, is said to be taking drastic measures to stop profiteering in Great Britain, and to reduce the price of the necessities of life. All the flour mills are to be taken over and worked for the Government.

An agreement for the exchange of certain prisoners of war has been reached between the Governments of Great Britain and Germany.

The outstanding war news of the week is still the retreat of the Russians in Galicia, consequent upon the mutiny of divisions numbering upwards of 20,000 men in such a way that the Germans were able to drive a wedge that compelled loyal divisions also to retreat. In hope of staying the disaffection Gen. Korniloff is said to have turned artillery on the eleventh division, but without securing the effect sought for. The women's battalion under the girl officer, Vera Butchkareff, stood its ground in one engagement, when regiments about were

FERTILIZER

Now is the time to order your fertilizer for fall wheat. Get our prices before buying. We are sure they will interest you.

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We can supply you with first-class paints for outside and inside use. Prices furnished on application. We are still handling butter and eggs. Get our prices and give us a trial shipment. We pay express charges and furnish crates on application.

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Toronto, Ontario



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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 advertisements inserted for less than 50 cents.

RINGLET BARRED ROCKS—PUREBRED, trap-nested, heavy winter layers, beauty and utility combined; setting \$1.50, 100% fertility guaranteed. Book order now. Particulars, P. Coldham, Barriefield, Kingston, Ont.

WANTS & FOR SALE

Advertisements will be inserted under this heading, such as Farm Properties, Help and Situations Wanted and Pet Stock, at 10¢ per line. 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.

COOK; HOUSEKEEPER; FOR COUNTRY residence, close to Toronto. Apply Mrs. Jos. Kilgour, Eglinton, Ont.

COLLIE PUPS—BRED TO DRIVE STOCK, heifers. A. B. Van Blaricom, Morganston, Ont.

FARM WANTED TO RENT, FIFTY TO eighty acres in Norfolk County from April. Lawrence Wilson, Vanessa, Ont.

SCOTCH COLLIE PUPPIES, GUARANTEED heifers. Price \$5.00. A. T. McPherson, R. 1, Wilton Grove, Ont.

WANTED—BY A PRACTICAL CANADIAN farmer, married, position working and managing a farm. Life experience. Free by October. Apply Box R, Farmer's Advocate, London, Ont.

WANTED—MARRIED MAN WITH experience in general farm work; wages \$6.00 per month; free light, house, fuel, milk and potatoes. Apply to William Greenough, 148 S. Manager, Alton Dairy & Stock Farm, Beaconsfield, P. O.

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disgracefully retreating. They even pursued the Germans with deadly fire, and succeeded in capturing several prisoners, who were much chagrined on learning the sex of their captors. In the West the French have again been engaged in severe fighting, and Canadian artillery has scored the upper hand at Lens. Meanwhile a great battle is said to be brewing at along Gen. Haig's lines.

Markets

Continued from page 1230

was firm and prices went higher during the week, to 46c. to 48c. per doz. for new laid. Selected stock was quoted at 44c. No. 1 candled at 40c. and No. 2 candled at 38c. per dozen.

Butter.—Although the tendency in the market for creamery is strong, the range of quotations show very little alteration. Grocers were paying around 38c. to a fraction more for current makes it is said, although export prices were a cent or so below these quotations. Demand for export has fallen off and at the present is nil. The British Government fixes maximum prices and this prevents export from Canada at excessive figures. Fine creamery was quoted at 36c., with dairies ranging from 33½c. to 35½c., according to quality.

Cheese.—The Commission has been purchasing No. 1 cheese at 21½c.; No. 2 at 21c. and No. 3 western and eastern at 20½c., with lower grades selling at 20c. Cheese boards in Ontario are being cleared around 20½c.

Grain.—Oats were a shade lower, with No. 1 Canadian western selling at 84c., and No. 2 and extra No. 1 feed, at 83c. Manitoba feed barley sold at \$1.26 per bushel, ex-store. Beans were steady at \$9.25 to \$9.50 for Canadian 5-lb. pickers; \$8.75 to \$9.00 for Rangoons and \$8 to \$8.75 for yellow eyes.

Flour.—The market was quoted around the previous week's prices, Manitoba first patents \$13 per barrel; seconds \$12.50 and strong bakers \$12.30. Ontario winter wheat 90% patent flour sold at \$12 to \$12.30 per barrel, in wood, and \$5.75 per bag.

Millfeed.—The market was steady last week at the previous advances. Bran was \$35 to \$36 per ton; shorts \$40 to \$41; and middlings \$43 to \$50 per ton. Mouille \$60.

Hay.—With new hay hanging over the market, old baled hay was unchanged at \$11 to \$11.50 per ton, for No. 2, and \$9 to \$9.50 for No. 3.

Hides.—Lamb skins advanced to \$1. The market was otherwise unchanged at 38c. and 40c. per lb. for calf skins; 27c., 26c. and 25c. per lb. for beef hides; \$7 each for horse hides. Rough tallow was 3c. to 6c. per lb. and rendered 11c. to 13c.

Chicago.

Cattle.—Beeves, \$7.65 to \$11.15; western steers, \$8.40 to \$11.50; stockers and feeders \$5.80 to \$9; cows and heifers, \$4.50 to \$11.60; calves, \$8.75 to \$13.25.

Hogs.—Light, \$11.80 to \$16.05; mixed, \$14.65 to \$16.15; heavy \$14.45 to \$16.15; rough, \$14.45 to \$14.65; pigs, \$11.60 to \$14.50.

Sheep.—Lambs, native, \$9.25 to \$15.60.

Cheese Markets.

Belleville, 21 3-16 and 21½c.; London, bid 20c. no sides; Cowansville, Que., 20½c.; Waterloo, Que., 20½c.; St. Hyacinthe, Que., 20c¾; Victoriaville, Que., 20 7-16c.; New York, specials, 22c. to 22½c.; average run, 21½c. to 21¾c.

Gossip.

Mardella Shorthorns.

Prospects for a record year were excellent at Mardella Stock Farm when a representative of the Farmer's Advocate made a visit there recently. The Shorthorns numbering nearly fifty, and all bred from heavy milking strains never looked better. The herd is headed by the three-year-old bull, The Duke. On the sire's side this bull has a straight Scotch pedigree, while his dam, Lilly Archer, was got by that good breeding bull, Archer, and had in the R. O. P. a record of 13,599 pounds of milk and 474 pounds of butter fat for the year. Bulls of this record breeding are far too few in dual-purpose herds, and, as Mr. Graham has in this young sire the strongest of individuality combined with high record, the calves that will be coming from now on should make attractive offerings. The breeding females, with the exception of a few mature cows, all trace to good bulls, such as Victoria Duke, Scottish Oxford, and Emmy's Pride. The latter was got by the 17th Duke of Hillsdale who has perhaps produced as many good milking females as any other bull of the

breed. The older cows referred to trace to such females as Lady of Athelstane Imp., Henrietta Imp., Snowdrop, Imp., Fisher Roan Imp., and Red Roan Imp., most of which despite their strong Scotch pedigrees were heavy milkers. See Mr. Graham's advertisement in another column of this issue.

The Western Fair

The management of the Western Fair, London, Ontario, are adding \$2,000 to their Prize List this year. This amount has been carefully distributed throughout the list and will make it very attractive. The Exhibition has reached its fiftieth year, and every effort is being put forth to make this the best ever held in London. This Exhibition has the reputation of being one of the best agricultural exhibitions in Canada, and this year will certainly be no exception to the rule. Live-Stock Breeders and Exhibitors will do well to send their very best stock to London. A win there is sure to prove of very great benefit, as there are always plenty of buyers. For prize lists, entry forms and all other information write the Secretary, A. M. Hunt, London, Ontario. Remember the dates—Sept. 7 to 15.

Questions and Answers.

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

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

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

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

Miscellaneous.

Cattle Killed on Railway.

If cattle get out of my gate and go about one mile and get on railway over those wooden-slat cattle guards about one hour later and are killed by train, is the company responsible? L. W. T.

Ans.—We think so, unless the company can establish that the cattle got at large through the negligence or wilful act or omission of yourself or your agent.

Shoe Boils.

Could you advise me through the columns of your paper of any device that will prevent shoe boils on a horse? Would nailing a scantling on the floor behind the horse's fore feet be of any benefit? J. A. S.

Ans.—The only method we know of to prevent or cure shoe boils is to remove the cause by removing shoe or by placing a pad on the heel each night to protect the elbow. We doubt the efficacy of the scantling method.

Contagious Abortion.

A heifer came in season ten days after she was bred. I had her bred again and a few days afterwards the owner of the bull informed me that the animal had abortion. Would you advise breeding the heifer again and how soon? I do not wish to spread the disease. J. McK.

Ans.—A breeder must exercise great vigilance against this disease. Thoroughly disinfect the heifer regularly for three or four months before breeding her again. The material used must be injected into the vagina and the hind quarters should be washed. The bull should also be thoroughly disinfected after breeding. By taking these precautions danger of spreading the disease is lessened.

Lymphangitis.

I have a good light mare which had lymphangitis or something like that last fall. Her hind leg became very much swollen. She recovered except that her leg is still somewhat swollen at the fetlock and a little above. We did everything possible last fall and I thought the swelling would leave on the grass, but it still remains. Can you advise a cure? 2. Have a colt which has its fetlock joint, and it has let a puff in front of the joint. It happened about two months ago. What would you recommend? A. B. M.

Ans. Swelling of the leg frequently follows lymphangitis. The mare should be given regular exercise and care taken in feeding when she is idle. Substitute part of the grain ration with bran. Bathe the affected parts with warm water and

apply camphorated ointment or liniment after bathing. Exclude drafts.

2. Try the application of an absorbent liniment with sharp friction as one made of 4 drams each of iodine and iodide of potassium and 4 oz. each of alcohol and glycerine.

Sowing Sweet Clover.

Could you tell me through your paper if sweet clover will grow if sown in the fall on the top of the ground? If so, what time should it be sown?

SUBSCRIBER.

Ans.—Sweet clover is sown in the spring either with a grain seeding or alone on well-prepared land, and at the rate of 20 lbs. per acre. We would not advise sowing in the fall, although we have seen fields pastured throughout the summer and plowed in the fall re-seed themselves.

Boy Leaves.

I hired a boy for \$175 for eight months. He started April 5th and worked until June 21st, and got about \$12 in money. He went away on the night of June 21st and I have not seen him since. He gave me no notice of going away, and I have heard since he went to enlist. Will you kindly tell me through your paper what wages he is entitled to, as I feel he should not get his full wage as he has put me to a great inconvenience with haying and harvest coming on and leaving me alone on a 100-acre farm? I would be very thankful if you could give me this information as soon as convenient.

C. J. B.

Ans.—Under the circumstances it is rather difficult to say just what the boy should get. As he was hired for a lumpsum for the eight months he could not legally collect until he filled in his time. On the other hand, if he was a good boy to work while you had him and has enlisted he should get due consideration. We would advise you to see the boy if possible and talk the matter over with him in a friendly manner and endeavor to come to some settlement satisfactory to both. Of course, he did wrong in running away without explaining to you. As a general thing, it is wise to pay help what they have earned. We are not in a position to say how much this boy should get, not knowing the circumstances, but believe you should be able to reach a satisfactory, amicable agreement between yourselves. If both parties to the transaction settle according to the dictates of their own consciences both should be satisfied.

Veterinary.

Lame Mare.

1. A year ago our eight-year-old, half-bred Clydesdale mare went lame on right fore foot. It appeared to be in the pastern, but there was no swelling or apparent soreness. This spring she is lame on both fore feet and there is a hard swelling on point of right hip, but she is not lame. She stands with her fore feet well forward. We think it is rheumatism.

2. My son and I are working a farm together. Can we legally use on bill heads, etc., our joint names of T. A. & C. P. T.?

T. A. T.

Ans.—1. This is not rheumatism. The symptoms indicate navicular disease (coffin joint lameness). A cure is not probable, but the symptoms can be relieved to some degree by repeated blisterings. Get a blister made of 2 drams each of biniodide of mercury and cantharides mixed with 2 ozs. vaseline. Clip the hair off two inches high all around the hoofs. Rub well with the blister, tie so that she cannot bite the parts. In 24 hours rub well again with the blister and in 24 hours longer apply sweet oil. Turn loose into a box stall and oil every day, as soon as the scale comes off, tie up and blister again. After this blister once every month so long as you can give rest. If rest cannot be given keep the feet soft by poulticing or the application of water in some way until you can give rest. Try her with bar shoes, but if this does not give some relief or if it causes her to go worse, use open heeled shoes.

2. We do not think that there is any illegality in using the joint names. V.

Kendall's Spavin Cure
The Old Reliable
Horse Remedy

THOUSANDS of farmers and horsemen have saved money by using Kendall's Spavin Cure for Spavins, Curb, Ringbone, Splint, Bony Growths and Lameness from many other causes. It keeps horses working. A \$1 bottle may save a horse for you. Get a bottle the next time you are in town. Sold by druggists everywhere, \$1 a bottle, 6 for \$5, also ask for a copy of our book "A Treatise on the Horse"—or write to

Dr. B. J. KENDALL COMPANY
Enosburg Falls, Vermont 117

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, hnd, reduces Cysts, Wens, Painful, Knotted Varicose Veins, Ulcers. \$1 and \$2 a bottle at dealers or delivered. Book "Evidence" free. W. F. YOUNG, P. D. F. 258 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 bunched; 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:

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Alloway Lodge Stock Farm
Angus—Southdowns—Collies

SHOW FLOCKS

Rams and ewes. Heifers in calf to Queen's Edward, 1st prize, Indiana State Fair.

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

Kennelworth Farm Aberdeen-Angus
At special prices, six young bulls sired by Victor of Glencairn. All are of serviceable age, and show individuals.

PETER A. THOMSON, Hillsburg, Ont.

Beaver Hill ABERDEEN-ANGUS and OXFORD DOWN SHEEP
Cows with calf at foot and bred again. Shearling rams and ram lambs. One Yorkshire bull calf for sale.

Alex. McKinney, R. R. No. 1, Erin, Ontario

When writing mention "Advocate"

Questions and Answers. Veterinary.

Lightning Stroke.

What would be the appearance of the carcass of an animal that had been killed by lightning stroke?

Ans.—In some cases the hair is singed. In others there are no visible marks until the skin has been removed, when there will be noticed darkened tissue, in most cases radiating from a centre (the seat of compact) in streaks in different directions. In some cases there are deep burns into the skin and tissues. V.

Fatality in Horse.

Horse accustomed to 9 quarts oats and 4 quarts bran daily got loose and got at the oats and ate all he wanted. He was worked all day and ate his usual ration. During the night he became sick and suffered pain, looked around to his side, lay down and stretched out, and this continued until the third day, when he died standing. W. H. McL.

Ans.—The horse suffered from acute indigestion which became complicated with inflammation of the bowels and caused death. Horses in such cases usually stand towards the last and drop practically dead. When it was discovered that he had had free access to oats he should have been given a brisk purgative, given rest and not allowed anything to eat but a little bran until purgation commenced. This treatment would doubtless have saved him. When he became sick he might still have been saved. A veterinarian would have given him hypodermic injections of arecolin or eserine. An amateur would have given a couple of ounces of oil of turpentine in 1½ pints of raw linseed oil and followed up with 2 drams nux vomica every 4 or 5 hours, and given about 2 drams solid extract of belladonna to ease pain every few hours as indicated by symptoms. In such cases as this the services of a veterinarian should be procured promptly if possible, as energetic and correct treatment is necessary in most cases to save the patient. V.

Fatality in Calf, etc.

1. Two calves were kept in a small building with an earthen floor and were fed on whole milk fresh from cow, and when 2 weeks old one had difficulty in breathing, making a loud wheezing noise, I healed it but it continued to fail and became unable to drink and died.

2. The other calf developed a large, hard lump on the jaw. Does lump jaw appear in such young animals? A. F. C.

Ans.—1. The symptoms indicate acute laryngitis. Treatment consists in applying to the throat mustard mixed with equal parts oil of turpentine and warm water or a poultice of antiphlogistine, and keeping the throat well wrapped with flannel cloths. Also giving 20 grains chlorate of potassium and 5 grains quinine placed well back on the tongue out of a spoon, 3 or 4 times daily. Also causing the inhalation of steam from boiling water with a little carbolic acid in it, by holding its head for a few minutes over a pail or pot holding the water. In some cases an operation by a veterinarian (the insertion of a tube into the trachea) is necessary to prevent suffocation. The patient must be kept in comfortable, well-ventilated quarters.

2. Young animals sometimes develop lump jaw. Give iodide of potassium 3 times daily. Commence with 5-grain doses and increase the dose by 3 grains daily until it refuses food and water, fluid runs from eyes and mouth and the skin becomes scurfy. When any of these symptoms becomes well marked, cease giving the drug. If necessary repeat treatment in 3 months. V.

Dates Set for Ottawa Winter Fair.

At the annual meeting of the Ottawa Winter Fair, held recently, William Smith was elected President; J. C. Stewart, Vice-President; R. W. Wade, General Director, and W. D. Jackson, Corp. Secretary-Treasurer. The 1918 show of the Ottawa Winter Fair will be held January 15 to 18, inclusive.

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WHAT do we mean by "a better separator for less money?"

Just this: that in the Viking Cream Separator you get greater capacity, greater durability, greater simplicity, and a close if not closer skimming machine than in other standard separators which cost more money. You don't have to take our word for it; read about the free trial which any of our agents will offer you.

Meanwhile, ask your dealer or write us direct for our free catalog, which tells all about the Viking and gives more reasons why it is "a better separator for less money."

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Your dealer will sell you a Viking Cream Separator on 30 days' trial, on the distinct understanding that if you don't find the Viking all we claim for it, if you're not entirely satisfied, you can return it to him and he will refund your money immediately.

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BREEDER OF HIGH-CLASS CLYDESDALES
R. R. No. 1, OTTAWA, ONT.

Write me for prices on champion mares.

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, Ontario

WOODLANDS BROWN SWISS AND PONIES
We have no Clydes, left for sale. Our special offering is Brown Swiss bulls out of high-testing and big-producing dams. Strictly high-class. Also Shetland and Welsh ponies.

R. BALLAGH & SON, GUELPH, ONTARIO

Imported Shorthorns

Thirty-five imported cows and heifers, forward in calf to service in Scotland; also five imported bulls. Our 1916 importations are all choicely bred. Have also home-bred bulls and females. Farm half mile from Burlington Junction. Write or call and see us. J. A. & H. M. POTT, Freeman, Ont.

SPRUCE GLEN SHORTHORNS
of such popular strains as Minas, Fames, Miss Ramsdens, Florences, Emlys, etc.
Have still a few young bulls—thick, mellow fellows, fit for service.

JAMES McPHERSON & SONS, DUNDALK, ONTARIO

SHORTHORNS
Imported and Canadian bred. 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.

Imported Shorthorns
Cows and heifers in calf or with calves at foot. Yearling bulls and bull calves. One of the best importations of the year. You will be surprised when you see them.

Will. A. Dryden, Maple Shade Farm, Brooklin, Ont.

Blairgowrie Shorthorn Offering
Imported and Canadian-bred. More bulls to select from than any herd in Ontario, all of serviceable age; also a large number of females, which are bred right and priced right. All the stock for sale

JOHN MILLER, Ashburn, Ont. Myrtle Station, C.P.R. and G.T.R.

OAKLAND---50 SHORTHORNS
A herd of feeders, breeders and milkers that give satisfaction wherever they go. One bull for sale, 12 months, white, extra milk strain. Also females, any age. Priced so you can buy. One of the finest bulls in Ontario heads this herd.

JNO. ELDER & SONS, HENSALL, ONTARIO

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

J. A. WATT, ELORA, ONTARIO

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

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CREAM

We are open to buy cream both for churning and table use.

ASK ANY SHIPPER about our service and prompt returns.

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

The Toronto Creamery Co., Limited
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MAPLE LEAF FARM

Shorthorns; Shropshires; both sexes. Mail orders satisfactorily filled.

J. BAKER, R. R. 1, HAMPTON, ONT.

SHORTHORNS—Pail-fillers 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.

Glenfoyle Shorthorns

Present offering—three bulls from 10 to 12 months. Nice, straight, smooth fellows. Prices easy. Stewart M. Graham, Lindsay, Ontario

MARDELLA SHORTHORNS

Bulls, females, sires, quality; breeding dual-purpose cattle over 40 years. The Duke—dam gave 13,539 lbs. milk, 474 lbs. butter-fat—at the head. Thomas Graham, Port Perry, Ont., R.R. No. 3.

PLASTER HILL HERD

DUAL-PURPOSE SHORTHORNS. A few choice bull calves coming on; also a few heifers in calf to Butterfly Champion 110726. F. Martindale & Son, Caledonia, Ont. R. R. 3

WANTED A number of pure-bred dual-purpose Shorthorn females with high records. State in first letter, pedigree, price, full information and give photo of each animal. Harvey Daw, R. No. 1, Glanford Station, Ont. (Maple View Stock Farm)

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

Questions and Answers. Miscellaneous.

Enchanter's Nightshade.

The accompanying weed appeared four or five years ago by a fence side near the stable and has persisted since in spite of rigorous pulling each year. Please identify and state if noxious. W.O.H.

Ans.—The plant had opposite, long-petioled leaves, small, white flowers which will be followed by a small, bristly bur the size of a pin head. This is a native of our woodlands known to botanists as *circaea lutetiana* its common name is Enchanter's Nightshade. It loves rich, loamy woods or shady fence corners but it will not persist in the open field. The specimen sent in, nearly three feet tall, is more than usually robust for the species. J. D.

Water Course.

1. A and B own farms adjoining, and there is a run of water out of A's woodlot and pasture field. A's farm is a little higher than B's and the water is injuring B's field, which is under crop. Can B compel A to ditch his field and tile it down through the field?

2. Can B come on A for damages, or will he have to ditch his own field?

Ans.—1. If this is the natural water course A would only be assessed for the drain to the extent of the water draining off his farm. B could bring on an engineer and in this way compel A to assist in draining the field.

2. If the water has not been tiled or ditched to the edge of B's field it is doubtful if B can claim any damages, but he can secure A's assistance in ditching the field.

Destroying Ants.

What is the best way to banish ants from around the house? A. S.

Ans.—It is a difficult problem to eradicate the ants. There must be ant hills in the neighborhood of the house. Search for these and pour boiling water on them. They may also be destroyed by pouring bisulphide of carbon into the hill and covering it over immediately, so that the fumes will be forced into all the exits. Coal oil is effectual. When the ants come into the house from unknown regions a sponge moistened and sprinkled with sugar may be placed in their haunts. When the sponge fills with ants it should be dropped into hot water and the process repeated. If using the bisulphide of carbon treatment remember that the fumes are exceedingly inflammable and it should be kept away from a light or fire of any kind.

Sweet Clover.

I seeded a 12-acre field in the spring of 1916 with sweet clover for pasture, and it certainly has produced a whole lot of it, and at present it is white with blossom about four inches high.

1. If sufficient of it goes to seed will it amount to anything for pasture next year?

2. If field should be ploughed this fall and a grain crop sown next spring, would it be seeded for following year? Please advise what is best to do in the matter as it certainly has made our cows milk well, and although it is no better than alfalfa we have not lost any by bloating on it, as we did on alfalfa. Sometimes in morning some of them will be pretty well bloated, but by time we are through milking the bloot will be gone. It has kept 25 head of stock with exception of forenoons since latter part of May, and is good yet. G. T. H.

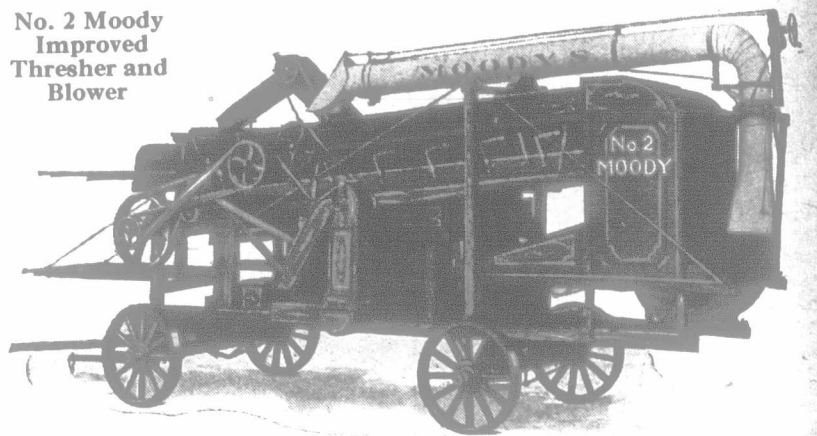
Ans.—We would advise plowing the field late this fall. Enough seed would likely be mature to re-seed it if sown with oats or other spring grain. We know of one subscriber who has two fields which he has in sweet clover and oats on alternate years, and the sweet clover re-seeds itself satisfactorily. In fact, it is so thick that he usually cultivates the field to be sown to oats about a week before he sows them, and then cultivates again just before sowing so that some of the young plants are killed. Otherwise, he fears they would be too thick.

A lady who had just received an interesting bit of news said to her little daughter: "Marjorie, dear, auntie has a new baby, and now mamma is the baby's aunt, papa is the baby's uncle, and you are her little cousin." "Well," said Marjorie, wonderingly, "wasn't that arranged quick."

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Get a "MOODY" and be Independent

No. 2 Moody Improved Thresher and Blower



The wise farmer wants his own thresher—this is possible to-day. A No. 2 Moody Thresher and Blower is within the reach of the prosperous farmer. The "No. 2" can be driven with a 10 H.P. Engine, at an average running capacity of 80 bushels of oats per hour. There are small or larger Moody Machines to suit various needs—all are dependable and do perfect work—the best of their kind in Canada. Extensively used in Ontario, Quebec and the Maritime Provinces.

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There are men that have good Shorthorn Herds that need good bulls to head them. There are men that have herds that are kept to breed thick, easy-feeding cattle and big cows that are good milkers.

There are men that are trying hard to start improvement in their own herds and in their neighborhoods.

I have a suitable bull for each at a moderate price and I PAY THE FREIGHT.

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Offers for sale, (Imp.) Loyal Scot, conceded to be one of the best stock bulls in the country. Also good young bulls and females with the best of individual merit and breeding. Inspection invited. Geo. Amos & Sons, Farm 11 miles east of Guelph, C.P.R. Moffat, Ontario

1854 MAPLE LODGE STOCK FARM 1917

SHORTHORNS AND LEICESTERS. Three shearing rams, some lambs and ewes for sale. MISS CHARLOTTE SMITH R. R. 1, CLANDEBOYE, ONT.

BURNFOOT STOCK FARM

Breeders of high-record, dual-purpose Shorthorns with splendid conformation for beef. Visitors welcome. S. A. MOORE, Prop. Farm one mile north of Caledonia CALEDONIA, ONT.

WILLOWBANK STOCK FARM SHORTHORN HERD

Established 1855. This large and old-established herd has at the head the two great bulls, Imported Roan Chief =60865=, a Butterfly; and the prizewinning bull, Browndale =80112= a Mina. An extra good lot of young stock to offer of either sex. Splendid condition. Good families of both milking strain and beef. James Douglas Caledonia, Ontario

Glengow Shorthorns, Cotswolds

For the present we have sold all the Cotswolds we wish to spare, but 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, Ont. Myrtle, C. P. R., Brooklyn, G. T. R., Oshawa, C. N. R.

SHORTHORN CATTLE AND LINCOLN SHEEP

Young cows and heifers of the best Scotch families. Sire in service, Sittytton's Selection =86508= The winning pen of long-wool lambs, all breeds competing, at 1916 Guelph Winter Fair, came from this flock. Imported and home-bred rams and ewes for sale. New importation will arrive in July. R. S. ROBSON & SON, DENFIELD, ONT.

CREEKSIDE FARM SHORTHORNS

We have for sale, at present, a number of young things by our former herd sire, Clan Alpine (the Claret-bred bull, by Proud Monarch). We like them—so will you. If it's young bulls or a few females you need, we would welcome a visit from you. Write or phone. Visitors met by appointment. Geo. Ferguson, Elora Station, C. P. R., G. T. R. Salem, Ontario

IMPORTED SHORTHORN BULLS

We have several newly-imported bulls of serviceable age. Cruickshank, Marr and Dutchie 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.

The Hawthorne Shorthorns and Leicesters

Heifers and cows with calves, and a few bulls. 1 extra-good shearing ram, and ram lambs, and several real good grade ewes. Yorkshire sows. Allan B. Mann R. R. 4, Peterborough, Ont.

Lyndenwood Holsteins

Present offering, a bull, 16 months, whose dam won 2nd, Ottawa Dairy Test, 1916. One 11-months bull from a 20-lb. 2-year-old cow. Some fine bull calves from 2 to 5 months; also some choice young cows and heifers with good official records and from R. of M. dams. Write for prices or come and see them. W. J. BAILEY, Lyndenwood Farm JARVIS, ONT.

Pioneer Farm Holstein Herd With big yearly records and high average butter-fat test, and headed by Canary Hartog, grandson of Royalton Viclet at 10 years, 30.39 lbs. butter, 735 lbs. milk in 7 days; 29,963 lbs. milk, 1,300 lbs. butter in 1 year. Sire's dam, Royalton De Kol Fern, 34.60 lbs. butter in 7 days, 116 lbs. milk in one 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 Line.

Low Banks Farm Holsteins K. M. Dalglish, Prop., Kenmore, Ont.

Pontiac Korndyke and May Echo Sylvia—strongest combination of milk and butter in the world. Present offering—3 beautiful, young bulls, sired by Sir Echo, from daughters of Pontiac Korndyke, with 2-year-old records of considerably over 20 lbs. each; also 4 sons of Fairview Korndyke, from dams with similar records, going as high as 30.14 lbs. All straight, good individuals at moderate prices.

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There is no case so old or bad that we will not guarantee

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to remove the lameness and make the horse go sound. Money refunded if it ever fails. Easy to use and one to three 45-minute applications cure. Works just as well on Sidebone and Bone Spavin. Before ordering or buying any kind of a remedy for any kind of a blemish, write for a free copy of

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Ninety-six pages of veterinary information, with special attention to the treatment of blemishes. Durable, bound, indexed and illustrated. Make a right beginning by sending for this book.

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THE ONTARIO FERTILIZERS, LTD.
WEST TORONTO

Manor Farm Holsteins

Those wishing a young sire from high-record dams and sired by King Segis Pontiac Poach, will do well to write for pedigree and prices before buying elsewhere.

SATISFACTION GUARANTEED

Gordon S. Gooderham
CLARKSON ONTARIO

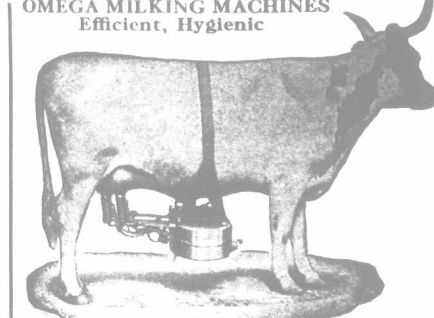
Record Holsteins

We have the only two sons in Canada of the 46-lb. bull, Ormsy Jane King, only mature son of the world's most famous cow. One of them for sale. Also a 30-lb. calf, whose dam and 2 great grandams average 38.4 lbs. butter in 7 days. 11 bull calves of lesser note and females all ages.

R. M. Holtby, R. 4, Port Perry, Ont.

OMEGA MILKING MACHINES

Efficient, Hygienic



The pail and teat-cups are suspended from the cow's back. The teat-cups cannot fall to the floor and suck up manure or straw. The Omega milks as fast and as clean as is possible by hand. Leading dairymen in Canada, U.S.A. and Europe are using the OMEGA. It's a perfect milker. WRITE TODAY for free booklet, describing the special features of the Omega. C. Richardson & Co., St. Mary's, Ontario.

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Canadian Ayrshire Breeders' Association
W. F. STEPHEN, SECRETARY-TREASURER
HUNTINGDON, QUE.

Choice Offering in Ayrshires

At Special Prices. Several young bulls of serviceable ages. Ask from R. O. P. sires and dams. Come and see them.

Jno. A. Morrison, Mount Elgin, Ontario

Glencairn Ayrshires

Herd established 40 years. Producing ability from 8,600 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.**

CITY VIEW AYRSHIRES

For July sales: Senator "42110," four years old. Choice bull calves, all R.O.P. dams. Will exchange one. Must have quality and R.O.P. records.

JAMES BEGG & SON, ST. THOMAS, ONT.

Questions and Answers. Miscellaneous.

Life Tenant and Taxes.

A is willed the "use and occupation" of a dwelling property for his life, and at his death the property falls to B. A is using the property. Who is lawfully entitled to pay the taxes, no mention being made in the will regarding taxes or upkeep?

Ans.—A.

Leaves Wrinkling.

What is the cause of leaves of books wrinkling up after pictures are pasted in them? What will prevent it? E. B.

Ans.—Paper is made of material which absorbs moisture and swells. Unless care is taken it dries unevenly, which results in a wrinkling of the leaves. Using a pad of blotting paper on the opposite side of the leaf to which the picture is pasted will aid in reducing the trouble but will not entirely prevent it.

Heaves.

I have a young horse which is very bad with the heaves. I have been giving him medicine for several weeks, and it seems impossible to even relieve the trouble so that I can drive him. What treatment do you advise? A. S.

Ans.—Care must be taken in the feeding of a horse that is affected with heaves. Feed small quantities of bulky feed and larger quantities of grain so as not to overload the stomach. Avoid working the horse immediately after a full meal. Care should be taken that everything he eats is of first-class quality, and it is advisable to dampen his hay and oats with a little lime water. Dusty hay or dust in the stable aggravates the trouble, and overloading the stomach on hay or grass usually has the effect of rendering the horse practically useless for a short time. Some use a little pine tar on the grain and claim that it gives results. However, the remedy is in proper feeding rather than the administering of medicines.

Recipe for Paint.

1. What is a good method of killing lilac trees?
2. How do you kill horse radish?
3. What is the recipe for making white paint for outside use which is mixed with milk?

A. R.

Ans.—1. The best method of destroying lilac trees is to grub them out. It is the most practical and surest way.

2. Cutting the horse radish off and then applying salt quite thickly should have the desired effect. However, salt will render the land unfit for crops for a year or two. Therefore, if the patch is not too large it might be advisable to dig out the horse radish roots and then keep the patch hoed to prevent any new growth starting.

3. There are several mixtures which have been used, but one which gives very satisfactory results is to take one gallon of new milk and mix with 3 pounds of cement. This can be applied with a brush. It is necessary to keep it well stirred as the cement will settle at the bottom. Do not mix more than you will use in one day. By adding colored paint powder, any shade desired may be secured.

Cream Too Thick.

What is wrong with my cream separator? It will not skim thin cream. The cream sticks to the top rim and wont run out until there is about two inches of skim-milk in the milk pail. I have taken the cream screw out entirely but still the cream is thick. One cow freshened last fall; the other in May. They get salt night and morning and are on old pasture. W. E. S.

Ans.—With the feed the cows are getting the cause of the thick cream must be in the handling of the separator. If the machine is kept scrupulously clean and the cream screw properly adjusted there should be no trouble. It is just possible that a little dirt has become lodged in the opening through which the cream comes. This would tend to cause thick cream. Put the cream screw back in place and carefully go over the separator bowl to see that every part is clean. Follow directions for separating as closely as possible. If this fails to give cream of the proper consistency there must be something wrong or out of place with the mechanism of the machine, and the local agent or expert should be called in to make adjustments.

Important Notice to Breeders of Holsteins

Under the auspices of THE WESTERN ONTARIO CONSIGNMENT SALES COMPANY, there will be held at the FRASER HOUSE, LONDON, ONT., on

WEDNESDAY, OCTOBER 17, 1917

A great sale of PURE-BRED HOLSTEIN CATTLE. Parties having stock to consign should communicate early with the Dairy Manager. Entries close AUGUST 15TH.

FOR ENTRY FORMS APPLY TO

D. CAMPBELL Box 3, Komoka, Ont. Dairy Manager

HIGHLAND LAKE FARMS

SOME OF THE BULLS WE HAVE FOR SALE AT ATTRACTIVE PRICES

1. Born May, 1917, two nearest dams average 35.62 lbs.
2. Born March, 1917, two nearest dams average 34.16 lbs.
3. Born March, 1917, two nearest dams average (one at 3 yrs.) 34.23 lbs.
4. Born March, 1917, two nearest dams average (one at jr. two years) 33.12 lbs.

These are sons of Avondale Pontiac Echo, our herd sire (under lease) a son of May Echo Sylvia, the world's record cow. Only one other 41-lb. bull in Canada. Send for extended pedigrees and prices on these and others, a few of serviceable age, one from a 111-lb. cow. We guarantee satisfaction. Twenty-five females for sale.

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

SENSATIONAL OFFERING IN 30-LB. BULLS

We have at present several 30-lb. bred bulls, all nearing serviceable age, that must go out to several of the country's best herds in the near future. They are sired by one of the three sires used in the herd during the past year. Pontiac Korndyke of Het Loo., Avondale Pontiac Echo, or King Segis Alcartra Spofford. Our herd contains more 30-lb. cows than any other herd of equal size in the Dominion. Extended pedigrees mailed on request.

ROYCROFT FARM W. L. Shaw, Prop., NEWMARKET, 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.

Sunnybrook Farm Holsteins

SELLING QUICKLY—A limited number of young bulls and heifers from approved cows, testing 18 to 30 lbs. in 7 days, and averaging from 7,000 to 12,000 lbs. milk per annum, sired by Sunnybrook Mercedes Natoye, whose dam is a 29.34-lb. cow, and Count Fafort Sylvia Segis, highly strained in blood of the world's record cow. **DON'T MISS THIS OPPORTUNITY.** Write—

JOS. KILGOUR, Eglinton, Ontario; or Phone Toronto, Belmont 184, Adelaide 3900.

Choice Young Holstein Sires

I am offering a few choice young bulls at bargain prices. These are growthy, healthy, and great individuals. While the bargain lasts is the time to purchase. Write for prices, extended pedigrees and full information. Kindly give me an idea of the age of the bull that you would require. Correspondence solicited.

Oak Park Stock Farm - R. R. 4, Paris, Ont. - W. G. Bailey

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

CLOVERLEA HOLSTEIN-FRIESIANS

Stock for sale, all ages, from choice, high-testing dams—75 head to choose from. Our special offering is a few choice heifers, due to freshen in September or October. Personal inspection is invited.

GRIESBACH BROS. L.-D. Phone COLLINGWOOD, ONT.

EVERGREEN STOCK FARM . . . REGISTERED HOLSTEINS

Just now we are offering a very choice young bull, five months old, whose five nearest dams average over 30 lbs. of butter in seven days and 100 lbs. milk in one day. Also another bull calf whose dam was the top-price cow in the Woodstock Sale. Bell phone.

A. E. HULET, Norwich, Ont.

DUMFRIES FARM HOLSTEINS

175 head to choose from. Special offering; bulls from one month to one year old

Grandsons of Prince Aaggie Mechthilde. Visitors always welcome.

S. G. & ERLE KITCHEN ST. GEORGE, ONTARIO

SILVER STREAM FARM HOLSTEINS

Present Offering: One bull fit for heavy service, a straight and good individual of richest breeding. Sire's six nearest dams average 30.10 lbs. butter in 7 days; his dam's sire's five nearest relatives average 31.31 lbs. butter in 7 days. Anybody wanting a well bred sire at a moderate price, write at once. **J. MOGK & SON, INNERKIP PHONE 1 ON 34, R.R. NO. 1, Tavistock, Ontario.**

WILLOWBANKS HOLSTEIN-FRIESIANS

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 Dekol 33.31 and King Segis, who is 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, ONT.

Glenhurst Ayrshires

For 50 years I have been breeding the great Flos tribe of Ayrshires; dozens of them have been 60-lb. cows. I have lots of them get 60 lbs. a day on twice-a-day milking. Young bulls 1 to 10 months of age, females all ages. If this kind of production appeals to you, write me.

James Benning, Williamstown, Ont.

THE WOODVIEW FARM JERSEYS

THE CANADA'S MOST BEAUTIFUL JERSEY HERD

The foundation of this herd is made up of very high-class cows, imported from the Island of Jersey, most of them in the Record of Performance, and while we have, at all times, a few mature cows for sale, we make a speciality 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.

Young BRAMPTON JERSEYS Bulls

For the next fortnight we are making a special offering on young bulls, bred from the highest producing families ever introduced into Canada. Brampton Jerseys and their descendants hold all Jersey R.O.P. records, save one. Females, all ages, also for sale. **B. H. BULL & SON, BRAMPTON, ONTARIO**

Edgeley Stock Farm

THE home of Canada's greatest producing Jersey, SUNBEAM OF EDGELEY, the Sweepstakes Dairy Cow at the recent Guelph test; is also the champion R. O. P. butter cow for Canada. Would a grandson or great-grandson of this famous cow improve your herd? We have them. Write for particulars.

JAS. BAGG & SON, Woodbridge, C. P. R.; Concord, G. T. R. EDGELEY, ONT.

CENTRAL CANADA EXHIBITION

Ottawa, Sept. 8th to 17th, 1917

\$25,000 In Prizes for Live Stock

New York Hippodrome, Vaudeville Acts, Balloon Ascensions, Aviator, \$9,000 for Horse Racing, Pure Food Show, Gov't Exhibits, Dog Show, NIGHT SHOW—Magnificent Spectacle and Fireworks, British advance in Mesopotamia—Destruction of the Forts at Kut-el-Amara.

Entries Close August 31st. Reduced Railway Rates. Stewart McClenaghan, President, J. K. Paisley, Mgr. & Sec'y.

BLACK LEG LOSSES SURELY PREVENTED
by CUTTER'S BLACKLED PILLS
Low-priced, fresh, reliable; preferred by western stockmen, because they protect where other vaccines fail.

Write for booklet and testimonials.
10-dose pig, Blackleg Pills, \$1.00
50-dose pig, Blackleg Pills, \$4.00
Use any injector, but Cutter's simplest and strongest. The superiority of Cutter products is due to over 15 years of specializing in VACCINES AND SERUMS ONLY. ISSUED BY CUTTER'S. It is obtainable, order direct.
The Cutter Laboratory, Berkeley, Cal., or Chicago, Ill.

Linseed Oil Cake

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

Yorkshires

From choice stock on both sides. Several young litters. Also some young sows, ready to be bred.

WELWOOD FARM
Farmer's Advocate, London, Ont.

SPECIAL OFFER OF PEDIGREE Tamworth Breeding Stock

Young sows in pig, also males and females about to be weaned
HEROLD'S FARMS, Beamsville, Ont.
(Niagara District)

Blue Pigs

If you are not satisfied with the growing qualities of the hogs you now raise, why not try the Blue ones? They are not expensive, but they are the best. Write for descriptive matter and booklet.
Blue Hog Breeding Company, Wilmington, Mass.

Morrison Tamworths and Shorthorns. Bred from the prize-winning herds of England. Tamworths, both sexes; 12 sows, bred to farrow in August and September. Young boars, from 2 to 10 months old. Shorthorns, males and females.
Chas. Currie, Morrison, Ont.

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.

YORKSHIRES Sows 170 lbs. and under not yet bred. Boars 2 and 3 months, 60 to choose from. Bred from prize-winning stock, Eldon Duke still at the head. Tell us your wants.
Wm. Manning & Sons, Woodville, Ontario.

Cloverdale Berkshires and Shropshires—In Berkshires I can furnish boars or sows, all ages, pairs not akin. All breeding stock imp. or from imp. stock. In Shropshires can furnish rams or ewes, any age, from imp. stock. Prices reasonable.
C. J. LANG, R. R. No. 3, Burketon, Ontario.

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

Polands, Durocs and Berkshires
Young stock at all times, both sexes and all ages. Can also supply anything in Dorsets or South-downs. Everything priced to sell.
Cecil Stobbs, Leamington, Ont.

DUROC JERSEY SWINE. My herd won all the champion prizes at London, Toronto and Windsor, 1916. Young stock for sale, pairs not akin. Come and see them, or write. Trains met by appointment.
Culbert Malott, R. R. No. 3, Wheatley, Ont.

Questions and Answers. Miscellaneous.

Crippled Pig.

I have a pig which is a cripple. It cannot walk. Last winter it started to lie around, but I did not think anything about it until I noticed that it did not come to its feed as usual, and when it was touched it would squeal as if it was sore all over. At that time I was feeding it shorts, and I changed its feed to chop and it seemed to get better, but it never has been able to walk. It does not seem to grow any although it eats quite heartily. I turned it outdoors and am feeding it milk, raw potato peelings and pig weed, etc. Would you advise me to change its feed? Would potato peelings be better cooked? Could you recommend some treatment so that it would regain the use of its limbs?
H. E. R.

Ans.—The pig has rheumatism commonly known as crippling. Keep it outside as much as possible. Keep dry, however. It is necessary to have a shelter in the paddock. Nothing could be better than sour milk for the pig. Give also a little light chop and plenty of green feed. Pig weeds are all right. Clover would be better. Try a little Epsom salts in the feed for a few feeds. Boil the potato peelings. The pig may recover but it takes time.

Muscovy Ducks.

1. Are Muscovy ducks a desirable table fowl?
2. How much would they weigh when fit for market?
3. How many ducks is it advisable to mate with one male?
4. Do they require a creek for swimming in or will they thrive without running water? Give a few instructions on feeding and care from the time they are hatched until they are mature.
5. Do they lay many eggs?
6. Are they inclined to be broody?
7. Where could I get eggs for hatching?
8. How are the drakes distinguished from the ducks?
9. Will they stand confinement?
10. Are they quarrelsome with other poultry?
11. Can they be forced for market at ten or twelve weeks old?
12. Are they good foragers?
13. Are they susceptible to disease or lice?

J. R. C.

Ans.—1. They are a very good table fowl.

2. Standard weight for a young drake is 8 pounds, and a young duck, 7 pounds.
3. Four or five.
4. Ducks require water for drinking but not necessarily for swimming in. Breeding ducks are fed a good deal on mixtures of millstuffs wet with cold water. Many feed no whole grain at all as the duck's digestive apparatus is not suited to a ration composed largely of whole grain. Ducks will consume large quantities of coarse, bulky food and should have all the green food they will eat. A mixture of two parts bran, and one part middlings, one of oats and one of wheat, mixed with about two bushels of chopped grass or clover is a very good ration. Ducklings do very well the first few days on one part hard-boiled eggs and three parts breadcrumbs. After a week a mixture of four parts cornmeal, two parts wheat bran, two parts middlings and one part beef scrap, mixed with green stuff, gives good results. At about six weeks of age the ducks can be put in the fattening pen. More corn and less green feed should be fed the last couple of weeks.
5. They are reputed to be poor layers.
6. Not any more so than other breeds of the same weight.
7. We cannot say just at present. Breeders usually advertise during the breeding season.
8. The head of the drake is a little larger and the top is covered with long, brush-like feathers. There is usually a little difference in the color and also in the call of the birds.
9. Not too close.
10. They have the reputation of being vicious.
11. Yes, if properly fed.
12. Yes.
13. Ducks on the whole are comparatively free from disease and vermin.

1½ H. P. On Skids with BUILT-IN MAGNETO



\$65.

3 H.P. \$115. 6 H.P. \$205.

F.O.B. Montreal or Toronto

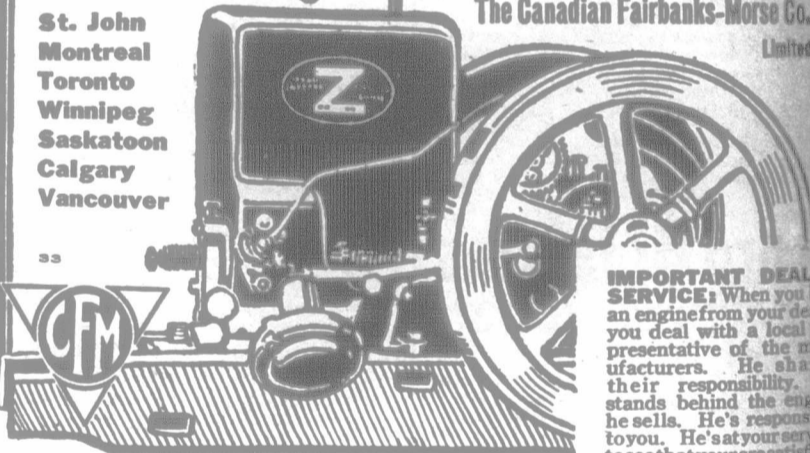
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IMPORTANT DEALER SERVICE. When you buy an engine from your dealer you deal with a local representative of the manufacturers. He shares their responsibility. He stands behind the engine he sells. He's responsible to you. He's at your service to see that you are satisfied.

LINCOLNS C. NICHOLSON

of Horkstow, Lincolnshire, England
has for sale Pedigree Lincoln Long Wool Rams and Ewes from his world-famous flock of ALL DUDGING-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

FARNHAM OXFORD DOWNS

Flock established from the best flocks in England. Our initial importation was among the first in 1881. Having quit the show-ring, we now make a specialty of breeding / animals. Special attention to flock headers. They will give a good account of themselves in the show-ring. Offering for the present season:—120 yearling rams; a few two-year-olds; 80 superior yearling ewes. A nice lot of ram and ewe lambs coming on.
HENRY ARKELL & SON, R. R. No. 2, (Tel. 355r 2 Guelph.) GUELPH, ONT., CAN.

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, Ont.
Langford Station on Brantford and Hamilton Railway.

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.

Pine Grove Yorkshires

Bred from prize-winning stock of England and Canada. Have a choice lot of young pigs of both sexes, pairs not akin, to offer at reasonable prices. Guaranteed satisfaction.
Joseph Featherston & Son, Streetsville, Ont.

PROSPECT HILL BERKSHIRES

Young stock, either sex, for sale, from our imported sows and boar; also some from our show herd, headed by our stock boar, Ringleader. Terms and prices right. **John Weir & Son, Paris, Ont., R. R. 1.**

OAK LODGE YORKSHIRE HOGS

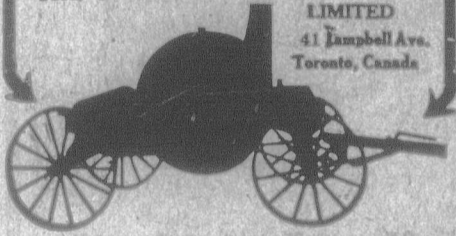
We have a large selection of extra-good boars and sows of different ages. We are selling at prices that make it attractive for the purchaser. Write for what you want.
J. E. Brethour and Nephews, Burford, Ontario.

TRADE-MARK
Wilkinson Climax B
REGISTERED
**Ensilage and
Straw Cutter**

Our "B" machine, built especially for the farmer. A combination machine—it will cut and deliver green corn into the highest silo or dry straw or hay into the mow. 12-inch throat, rolls raise 6 inches and set close to knives—solid, compact cutting surface. Can change cut without stopping. Can be reversed instantly. Direct pneumatic delivery. Knife wheel carries fans. No lodging; everything cut, wheel always in balance. Steel fan case.

Made in two styles—mounted or unmounted. We also make larger type machine for custom work. Ask your dealer about this well-known machine and write us for new catalog showing all styles.

THE BATEMAN-WILKINSON CO., LIMITED
41 Campbell Ave.
Toronto, Canada



**LIFT YOUR CORNS
OFF WITH FINGERS**

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

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

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

No pain, not a bit of soreness, either when applying Freezone or afterwards, 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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WOOL &c.**

SEND US YOUR SHIPMENTS—TO RECEIVE HIGHEST PRICE LIST FREE MARKET PRICES.
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A Guaranteed Remedy for every Common Ailment
Send 10c. for 160-page "Poultryman's Handbook," or write for FREE Book, "Poultry Wrinkles." Pratt Feed & Co., Canada, Ltd., 68 J. Claremont St., TORONTO.

You can assure your family a **MONTHLY INCOME for LIFE** or assure yourself an income during your old age by means of an

Imperial Monthly Income Policy

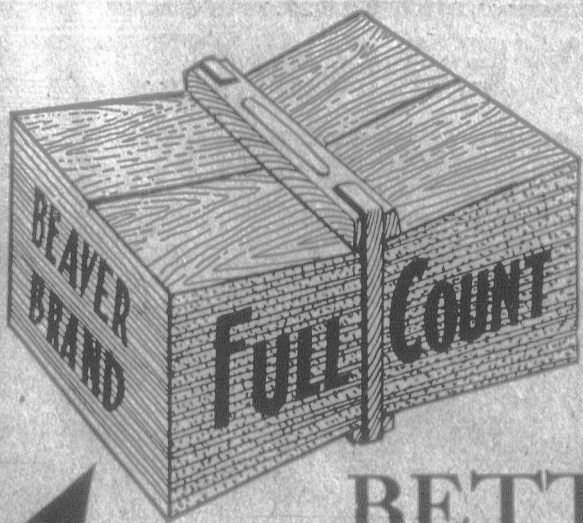
Write for particulars now and mention The Farmer's Advocate. Address: **Imperial Life Assurance Co. of Canada** Head Office: TORONTO

Artificial limbs are admitted DUTY FREE. SOLDIERS and others should get the best



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CHIMES AND PEALS**

MEMORIAL BELLS A SPECIALTY FULLY WARRANTED
McSHANE BELL FOUNDRY CO.
BALTIMORE, Md., U. S. A.
Chicago Office: 154 W. Randolph St.
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**BETTER
BARNs**

make better farms

You can't put everything in the bank. Your income is in your crops—your capital is in your stock and machinery.

Why not give them a shelter that's storm and weather proof.

If you are planning to build or fix a barn, specify the best roofing Specify Beaver Brand White Cedar Shingles and you will have a roof that will last your day and longer.

Get the kind that defy the storm, that stay on the job when the tornado has gone.

**BEAVER BRAND
WHITE CEDAR SHINGLES**

The Boston Transcript, August, 1916, says:

The wooden shingle again demonstrated its great superiority over other forms of roof covering, in the recent heavy rain and wind-storms in the southeastern cities. In the vicinity of Birmingham and through the east and south parts of the State the rainfall approached twelve inches in sixty hours, soaking all kinds of composition roofs, so that the wind rolled them up. The wooden shingles were not loosened by the wind, as were those of other types. Much of the property damage was caused by water destroying the contents of buildings, and in most cases the water entered because of defective roofing.

**THE SHINGLE ROOF
THAT'S STORMPROOF**

Bathurst Lumber Company
BATHURST, N. B. Limited

Eureka Potato Digger

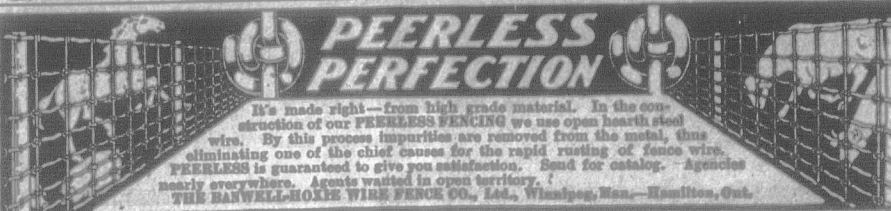
Gets the Potatoes and separates where other diggers cannot

A strong statement, but an actual experience many times, saving growers more than the cost of the Digger. Ask us for the proof.

The Eureka elevator and duplex shaker provides more separation than other diggers. Large wheels and main gears supply ample power. Mostly malleable and steel, avoiding frequent breakage and lost time. Growers report digging 80 or more acres without repairs. High clearance over shovel prevents weeds and vines bunching. Has vine-turner attachment.

6-ft. and 7-ft. sizes; several styles.
R. A. LISTER & CO., Toronto, Ont.

EUREKA MOWER CO., Box 1030, Utica, N.Y.



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PERFECTION**

It's made right—from high grade material. In the construction of our PEERLESS FENCING we use open headed steel wire. By this process impurities are removed from the metal, thus eliminating one of the chief causes for the rapid rusting of fence wire. PEERLESS is guaranteed to give you satisfaction. Send for catalog. Agencies nearly everywhere. Agents wanted in open territory.
THE BARWELL-HOLZE WIRE FENCE CO., Ltd., Winnipeg, Man.—Hamilton, Ont.



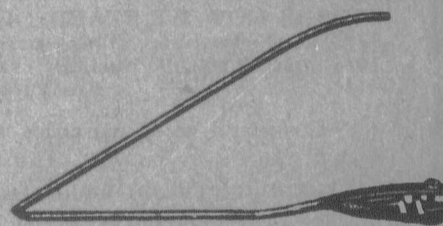
'Remembered'

THE LAST thing that can be done for brave fellows who have paid for their devotion to duty with their lives, is to keep alive the memory of their nobleness.

Families, churches, lodges, societies, and others wishing to erect appropriate bronze or brass memorial tablets will find every assistance here. Please address Memorial Department.

THE DENNIS WIRE AND IRON WORKS CO., LIMITED
LONDON, CANADA

LYING GRAIN LIFTER



Patent No. 167260

Write for full particulars, Mr. Farmer. You cannot afford to harvest your crop without this attachment, as it is no experiment, it has proven satisfactory in every way.

Write to-day for full particulars.

DICK AGRICULTURE WORKS
T. A. DICK, Manager, Bolton, Ontario

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HIVES - FRAMES
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THE TILLSON COMPANY, LTD.
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Ask your Grocer for
**McCormick's
JERSEY CREAM
Sodas**

Always crisp and delicious

5% INSTEAD OF 3%

Your money can earn 5% just as easily as 3% if you invest it in the debentures of the Standard Reliance Mtg. Corpn.

Our booklet, entitled Profits from Savings, tells you all about it. It's free.

Write now for a copy. **STANDARD RELIANCE MTG. CORPN.**
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THE ADAMS FURNITURE CO., Limited
Toronto, Ontario

"1900" Gravity Washer

Sent free for one month's trial. Write for particulars.

"1900" WASHER COMPANY
357 YONGE ST., TORONTO, ONT.
(Factory, 79.81 Portland St., Toronto)



One Million Acres of Wheat for Ontario Will Be Justified in 1918 by the Present Abnormal World Situation

THIS IS HOW WE STAND: In 1915 wheat exporting countries had a bumper crop, hence a huge carry-over was provided for 1916 of 329,000,000 bushels. This surplus saved the Allies; for the 1916 crop was short—745,000,000 bushels less than 1915, 156,000,000 bushels less than 1914, and 82,000,000 bushels less than the five-year average. As a result we have to-day practically no available exportable surplus. The world must live from hand to mouth—must depend on each crop to carry it until the next harvest.

This would be an extremely serious situation even if there were no war. The normal condition is a large surplus at the beginning of each harvest to make provision for crop failures which usually occur in some part of the world. The war, of course, aggravates the situation. Europe produces less wheat now and consumes more. North America, the present great source of supply, is sending, or will send, millions of men to the battlefield, while labor has been diverted to new industry. Added to all this, the submarines take a constant toll of shipping and cargoes. That is the general situation.

Supply Unequal to Needs

Nor are the prospects bright this year. England, France and Italy require 460,000,000 bushels of imported wheat. India and Australia are too far away to render much assistance in view of submarines and shortage of shipping. The Argentine new crop is a failure and no surplus is available there for export. The best of weather conditions will not, it seems now, permit of a greater exportable surplus from the North American 1917 wheat crop than 225,000,000 bushels.—125,000,000 from Canada and 100,000,000 from the United States. In all probability it will be less. Hence the supply of wheat in the world this year will not nearly equal the demand.

That is the outstanding factor. No trade agreements or organization can supply the wheat that does not exist. Nothing can restore the balance but heavy production. High prices must of necessity prevail until the balance is restored—and that can scarcely occur while the war lasts. Therefore the situation justifies the planting of all the winter wheat in western and central Ontario, and all the spring wheat in the eastern and northern counties that can be handled without disturbing too greatly the general scheme of farming now practised—for which stock and buildings have been provided.

A Crisis is Coming

The wheat situation is given in detail as an illustration of the food crisis we are approaching—for we have not reached it yet. The true crisis will occur in 1918 or 1919. Although wheat is the chief exportable food grain, all other staple crops must be considered in somewhat the same light. Wheat, beans, oats, dairy products and meat are required by our Allies. High prices for these must increase the prices also of non-exportable foods. And we must utilize the latter products in the fullest measure to permit the liberation of greater supplies of the former for our armies in the field. It would seem that necessity in 1918 will make for high prices and the conservation of food by all our people, regardless of when the war ends.

That it is his duty to produce foodstuffs need not be told the farmer. He realizes his duty as well as any element of the Canadian people. He practises thrift, he works long hours, he studies how best to meet a perilous situation. He will continue to do his part throughout the war as loyally as he has thus far.

Government Help with Labor

The labor problem is the most pressing. Ontario farms are undermanned. Only from cities and towns can more help come. But machinery will be of assistance. Fifty-three tractors, owned by the Ontario Government are at work right now plowing and preparing the soil. This number will be greatly increased as rapidly as is possible. They do the work at cost—write for particulars. Wider horse-drawn machinery will also help. Gang plows do not plow as nice a furrow, but the results are just as good. They will do much this year to turn the land for 1918 crops.

In view of the world shortage of food and consequent higher prices, the labor situation and weather conditions, certain points may be therefore emphasized with reasonable assurance regarding our preparations for the 1918 crop.

Michigan Amber are good general purpose varieties. Where winter wheat is not a reasonably sure crop, spring wheat should be a profitable cash crop next year.

Winter Rye. If it is impossible to sow winter wheat by the latter part of September—at latest—winter rye will give good results. It is very hardy, yields well and will stand later seeding than the wheat.

Keep the plow going. It is wise, both from the standpoint of production of crops and of economy of labor to plough land in the fall for the spring crops. In Ontario we have to-day 400,000 acres more in sod than we had four years ago—and there has been no corresponding increase in live stock. Much of this is old pasture which yields little feed. A Government tractor or a gang plow would do much to turn over your part of this huge acreage of old sod. After the rains in fall the land will plow more easily. But, of course, it will not be wise, even though prices may be high, to attempt to crop more than can be handled properly.

Fertilizers. In preparing for fall sown crops and spring crops alike it is well to consider very carefully the manure question. Farmyard manure should be so applied as to give best results while in many cases it can be profitably supplemented with commercial fertilizer. Write for fuller information regarding the question.

Live Stock. Our armies afield must have meat and Ontario is by nature and development a live-stock province. But the great demand for food grains and consequent high prices of concentrates is tending to encourage field crop production rather than fattening live-stock for market. The live-stock man's slogan may safely be "Carry on". His foundation stock must be maintained in his own good interests, and in the best interests of the Provinces. It will continue to command extremely high prices for some years after the war. But each animal should be studied closely and every individual which will not pay its way should be sold. This is a splendid time to unload for meat every breeding animal which is not giving a profitable return.

Information Gladly Furnished

For immediate and definite information in detail concerning:

Latest approved methods of preparing land for winter wheat, winter rye or any field crop.

Best varieties of any of these crops for your particular section of the province.

Special information regarding fertilizer requirements for any crop.

How to treat wheat for smut.

How to secure a Government tractor to do your plowing at cost.

Different kinds of plows, field machinery, etc., and their efficiency in practice.

Methods of economical feeding of any kind of live stock.

General market conditions in relation to any branch of the live-stock industry.

When it will pay to feed mill-feeds, and the fertilizing value of these feeds as a by-product.

Or any other question regarding the preparation for next year's crops write the office of the Commissioner of Agriculture, Parliament Buildings, Toronto.

Is Your Farm for Sale?

If so let us know. Many returned soldiers with some capital, will wish to buy good farms in Old Ontario, conveniently located and at a reasonable price. To facilitate these purchases the Ontario Department of Agriculture is compiling a list of suitable farms for sale and will put owners who desire to sell and prospective buyers in touch with each other.

Send Full Information

If you wish to sell kindly forward a complete description of your farm—the location, distance from church, school, post office and nearest town, and the condition of the roads, nature and condition of soil, amount of drainage done and required, kind and condition of fences, number of acres and how cropped, noxious weeds prevalent, complete description of buildings and source and condition of well water. State sum for which you will sell.

Write at once the office of the Commissioner of Agriculture, Parliament Buildings, Toronto.

Some Crop Suggestions

Wheat. As much land as possible can profitably be ploughed after haying for winter wheat. The seed sown should be of good quality, standard variety, unmixed, high vitality, thoroughly cleaned of every impurity and treated for smut. The seed bed should be properly fitted. It's a waste of much good seed to sow it in poorly prepared land. Dawson's Golden Chaff, The American Banner and American Wonder are high yielding varieties, but rather soft in grain. Imperial Amber and

ONTARIO DEPARTMENT OF AGRICULTURE

Sir Wm. H. Hearst
Minister of Agriculture

Parliament Buildings, Toronto

G. C. Creelman
Commissioner of Agriculture

