

# THE FARMER'S ADVOCATE

AND HOME MAGAZINE



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

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VOL. LIII.

LONDON, ONTARIO, JULY 18, 1918.

No. 1347

## Artistic and Economical

There is a beauty and individuality to a roof covered with Brantford Asphalt Slates that appeals to all lovers of the artistic. There is an economy in their low cost per year of service that appeals to all seekers of a sound roofing investment.

## Brantford Asphalt Slates

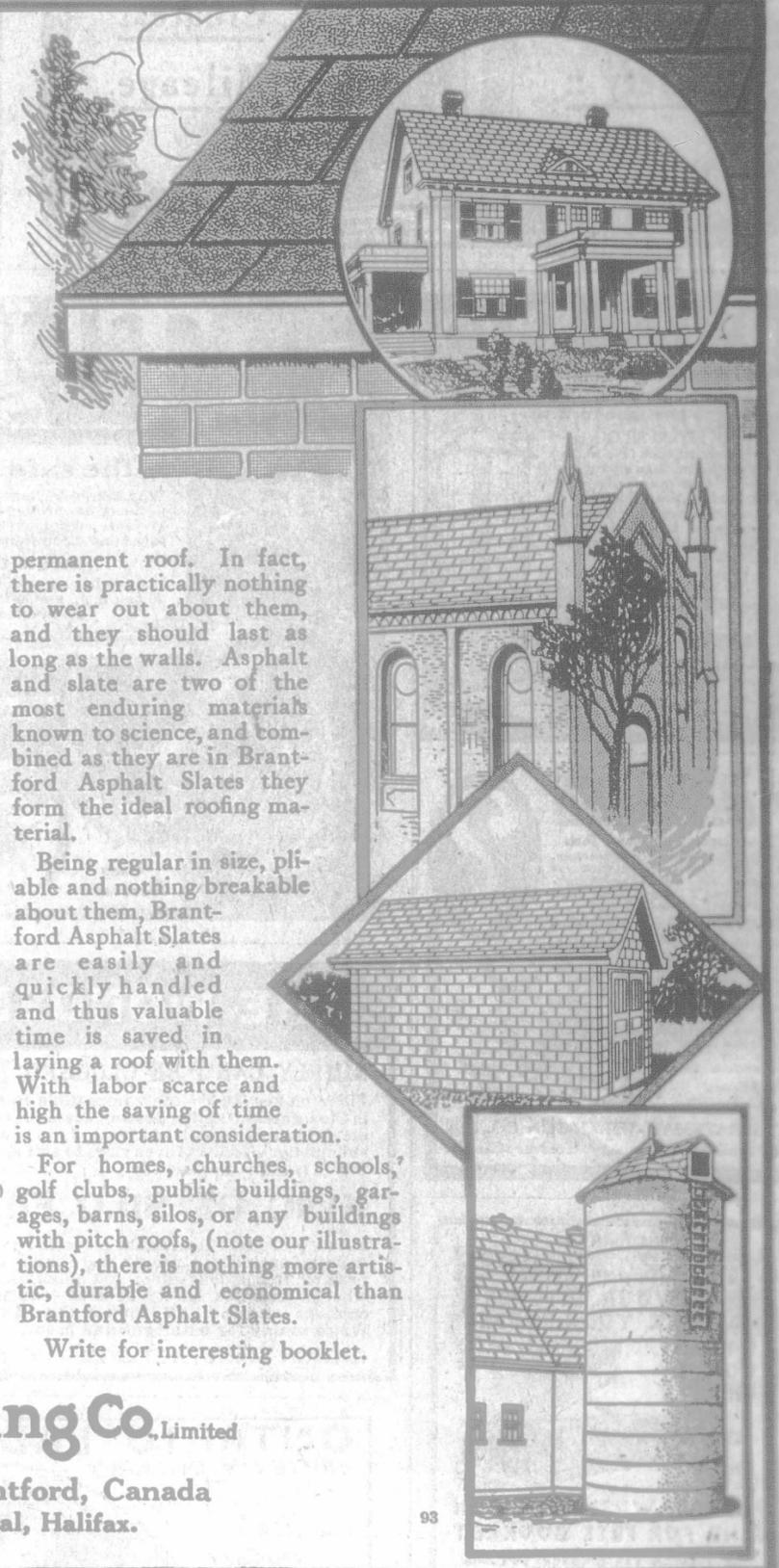
are made of a special grade of long fibred felt thoroughly saturated and coated with asphalt, on top of which is a surface of crushed slate.

The asphalt is a blend of soft and hard asphalts, tempered to resist the extremes of the Canadian climate. The slate is the real quarry slate and its colors of reddish brown and dark green are the natural colors of the slate and are therefore unfadeable. Brantford Asphalt Slates never require painting. It would be hard to imagine a more durable roofing, let alone make one.

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Write for interesting booklet.

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Head Office and Factory, Brantford, Canada  
Branches at Toronto, Montreal, Halifax.

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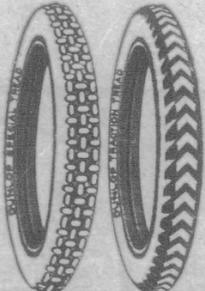
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### Simplicity

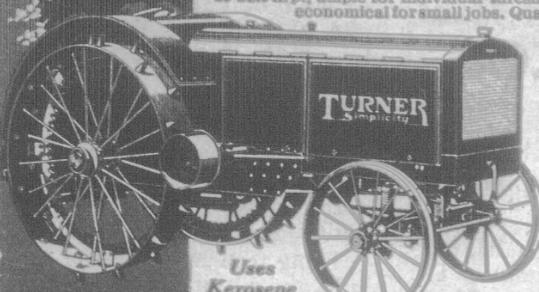
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Why take any chances in buying a tractor? Farmers' actual experience has proved certain tractor principles to be right. Turner's 17 years engine experience has taken those practical tested features and standardized them in a tractor that

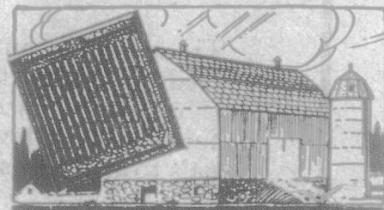
**meets the needs of every farm**

12 draw bar h.p., pulls 3 1/2 inch plows under usual conditions. Over 20 belt h.p., ample for individual threshing, silo filling, etc., yet economical for small jobs. Quality built—great strength; light weight. Waukesha 4 cyl. motor, Hyatt roller bearings throughout, Perflex Radiator, Dixie Magneto, Footie-Strite transmission and other standard quality parts.

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THESE shingles lock on all four sides, forming practically a one-piece roof of heavily galvanized steel, which, when properly grounded, causes lightning strokes to be evenly and harmlessly distributed. Proof also against fire, wind, rain or snow, and will not rust or decay, but will last a lifetime without need of repair. See your dealer or

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FLEET FOOT SHOES are money-savers, for you can have two or three

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Be sure that the name FLEET FOOT is stamped on the sole—none genuine without it.

The best Shoe Stores sell FLEET FOOT



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How many times have you thrown away letters and papers containing information that you needed later on? An "Office Specialty"

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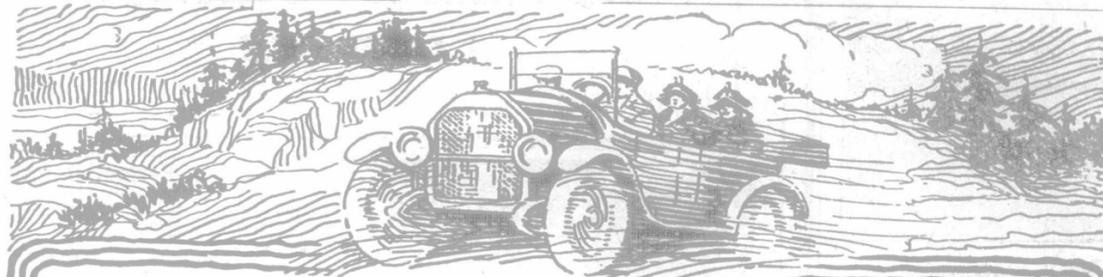
will hold the average man's correspondence for a year or so; his accounts, tax receipts and any other kind of papers with information that is likely to be useful at some future time. And it enables you to get what you want in a second.

Fits in any spare corner or on your book shelf; easily moved to table or desk when writing; gives you an easy and simple way to keep track of your papers and records.

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The smooth-running and dependability of Studebaker Cars are made possible through the exacting care with which each part is selected and put together.



### Dependable Spark Plugs

play an important part in producing that dependability and smoothness.

This Champion plug was developed for the Studebaker as were other Champion Plugs for Fords, Overlands, and every other type of motor—in many instances replacing other makes of plugs.

Such is the tribute to Champion dependability.

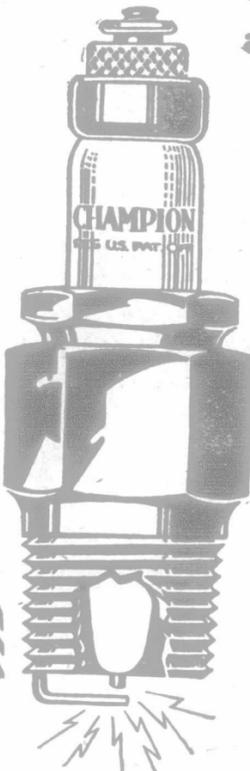
We make only spark plugs and each type has been tested under super-service conditions to increase the efficiency and economy of operating the particular motor for which it was designed.

The outstanding feature of each Champion is its patented asbestos-lined copper gaskets which cushion the porcelain by absorbing the rapid and incessant blows of cylinder explosions.

Dealers everywhere sell Champions.

Look for the name "CHAMPION" on each porcelain. It guarantees "Absolute satisfaction to the user or free repair or replacement will be made."

Champion Spark Plug Co.,  
of Canada, Limited  
Windsor, Ont.



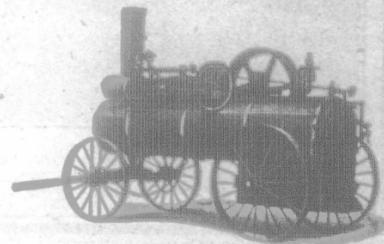
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Every motorist should have one. Cleans a set of plugs perfectly in a few minutes without taking them apart or even getting your hands dirty. All you have to do is half fill the tube with gasoline, screw in the plug and shake for a minute. Sells everywhere for \$1.00



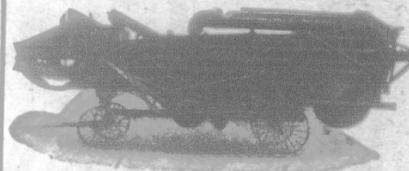
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For Studebaker Cars  
Price, \$1.00

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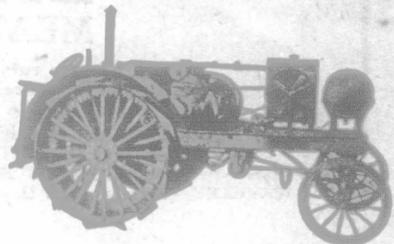


New and rebuilt Separators, all sizes from the individual Farmer's Thresher to the largest size.

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The Three-Plow Tractor for Ontario. The Tractor that makes good.

The Tractor that has stood the test

The Tractor that is guaranteed under all conditions.

Write for free catalogue, prices and any information wanted.

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Selling agents for Ontario. Seaforth, Ont.

Made in Canada  
**Tarvia**  
Preserves Roads  
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**A Tarvia Road to Market—**

What the steel rails are to trolley-traffic, the Tarvia road beside it is to horse- and motor-traffic.

Over a Tarvia road, like that shown below, farm products can come to market in any sort of weather with full loads and at good speed.

The use of Tarvia makes a macadam road dustless, mudless, frost-proof, and automobile-proof, and costs so little additional that the savings in annual maintenance charges will more than make it up.

A coating of Tarvia in time will arrest the deterioration of plain macadam and add years to the life of a road at much less expense than any other method.

Many road engineers everywhere, in Canada and the States, have settled down to the regular use of Tarvia on their principal thoroughfares because they find it gives them better roads and at the same time materially reduces maintenance costs.

Booklet telling about the various Tarvia treatments free on request.

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without cost**

How many times last winter did you promise yourself that never again would you attempt to heat your home with the rusty, cracked, smoky, drafty, erratic, inefficient furnace you now have?

The man who knows by expensive and exasperating experience what a poor furnace is, is the man McClarys want to talk to about the Sunshine Furnace, because he knows what a good furnace ought to be and do.

Almost every home has its own individual heating problem, requiring its own special solution.

Half a century of heating experience has gone into the designing and construction of the Sunshine Furnace.

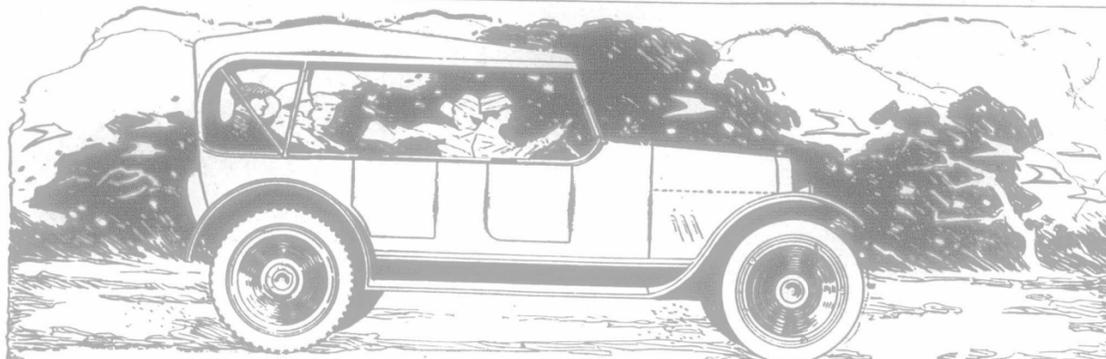
Why not get in touch with the local McClary dealer or the nearest McClary branch to-day—have this heating problem settled without delay? Don't put it off—have it done to-day.

**Free Engineering Service** McClary's own heating engineers are at your service when you buy a Sunshine Furnace, to give you free expert advice on your home-heating requirements. Write to the nearest McClary Branch and ask for particulars about this service. A booklet, "Comfort in the Home," makes clear all the things you want to know about furnaces, and it is sent free on request.

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Divides your stock and they stay where you put them. The fence that serves you for all time. Can't rust, sag or break down. Stands any weather. Each joint securely held with the Peerless lock, all parts heavily galvanized, the strongest, most serviceable farm fence made and fully guaranteed.  
**SEND FOR CATALOG** of all kinds of fencing for farms, ranches, parks, cemeteries, lawns, poultry yards, ornamental fencing and gates. See the Peerless line at your local dealers. Agents wanted in open territory.  
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MEANS MOTORING LUXURY**

To see the ruts without feeling them; to shift gears with the slightest effort; to accelerate or slow up with equal promptness; to throw the emergency brake with a one-finger motion—

These are the things that make the driving of the Briscoe a matter of supreme ease. These are some of the Briscoe features that will make you happy in Briscoe ownership. Price \$1,205, f.o.b. Brockville. (Briscoe pays the tax.)

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When writing please mention "Advocate"

# The Farmer's Advocate and Home Magazine

PERSEVERE  
AND  
SUCCEED

ESTABLISHED  
1866

REGISTERED IN ACCORDANCE WITH THE COPYRIGHT ACT OF 1878

LIII.

LONDON, ONTARIO, JULY 18, 1918.

1347

## EDITORIAL.

Once a week is not too often to cultivate the corn.

A summer-fallow is a mistake and a source of loss if it is not looked after properly.

The monthly milk check is a good thing from which to estimate a dairyman's farming ability.

Any live stock intended for the show-ring this fall should be handled and trained. Start now.

How about the weeds growing around the fences—will they be allowed to stand and reproduce themselves?

Are the canvas and working parts of the binder in trim for the harvest? "Preparedness" is better than "watchful waiting."

Pullets intended for winter layers should receive extra attention from this on. Fresh eggs next winter will command a good price.

It is customary in editorial comment to say something about the Kaiser and his ilk, but language, suitable to the occasion, would no longer appear well in print.

Calves are better kept indoors during the heat of the day and allowed to run out at night. Protection against flies in the real young stuff is both practicable and profitable.

Canadian wool is at last meeting with the recognition it deserves, but producers had to be impressed first. When they became interested and got together, then something happened.

Pure-bred cattle on pasture away from home should be watched closely. Open heifers and un-bred cows often get in calf under such circumstances, and the sire is frequently a scrub or a poor grade. This means loss.

The Patents and Copyrights Branches have, at last, been removed from the Department of Agriculture at Ottawa. This opens the way for a Deputy Minister who understands agriculture and will mix with the fraternity.

The Saskatchewan farmers did their part in increasing production but climatic conditions have been rather unfavorable. The element of luck seems to enter into farming operations, at times, in spite of the saying that there is no such thing.

It has been stated in meteorological circles that the mean or average temperature for one year corresponds very closely with that for any other year. We must have some warm weather soon and a lot of it to balance the cold from January to July.

Potato diseases are becoming common, and unfortunately they are not easily recognized by those who have not paid particular attention to this kind of crop. However, the blight is still the common and deadly enemy of the potato, and this can be held in check with Bordeaux mixture.

Weedy fields should be plowed soon after the hay is off, and either prepared for fall wheat or summer-fallowed for the remainder of the season. Of course, a very dirty field is not suitable for wheat, but if handled properly many of the weeds can be germinated and destroyed before seeding time.

### Conservation of Banking Credits.

The President of the Canadian Bankers' Association, Edson L. Pease, has requested the General Managers of all banking institutions to consider the reduction of existing credits and to apply a rigid check upon the further expansion of credit. This is the test he would have applied to all applications for a new loan: "Is it necessary for the prosecution of the war or the health and safety of our civilian population?" This appears like sound and reasonable finance, for any moneys tied up in non-essential and unproductive industries only retard the work which is of importance in connection with the prosecution of the war. The three main groups of borrowers in essential lines are mentioned as, farmers, manufacturers and merchants, and in regard to the former he says: "The farmers are being asked to produce more than ever before, and loans for productive purposes must have the right of way." We are pleased indeed to see that the President of the Canadian Bankers' Association holds such a reasonable and sane view in regard to agriculture, and it is to be hoped that the General Managers will become converted to this doctrine and impart the same spirit to the local branches where the farmer applicant will, no doubt, apply the test. There are, however, three classes of loans which the President says should be discouraged, the first of which is:

"Loans for carrying over grain, cattle or other marketable products in the hope of obtaining higher prices, and loans for the acquisition of additional property, unless the area under production is to be increased thereby and immediate results may be expected."

In regard to cattle a construction might be put on this section which would be very injurious to the cattle industry and to production in general. Cattle are marketable in almost any condition so long as they are healthy, and they are held, in the majority of cases, for the increase in price which is expected on account of the gains made. A farmer who puts in feeder cattle in the autumn hopes for a spread of at least two cents per pound by spring, for the gains in weight will not pay him for the feed consumed and the labor expended. Therefore, any restriction of credits in this connection would be doing serious harm to a very worthy industry.

### Britain's Agricultural Policy.

The Overseas Dominions of the Empire will find many significant points in Britain's proposed agricultural policy handed down by the Committee appointed in 1916 under the chairmanship of the Earl of Selborne. Already the British Isles have reversed their position from that of producing twelve weeks' food supply and importing enough for forty weeks, since, if the harvest prospects are realized this year they will reap a crop sufficient for forty weeks, and leave a balance of only twelve weeks' requirements to be imported. In March of 1917 this Committee submitted a report recommending the adoption of three principles, namely: a minimum wage for agricultural workers, a minimum guaranteed price for wheat and oats and the assumption by the Board of Agriculture of powers to enforce cultivation. These and other proposals were given effect by the Corn Productions Act. While the Committee look upon these as the permanent basis of agricultural reconstruction they deem other measures necessary to produce the results aimed at, namely, to render the United Kingdom practically self-supporting as regards corn potatoes and dairy products; corn meaning in this case practically all kinds of grain, which significance is given the word in that country. With this object in view they recommend in a second report sweeping changes which include the following points: 1, establishment of national agricultural councils for England, Scotland, Ireland, Wales, and statutory county agricultural committees; 2, improved agricultural instruction in schools; 3, increased

state aid for agriculture through existing societies and otherwise; 4, small holders to be given facilities for purchase; 5, village reconstruction, and development of rural industries; 6, establishment of reclamation and drainage authorities for each of the three kingdoms; 7, systematic efforts to deal with weeds and animal pests; 8, adoption of a uniform standard of agricultural weights and measures; 9, reorganization of rural transport.

Commenting on these proposals the Committee assert that the three fundamental principles enunciated in 1917 and the recommendations made in the recent report are inseparable and that the policy advocated must stand or fall as a whole. If the minimum wage, the minimum price, and the power to enforce cultivation are not embodied in permanent legislation "there can be no hope for the people of the United Kingdom becoming emancipated from dependence on supplies of food brought from overseas, or of the increase of our rural population."

In reply to the question how great an increase is necessary in the interests of national security, and how great an increase is possible the Committee say: "Our reply is that in any future crisis like the present war this country must be wholly independent of overseas supplies of corn, potatoes, or dairy products, and that it must be less dependent on overseas supplies of meat than it is now; and that if the measures we recommend are continuously carried out the dependence of this country on overseas supplies of food will become continuously less during the years of peace, with the result that on the outbreak of war and by carrying out the plans of the Board of Agriculture, carefully matured in times of peace, specifying the crops to be grown, the country would become self-sufficient in the foodstuffs named after the first subsequent harvest in respect of the cultivation for which these plans have been carried out."

From the foregoing one can glean sufficient information to excite an interest in the policy and to see that it is of vast importance even to the agricultural interests of this country. We, as a producing commonwealth, have long considered the United Kingdom as an outlet for our surplus product, and the market which we found there was extremely useful to Canadian farmers and beneficial to Canada, especially in adjusting financial balances arising out of the considerable investments of English capital in this Dominion. If this proposal meets with any degree of success it will call for a corresponding reconstruction and a readjustment of affairs in this and others of the Overseas Dominions. Mr. Prothero, President of the British Board of Agriculture, has said "From the struggle we have necessarily taken many severe lessons, not the least of these has been that we must make ourselves at least capable of self-feeding; not to be self-feeding but to be capable of self-feeding." Again he says, "It is idle to pretend that we shall return to anything even approaching pre-war agricultural conditions. A new order has been set up in England, a new doctrine already invested with the authority of the law printed upon it." Mr. Prothero further contends that in order to be capable of self-feeding, between 13,000,000 and 14,000,000 acres of land must always be under cultivation, and the Government must see to it that at least half of the farm land in the Kingdom is annually plowed.

Some are inclined to argue that after the war Britain will revert to a strictly manufacturing and shipping nation, and that the country is pre-eminently fitted for an industrial system and climatically unfitted for an agricultural system; that agriculture can only be developed at the expense of British manufactures and the British mercantile marine. The Committee replied to this argument in a very forceful manner and stated that if carried to its logical conclusion "it would degrade the use of English land to the perpetual sport of the manufacturing rich and to the occasional play-

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## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

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Agents for "The Farmer's Advocate and Home Magazine",  
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.
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10. LETTERS intended for publication should be written on one side of the paper only.
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London, Canada.

ground of the poor." They claim that the argument is as unsound economically as it is socially, and in proof they cite the development of German agriculture which has synchronized with the equally great development of German manufactures and of the German mercantile marine.

The United Kingdom has become enlightened as to what can be done agriculturally, and it is very doubtful if the land now cultivated will ever again be used for the perpetual sport of the manufacturing rich and as an occasional playground for the poor. This will necessitate a remodelling of our own agricultural policy to conform more or less with the weak points in the British system. We venture at this time to suggest that livestock products will be the last commodity with which the Motherland will supply herself in ample quantities, even should she develop her grain production to an unexpected extent. Consequently, it would appear wise on our part to increase our live stocks so as to cater to that demand, for we have an ever-increasing national debt which will call for the exercise of our best efforts and soundest judgment to meet it. We must also have a policy in this country looking to the development of our own resources, which will establish for this country a more reliable and adequate market at home.

It is quite possible to change breed type. Some breeders have evidently had certain points in view and have intensified these to the exclusion of others. Consequently lard types of hogs have been lengthened out, high quality in cattle has in some cases been secured at the expense of size. When selecting breeding stock, breed type, and conformation must ever be kept in mind but constitution, size and balance must not be lost sight of.

The wool clip of Canada is largely being marketed co-operatively and sold on the graded basis. It is understood that a very satisfactory price is being paid by the Canadian manufacturer for the different grades.

## Mounted Police For Rural Districts.

BY ALLAN MCDIARMID.

Why has Canada not got a force of Mounted Police in the rural districts of this country? This is a question that a good many people are inclined to ask at the present time. Many signs point to the fact that something of the kind will soon be a necessity if we are to continue to be known as a nation of law-abiding men and women. Some incidents in connection with the enforcement of the Military Service Act bear out this statement. It is well known that a good many men who should have done so have not obeyed the law in regard to registration, either for service in the army or for service at home. Not only that but they have tried, in some cases, to hinder those that were endeavoring to enforce the law. Just recently we had an account in the daily papers of an attack being made on a certain registration booth used on June 22nd and the registration cards being stolen and then burnt. So far as we know nothing was done by the authorities in the way of punishing the parties who were guilty. Another story comes to us about an unsuccessful attempt by the Military Police to arrest some slackers in one of the Eastern counties of Ontario. They were met with rifles, it is said, and went back to headquarters without their men. Another instance of this law-breaking spirit, and one which I know positively to be a fact, took place in the county above mentioned just last winter. A certain man who had been pretty active in helping the Government in military matters was compelled to be absent from home for a number of weeks. On his return he found that some one had cut down a grove of ever-green shade trees that were about his house and stables and these trees were placed in such a way that as soon as they dried a little they could be fired and a clean sweep made of everything. Whoever the criminal was, he is still enjoying his freedom. And another thing; in a province as dry as Ontario is supposed to be there is more whisky drinking going on than there should be. That it is being sold contrary to the law by some one is pretty evident. "You can get it if you know where and how," is the way some of the privileged characters put it. However, the most noticeable evasion of the law just at present is that by which those who do not want to serve their country, either at home or in France, are getting out of doing so. They simply refuse to sign up and they are so numerous and so scattered that it is apparently impossible for the Government, with its present organization, to accomplish the task of gathering them in.

And it would be right here that an efficient force of Mounted Police, properly distributed throughout the country, would solve the problem. The system is working well in other places, so why shouldn't it here? Eight years ago the State of Pennsylvania organized what they call their "State Police". These received their original training in the army but were later instructed and drilled for the work they were called on to do. All were picked men, and past record, character and mental and physical fitness, were separately taken into consideration when choosing them. They had to undergo the severest kind of discipline and study before they could qualify and any who couldn't measure up to the standard were quietly dropped from the ranks. As finally organized they were a body of men who feared absolutely nothing and were ready for whatever call might come. Their duties are simply to see that the law is obeyed throughout the rural districts and to help anyone who may call on them for assistance.

Law-breakers in a neighborhood often go unpunished because no one has the courage to take the matter up and see the thing through. But in the case of these "State Police" they have nothing to fear from the revenge of the criminal or his friends. They have no barns to be burnt nor votes to lose. They are not looking for either money or office. They are here to-day and gone tomorrow when their work is finished.

And these Pennsylvania State Police have made good to such an extent and have proved themselves so efficient, that the State of New York has just organized a similar body of men and these men are proving themselves quite as effective in bringing about obedience to the law as their partners in the sister State.

This department of State Police in New York was created in April, 1917. There were 2,670 applicants for a place on the force and out of these 235 were chosen. Then young Western horses from good stock were selected for mounts and training was started. Barracks in well-chosen locations were built for the men. Sub-stations were erected wherever necessary and all were connected by telephone. Patrol routes were laid out and it was arranged so that a trooper could be reached at almost any point on the route by phone. These troopers ride in pairs and wear grey uniforms. They carry revolvers and what is called a "first aid kit," to be used in case of accidents. These men are the doctors for all the troubles the State cares to bring to them. No matter what the emergency they are supposed to be ready for it. In a small-pox epidemic in New York State they were successful in completely stopping the spread of the disease. Another instance of their activities was the shutting up of a "Blind Pig", where men were getting drunk and making themselves a nuisance to the community. Farmers who neglected and abused their live stock, and children who were guilty of the same thing towards their aged parents, alike came under the notice of these guardians of the law and were made to change their ways, and to stay changed, for anything once brought to their attention is kept in mind as long as necessary. And not only are they bringing criminals to punishment but they are preventing crime by putting fear into those who would otherwise commit it.

Now again we feel like asking the question; why

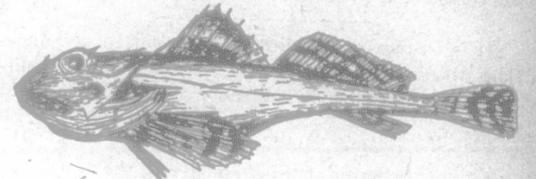
shouldn't we have these Mounted Police in Ontario and Quebec and other parts of Canada? Enough has been said to prove that we need them, if any proof were needed, but we should be impressed with the fact that the circumstances in which our country finds itself at present makes it doubly important and essential that we have some more adequate means of enforcing the law, particularly in those parts that do not come within the limits of our large towns and cities.

Are we carrying on our share in this war as progressively and efficiently as is possible? If not the reason is likely to be found in our inadequate system of law-enforcement. We have been given a good example. Can we not follow it?

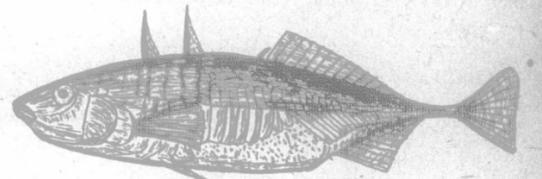
## Nature's Diary.

A. B. KLUGH, M.A.

I recently made a little trip down Miramichi Bay on biological work and we came across some things which would interest students of nature. We went ashore at Point au Car, and here we found quite an extensive Oyster bed. The Oysters were attached either to stones or to old Oyster shells, and they were to be found from just above low-tide mark to some considerable distance below low-tide mark. On climbing the low cliffs of sandstone rocks, which were carved into columns and caves by the waves, and entering the forest of Red and White Spruce, I found several species of Warblers breeding. These were the Bay-breasted Warbler, Tennessee Warbler, Magnolia Warbler, and Parula Warbler, all birds which are common, or fairly common, during migrations in the southern portions of Canada but which pass on to the north to breed. The Parula, a dainty little bird with a light blue back and crown, yellow throat and breast, with a band of burnt orange across the latter, and a white abdomen, was climbing about amid the long hanging tufts of the lichen *Usnea barbata*, which is often referred to as "hanging moss." This lichen is very common on the Spruces here, as elsewhere in the Maritime Provinces, and is undoubtedly the plant to which Longfellow refers in the beautiful opening passage of *Evangeline*, where he mentions "the murmuring pines and the hemlocks, bearded in moss." The Hermit Thrushes and the White-throated Sparrows were as common and singing as beautifully as they do all through this northern country.



Eighteen-spined Sculpin.



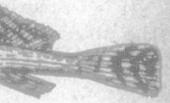
Two-spined Stickle-back.

Going aboard again we went on to Baie de Vin and anchored for the night. In the morning we made a seine-haul on a sand-bar at the mouth of the Vin River and our catch consisted of several 18-spined Sculpins, a good many small Flounders, a large Eel, and a large number of Stickle-backs. The Sculpin is a very common marine fish of a rather remarkable appearance, as may be seen from Fig. 1, the large head and the long spines giving it the semblance of a dragon of the deep. It is the proud possessor of one of the longest of scientific names — *Acanthocottus octodecemspinosus*, a name which, like most scientific names requires to be "taken to pieces," the first word meaning "spiny" and "cottus," (an old name for a fish of this kind) and the second word meaning simply eighteen-spined. Of the Stickle-backs there are several species, and in our haul three species were represented, the commonest being the Two-spined Stickle-back shown in Fig. 2. The Stickle-backs are found in both fresh and salt water and they are all interesting on account of their breeding habits. The males construct nests, these being globular hollow balls of Alga, and bits of water plants, built in the stems of living water plants. After the female has deposited her eggs in the nest the male stands guard outside and drives away intruders with great ferocity, darting at them with all his spines stiffly set.

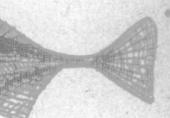
Passing down the bay we saw hundreds of salmon-traps, with their long lead net running out from the shore and the pound at the end, and outside the islands there were many fishermen engaged in drifting for salmon. By drifting is meant the setting of a gill-net, held up with buoys, but not attached to any stakes, and after the setting of the net the boat is made fast to the end of the net and thus drifts for some hours. The salmon catch has been a large one, and some idea of the quantities caught in Miramichi Bay may be obtained from the fact that in a single day the steamer which brings in the salmon from many of the points on the bay landed 161,400 pounds of salmon. And this was only a portion of the salmon caught that day, as there are salmon traps for twenty-eight miles up the river, none of the salmon caught in them are collected by this steamer. The current rate lately has been \$1.00 per fish, and the fish average ten pounds.

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The Beginning of Harvest.

## THE HORSE.

### Breeding Fall Colts.

There are several reasons why the practice of having mares reproduce in the fall, rather than in the spring, should be more common than it is. Of course, for show or racing purposes, when the animal is under four years old, the production of fall colts is not advisable, as the age of horses for these purposes is reckoned from the first of January of the year in which they were born, hence a foal born in the fall would have to compete with those several months older, either in the show-ring or on the race track. But the breeder who does not show or race his horses until they reach maturity would probably find it more profitable to have his foals born in the fall.

There is no doubt that a large percentage of the fatalities in spring colts is due to the manner in which their dams have been fed and used during the last few months of gestation. Especially on farms where there are sufficient horses to perform the winter work without using the pregnant mares, they are often allowed to pass the time in perfect idleness, often not given even box stalls to stand in, but are tied in single stalls and well fed on hay and oats, and, if the weather be rough, are not even turned out in the yard to get exercise during the day time. Then again, even where there is a disposition on the part of the owner to exercise his pregnant mares, conditions often forbid it for a greater or less portion of the winter months. When the ground is slippery it is dangerous, even though they may be well shod, and when the snow is quite deep it is also dangerous, as the driver cannot always keep his team, or single horse, as the case may be, out of the deep snow, where more or less plunging often occurs, and all breeders know that all undue nervous or muscular exertion should be avoided in pregnant animals. All breeders will admit that regular, but not excessive labor is beneficial, and all observers have noticed that, in the majority of cases, the mare that has had such during pregnancy, especially during the later months, produces a stronger foal than the one that has been pampered and kept in idleness. When breeding mares are not required for work, the necessary exercise is obtained while on pasture in the summer time much better than being turned out in the yard for a few hours each day during the winter time. When the services of the mare are required, either during pregnancy or after parturition, we get more satisfactory service before than after the birth of the foal. It goes without saying, that to get the best results the mare nursing a foal should be well fed, and live in comparative or complete idleness, hence we claim that, on this account, fall production is the better, as the mare can perform the ordinary work of a farm horse during the spring, summer and early fall, and then, after foaling, her labor is not usually required. She can then be given comfortable and roomy quarters for herself and foal during the late fall and winter months, and in the spring when the foal has been weaned, it will be in good condition to be turned out to pasture, while the dam, if again pregnant, will be in condition to do a season's work and reproduce again in the fall.

Again, the food that the mare consumes during the months in which she can be on pasture at nights tends to nourish the foal in winter better than the food usually given when horses are necessarily fed in the stable, and by breeding the mare in this way the farmer loses practically no services of his mare, and at the same time increases his stock. It is seldom that the foal of a mare that has been on pasture during the later months of pregnancy is weak or delicate. Of course, the same danger of mal-presentation, causing difficulty in parturition, exists in one case as in the other, but the foals are usually stronger and smarter if produced after the mare has been some time on grass. There is also less danger of joint-ill when the mare foals on grass, from the fact that the germ that causes the disease is not so liable to be present in the pasture field as in the stable. All breeders know that the production of late-fall or early-winter foals is not an easy matter, as mares do not usually show oestrus in cold weather, but we advocate having mares foal in the early fall while still on pasture. The fall colt, as stated, cannot, with equal chances, compete in the show-ring or on the race track during colthood with the spring colt, but at maturity should be as good or a better animal, especially if the dam has been worked while nursing, hence we think that for the ordinary breeder fall production will give the better results.

WHIP.

### Care of Work Horses.

The Boston Work-Horse Relief Association has issued the following suggestions in regard to the care of horses and we are glad to pass them along.

Look out for sore shoulders and backs, especially in plowing. Be sure that your collars fit. A collar too big as is bad as one too small.

When the horses are at work on a warm day, lift up the collars now and then to cool their shoulders, and wipe off the sweat and dirt with a bunch of grass.

Wipe off the harness marks on your horses when you stop work at noon and at night, and clean the inside of the harness, the collars especially. The salt sweat, drying on the skin and on the harness, is what makes the trouble.

If the skin is wrinkled under the collar or saddle, bathe it with witch-hazel. If the skin is broken, bathe it with clean warm water containing a little salt. Fix the collar, with padding or otherwise, so that it will not touch the sore spot the next day. A little care-

lessness at the beginning may cause a lot of trouble and suffering.

Clean your horses at night, water them, give them a good bed, and water them again after they have eaten their hay. Let them rest an hour or more before they are grained. The observance of these simple rules will not cost you a cent, and will make a big difference.

## LIVE STOCK.

At an Illinois auction sale of Aberdeen-Angus cattle 45 head brought a total of \$24,330.

Magnus Bros. of Minnesota had an average of \$622 on 46 head of Herefords which they recently sold by auction.

At the dispersion sale of J. H. Miller & Son, Ind., held late in June, 91 Polled Durhams and Shorthorns averaged \$709.



Pair of Romney Ram Lambs

Each made a pound a day gain for the first 45 days. Bred by J. H. Patrick & Son, Ilderton, Ontario

Encourage the boys to fit a calf, colt, pig or sheep for the local fair. It will be fitting them to enter the larger show arenas later on.

At the Shorthorn sale held by Leslie Smith & Sons of St. Paul, 72 head of imported stock brought a total of \$92,870 or an average of \$1,289.

If remodeling the stable or barn, build for convenience in feeding and caring for the stock. Plan to save all the steps you can when feeding the stock or cleaning the stables.

It is understood that the American Shorthorn Breeders' Association have offered to duplicate prizes won by Shorthorns in Canada that have been bred in United States.



Raithby Blenheim

Winner of the 1,000 gs., champion cup, at Bulawayo Show, South Africa.

It usually pays to give prompt attention to ailing animals. If you cannot diagnose the trouble or if you haven't first aid remedies on hand lose no time in securing a veterinarian.

Improve the grade herd or flock by using a pure-bred sire of recognized type and conformation for the breed and with a good pedigree. Then, cull out the inferior individuals.

Did it ever strike you that the majority of the ailments of animals can be traced to improper feeding or

lack of care? A little more attention given to the study of feeds and feeding and to the animal's wants would save expense and in many cases loss of animals.

Let the boys help choose the next herd sire or females to strengthen the herd and thus show them that you appreciate their opinions about stock. Besides the chances are that the boys will have to feed and look after the herd. Too few stockmen make partners of their sons.

It is understood that live stock and live-stock products cannot now be exported without the exporter securing a license. We have heard of several breeders of pure-bred stock having their animals held up at the border, thus causing a great deal of trouble and inconvenience.

### English Live Stock News.

The magnificent sum of 3,500 guineas has been paid for an English-bred Holstein cow, Eske Hetty, the first

cow in Britain to yield 2,413 gallons in 365 days. She was sold at Heybridge, Essex, on June 6, the Olympia Pure-Bred Stock Farm's Co. buying her for one of their Yorkshire milk farms. The same firm also paid 1,700 guineas for Routh Blossom 3rd, that gave 1,342 gallons in 308 days with her second calf. Since calving again she has averaged nearly seven gallons a day for her third lactation. F. B. May that day sold 33 Holsteins for £12,626 5s., or a general average of £382 12s., 3d. apiece. This is the "record" sale event of the Holstein world in Britain.

As a set off to this let me say in 1917 some 6,564 head of milking and beef Shorthorns were sold in Great Britain for £16,257 1s. 6d., or a general average of £78 16s. 6d. Fancy half a million of English pounds sterling—I'll leave it to you to figure how many million dollars it means. Could any wizard at figures put a value price on the studs, herds and flocks of this tight little island? I think not!

We are going to revive as a pure breed, which we have let slide for the sake of mere commercialism, the sheeted or saddle-back pig, which you in the New World have long since kept pure and called the Hampshire hog. He emanated with you from Hampshire, England, no doubt, and he is still to be found quite pure in that agricultural county, in Dorset, in Wiltshire, and in Somersetshire, which is what literary high-brows over here call the "Wessex Country" of Thomas Hardy's truly rural novels. I need not paint to you a word picture of the merits of the Hampshire hog. You know 'em off by heart, but it will strike you once more that we must be a funny nation, to give North America a breed of pigs and not worry about it ourselves for fifty years after that, and then to move, only because the war and a boom in pig keeping has made us look a bit closer after our farming stocks, and our porcine races particularly so. Some good men are behind this revival of the sheeted pig and it is bound to go ahead.

There are two Wensleydale-Sheep Societies in England, but as the respective types are much the same a call has gone forth for an amalgamation of both. The chief argument in favor of this is that colonial buyers of the breed—and it is a good long-wool breed—get a wee bit mixed up when ordering stock and think there is a definite difference between the stock as represented by two societies, whereas there "ain't no sich" distinction.

At Bulawayo Show, South Africa, a 1,000-guinea championship cup is offered for the best bull of all breeds that go into the ring for this supreme title. It has just been won by a recently exported English Shorthorn bull called Raithby Blenheim, sired by Bilsington Blenheim, a bull in the Bilsington herd at Maidstone, Kent. There are some breeders of the Suffolk horse which think the breed needs stirring up, by way of publicity. There are others who think the Society ought to be told bluntly what breeders in Canada and in other far-off countries and districts think are the best points in the breed to develop. Good as the Suffolk horse is, its breeders at home are a "cribbed, cabined and con-

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finned" lot. They never go afiel and do not seem to care what the world thinks of the breed, or what the world wants, so long as they can go on filling just local requirements, i. e., breeding geldings and farm working mares for their own use. The Suffolk horse is a good horse and deserves to be better known but the Council of the Society slumbereth on, oblivious to what they might achieve if they could open out the markets of Canada and the United States with good, sound and representative specimens of the breed.

A frenzied discussion is going on in Britain as to whether the Cruickshanks were great breeders, or whether they merely "carried on" with the Booth blood in the cattle they bought and worked out the lines that Booth set running. It is a fine debatable point. If you are English the answer is that the Cruickshanks did nothing brilliant; if you are Scotch, the reply is the Cruickshanks were the real saviours of the Shorthorn. The whole point to my mind turns on this one thing— if Amos Cruickshank had not bought from Wilkinson, of Lenton, the bull, Lancaster Comet, would the herd of the Scots brothers have achieved the fame it did? I say "No"—but there I'm English and "prahd" of it. Think it over, brother beef men in Canada, and write to The Farmer's Advocate about it!

ALBION.

**Grade Up the Herds and Flocks.**

The ambition of every farmer should be to improve his live stock. If this desire does not burn within his breast then he is not likely to accomplish much along live stock lines. The aim should be to improve and in order to do this there must be a goal in view. On some farms the stock is no better than what was kept on the same farm two or three decades ago. Then it was scrub grades, and to-day the animals kept fall in the same category. The idea seems to be prevalent with some folk that expensive pure-bred stock is necessary before improvement can be made, and because they lack the necessary funds to purchase foundation stock which they think they should have they rest on their oars and drift along from year to year. While some of the

to cull out inferior animals and breed only the best has prevented more than one stockman from achieving fame. By this process of grading up, improvement in the stock will be made at comparatively small cost. The greatest expense will be that of procuring a sire. If the right quality of individual can be secured, the price should not stand in the way of purchasing it. Too often the dollar is held so closely to the eye that future returns or prospects cannot be seen. A sire of poor breeding with lack of individuality is dear at any price while the bull which shows character, has the recognized type and conformation of the breed, and whose pedigree shows that his ancestors have proven good, may be worth his weight in gold.

**Market Receipts and Prices.**

During the month of June finished cattle reached an unprecedented price at the Toronto Union Stock Yards, but the hog market showed a slight weakening. According to the monthly market report issued by the Live Stock Branch, Markets Intelligence Division, the top price for heavy-finished steers at Toronto in May was \$17.00 per hundred, while in June it reached \$17.50. The average price in May was \$15.25, while in June it was \$15.92, an increase of nearly seventy cents per hundredweight. Good steers of 1,000 to 1,200 pounds in weight found ready sale at well over the \$15.00 mark. It is difficult to say whether or not the market will hold steady during the next few months when a considerable number of grass-finished cattle will find their way to the stock yards. In some districts the pastures appear to be fairly well stocked, while in others feeding cattle are scarce. Stockers and feeders held their own during June, but \$12.00 to \$13.50 per hundred weight for 800 to 1,000-pound cattle makes a stockman stop and think twice before purchasing to fill his pastures. At the Toronto stock yards 18,323 head of cattle were received in June, which was over 1,000 head in excess of the same month last year, and the price exceeded the 1917 price by about \$4.25 per hundredweight. The receipts of cattle at all of Canada's leading markets were in excess of the same month last year. During

them has steadily increased from year to year, and a larger amount passes into the higher grades than was formerly the case, thus showing that selling on a graded basis tends to improve quality.

In former years the Canadian wool manufacturers were not very keen on taking Canadian wool at prices asked by the wool grower, consequently a good deal of our clip crossed the line to the American market. Some Canadian manufacturers contended that they could not handle Canadian wool as well as what they imported. However, necessity is the mother of invention, and the need for wool has evidently been great enough to induce the manufacturer to alter his machinery or else to realize that his previous contention was without foundation, because it is understood that this year Canadian wool will be manufactured in Canadian mills, and the top market price was paid for it. Canadian wool is of high quality and more of it might advisedly be produced.

**The Control of Flies on Cattle.**

It is impossible to estimate the misery which flies inflict on the stock of the country during a single year, and aside from the pain which they cause they are carriers of disease, and, owing to the worrying of the stock cause a very great loss. This summer flies of various kinds are evidently very numerous and consequently more annoying than usual. From various parts of the country come reports of the herds stampeding when attacked by flies which some call the gad fly, others the warble fly, while some contend that the harm is done by the horn fly. Whichever fly is doing the damage, it appears to be pretty general over the entire Province. In the issue of the Farmer's Advocate of July 4, appeared an illustration of the horn fly and of the warble fly, together with the description of these and several other flies. Recipes for fly repellents were also published in the same issue. Reports indicate that the material used to repel the flies does not always prove effective. While it may keep off the ordinary stable fly, it does not always prevent some of the larger and more vicious flies from worrying and irritating the



**Coquette McHenry, 40th**

A pair of Angus heifers consigned to the International Aberdeen-Angus sale last December, by Escher & Ryan of Iowa, and purchased by H. Fraleigh, Forest, Ontario



**Kacena**

progeny may excel their dams and sires in quality, on the whole the scale of quality is not raised from generation to generation; consequently numerous herds of low quality and poor conformation are to be found grazing on Ontario pastures and occupying stalls in large Ontario stables. The value of breeding, quality and conformation was clearly shown at auction sales of the various breeds held during the past six months. If improvement were commenced in every herd in the country even one decade ago, it would have resulted in Canada's live stock being valued at a considerably higher figure than it now is.

The past is gone, we must build for the future, and where there has been no tendency toward improvement in the past it is high time that a start be made. The grade animals of mixed breeding to be found in many stables can be improved in quality in a comparatively short time by the use of registered, high-quality sires. The late Prof. Thomas Shaw claimed that "the common stock furnished excellent material as the basis for improvement, and the more mixed the blood elements the more quickly could the improvement be made. This followed from the fact that each additional blood element differing in character from the preceding reduces the power of that animal to transmit its own properties to the progeny, consequently when such an animal is mated with a sire of a pure breed the influence of the latter preponderates in effecting the change. The degree of such preponderance is proportionate to the degree in which the prepotency of the sire excels the prepotency of the dam. By using a choice specimen of the breed, improvement is surprisingly rapid when the foundation stock is composed of common females of mixed breeding."

The first cross will show marked improvement on the whole, but there will be a few inferior animals and it will be necessary to weed these out. A breeder intent on improving his herd will be most unsparing in weeding out animals which do not come up to his ideals. Failure

the month 21,682 hogs passed through the Union Stock Yards on their way to the packing houses. This was approximately 15,000 less than in May, 1918, and 5,000 less than in June, 1917. Most of the other markets showed a falling off in receipts compared with the previous month and with the same month, 1917. The number of sheep marketed throughout Canada, according to the report, is practically double that of the same month last year. For instance, at Toronto it was 5,082 for June, 1918, compared with 2,781 for June, 1917. At Montreal it was 1,665 compared with 799, while at Calgary 1,457 sheep were received in June, 1918, and 562 in the same month 1917. The price for sheep was considerably higher than for a similar period the previous year. It is believed that the number of sheep kept in the country is much greater than it was at the commencement of the war. The heavier market receipts are not necessarily an indication that flocks are being depleted.

**Canada's Wool Clip Stays at Home.**

The small flock owner as well as the rancher in all parts of the Dominion has marketed his wool through his provincial co-operative grading station, and had it sold by the Dominion Wool Growers' Association at, we understand, a very remunerative figure. The keen demand for wool to meet war needs has caused the price to soar, and the high price has induced an ever-increasing number of farmers to add sheep to the classes of stock kept or to considerably increase the flock. Sheep give a double revenue, and as they are not ravenous feeders on high-priced concentrates they are proving profitable to their owners. True, there are the dog nuisance and disease to contend with, but what line of business could a person engage in that was without drawbacks?

Since the Provincial wool grading stations were started in Canada the amount of wool marketed through

farm stock. Cows in milk fail rapidly in the milk flow, and beef animals fail to make economical gains when tormented from sunrise to sunset. The greatest annoyance is usually caused in mid-day when the sun is the hottest, and we have noticed our own herd start all of a sudden and race as hard as they could for the buildings. As to which variety of fly is actually causing the annoyance, we cannot definitely say. We have tried a number of fly repellents without satisfactory results and at present we are spraying the cattle night and morning with a solution of crude carbolic acid, care being taken not to apply it in sufficient quantity to cause burning. A large box stall is also left open during the day so that the stock may take refuge from the strong rays of the sun. When in the partially darkened buildings the flies are not nearly so troublesome as in the open.

John McKee, a prominent dairyman of Norwich, writes as follows: "Herds of cattle will fairly stampede and run for a great distance. This is causing a serious drop in milk production. The ordinary fly sprays do not appear to be of any use so far as the gad fly is concerned. I wish some effective remedy could be found, as the matter is becoming quite a serious one in this district."

Harry Smith, a well-known stockman of Hay, Ontario, writes: "I have done nothing to ward off the attacks of the gad fly, because I knew of nothing which promised relief. Destroying the fly while still in the grub stage of development appears to be the most promising method of keeping this fly in check." Other stockmen have expressed themselves in much the same terms as the above. Undoubtedly a heavy loss is being caused this year by flies. Reports from the grazing districts indicate that steers are making poor gains, owing largely to being continually tormented.

George W. Muir, Assistant Dominion Animal Husbandman of the Dominion Experimental Farms, Ottawa,



A Two-furrow Foot-lift Gang at Work on the Farm of D. H. Martin, Huron Co., Ont.

writes as follows regarding the effect of various fly repellents which have been tried at the Dominion Experimental Farms:

"Of the various species of flies which infest cattle some are injurious on account of the annoyance, pain, and loss of blood due to their bites, and some on account of the diseases which they spread from the blood of diseased animals to the blood of healthy animals. Fortunately in this country the diseases carried by the latter are comparatively rare.

"Flies pester the cows in large numbers, therefore, in the interest of increased milk and beef production and growth of young stock, to say nothing of the comfort of the animals, it is advisable to use some form of fly repellent.

"The following remedies are fairly efficient in protecting cattle from attacks of flies but must be applied quite frequently. They will be found considerably cheaper per gallon to make than the many patented fly repellents on the market can be bought for:

"1. Rancid lard, 1 lb., and kerosene, ½ lb. thoroughly mixed and applied with a cloth, brush or the bare hands will last for two or three days.

"2. Fish oil 3 parts and kerosene 1 part, applied with a spray pump will last one to two days.

"3. Fish oil 2 parts and pine tar 1 part, thoroughly mixed and applied with a brush will last 4 to 5 days.

"4. Crude carbolic acid 1 part and fish oil 10 parts thoroughly mixed and applied with cloth or brush lightly so as not to blister, will repel flies two to three days.

"5. Fish oil 100 parts, oil of tar 50 parts, and carbolic acid 1 part applied with a spray pump is efficient for two days.

"6. Rancid lard 5 lbs. and pine tar 1 lb. thoroughly mixed and applied with a brush is efficient for three or more days.

"In addition to the above a number of patented fly repellents might be mentioned as having given good results, but with all of these sprays care must be taken not to apply too heavily for fear of blistering the skin, and not to spray just before milking for fear of tainting the milk with the strong odor of the sprays.

"Spraying besides keeping down the ordinary flies helps to keep in check the warbles with which the cattle are so commonly infested in the spring months.

"The duration of efficiency of any spray for flies depends upon the thoroughness of application, particularly to the parts most infested by flies, and frequently upon the weather conditions, as frequent rains invariably mean the necessity of more frequent applications.

"In spraying milking cows with either homemade or patent sprays great care should be taken to select ingredients or sprays which will not, in any way, taint the milk through their rancid or very strong odor."

From the above it will be seen that fly repellents can be compounded at home by the use of various common materials, and while these are claimed to be only partially effective in protecting the cattle it is advisable to use some form of repellent in an effort to give the stock as much relief from the fly nuisance as possible. It is necessary to apply the material frequently if results are to be obtained. Evidently the material that will repel one fly, is effective against other varieties.

By destroying the breeding places of flies, considerable can be done to lessen the number. Flies breed in refuse and filth, consequently by keeping the stables and yard reasonably clean the number of flies can be reduced. Some stockmen use material over the windows to partially darken the stable. This gives relief to the stock when they are in the stable. If old sacking, pine boughs, etc., are hung from the top of the stable door so as to brush on the cattle's backs as they enter, many flies will be kept out of the stable which would otherwise enter on the stock. Some make a practice of stabling their cattle during the day and giving them a little hay and grain and then turning them to pasture at night. In this way the animals suffer the minimum of annoyance from the pests in question. Using a fly repellent and stabling the cattle in partially darkened quarters during the heat of the day appear to be the only known means of giving the stock relief from their small but numerous enemies.

## THE FARM.

### The Two-Furrowed Plow.

While the two-furrow plow has been in use for many years, and farmers realize the advantages of turning two furrows instead of one and riding instead of walking, there are districts no doubt where this convenience has not yet made an impression. D. H. Martin, of Huron County, Ontario, sends up the accompanying illustration. He says this plow has now plowed, this season, nearly 100 acres. By the time it has plowed 103 acres it will have saved a walk of 847 miles, or the distance from Winnipeg to Edmonton. Mr. Martin believes that if he could persuade the farmers of Huron and Bruce Counties to purchase such a plow and get their plowing done quickly this fall, he would be doing a good service to the Allies. He furthermore recommends that since so many of the boys have gone to the front, farmers in a neighborhood should co-operate, purchase modern and large machinery and get their work done quickly and more easily. In this connection he mentions the two-furrow gang with a narrow bottom, the harrow-cart which is drawn behind the harrows and allows the teamster to ride, and the wide drill with the running board behind. Of these three implements perhaps the harrow-cart is the least known. They are used more in the West, but there is no reason why they should not be employed very much more extensively in Eastern Canada. Walking all day over the soft land is a waste of energy and man power. We are well supplied with horses in this country, and it is not good management when a man has to follow the harrows all day besides doing chores night and morning.

### Prevent the Weeds From Seeding.

On the whole Canadian thistles and other perennial weeds do not appear to be so numerous in hay and grain fields as they have been in previous years. The season no doubt has tended to lessen the number. Shortage of labor in the past resulting in insufficient cultivation on many farms has given the weeds an opportunity to fasten themselves securely in the ground and to spread to neighboring land. Where possible an effort should be made to keep noxious weeds in check. Allowing a few plants to mature and scatter their seed may mean hundreds of plants the following year, so productive are some of our worst weeds. If time permits, thistles should be cut and other weeds pulled from grain fields. Hay is usually harvested before many weeds mature. In the case of cultivated fields, sharp teeth on the cultivator will destroy most of the weeds, provided

the field is gone over at frequent intervals. The hoe is necessary to remove thistles, etc., from the corn and turnip rows and if possible it should be used. It is frequently noticed that weeds are prevalent in the grain near the fences of a field which was in roots or corn the previous year. This may be due to poor cultivation of the headlands, but more generally to failure to cut weeds growing along the fences. The cultivated soil makes an ideal bed for the seeds maturing along the fence. It does not take long to go around the corn or root field with a scythe and cut the weeds, and it will result in a cleaner and more attractive field the following year. Weeds around hay and grain fields should also be cut if the farm is to be kept clean.

The roadside is also a source of supply of weed seeds. In some townships the weeds flourish from one side of the road to the other and under these conditions the farms adjoining cannot be kept clean. Among the worst roadside weeds are thistles, wild carrot, blue weed and rib grass. These should be cut to prevent the weeds seeding and polluting neighboring land. Waste land should be looked after as it is too often the source of a large variety of foul weeds. The pasture field is another part of the farm frequently neglected. Thistles are possibly the most prevalent, although rib grass, wild carrot, ox-eye daisy, etc., may be seen growing luxuriantly. It would spoil a day with man and team to cut a ten-acre pasture but it would be time well spent. Weeds take moisture and plant-food from the soil which should go to feed the crop of grain, corn, roots or grass. Some weeds apparently do little injury to the crops but this cannot be said of biennials, perennials and some of the annuals. Vigorous warfare should be waged against weeds as they are enemies of the cultivated crops. Sowing clean seed and giving the soil judicious cultivation to prevent weeds maturing seed are among the weapons used in combating the enemy known as "weeds".

### Thrift.

EDITOR "THE FARMER'S ADVOCATE":

Young people do not like the sound of that word "thrift." Most of them prefer to spend their earnings on immediate pleasures, and hence they make certain that their savings will never exceed "nothing" a week. The habit of saving nothing a week, when once it is well established, is likely to persist, even though it involves the spending of liberal salaries. Sixty per cent. of the Americans who reach old age discover that they have saved nothing. Most people who have contracted this chronic spending habit would do well to employ a life insurance company to do the saving for them.

A sum of money invested at 5 per cent. compound interest will double itself in about fourteen years. Hence \$1,000 invested at 5 per cent. will be \$2,000 in 14 years; it will be \$4,000 in 28 years, or it will be \$8,000 in 42 years. A person with money to invest at the present time can do better than 5 per cent., on account of the prevailing high rates of interest. Therefore, there should be strong incentive for people to save most ardently during youth, while the earning power of their savings is still great.

Also, if a man has \$1,000 with which he intends to purchase a pleasure car, he has the choice of the following: If he postpones the purchase for two or three years the interest accumulated will help to pay the running expense of the car. If he postpones the purchase for fourteen years the interest will buy the car, leaving the \$1,000 to earn more luxuries if desired.

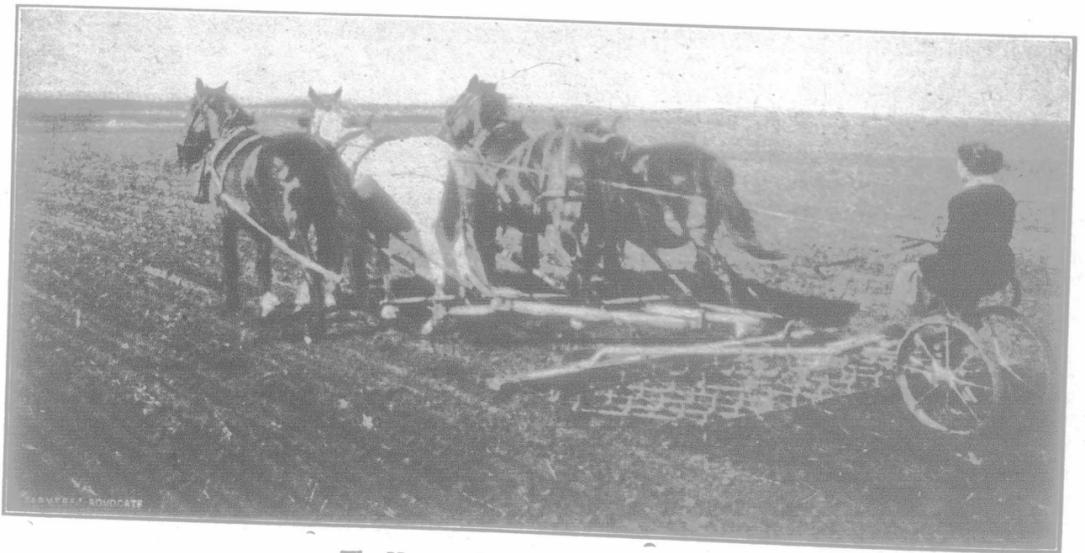
Procrastination is a paying proposition when you are thinking of buying luxuries. Remember: the man who has a savings account has his name on two pay rolls.

Ontario Co.

NELSON McDOWELL.

The grain harvest is now commencing. Is the binder repaired and ready for the field?

If time permits, mow the fence corners and along the lanes. Grassy fence bottoms detract from the appearance of the farm.



The Harrow Cart Saves Many Steps.

# Canada's Young Farmers and Future Leaders.

## Using Land to Advantage.

Perhaps the most important fact about agriculture is its dependence upon land. This does not necessarily mean soil fertility or depth of soil but mainly land area—space. Assuming that the average wheat yield is in the neighborhood of twenty bushels per acre, the production of 1,000,000 bushels would require 50,000 acres of land. To convert this amount of wheat into flour, however, would require only a few acres, and here lies the striking difference between agriculture and manufacture as typified by urban industries. A tannery may cure the hides from cattle which thousands of acres had supported, and an acre or more may turn all the leather of the tannery into shoes or harness, but land area is the prime requisite of agriculture. Even farmers who should appreciate this fact more than others, too often regard land as cheap and fail to use it to best advantage. Because agriculture is in most countries of such fundamental importance and because it requires so much more land than any other industry, nations frequently find themselves short of land for agricultural purposes and may take steps to acquire more, which frequently lead to war. There are few strikingly effective ways of economizing on land for agriculture aside from reclamation or irrigation. There are, of course, effective ways of economizing land for urban industries, notable among which is the erection of tall buildings. Land cannot be arranged so as to grow crops in tiers, one above the other, like offices in a skyscraper. One acre of mining land may occupy the labor of many men, in fact as many as can find room to work at different levels below the surface, but agricultural work for the most part can be carried on at only one level, except for such rare exceptions as mushrooms and tomatoes for instance, grown in greenhouses.

It is, of course, quite true that yields per acre can be improved and very greatly increased by the greater expenditure of labor and seed. There is, however, a limit to the profitability of such increases and it is this limit which should be determined as closely as possible by every farmer. Some farms may be naturally fertile but require more labor to make them more productive, others may be well worked but needing greater quantities

of fertilizer, lime or manure. The owner alone must judge as to the amount of money he can afford to spend for manure or labor. Too great an economy of land may result in a real waste of energy and time and the proper degree of economy to bring about becomes, therefore, a nice problem in farm management, which will vary with each farm. Where intensive cultivation is practiced much greater capital is required per acre, and, even though it may be used at satisfactory rates of interest, lack of capital may prevent or make unwise the more intensive methods. Land being so fundamentally important it is therefore of the greatest importance that it be used wisely and with care.

## The Agricultural Fair.

If one were to attempt, by any method or means for determining values of abstract things, to determine the value of the fairs and exhibitions which have been held in Canada to the agriculture of this country, he would, in all probability be astounded at the amount of good that has been accomplished in this manner. We are accustomed to reading the flaming posters and the large advertisements in display type inviting our attendance and our patronage of this large exhibition, or that country fair, without giving a great deal of thought to the reasons which may be behind the holding of them. Away back in the days of the early settlements in North America these fairs were not as they are to-day. They partook partly of the nature of thanksgiving festivals, stated times for which were duly appointed each year when the products of the year were gathered together in each community and the people given occasion to witness in a striking manner the reward of their labor. Later on, these occasions were also made to serve in the capacity of social gatherings and, gradually, the evolution of the modern fair or exhibition has given us the highly specialized and departmentized event to which so many of us look forward each year.

Someone has aptly said that the fall fair is the mirror or the photographic plate of the community, reflecting

the prosperity, the customs, occupations and other characteristics of the people. This is very true and one has only to observe carefully the classes of live stock, for instance, shown at a few fairs in different localities to realize to what extent these communities follow similar lines in the raising of live stock. Horses may be strong in one locality but beef cattle may be weak; trotting events may denote a live interest in light horses, or an absence of good types of horses on the surrounding farms. Holsteins may be more prominent in one section, Ayrshires in another, and Jerseys in still another. Certain sections may be exceptionally favorable for the growing of corn, while others may grow but little corn but most excellent cereals. All these will be reflected in the prize list for the fall fair and in the exhibits, and it should be the object of every citizen in the community to see that the best is represented. Many a stockman has been attracted to a certain district because a chance visit to a fall fair has shown splendid quality or large numbers of the particular kind of stock in which he was interested and it is only natural that he should endeavor to obtain further purchases from districts which he knows can supply his wants. The same thing holds true of seed grains and seed of all kinds. This is being realized to a greater extent all the time, and now we see for example, fruit exhibitions in certain parts of the country and corn shows in others.

From the standpoint of progressive agriculture and because of its possibilities in business, everyone should take an interest in the fall fair. A reputation for good farming should mean increased land values to the community and this naturally points toward increased prosperity. What has been said with regard to the local fair is no less true with respect to the larger exhibitions such as the Ontario Provincial Winter Fair, or a national or provincial exhibition. The smaller fair seeks to attract attention to a certain locality and the excellence of its products; the larger show or exhibition has broader aims and has a value less directly concerned with the individual but in a general sense does a very important work. Let us, therefore, do our best to support the local fair and the larger exhibitions by exhibiting our best.

# Automobiles, Farm Machinery and Farm Motors.

## Compression.

BY PROF. W. H. DAY.

Not only must the valves be timed correctly, they must be properly ground so that during the compression and power strokes, especially the former, there may be no leakage and consequent loss of power. To test the compression turn the engine over on the compression stroke. If it turns hard, and when the piston is once

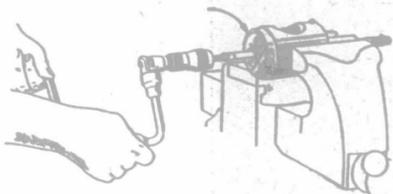


Fig. 1—Grinding Valve, When Contained in a Cage.

With acknowledgements to the I. H. C.

past centre the elasticity of the compressed air shoots the engine forward to the end of the stroke, the compression is good, but if it turns easy and is rather sluggish after the piston is past centre, then the compression is poor, and there is a leak somewhere. The exhaust valve is the most common place for leaks—sometimes it becomes warped by the intense heat, sometimes it becomes pitted by the continual action of the exhaust gases, and sometimes bits of carbon may lodge between the valve and the seat. The last two are the most common, and perhaps carbon is the initial cause of pitting. When warping or pitting occurs it is necessary to regrind the valves. The method of doing this varies with the design of the engine. If the valves are in cages, the latter may be removed and placed in a vice, as shown in figure 1, to admit of easy grinding. If they are in the head, this must be removed and turned upside down as shown in figure 2, to admit of access to the valves. The valve spring is removed and some of the grinding compound placed between the valve and the seat, and then the valve turned back and forth by means of a grinding tool like a screwdriver in an ordinary brace. The grinding should continue until both the valve and the seat show a smooth, even surface of contact all the way round. Frequently in L and T heads the valve seat is solid, with the engine body. In this case it becomes necessary to grind the valves right in the engine. Access to them may be had by removing the valve caps and the mechanic must place himself above the engine in order that the brace may be worked to advantage. The push rod must be shortened or removed so that the valve stem will not ride on it as the grinding proceeds. Care must be taken that none of the grinding compound drops over into the cylinder. To guard against this a small cloth may be used to close the opening between the cylinder and the valve chamber

or combustion chamber as it is usually called. And this chamber must be thoroughly cleaned before the cloth is again removed. After the grinding is finished and the valve and spring replaced the push rod must be properly adjusted.

The writer cannot refrain from observing that his experience has been that if a good carbon remover (and there is such on the market) is used regularly in the engine, the valves will last almost indefinitely without need of regrinding. I have used carbon remover in my automobile engine for 10,000 miles with entire satisfaction. At the end of 6,000 miles the pistons were removed for inspection and could not possibly have been in finer condition, there being no sign of scoring or undue wear, and there has not been a leaky valve in 10,000 miles.

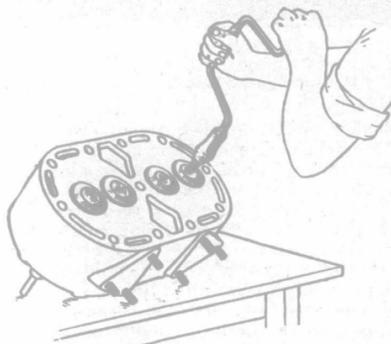


Fig. 2—Grinding Valves in Valve-in-head Type of Engine.

With acknowledgements to the I. H. C.

If after the valves are in good condition the compression is still poor, then the leakage must take place past the piston rings. This may occur from insufficient lubrication, or from the rings or cylinder being worn or from the rings being gummed in the grooves by carbon. If the last is the trouble a treatment with a good carbon remover will loosen them and avoid a great deal of unnecessary work. If none is at hand, however, the piston must be taken out and the rings removed, and they and the grooves thoroughly cleaned. In doing this coal oil will be found helpful. Care must be taken that the rings are not broken in being removed or replaced. Three strips of tin will be found helpful, as shown in figure 3. If the rings are worn new ones may be put in, but if the leak is due to worn or scored cylinder, then it must be rebored and the piston fitted with new rings the proper size for the new bore.

## Bearings.

Sometimes an engine develops a knock on account of a loose bearing. There are three places where this may occur:

1. At the wristpin.
2. At the connecting rod bearing on the crankshaft.
3. At the main bearings, i. e., where the crankshaft rests in the frame or base.

In any case the knock should be removed before it becomes really bad, else the bearings may be flattened by the pounding or the shaft worn out of true. When the crankshaft and connecting rod are accessible it is an easy matter to locate the loose bearing. To test the connecting rod turn the crankshaft till it is half way between inner and outer dead centre, then place one hand on the connecting rod and crankshaft to detect any play or lost motion as the flywheels are rocked back and forth with the other hand. The wristpin may be examined in a similar way. To ascertain if the main bearing is loose it is customary to place one end of a lever under the flywheel to raise and lower it, while as before the hand rests on the hub and bearing to detect any play. Care must be taken not to spring the crankshaft. If the base is enclosed as in automobiles, one may make a shrewd guess by certain symptoms or characteristics. A wristpin knock is erratic—sometimes present, sometimes absent, but most in evidence while the engine is idling. To a connecting rod knock there is no let-up, and it is worse when the engine is pulling heavy. The main bearing knock is most in evidence when the engine is exerting a moderate pull, e. g., when the power is partly shut off with the car going at a moderate rate of speed. A wristpin knock is not as serious as the others.

If either the connecting rod or main bearing is loose the cap must be taken off, some liners removed, the cap replaced, the bolts tightened and the bearing tested again. If still loose or if too tight another adjustment must be made. The bearing should have only a very slight play—about 5/1000 to 8/1000 of an inch in the bearing and 1/16 to 1/32 side play.

If the knock is at the wristpin then it is necessary to put in a new pin, and a bushing also, if the knock is

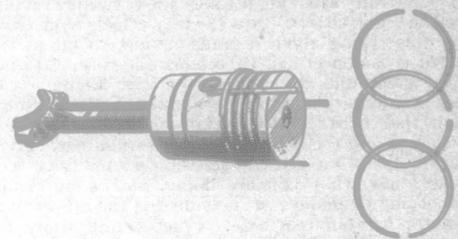


Fig. 3—Replacing Piston Rings.

Note strips of tin used for sliding rings to the grooves.

bad. If taken early, however, the new pin will probably be a shade larger even for the old bushing.

To grind the bushing the proper size the old pin will come handy—put some valve grinding compound on it and twist it round in the bushing, cleaning the latter every few moments and trying the new pin in it. The wristpin should fit the bushing so snugly that when the piston is stood on end with the connecting rod pointing upward, the latter will just lop over sidewise and no more.

The following calculation may enable the reader to appreciate the importance of attending to the bearings once a knock develops. The maximum pressure in the cylinder during the power stroke is in the neighborhood of 250 pounds per square inch. The area of the end of a 4-inch cylinder is  $12\frac{1}{2}$  square inches. Hence the explosion strikes a blow of  $250 \times 12\frac{1}{2} = 3,062.5$  pounds. On an 8-inch cylinder the blow would be 6,125 pounds, and on a 12-inch 9,187.5 pounds. And these great blows come directly on the bearings, hence any unnecessary play will soon lead to serious trouble.

### The Transmission.

Considerable mystery seems to surround the transmission of a motor car, because in the first instance it is usually concealed by the floor boards in the front compartment, and even when these are taken away the housing prevents anyone from securing a knowledge of the functions. You will never forget exactly what the transmission stands for if you bear in mind that its purpose is to transmit. The word comes from two Latin terms "trans" across and "mitto" to send. To be perfectly brief a transmission is something that sends across. Ordinarily it may be power that it is handling or it may be anything else. In the case of the auto it is for the handling of the power developed by the engine which is to be delivered to the rear axle in the proportion desired by the driver. There are a number of different transmissions, but we shall confine ourselves in this article to the sliding gear type. Before going any farther we may explain that sometimes the transmission system of a motor car is meant to include the clutch, the propeller shaft, the gear shift, the differential and the rear axle, but generally it only refers to the gear set or mechanism by which the speed of the machine is changed through the usual gears.

In all motor cars the power developed by the engine is in direct ratio to the speed. If the crank shaft is making five-hundred revolutions per minute, and giving a certain speed, it will provide twice the momentum when the number of revolutions are doubled. You can readily realize from this that the faster the crank shaft is running around the greater will be the speed of the automobile when the power is transmitted to the rear axles. There are conditions in driving, however, that require tremendous power to overcome. You can be starting or running through mud or gravel, or it is possible you can be climbing a steep hill or endeavoring to make your way through sand. In all such circumstances the power will be out of proportion to the speed acquired. It is not difficult to understand that an engine cannot spin a motor as easily under rough road conditions as it can upon asphalt. All this makes it plain that the ratio between the revolutions of the crank shaft and those of the rear wheels must be frequently changed. It is through the transmission, or as it is sometimes called, the gear set, that the driver of the car is able to handle the power exactly as he desires. A selective sliding transmission is generally made up of two shafts, the upper or main shaft and the lower or counter shaft. The gears of the counter shaft revolve together, but those of the upper shaft can operate independently. When you are in what is known as neutral, and this can always be determined by your ability to wobble the gear shift lever sideways, you will understand that the car does not move, because neither of the movable gears are in mesh. Upon placing the low gear into mesh with the counter-shaft you have done what is called "putting it into low". This means that you have established the first speed condition. You have now the low gear in mesh with the counter gear, and gradually the car develops momentum. In this instance, however, a small gear is driving a big one, and consequently the speed is not great. Probably it is taking fifteen revolutions of the crank shaft to turn the rear wheels over once. Having developed a certain amount of motion, you now "put it into second", and this means that you change the gears so that a little larger one than the first gear is doing the driving, and in all probability it will now only take about seven or eight revolutions of the crank shaft for each single revolution of the rear wheels. Upon your deciding "to go into high", you will follow out the same idea, but you reduce one-half or more the number of revolutions of the crank shaft required to turn over the rear wheels. You will now be in a position to understand the method by which the power of the engine is gradually transmitted to the point at which it develops speed. When you put the car into reverse you will find that this speed is even lower than when it is in the first gear condition. Generally speaking it takes about twenty revolutions of the crank shaft to turn the rear wheels over once.

The great thing about a transmission, so far as the driving of it is concerned, is comfortable ease. Do not grind the gears and do not struggle with them. "Get the feel of the car," find out for yourself the personal equation that exists between the clutch and the gear shift lever. From the explanation we have already given you can realize what the transmission stands for. You will now know what you are doing, and what results you are trying to achieve in transmitting the power from your motor to your rear axle. Practise and study the entire mechanical proposition until you can carry it out without a suggestion, let alone a murmur of sound.

AUTO.

## THE DAIRY.

The average price for 175 head of Holsteins sold at the National sale at Milwaukee was \$2,557.

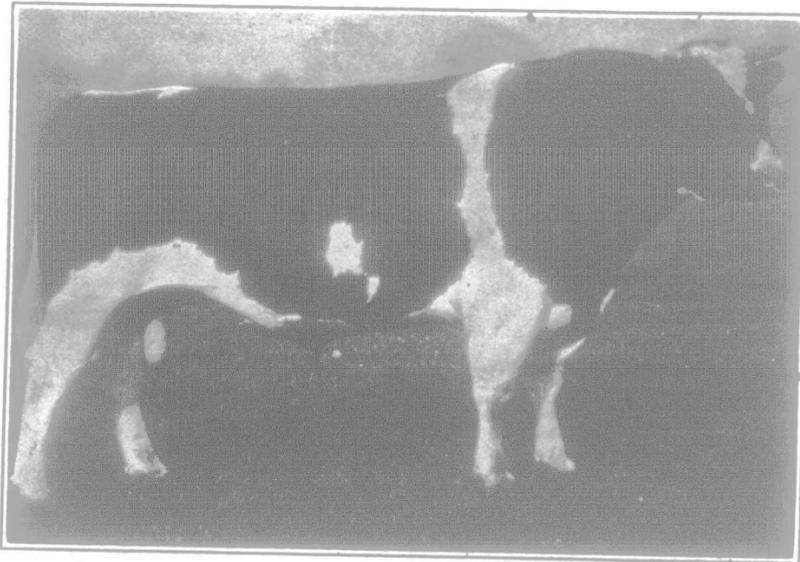
At the recent sale of Holsteins, held at Pine Grove Farms, Elmo, N. Y., 145 head from this farm sold for \$139,730, an average of \$964 per head.

According to the United States Food Administration, ice cream is a healthful food and offers an excellent way of using milk products. On account of the sugar used, however, we should patronize dealers who use corn syrup or other sugar substitutes.

The United States produces about 33 billion quarts of milk annually, of which 4.3 per cent. goes to feed calves, 6.6 per cent. goes into the production of ice cream and condensed milk, 60 per cent. goes into butter-making, 5 per cent. goes into cheese-making, and 24.1 per cent. is used as fluid.

### Fitting and Exhibiting Dairy Cattle.

Not long ago a veteran dairy cattle breeder and exhibitor stated that in his opinion it was the duty of every breeder of pure-bred cattle to exhibit his animals. This was no less true at small than at large shows. The primary object of judging cattle at exhibitions is to combine, as nearly as possible, heavy producing ability with that type and conformation which implies a strict adherence to dairy cattle standards. We have heard it said, and probably with a great deal of truth, that type runs in strains as much as milk or butter-fat production. In the various breeds of dairy cattle there are certain known strains or blood lines which are widely sought after and which command high prices in the sale ring because of their past performance under official test. It is in this sense true, probably, as well as in the case of production, that type runs in strains. The veteran breeder above referred to quoted Prof. Barton,



Botermigri.

Holstein-Friesian bull, first prize Royal Show, 1916. Sold recently for £3000.

of Macdonald College, Quebec, in support of this contention. He said that some time ago Prof. Barton, in tracing out the pedigrees of animals winning in the show-ring, found that the same strains of animals were winning, as were making good records at the fair.

The importance of the show-ring to the pure-bred stock industry can scarcely be overestimated. The decision of the judges affords splendid opportunities for breeders to crystallize their ideas with regard to type and conformation. In the show-ring, animals usually appear in the pink of condition. They appear at their best and the care and feeding they are given in order to show them at their best, requires considerable skill and very careful handling. The experience gained in this way can be utilized with good effect in putting animals in good condition to sell; in fact, the two are combined to a considerable extent in the show-ring, since many animals change hands with every show. While it is true that the degree of fitting required to put an animal in a condition to win at a show is not necessary if the animal is to be sold for breeding purposes, and while it is equally true that what amounts to over-fitting sometimes, may be injurious to the future breeding performance of the animal, it is nevertheless a fact that the experience gained in fitting animals for the show can be utilized with excellent effect in disposing of sale stock at good prices.

To properly prepare an animal for appearing at its best in the show-ring, more than one year is required. Really, the proper time to prepare for one show is when you get home from the show held the year before. This is true because of the effect which a poor showing at a large exhibition may have upon the future profitability of the herd. There is in Canada a class of judges who know their business thoroughly and who, generally

speaking, make decisions which cannot be regarded as otherwise than fair. Their decisions, therefore, are of considerable importance and bear a distinct relation to the fitting which the animals before them have received. It cannot help but be a source of regret and chagrin to owners of excellent cattle, but for some reason perhaps not in the pink of condition, to see other animals not quite so good but in the very best of shape being placed nearer the head of the line. The difference between first prize and second prize is well known, and very frequently it is largely a matter of fitting and condition. While this may seem unfair in some respects, the judge must take the animals as he sees them or get into a great deal of difficulty.

According to the experience of some breeders and exhibitors, calves should not be out of the stable during the first year. Other breeders do not follow this practice but since it is well known that it is the object of every breeder to bring his cattle out in their very best bloom, it follows naturally that anything which will hinder the development of the calves should be strictly avoided. Generally speaking, among dairymen it is considered good practice to keep even the ordinary calves in the stable during the hot summer months. The skin of the calf is not tough enough to withstand the hot sun; flies bother them, and check their growth so that during the daytime at least, from the time the weather gets really warm until it begins to get cool again in the fall, calves should be allowed out only at night, if at all. Earlier in the season, and later, it may be wise to let the calves out in the daytime and keep them in at night because the nights are cool and the days not too warm. Older stock should be in the stable from three to four weeks before the time for them to appear in the show-ring. It is considered good practice also to keep them blanketed for a few weeks and fed on succulent feed, such as silage. Oil cake and silage makes an excellent combination for putting animals in condition. Just here it may not be out of place to remark that it will probably pay to exercise this good care and attention upon animals which are to be shown only at the smaller exhibitions, because to come second at a small exhibition implies a much greater lack of care and attention than to come second at a large exhibition. It is the experience of a number of breeders that yearling animals are hard to fit for a show.

A number make a practice of clipping, but others consider that this is a mistake. The latter maintain that the animals should be brought in the stable early and blanketed in order to put the coat and skin in proper condition. They maintain that a clipped coat can never present as healthy an appearance as the natural growth of hair. Grain feed, such as oat chop and bran, will assist very materially in putting a good coat on an animal, and, according to the experience of some breeders, oat chop and bran or other similar feeds will do so better than heavier rations. If silage is not available green corn may be used.

The object in clipping, of course, is to accentuate as much as possible the dairy type of the animal, as well as to correct any slight inequalities of fleshing or conformation which may exist. A very slight hollow here or there may be covered up by leaving the hair unclipped at this place, but of course considerable skill is required in order that the animal will not look patchy. The angular outline of the dairy animal may be made more prominent if the hair is left short, but it must always be remembered that it is perhaps easier to spoil a good animal by clipping than to improve its appearance. Some exhibitors polish the horns, others give the animal several washings with olive oil or other cleansers. This may be very satisfactory and of some value where the animals are not white in color. Generally speaking, however, thorough washings with soap and water will usually put the animals in good condition to show. Too much washing, however, often makes long hair and for this reason it is the practice of some breeders to wash only once before going to the show and again the day before the animals are shown. The clipping is perhaps better done just before washing. Anything is legitimate in the preparation and fitting of an animal for the show-ring which will assist in putting it in perfect bloom, providing no dishonest practices are followed.

Many an animal has lost a well merited prize because of poor handling in the ring. It should be the object of every exhibitor to see that his animals appear at their best before the judge. An animal standing in the ring in a humped-up condition, or stretched out, or with its head twisted to one side, may present such a poor appearance that the first impression of the judge would be adverse to that animal. The person who is holding the animal should watch the position of the feet, the posture of the animal, the elevation of the head, and little things of this kind which, combined, make for

a good showing of the qualities of the individual. It is a common saying that a good exhibitor always keeps one eye on the animal and the other on the judge. The idea is that whenever the judge looks at the animal you are holding, that animal should always be found showing to best advantage. Animals should not be taken into the ring when they have been given too much feed, because that detracts considerably from a looseness of the skin which is a characteristic considered by every judge. Gentleness is another factor which may assist in winning a prize for the animal. Animals that are well trained to the halter and trained to stand well, make the work of exhibiting them much easier and usually much more profitable.

### Commission Rules For Butter Purchase.

A circular has been issued by the Dairy Produce Commission dealing with the rules which will apply in the purchase of butter by the Commission until further notice. Many of the clauses of this circular are of interest only to dealers and exporters, but several should be worthy of note by creamery butter makers and these will be briefly noted.

Three grades will be established, No. 1, No. 2 and No. 3, as adopted by the Official Referee of butter and cheese in Montreal. The first grade must be butter of sound, sweet and clean flavor, waxy in texture, with not too much moisture, and even but not too high color, with no streaks or mottles. Salt must be all dissolved and salting must not be too heavy if salt butter. Packages must be well filled with a bright, even surface, lined with good quality parchment paper lining, and neatly arranged. Packages used must be well made and of good material, and clean. The boxes used must be of the proper size to hold 56 pounds of butter when properly filled, paraffined on the inside and neatly branded. Second grade will permit a flavor that is not quite clean or with some other objectionable flavor. Salty or overworked butter with too much free moisture is also included in this grade. The color may be slightly mottled or streaky; too high color or of objectionable shade. Salting: Too heavy; salt undissolved, or unevenly distributed. Finish: Very light or poor quality parchment paper lining; lining not arranged to protect butter. Rough, uneven surface. Package not properly filled. Packages: Rough, badly made or dirty packages. Uneven weight. Third grade.—Flavor: Very stale; very strong stable flavor, or anything inferior to second grade. Body and grain: Very salty; "mushy"; mould in butter. Color: Very mottled or otherwise inferior to second grade, in regard to color. Salting: No question of salt alone sufficient to make third grade if other qualities are up to first grade. Finish: No parchment lining. Very rough finish. Dirty surface. Packages: inferior to second grade.

Dairy re-worked or milled butter, providing it is required by the Commission, will be purchased on its merit and such purchases will be governed by the same rules of delivery as govern the purchase of creamery butter. All butter must be tendered ex Cold-store, Montreal, in quantities of 500 packages, with a permissible variation of five per cent. Moreover, butter that is awaiting shipment must be held in Montreal cold storage warehouses which are approved by the Commission. The exporter will be held responsible for weights and quality of their respective shipments, notwithstanding inspection made in Montreal, since the inspectors can only examine samples of each delivery of butter to the Commission. All invoices and documents must truly represent the quality and weight of butter tendered the Commission, and any departure therefrom on the part of any exporter will be deemed sufficient reason for discontinuing further purchase from such parties. Creamerymen will be interested in the rule which says that "butter must be free from any adulteration whatever, and the seller must guarantee that it does not contain over 16 per cent. of moisture. All deliveries must be fresh current receipts." It is also stated that all butter must be coopered to the satisfaction of the Commission and shipped in good order. Butter which is badly coopered or in poor packages will be reduced in grade or may be refused.

### Silo Pointers.

Every dairy farmer with a silo would scarcely be without it after one year's use.

In the silo you can store corn in such a way that nearly every particle can be eaten.

Winter pasturage is really what is secured by the use of silage. Moreover, it is a food that is both palatable and succulent.

During the winter months when mostly dry feeds are being given, the use of silage will aid digestion very materially.

It is asserted that animals fed on silage are not more subject to tuberculosis, do not lose their teeth more quickly, and are not shorter lived animals than those fed on other common kinds of feed.

Corn which would otherwise be lost by frost is often saved and turned into profitable feed by the use of the silo.

A good silo should be round, air-tight, water-proof, as nearly frost-proof as possible, consistent with economy in construction, and should have walls that are smooth inside, besides being strong and durable.

Convenience in feeding should be the main object in locating the silo, but one should also pay attention to the direction from which extremely cold winds will come.

One hundred tons of silage will feed a herd of twenty-

five cows for two hundred days at the rate of forty pounds each per day.

A silo 15 by 32 feet will hold 100 tons, or a silo 14 by 36 feet will hold 103 tons. A silo 16 feet by 39 will hold 150 tons.

### Summer Feeding of Milch Cows.

In order to get the milch cow in proper condition for the milking period, feeding in preparation for this condition should start when she is dry. Generally speaking, from six to eight weeks should be allowed the cow to rest up between the time she is dried and the time of freshening. The importance of conditioning is not always appreciated by even good dairymen, but it does play a strong part in prolonging the lactation period of a cow over that of a cow of similar breeding and producing power, but kept in poor condition.

Really, the best conditioner for the dry cow in preparation for milking is a first-class pasture. In addition to the pasture, grain may be fed, such as equal parts of bran and ground oats, or ground oats and barley, or bran and ground barley. Generally speaking, however, the dry cow will require no grain, provided she is in good flesh and has plenty of good pasture. If she is thin, however, it may be necessary to feed as high as four to seven pounds of grain daily in addition to good pasture, in order to put her in condition for freshening. Prof. E. S. Archibald, of the Central Experimental Farm, Ottawa, has made the statement that a pound of grain during the dry period is worth at least three pounds of grain fed after the cow has freshened, so far as putting the cow in condition for the lactation period is concerned. A cow weighing 1,000 pounds, for maintenance purposes only, requires 40 pounds of mixed pasture grass, or 10 pounds each of clover, hay and oat straw, or the equivalent of these. In addition to this there must be sufficient food during the milking period to supply energy and the materials from which the milk is manufactured. Generally speaking, therefore, stinted feed to milch cows cannot be as profitable as liberal feed, which, if not carried to excess and carried out with good animals, should be followed by heavy production more economically secured.

As a rule, the summer months are the time when the cheapest production can be secured. Pasture of a good quality is an ideal food for dairy cattle and during the summer months pasture is usually abundant. It follows, therefore, that the pasture fields should be given every care. Too early or too close grazing should not be allowed, because during the dry season close grazing may prevent the field from withstanding drought. Spring or fall-sown grain may supplement the permanent pastures when the latter become short. Excellent summer pasture may be secured from oats heavily seeded with barley, or a mixture of oats, barley and wheat, or better still, perhaps, the annual pasture mixture advocated by the Ontario Agricultural College. It has been suggested that with the present labor shortage, these annual pasture crops are probably more economical than the growing of soiling crops which it is necessary to cut and haul to the stock either in the field or in the stable. These latter, however, should not be eliminated from the farm scheme, particularly if there is not good promise of abundant pasture, since green corn, second-cut clover, or turnips fed just as they are pulled, tops and all, will provide excellent substitutes for pasture. Probably silage from corn, or peas and oats, if available, is both a cheaper and a superior substitute for pasture than soiling crops.

With regard to grain feeding, most dairymen feed as a rule some grain at least during the summer months, whatever the roughage may be. From the Experimental Farms at Ottawa a mixture of equal parts of bran and oats, with the addition of ten per cent. ground peas or some similar concentrated meal, is recommended to give excellent results. In feeding concentrates on pasture, however, it must always be remembered that the profitableness of this practice depends very largely upon the excellence of the animal and the abundance of good, rich pasture. Grain feeding should be more profitable when pastures are short than when there is plenty of it, and poor or mediocre cows will never make grain feeding profitable.

### Pepsin as a Substitute For Rennet.

Trial tests made early in the war in Queensland to determine the value of pepsin as a substitute for rennet in cheesemaking, showed, according to a report, that it was not possible to detect any difference in the curd made from milk treated with rennet or with pepsin. Numerous analyses were made of the cheese to determine the effect of the pepsin upon the keeping quality of the cheese, as well as the maturing quality, but no indication was observed of any harmful influence. The North Queensland Register states that "comparing these with the analysis of the finest quality of English cheese made from rennet, showed a remarkable agreement in composition with those made from pepsin." In 1915 at the Brisbane show, a pepsin-made cheese gained first honors in a mature class of 40 entries. It appears to be necessary to test the pepsin thoroughly before using it in a factory, otherwise the quality of cheese may be adversely affected before any fault is discovered. According to an authority in the British "Live Stock Journal" the best acidity of milk for treatment is considered to be 0.185, any material difference rendering the pepsin practically inoperative.

### Holstein Work in June.

Fifty-three cows and heifers are included in the records received and accepted for entry in the Record of Merit during the month of June. This number is somewhat below the number for May, but the mature class for the month of June contains the names of nine cows that have made over 30 pounds of butter in seven days. The highest of these is Lakeview Dutchland Artis, with a record of 564.5 pounds milk, 43.05 pounds butter, giving her first place in all Canada for butter production in seven days. Korndyke Queen De Kol 6th takes second place in the mature cows with 37.26 pounds, her last year's record being 35.09 pounds. Following these two cows come three 34-pounders, three others with 32-pound records, and one with a record slightly over 30 pounds. In the junior four-year-old class, Johanna Korndyke Luraine heads the list with 26.12 pounds butter from 568.2 pounds milk. In the senior three-year-old class, Toitilla Pontiac Cot has a record of 27.78 pounds, and a 30-day record of 111.46 pounds. Raymondale Geiske, a Quebec Holstein, heads the list with 29.06 pounds butter from 616.6 pounds milk. The senior two-year-olds are headed by Fulton Sylvia Queen, whose record is 23.08 pounds, while Rosa Calamity Hermes heads the junior two-year-old class with 21.67 pounds.

Semi-official records of Holstein-Friesian cows show that during the month of June 15 cows and heifers, qualified in the yearly Record of Performance tests. In the mature class, Della Johanna Calamity 2nd takes the lead with 782.5 pounds butter from 19,526 pounds milk. In the three-year class, Pauline De Kol Rosa leads with 516.25 pounds butter, milk 11,816 pounds. This cow and the leader in the two-year-old class are British Columbia animals, the latter being Priscilla Hartog Mechthilde with 661.2 pounds butter from 12,165 pounds milk.

## POULTRY.

Important—green food, shade and water.

Caponizing should be done at the age of about 10 or 12 weeks.

Economy and convenience in the poultry yard mean greater profits now than ever before.

Cockerels and pullets of the lighter and earlier maturing breeds should be separated by this time.

All green succulent grasses, clover, alfalfa, peas, beans, cereals or buckwheat, make excellent green feed for the flock.

Every poultry house should provide for plenty of ventilation and pure fresh air during the night. This means healthier birds.

When planning new quarters for the laying flock next fall and winter, remember that exercise and ventilation are important.

There is no reason why roasters of good quality should not be produced from farm flocks, if the market seems to warrant it.

Considering the cost of feed and labor, it will probably pay better to dispose of surplus stock as broilers than to keep them until they reach roaster size.

Plymouth Rocks, Rhode Island Reds and Wyandottes, as well as others of the utility breeds are all suitable for the production of small roasters.

### Poultry Rations in England.

It is proposed in England to develop a scheme for the rationing of poultry with the idea of conserving food for the use of the better type of flocks. This scheme is being introduced by the Ministry of Food, jointly, with the Boards of Agriculture for England and Scotland. Fifty thousand tons of poultry feeding stuffs have been allotted by these official organizations for the maintenance of the best breeds of poultry for utility purposes. Feeding stuffs committees already exist in each county, and it has been decided that poultry sub-committees shall be formed. A special ration of four ounces of feeding stuffs per day is to be provided for fowl, but in order to obtain this amount flocks must subscribe to certain conditions.

Generally speaking, the scheme will be carried out along lines somewhat similar to those laid down for the rationing of all live stock. It is proposed to make food mixtures at mills near the port, and to supply the ration in the form of a grain mixture and a mash in dry form in equal proportions. The mixture may vary from time to time and poultry receiving rations under the special poultry scheme cannot, of course, receive any ration under the general scheme. Poultry owners must make application to the sub-committee in their area and the feed will be supplied through any retailer they may nominate in their application form. The conditions which must be met by fowl that have come within the special scheme are given below. A first and second grade of breeding stock has been defined. The second grade includes fowls which have not been bred by a thorough system of selection of the best females, yet "if the best available males have been regularly used such stock will be worth conserving and should be included in the second grade.

The second grade fowls should only receive rations after the demands of the owners of first-grade birds have been satisfied." The conditions surrounding the first-grades are as follows:

"A. Fowls must be utility breeding stock for egg production or breeding stocks of high utility quality.

"B. The fowls must be pure-bred stock.

"C. The standard of health of the flock must be high.

"D. That for a period of at least two years this stock has been bred to meet the above requirements.

"E. That the owner of the stock will give an undertaking that if his stock receives preferential treatment he will supply the public with hatching eggs, day-old chicks, and older stock at a cost no greater than his 1917 charges.

"F. Selective breeding must have been practiced in the flock."

### Grading Up the Farm Flock.

Some people who keep poultry claim that it does not pay to breed pure-bred stock, and this is true of live stock other than poultry.

It is sometimes said that if pure-bred stock is good for anything it should prove superior to common stock under the same conditions in which common is usually kept. On the other hand, the owner of common stock very often says that he does not believe in pampering his fowls, forgetting that the high excellence of pure-bred stock of all kinds has been reached by years of the most painstaking and careful thought in breeding and feeding. The present prize winners of the various breeds at all our pure-bred shows stand as worthy monuments to the skillfulness of past and present breeders. The animals have been developed more or less as machines, built and cared for along certain lines and kept for certain purposes. A farmer who invests in pure-bred stock and gives it the same care that he has been rather grudgingly bestowing upon his common stock will find that the pure-bred poultry will be satisfactory for only a short time; after that it will become more and more unsatisfactory until it will descend to the level of the common stock which, in many cases, represents the highest type of stock which he is qualified to care for under his present standards of care and feeding. These usually are the breeders who maintain most stoutly it does not pay to breed pure-bred stock.

It is true that pure-breds are best for even the farm flock, for the simple reason that if one really tries to rear them under proper conditions, they will respond more quickly to good management than scrub stock, and will therefore be more quickly profitable. However, it is possible by the exercise of some care, accompanied by systematic selection and improvement to build up in the course of a few years a farm flock of a high type of excellence by the process known as "grading-up". In this scheme of improvement the most satisfactory method to follow is to purchase a pure-bred male. Pure-bred males can be used in mixed flocks of nondescript breeding so successfully as to develop a flock which will be practically pure in a comparatively short time. The progeny of pure-bred males and nondescript hens are properly termed grades. The mating might be made the other way round, but since it is necessary to purchase fewer pure-breds if males are purchased, this is the method usually followed.

This method has of course one very serious disadvantage and that is that continuous and careful grading may not be followed after the flock has reached a certain point of excellence. Just as soon as the breeder stops using a pure-bred male and begins to use a grade of his own rearing, the flock will begin to deteriorate and, naturally, the breeding will become poorer and poorer. The accompanying photograph shows a lot of 100 common hens in the flock of the Manitoba Agricultural College. These hens are being kept for the purpose of grading up a flock in the manner just described. Prof. Herner of the Poultry Department, hopes to show the possibilities of grading up an average farm flock, solely by the use of pure-bred male animals, thus avoiding the expense of purchasing pure-bred females, or eggs from pure-bred fowl. The method to be followed is to select from the progeny of the first mating 50 pullets for the next season. The best 50 of the original flock of hens will be kept after a selection from trap-nest records, and this flock of hens and pullets will be mated again next year with pure-bred males, the same procedure being repeated for five years.

## HORTICULTURE.

Pears in the Niagara District show about 40 to 50 per cent. of a crop.

The Nova Scotia apple crop, according to the July fruit crop report of the Fruit Branch, Ottawa, will not exceed over 400,000 barrels. Production in 1917 was about 700,000 barrels.

White Burley tobaccos are largely used for the manufacture of cut pipe tobaccos and plugs. The growing of Bright tobaccos has rapidly increased of late years' especially on the less fertile soils.

The British Ministry of Food has fixed the price of small fruits in England. Growers are allowed to charge \$7.20 per 100 pounds for black currants, \$3.72 for red currants, \$4.44 for raspberries, and from \$4.80 to \$5.76 per 100 pounds for strawberries.



Flock of Common Stock at the Manitoba Agricultural College.

### Late Celery.

Late seedings of celery for long winter keeping should be ready for planting outside now, if not already planted. Celery can be and frequently is planted as a second crop after early peas, lettuce, cabbage or beets. In such cases the celery plants are better left out of the ground until the first crop is gathered, but ordinarily celery should be set out in the field or garden as soon as the plants are big enough. This is to ensure strong and stocky plants; if left too long in the transplanting bed they will soon begin to crowd and become weak and poor.

Land intended for late celery should be thoroughly worked up, plowed, harrowed and made smooth. Furrows six inches deep or trenches dug by hand should next be made in the rows where the plants are to go. Where possible, about three inches of fine, well-rotted manure should be put in the bottom of the furrows and thoroughly mixed with the soil, so as to nearly fill the furrow. Well-rotted compost is good if it is not convenient to use well-rotted manure. For very rich land or land customarily used for the production of commercial crops of vegetables there may be no need for the manure or compost, but celery likes plenty of fertility and moisture.



Specimens from a Well-grown Crop.

Where the celery must be blanched plenty of room must be provided if earth is to be used. About four feet apart between the rows will provide plenty of space for cultivating and plenty of soil for blanching. The plants should be about six inches apart in the row. Sometimes double rows are planted, plants in each row being six inches apart and each single row six inches from its mate, individual plants alternating with the plants in the other row.

Before planting, the seed bed should be soaked with water and the tops of the young plants cut off. It is a good idea also to shorten very long roots on any plants showing them and to dip the roots in water. Better

chances for quick growth and a good stand of plants will result if the soil is made moist and precautions taken to avoid drying out after planting. Where an irrigation system is installed over the land its use immediately before and after planting is very often advisable, especially in dry weather. In exceptionally hot weather, shade should be provided at first, if this is at all practicable.

Celery is a plant the leaf of which provides the edible portion, so that every effort should be made to secure good growth. Naturally this is assisted very materially by the application of nitrogenous plant foods or manures, such as nitrate of soda or well-rotted stable manure, hen manure, or rich compost. If the need for some further supply of food in the soil is noticed when the plants are growing, shallow trenches may be dug at one side of the row and the manure or fertilizer applied here. This supplies the food at the roots, just where it is needed and is therefore most effective.

As celery grows it naturally spreads out on the surface of the soil somewhat like a carrot, but this is undesirable under cropping conditions and consequently the plants must be "handled." This consists in pulling the tops together very closely and packing earth around each plant firmly enough with the hand to hold its top together. The rest of the earth necessary for banking up can be drawn up with a hoe. Commercially such primitive methods would scarcely be profitable and it is therefore customary to use a kind of scraper which will draw the earth up to the plants sufficiently to hold them until the boards can be put up for blanching.

Everyone is acquainted, of course, with the object of blanching or whitening the leaf stalks of growing celery. The green coloring matter of plants cannot develop in the absence of sunlight and its absence for any cause, therefore, leaves the stalks white, a condition in which it finds favor among consumers. It does not make any difference what materials are used for blanching so long as the light is excluded, but earth, paper or boards are commonly used. Boards are in commonest use for commercial crops, but the quality is perhaps not quite so good as where earth is used. However, certain varieties like Golden Self-blanching and White Plume do not stand banking with earth so well. The disadvantage of blanching with earth is, of course, that much less celery can be grown per acre, since so much earth is required for banking. Sometimes heavy roofing paper is used and if carefully handled can be made to do for more than one year. Occasionally, too, where limited quantities are involved, the plants can be wrapped individually with strong manilla wrapping paper and tied with cord, but this is of course, very laborious. For the garden, a few four-inch tile come in very conveniently since they are twelve inches long and will produce celery of better quality than either boards or paper, according to the experience of some. They are cool and can impart no bad odors to the plants.

### Summer and Fall Treatment of Asparagus.

Now that the cutting season is over for the asparagus bed, it is important that it be given every attention in order to put the plantation in good shape for the crop next year. Asparagus is a gross feeder, and there is probably no other plant in cultivation upon the vitality of which so great a drain is made. The cutting of all sprouts for several weeks as soon as they appear at the surface of the ground is, to say the least, a very severe tax upon the plant, and in order to maintain the life of the bed it should be given careful attention between cutting seasons, which usually last from about May 1 to the last of June.

During the cutting season the rows are ridged up, but as soon as cutting is done these ridges should be leveled and frequent cultivation given to keep down all weeds. Growth of the green stalks is, however, very rapid and soon the stalks cover the space between the rows, providing shade enough to keep down weeds.

If any tall weeds should survive these unfavorable conditions they must be pulled by hand. In the fall, just as the berries are turning red, but not before, the tops should all be cut off level with the ground and burned, so as to prevent the berries from ripening and re-seeding the bed. Asparagus plants out of place make very persistent and troublesome weeds because of their perennial nature, so that this practice of preventing them from re-seeding goes a long way toward keeping the bed clean.

Manuring asparagus is important from the fact that exceedingly rich soil is necessary because of the very heavy and quick growth the plants are required to make in early summer. The plant food supplied should also be readily available and because the buds from which the spears for next year's crop grow are being formed now, it is considered the best practice to apply manure immediately after the cutting season is over. Manure rich in phosphoric acid and potash is best, and for this reason stable manure is less popular among commercial growers than formerly, although no plant food of any kind is amiss on the asparagus bed. So important is rich soil to asparagus that tough, stringy shoots will result if plant food is not plentiful enough and sufficiently available to promote ready growth. Fertilizer or manure can be applied on the row or between the rows with equal effect, since the whole is a mass of roots underneath the surface. A ton and a half per acre of artificial fertilizer, or its equivalent in manure, is sometimes applied.

**Fruit Transportation News.**

Several matters of interest regarding transportation are covered by G. E. McIntosh, in charge of transportation of the Fruit Branch, Ottawa, in a communication dated July 8. It is stated that increased icing charges have become effective in both Eastern and Western territory with the exception of British Columbia. In Ontario, east of Fort William, there is a charge of \$3.00 per ton of 2,000 pounds or part thereof, and a minimum charge of \$3.00. In Manitoba, Saskatchewan, Alberta and that part of Ontario west of Port Arthur, the charge is \$3.60 per net ton, with a minimum of \$2.00. In British Columbia the charge is \$5.00 with a minimum of \$2.50 per car. A matter of interest in this connection is that the charges for blanket icing in transit which formerly applied to shipments destined to points in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia are cancelled. These charges varied from \$16 to \$20 per car. Several express tariff changes have been made in the tariff of the Dominion Express Company, and apply to carload shipments of berries, cherries and currants from British Columbia points and are effective to August 31. The minimum carload weights have been increased for shipments originated on lines west of Port Arthur, these changes having become effective July 15, 1918. Mixed carloads of fresh fruits in boxes or crates, and early vegetables in packages, may be accepted at their respective rates, minimum 30,000 pounds, provided that the carload contains not less than 5,000 pounds of fresh fruit.

**Gooseberries in England.**

Lord Rhondda, British Food Controller, has taken steps to see that the crop of gooseberries is conserved for the use of the army, and its distribution regulated, so far as practicable, for the needs of the civilian population. An order which came into force recently restricts the price of fresh gooseberries in England and Wales and provides that the bulk of the crop shall be used for the manufacture of jam. The order provides that no gooseberries shall be sold for a higher price to the grower than 27 shillings per hundredweight. The dealers profit for commission on any sale must not exceed one shilling per hundredweight above the grower's price. Restrictions as to prices do not apply to retail sales of 5 pounds or less but growers who have, all told, five hundredweight or more, may not sell their gooseberries to any person other than a licensed jam manufacturer, or a recognized fruit salesman who has undertaken in writing that he will resell the fruit to a licensed jam manufacturer.

**THE APIARY.**

**Bee Diseases.**

The widespread demand for bees this year has increased the risk of the spread of bee diseases. Two of these, American Foul Brood and European Foul Brood cause a heavy loss to the beekeeping industry every year, and wherever they are found they should be treated promptly and reported to the provincial apiarist or bee inspector. Every beekeeper should know how to recognize these diseases, and how to distinguish them from the less serious Sacbrood.

In American Foul Brood, the bee larva or maggot, in the stage just after it is capped over with wax, becomes a viscid coffee-colored mass which can be made to rope out an inch or more and has an unpleasant glue-pot odor. Cells containing the rotten larvæ have their cappings discolored, sunken, irregularly perforated or removed altogether. The remains dry to a scale which adheres tightly to the wall of the cell. This disease must be treated by shaking the bees into a clean hive containing frames fitted with narrow strips of foundation, and burning or boiling the combs, as explained in the Experimental Farms Bulletin No. 26, (Second Series) "Bees and How to Keep Them."

European Foul Brood attacks most of the larvæ before they are capped over while they lie curled up in the bottom of the cell. The larva turns yellowish or greyish and melts into a pulp which will not rope or will rope but little, and has a slightly sour odor. A few capped larvæ are often affected. Sometimes a fetid odor is present. The dried scale is easily removed. Italian bees will resist this disease, and therefore the best treatment is to introduce Italian queens of a good strain. The shaking treatment should also be carried out in many cases.

In Sacbrood the dead larva with darkened skin lies extended in the cell. Usually the entire larva can be removed from the cell without breaking the skin. On puncturing the skin, the contents are found to be more or less watery. Colonies affected by this disease usually recover and no treatment is necessary.

To guard against foul brood, do not buy bees on combs or used bee supplies, unless you are sure they are clean. Do not feed your bees with honey from another apiary. Keep the colonies strong and avoid robbing. If European Foul Brood is in the district Italianize without delay.—Experimental Farm Note.

**FARM BULLETIN.**

**Calgary Show a Grand Event.**

The Western Show Circuit was opened at Calgary, Alta., on June 28, and the first of these series was a very successful exhibition of live stock and farm products. Reference was made in our issue of June 11 to some of the awards, particularly the championships, but readers may be interested in a more detailed enumeration of the winnings. Among the leading exhibitors of Shorthorns were Chas. Yule, Carstairs, Alta.; J. G. Barron, Carberry, Man.; J. J. Elliott, Guelph, Ont.; L. A. Bowes, Calgary, Alta.; T. B. Ralphs, Calgary; R. A. Wright, Drinkwater, Sask.; Geo. Walters, Delacour, Alta. In the aged-bull class, Yule's Craven Knight defeated Newton Loyalist, shown by Elliott, of Guelph, and went through to the senior and grand championship. Elliott was first in the junior yearling class with Challenger, and third in the senior bull calf class with Newton Perfection. A similar win was made by Elliott in the junior bull calf class with Conqueror Crown, where Barron won with Conqueror. In the aged-cow class, with calf at side, Barron was first and third with Fairview Baroness Queen and Fairview Jubilee Queen. Elliott came second with Roan Lady, the entry which won senior championship for him at the Canadian National Exhibition, at Toronto, last year. Cows three years or over had two entries, where Bowes won with Collynie's Best, and Yule was second with Lucille. Elliott won the two-year-old heifer class with Rosa Hope 21st, last year's Canadian National champion, but she went down in the championship class at Calgary before Collynie's Best, which won the highest female honors in Shorthorns. In senior yearling heifers, Barron was first and third with Oakland Baroness and Cicely's Gem. Yule was second with Clipper Girl. Yule was first in the junior yearling class with Emma 62nd, while Barron won like honors in the senior calf class with Lavender 47th. Barron was first with three, the get of one bull, and two the progeny of one cow, with Elliott second in both cases. Elliott had the best senior herd and Barron the best junior herd, also the best three calves under one year.

Eastern Canada Herefords were represented by the herd of L. O. Clifford, Oshawa, Ont. Frank Collicut was first and third in the aged-bull class, with Gay Lad 16th and Gay Lad 40th. The Curtice Cattle Company was second with Beau Perfection 48th, and Clifford was fourth with Brae Real 6th. In two-year-old bulls the Curtice Cattle Company won with Beau Donald 192; G. E. Fuller, Girvin, was second with Nathan Fairfax, while Clifford was third and fourth with Beau Gaston 42nd and Beau Dover 7th. Clifford had the best senior yearling in Fairview Gaston 11th. Collicut won the junior yearling class and the junior calf class, while the Curtice Cattle Company were at the top in the senior calf class. The senior and grand champion bull was Gay Lad 16th, but Beau Donald 215, which won the senior calf class for the Curtice Cattle Company, annexed the junior championship. Clifford's Miss Armour Fairfax took second place in the aged-cow class with calf to Collicut's entry, Sally. Collicut also won the class for cows three years old and for two-year-old heifers, Clifford coming back in the senior yearling class with Perfection Lass 5th, which later was declared the junior female champion. The junior yearling class, and the junior calf class were won by Clifford with Della and Lady Armour Fairfax, respectively. Collicut won the senior calf class. The winning aged cow with calf by side, Sally, was declared the female champion.

The exhibitors of Aberdeen-Angus included Jas. Bowman, Guelph, Ont.; A. E. & E. S. Clemens, Sedgewick; J. D. McGregor, Brandon; E. A. Noad, Olds; and S. E. Pritchard, Camrose. In the aged-bull class Noad was first with Marshall of Glencarnock; Bowman was second and third with Young Leroy and Beauty's Leroy; Pritchard was fourth with Rosador of Glencarnock. McGregor's Pathfinder of Gwenmawr was declared the best two-year-old bull. In the senior yearling bull class, McGregor was again first, his entry in this case being Black Cap McGregor, which bull annexed the grand championship. Bowman took second place on senior yearling bull with Elm Park Buxom. First prize in the junior yearling class went to McGregor, but Bowman came first and third in the senior calf class with Elm Park Radiator and Elm Park Belmont. The senior championship went to Noad on Marshall of Glencarnock, while the junior and grand championship went to McGregor, on Black Cap McGregor. In aged cows, McGregor was first with Majesty Queen; Bowman was second with Elm Park Rosebud 15th; Noad was third with Ruby Nancy, and Pritchard fourth with Rose of Glendale. In two-year-old heifers, Pride of Glencarnock 3rd won first place for McGregor; Bowman secured the second and third positions with Elm Park Emmeline and Elm Park Rosebud. McGregor had the best senior yearling heifer in Pridista of Glencarnock, with Bowman again second and third on Elm Park Witch and Elm Park Idala. McGregor won all the female championships as well as the senior herd, the junior herd, three the get of sire, and two the progeny of one cow.

There were 133 Clydesdales in this department of the horse exhibit, and these were brought forward by a considerable list of exhibitors. D. Thorburn won the aged-stallion class with Scotland's Splendor. A. L. Dollar had the best three-year-old stallion in Scotland's Seal. Clifton Heir won the two-year stallion class for Dollar, while John Prouse was first in the yearlings with Nonpareil Blend. Scotland's Splendor was declared the champion stallion, while the best Canadian-bred stallion was Clifton Heir. The brood mares with foal by side were lined up thus: 1, Thorburn and Riddell, on Lady

Ruby Rose; 2, McLennan, on Queen of Argyle; 3, McMillan, on Eurdyce; 4, McLennan, on Ruby Baroness; 5, McMillan, on Golden West Beauty. The dry aged mares were placed as follows: 1, 2 and 3, Thorburn and Riddell, on Maggie Fleming, Nell of Aitken, and Jessie Glenavon; 4, McMillan, on Royal Maud. The best mare was Princess of Mt. Pleasant, which won the three-year-old filly class for J. W. Durno, and the best Canadian-bred mare was Nonpareil Model, which won the two-year-old filly class for Prouse.

**Canadian Crop Conditions.**

The Dominion Bureau of Statistics issued on July 13 a revised estimate of the areas sown to spring grains, an estimate of the areas under later-sown cereals and hoed crops and the condition of grain crops on June 30, as compiled from the returns of crop correspondents.

**Areas Under Principal Grain Crops and Hay.**

For all crops, except peas, the estimate of areas sown to spring grains is less than it was a month ago, the decrease being caused by unfavorable weather conditions in the West. For wheat, the total acreage is now estimated at 15,838,000 acres, or 7 per cent. more than last year, spring wheat occupying 15,497,300 acres, or 10 per cent. more than last year, and fall wheat 340,700 acres or 53 per cent. less than last year. For oats the area sown is now placed at 13,784,000 acres, or 4 per cent. more than last year; for barley the area is 2,403,750 acres, and for rye 201,000 acres. Peas occupy 205,730 acres, mixed grains 501,400 acres; hay and clover, 8,015,250 acres and alfalfa 102,900 acres. In the three Prairie Provinces the area sown to wheat is 14,964,000 acres, comprising 2,618,000 acres in Manitoba, 9,101,000 acres in Saskatchewan, and 3,245,000 acres in Alberta.

**Later-sown Cereals and Hoed Crops.**

The estimated acreage of later-sown cereals and hoed crops, as compared with 1917, are for all Canada as follows: Buckwheat, 407,800 as against 395,977; flax, 927,300 as against 919,500; corn for husking, 213,400 as against 234,339; beans, 105,560 as against 92,457; potatoes, 686,300 as against 656,958; turnips, etc., 216,970 as against 218,233; sugar beets, 13,200, as against 14,000, and corn for fodder, 344,700, as against 366,518. The area under beans shows an increase of 14 per cent., and that under potatoes an increase of 4 per cent. The areas sown to both of these crops is the largest on record; the increase of beans is chiefly in Quebec, and of potatoes in Quebec and in Alberta.

**Condition of Grain and Hay Crops.**

In general, the condition of grain crops in the Atlantic provinces is not so good as it was this time last year, and there is also a slight falling off as compared with a month ago; but the prospects for good yields are fair. In Prince Edward Island the condition of wheat is 2 above, in Nova Scotia 1 below, and in New Brunswick 1 above the decennial average. Oats are 2 points below average in Prince Edward Island and Nova Scotia, but 1 above average in New Brunswick. In Quebec conditions have gone back during June, but are still much more favorable than they were a year ago. Spring wheat is 103, oats are 101 and barley 100. In Ontario fall wheat remains poor, being 70, or 30 per cent. below average, but spring wheat is 101. Oats and barley are equal to the average. In the Prairie Provinces drought and continuous winds during June have caused serious damage to wheat crops, and large areas have had to be resown to other crops. In the northern parts of these three provinces, however, the rainfall has been sufficient, and conditions are fairly promising. For spring wheat the condition is expressed numerically by 88 in Manitoba, 85 in Saskatchewan and 83 in Alberta, i. e., 17 to 12 per cent. below average. In British Columbia, hot, dry weather in May and the early part of June retarded growth, and the condition of wheat is 10 and of oats 14 per cent. below average.

**Reports of Provincial Governments.**

Telegraphing on July 9, the Saskatchewan Department of Agriculture reports that more rain is greatly needed throughout the province. In many sections wheat has headed out, but is very short; and not more than half a crop is anticipated. Conditions are better in the northwestern and northeastern districts, where prospects are excellent. In the southwestern and southeastern districts crops are nearly ruined, a few points reporting better prospects than the majority. The Alberta Department of Agriculture telegraphed (July 6) that while the grain crops of the whole province, except the Edmonton, Peace River and Grand Prairie districts, have been seriously affected by the lack of moisture, recent rains covering most of the province have helped the general situation.

**"The Farmer's Advocate" Represented.**

A party of Canadian publishers and editors are now the guests of the British Government, and are studying conditions in England and France as they exist after almost four years of war. "The Farmer's Advocate" is being represented on this mission by John Weld, Manager of the William Weld Publishing Co. The delegation sailed late in June, and arrived in England last week. Four weeks will probably be spent in England and France, under the direction of the British Ministry of Public Information.

Notes From Pontiac.

EDITOR "THE FARMER'S ADVOCATE":

Work on the land in this section began about April 14 on the dry lands, and by May 20th of the month had become quite general all over this part of the country. Clay lands never worked up better than they did this year. As November of 1917 was the coldest November for years and this spring the driest we have had for years, the soil particles which had been burst and pulverized by the frost were not packed at all by rain but harrowed into a beautiful mellow bed with very little work. Low lands kept damp for some time and the frost was slow in getting out of some places, as the weather kept cool and dry up till May 10. On May 12 the dry lands which were beginning to feel quite thirsty were refreshed by a beautiful, gentle rain which began to fall about eight a.m. and continued till five p.m. Warm days and frostless nights up till May 26 furnished ideal conditions for growth, and prospects for a splendid crop were good. Fall wheat is not a general crop in this section, though some farmers grow it successfully. Clover came through the winter in good condition and made a good start, but a cold wave which lasted from May 27 till June 10, with high winds in the afternoons and from two to four degrees of frost quite frequently at nights, soon lapped up all the moisture and a great many of the clover plants died, and the general appearance of the meadows was not so good on June 10 as on the first of the month. Showers were frequently seen to rise in the West but they always seemed to go north by Otter Lake, or south down the Ontario side of the Ottawa, while this section of the country was suffering from drought. Farmers were beginning to look kind of sad; pastures were getting very bare, creeks were going dry, and hay was going to be a short crop; turnip and mangel seeds were not coming up evenly; their boys were being drafted, and things were generally going wrong, when out of a clear sky on the evening of June 11 rain began to fall, keeping it up till well on into the night. Again on the 12th it rained nicely for three or four hours, and this relieved the situation for a time.

Wages are high in this section; good experienced farm hands are getting \$50 to \$55 a month with board. Some are paying the above wages, though doubtful if it is a paying proposition, and are preparing to reduce their stocks and cultivate only what they can handle with the help of their families. Some relief may be afforded after the registration is over, but as most of the farmers in this section have to take their help right into the home with them, they are going to think seriously over it before they take in a stranger from the city, or distant town, among their little family of growing boys and girls.

Several cool nights in succession were followed by a severe frost on the night of June 19. Garden crops of all tender plants were seriously hurt and in many instances killed entirely. Beans and potatoes were badly frozen in many places. Some plots of the former were replanted with beans again, some with turnips, or rape, and some were left to see if more favorable conditions might not revive the crop.

The Pontiac Wool Growers' Association have again had a very successful season; 4,300 odd pounds of wool have been sold co-operatively this year, and it is expected that the average price paid the producers will be around 70 cents per pound—a dandy price.

A new creamery began operations at Shawville about the first of June and is being well patronized. The price paid for butter-fat during the last half of June being 47 cents per pound. Beef cattle are being shipped and in fairly large numbers since the middle of June. Not many cattle were fattened in the stables last winter, but were fed some meal and finished on grass. Farmers who are fortunate enough to have any pulpwood on their farms are making every possible effort to get it peeled while the bark is loose. Poplar, spruce and balsam are all quite common in many sections of the county, and are all bringing good prices at present. The poplar is always peeled and a larger percentage of spruce and balsam is being peeled every season as the price is somewhat better, and it is much lighter to draw and handle when the bark is off for a few months.

The Hon. George Foster's Daylight Saving Bill is not at all popular with most of the farmers in this section, and I fear will be less so when haying and harvesting operations begin. Millfeeds are scarce and hard to get. The local feed dealers have a good deal of trouble trying to get in enough to keep those who are depending on them for their supplies going in a kind of a way.

Young pigs were more plentiful than usual this spring, and sold at four to six weeks of age for anywhere from \$3 to \$8 each, according to their size, breeding and the ability of the seller as a salesman. Less chickens are being raised than last year on most farms, and the season has been so cool and suitable feeds so scarce that those that were hatched are not making a very satisfactory start.

Help is getting quite scarce in this county, but I guess we are no worse off in that respect than most rural districts throughout the country. Our local brick and tile manufacturer is afraid he will be compelled to close down his plant for want of men, and also cordwood, which he uses entirely for fuel, as there are so few hands left to cut it. My letter is already too long, so I must close.

Pontiac Co., Que.

PONTIACIA.

Potato Diseases Prevalent.

In conversation with an official of the Ontario Department of Agriculture recently, he remarked that several of the potato diseases appear to be especially prevalent this year. Leaf roll or leaf curl, mosaic and early blight have been very prevalent. The latter is very bad at the present time having been spread by the turnip flea beetle early in June. There seems to be no districts where these diseases are more serious than others. Leaf roll especially is prevalent over all of the province, and particularly where seed from southern or older Ontario was used. A certain amount of blackleg is to be found over the province, but is confined more or less to the recognized potato districts. Blackleg is a bacterial disease, the winter form being a soft rot. One of the vegetable gardeners in the vicinity of Kingston has a very interesting experiment with Irish Cobblers, which is typical of the spread of leaf roll and mosaic from Southern Ontario grown seed. One row each is grown of seed from 1, New Brunswick seed grown in 1917 on muck soil at Peterboro, Ont.; 2, New Brunswick seed grown in 1917 on sandy soil at Peterboro; 3, Northern Ontario grown seed from Fort William; 4, fresh New Brunswick seed; and 5, seed from the mountains of Virginia. As they stand at present the seed grown on muck soil last year and the Northern Ontario seed show practically no disease whatever, while the fresh New Brunswick seed shows a small percentage, but not nearly as much as the seed grown in the mountains of Virginia. That grown from seed produced on sand in Southern Ontario last year and originally from New Brunswick, is by far the worst of all, and shows about 40 per cent. of leaf roll and about 10 per cent. of mosaic in spite of exceptional growing conditions for the district.

Leaf roll is characterized by a curling of the lower leaves, which take on a hard and leathery texture. The plants grow very upright, a symptom which can be plainly noticeable at considerable distances. Mosaic can be recognized by a mottled appearance of the leaf and a wrinkled or crinkled surface. The upright growth is not so noticeable as in the case of leaf roll, but the plants take on a yellowish appearance due to the loss of chlorophyll in the lighter mottled spots. Blackleg can be easily recognized by a wilting of the plants, and the fact that when pulled the lower part of the plant has turned black, due to the rot induced by the disease. As stated above, the winter form of this disease is known as bacterial soft rot. The whole plant dies and effectually prevents the formation of tubers. Leaf curl and mosaic are carried over in the seed stock and, while not so immediately disastrous as blackleg, will completely wipe out the crop within a period of three or four years, unless a change of seed is made. This is due to the gradual sapping of the vitality of the plant, and the steady decrease in productiveness of the resulting tubers. Southern Ontario is particularly affected by this disease, and growers should take steps to use seed not subject to or affected by the disease. There is no remedy of an artificial nature. The only thing that can be done is to secure seed from districts unaffected, such as Northern Ontario, since the disease spreads through the growing season from what may be only a few affected tubers at planting time. Mosaic may be spread from the clothing even. The rapidity and seriousness of the spread of leaf roll is instanced by an experience of one prominent vegetable grower who last year selected some exhibition tubers from some hills that appeared to be absolutely healthy in a field where leaf roll and mosaic were present. These selected tubers won first prize when shown and were planted this spring. The plants this year show 75 per cent. of leaf roll and 25 per cent. of mosaic, except for three or four hills showing blackleg. This would almost prove the necessity of securing fresh seed from Northern Ontario each year, especially for the sand and clay soil of Southern Ontario.

Ontario Stock Win at Edmonton Exhibition.

The live-stock classes at the Edmonton Exhibition were well filled with a particularly choice lot of animals. The fair was well patronized, and visitors were well repaid for time spent beside the judging ring and in looking over the various farm and commercial exhibits. The Collicut herd of Herefords and the Shorthorn herds of Chas. Yule and L. A. Bowes were not brought up from Calgary. However, the Shorthorn classes were strengthened by the herd of Hon. Duncan Marshall.

The horse and cattle judges were: Clydesdales, Jas. Torrance, Highfield, Ont.; Percherons, A. Galbraith, Spokane, Wash.; Shorthorns, John Gardhouse, Weston; Herefords, R. A. Kinzer, Kansas City; Angus, A. A. Dowell, Edmonton.

The championships in Clydesdales were won by Thorburn & Riddle, of De Winton, on Scotland's Splendor and Nell of Aikton. Eugene from the stable of Toyzelle & Parr, Calgary, was the champion Percheron stallion, and Geo. Lane won the female championship with Nora Belle. J. J. Elliott, of Guelph, Ontario, secured both Shorthorn championships on Newton Loyalist and Rosa Hope 21st, and also won the senior herd prize. J. G. Barron, of Carberry, Man., had the winning junior herd.

L. O. Clifford, of Oshawa, Ont., captured the female Hereford championship on Perfection Lass 5th, but the male championship went to the Curtice Cattle Company, Calgary, on Beau Perfection 48th. The senior herd prize went to Curtice Cattle Company, while the Ontario herd won the junior prize.

The championships in Angus went to J. D. McGregor on Black-Cap McGregor and Majesty's Queen.

A Hitch in the Standard Feed Movement.

Last fall farmers of Canada were asked to increase the number of hogs in this country in order to meet the extremely critical situation in regard to the cupboard overseas which was becoming empty, with very poor prospects of replenishing it adequately to meet the needs of the armies and the civilian population of our Allies. To their credit farmers responded without the sign of a guarantee in price and in spite of the absolute lack of confidence they held in the packers to maintain values at a reasonable level when the hog harvest would come in the summer and autumn of 1918. Now feed is short and a movement has been on foot to prepare a standard feed for this class of stock, and the hope was entertained for a time that the product would be available this month to tide the hogs over till the threshing began. Everything was moving satisfactorily till the millers "stalled" recently in fear that prices might drop and money would be lost on the goods they had on hand. From a straight business point of view possibly the millers are justified in going slowly because they are not accustomed to losing very much, but on the other hand they would not be taking as long a chance as farmers took last fall and winter. It seems too bad that the late Baron Rhondda's famous remark to the farmers of Britain could not have a broader application and include all industries. When they complained of losing money on account of the price fixing they were told "to mark it off as a gift to the Nation."

The United States Wars Against Loafers.

A federal order, drawn up in the United States by Provost Marshall Enoch Crowder, went into effect on July 1 and effectually set the face of the law severely against all loafers. All men of draft age between the ages of eighteen and fifty must now be engaged in productive employment or get into the army. In many States Anti-Loafing laws have been passed, and the following non-productive occupations have been singled out by the federal order: 1, persons engaged in the serving of food and drink, or either, in public places, including hotels and social clubs; 2, passenger elevator operators, attendants, door and footmen, carriage openers, and other attendants in clubs, hotels, stores, opera houses, office buildings and bath-houses; 3, persons, including ushers and other attendants engaged and occupied in connection with games, sports and amusements, except actual performers in legitimate concerts, operas and theatrical performers; 4, persons employed in domestic service; 5, sales clerks and other clerks employed in stores and other mercantile establishments. It is estimated that 1,000,000 people will change their employment as a result of this Order. A circular under date of July 13, 1918, states that Canada also has an Anti-Loafing Law which has been in operation since early in April, and applies to every male person between the ages of sixteen and sixty, unless a bona fide student or physically unfit. Most farmers will agree with the Food Board that "there is no room for loafers, no time for idlers, and there should be no mercy for tramps and mere pool-room sports."

United States Crops Good.

While the July crop report of the United States Government shows a decline of 40 million bushels of wheat from the amount predicted a month previously, there still remains the prospects of 891,000,000 bushels to be harvested. Corn promises to be the best on record, and the forecast, the first of the season, is for 3,160,000,000 bushels. There were 113,835,000 acres planted to corn. Record crops of barley, rye, sweet potatoes and rice are indicated, while forecasts of the oats, white potatoes and tobacco crops show they will probably equal their records if growing conditions are favorable.

The following is given out by the Canada Food Board as showing present wartime prices of some staple articles of food in France, as compared with pre-war prices:

	1918	1914
Butter per pound.....	.90	.30
Pork per pound.....	.70	.28
Potatoes per pound.....	.06	.02
Roast beef per pound.....	.65	.30
Beans per pound.....	.28	.12
Coffee per pound.....	.60	.40
Chocolate per pound.....	.65	.25

It is stated that twenty sheep are required to provide wool enough to keep one soldier clothed. In Canada there are less than five and a half sheep per soldier.

# Toronto, Montreal, Buffalo, and Other Leading Markets

## Week Ending July 11.

### Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers (1,000-1,200)				Receipts		Top Price Good Calves			
	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4
Toronto (Union Stock Yards)	4,380	4,310	4,442	\$14.60	\$11.50	\$15.50	1,379	1,120	1,449	\$17.00	\$15.00	\$17.25
Montreal (Pt. St. Charles)	801	1,120	376	14.00	11.75	14.50	3,216	1,612	2,157	15.50	12.50	15.00
Montreal (East-End)	1,091	1,470	705	14.00	11.75	14.50	1,573	1,112	1,316	15.50	12.50	15.00
Winnipeg	2,794	2,577	2,339	15.00	11.00	16.50	243	142	204	15.50	12.50	16.00
Calgary	2,213	659	987	12.25	8.50	13.00						
Edmonton	972	552	585	11.50	8.75	13.50	42	6	59	13.00	12.00	14.50

	HOGS						SHEEP					
	Receipts		Top Price Selects				Receipts		Top Price Good Lambs			
	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4	Week Ending July 11	Same Week 1917	Week Ending July 4
Toronto (Union Stock Yards)	5,953	9,588	7,195	\$18.50	\$16.75	\$18.50	1,550	1,158	1,045	\$23.75	\$17.00	\$22.00
Montreal (Pt. St. Charles)	1,835	1,839	1,349	19.25	17.25	19.00	635	508	704	21.00	10.00	21.00
Montreal (East-End)	1,022	1,080	866	19.25	17.25	19.00	546	669	542	21.00	10.00	21.00
Winnipeg	5,954	6,406	6,861	18.00	15.50	18.25	346	89	327	18.75	10.50	18.50
Calgary	3,436	1,594	2,908	17.35	15.00	17.35	1,041	250	223	14.25	13.50	14.25
Edmonton	846	559	889	16.85	14.85	17.25	84	1	445	16.00		14.50

NOTE.—The total of the graded stock at each stock yard will vary from 1 per cent. to 5 per cent. of the actual receipts offered for sale. Any variations from this will be noted.  
\*Each.

### Market Comments.

#### Toronto (Union Stock Yards).

The demand for cattle at the local yards was limited and prices were considerably lower on all classes of cattle compared with those paid during the previous week, drovers being forced to accept a cut of from 50 cents to \$1 per hundred on all classes. Even at these lower figures the demand was very slow. The lighter consumption of beef at this season of the year, together with the delivery of liberal numbers of distillery-fed steers and direct shipments of grass cattle from country points to a local abattoir, were all contributing factors to the decline in prices. There is no indication that the market is likely to assume an upward tendency in the near future; in fact, as supplies became heavier, further declines must be expected. Cattle are ruling about \$3 per hundred higher than at this period of last year. The quotations during the week were so unsatisfactory from the drovers' standpoint, that shipments off the market to Buffalo were made in a number of cases. Quite a number of heavy cattle were on sale, of which one lot sold at \$15.85 per hundred. The next best sale was that of a load of twenty head of thirteen hundred pounds which realized \$14.75 per hundred; twenty-two head of twelve hundred average sold at \$14.20, and another load of equal weight at \$14. Of steers weighing from ten hundred to twelve hundred pounds, twenty head of eleven hundred and fifty pounds sold at \$14.75, forty head of eleven hundred and twenty pounds at \$14.50, while most of the steers in these weights sold from \$13 to \$13.75 per hundred. Of steers and heifers of lighter weights, one or two loads of nine hundred and fifty pounds each sold at \$13.50, a few sold at \$13.75, but the majority of the sales of good cattle weighing around nine hundred were from \$12.50 to \$13.25; medium sold from \$12 to \$12.50, common butchers from \$10 to \$11, and light eastern butcher cattle from \$8 to \$9 per hundred. Prices for cows and bulls were lower in sympathy with the general decline in prices. One or two exceptionally choice cows sold at \$12, while most of the choice animal moved from \$10.50 to \$11.25, good cows from \$9.75 to \$10.25, and common cows from \$8 to \$9. Bulls were weighed up at about similar prices as for cows. Choice bulls were sold from \$10.50 to \$11.25, and bologna bulls from \$7.75 to \$8.50. A few loads of stockers and feeders were shipped to country points during the week: good feeders brought from \$10.50 to \$11.25, and good stockers from \$9.75 to \$10.50. Calf quotations weakened during the week, choice veal calves selling from \$15 to \$17, medium from \$13 to \$15, and common calves from \$9 to \$11.

The market for sheep and lambs was active, and prices ruled higher compared with those of last week. Choice spring lambs sold from \$21 to \$23.50 per hundred, light sheep from \$13 to \$15, yearling lambs up to \$17, and heavy sheep from \$11 to \$13 per hundred.

Hog quotations were unchanged throughout the week. Select hogs sold on Monday at \$18.25 per hundred, fed

CLASSIFICATION	No.	TORONTO (Union Stock Yards)				MONTREAL (Pt. St. Charles)			
		Avg. Price	Price Range Bulk Sales	Top Price	No.	Avg. Price	Price Range Bulk Sales	Top Price	
STEERS									
heavy finished	180	\$13.75	\$13.00-\$14.50	\$15.85					
STEERS good	362	13.43	13.00-14.00	14.60	79	\$13.85	\$13.00-\$14.00	\$14.00	
1,000-1,200 common	20	11.95	10.75-12.75	12.75	5				
STEERS good	615	12.83	12.00-13.50	14.00	97	12.00	10.50-13.00	13.00	
700-1,000 common	290	10.54	10.00-11.50	12.25	51	10.25	9.00-10.75	10.75	
HEIFERS good	475	13.06	12.75-14.00	14.25	23	11.50	10.50-13.00	13.00	
fair	298	11.24	10.50-11.75	11.75	36	9.00	8.75-10.00	10.00	
common	33	9.69	9.00-10.50	10.50	84	8.50	8.00-8.75	8.75	
COWS good	935	10.54	10.00-11.25	11.75	90	10.75	10.00-12.00	12.00	
common	574	8.77	8.00-9.75	9.75	167	8.75	8.00-9.50	10.00	
BULLS good	54	11.06	10.50-11.50	12.00	20	10.25	10.00-10.50	10.50	
common	79	9.36	8.75-9.75	10.75	93	8.50	8.00-9.00	9.00	
CANNERS & CUTTERS	37	6.50	6.00-7.00	7.00	36	6.00	5.50-7.00	7.00	
OXEN					1				
CALVES veal	1,342	14.50	13.00-16.00	17.00	3,162	9.50	9.00-14.00	15.50	
grass	37	8.00	7.00-9.00	9.00	54	7.75	7.50-8.00	8.00	
STOCKERS good	143	10.21	9.75-10.75	10.75					
450-800 fair	123	9.42	9.00-10.00	10.00					
FEEDERS good	112	11.24	10.75-11.50	11.50					
800-1,000 fair	50	10.70	10.25-11.00	11.00					
HOGS selects	5,600	18.28	18.25-18.50	18.50	1,600	19.25	19.25	19.25	
(fed and watered) heavies	34	18.29	18.25-18.50	18.50					
lights	98	16.75	16.50-17.25	17.25	38	18.50	18.50	18.50	
sows	216	15.86	15.25-16.50	16.50	187	16.25	16.25	16.25	
stags	5	14.25	14.25	14.25	10				
LAMBS good	861	21.62	20.00-23.00	23.75	232	20.25	20.00-21.00	21.00	
common	9	18.00		20.00					
SHEEP heavy	365	12.00	11.00-13.00	13.00					
light	208	14.12	13.00-15.00	17.00	173	13.00	13.00	13.00	
common	107	8.59	7.00-10.00	10.00	230	11.75	11.75	11.75	

and watered. While lower prices were talked of on Tuesday, they were not realized and quotations remained the same until the close of Thursday's market. A few odd lots of hogs sold throughout the week at \$18.50 per hundred. With Chicago and Buffalo quotations advancing, the latter now being about equal to those at Toronto, a decline here, except in sympathy with Buffalo is scarcely to be expected; in fact, it would not be surprising if the local market developed further strength.

Of the disposition from the Yards for the week ending July 4, Canadian packing houses purchased 747 calves, 73 bulls, 130 heavy steers, 3,251 butcher cattle, 7,060 hogs and 648 sheep. Local butchers bought 400 calves, 309 butcher cattle, 214 hogs and 277 sheep. Canadian shipments consisted of 44 calves, 62 milk cows, 499 stockers, 210 feeders and 8 sheep. Shipments to United States points consisted of 255 calves, 50 butcher cattle and 41 stockers.

The total receipts from January 1 to July 4, inclusive, were: 129,974 cattle, 35,932 calves, 194,827 hogs and 17,704 sheep; compared to 117,597 cattle, 28,992 calves, 255,818 hogs and 16,478 sheep, received during the corresponding period of 1917.

**Montreal.**  
Trading throughout the week was slow, due principally to the difference in prices now being offered for cattle and the prices paid three weeks ago, but also partly due to the irregularity of weekly receipts. Receipts during the week were more than those of the previous week by seven hundred and fifty cattle, thirteen hundred calves and eight hundred hogs. Two loads comprising forty-seven steers, one load of which averaged eleven hundred and thirty-five pounds and the other slightly less than eleven hundred and fifty pounds, sold at \$13.90 and \$14, respectively. Twenty-three head of steers weighing around nine hundred and seventy-five pounds each, sold at \$12.50 per hundred, five head of medium heavy steers and eleven of lighter weights, and a few heifers were weighed up at \$13. The best quality butcher cows offered were purchased for shipment to Quebec City, Quebec, for the butcher trade. These cows were fat and sold for \$10.50 to \$12 per hundred. Well finished cows are holding their prices well. Many of the cows offered were in fair flesh and weighed around nine hundred pounds each; these sold at \$9 per hundred. No bulls of good quality were on hand; heavy dairy bulls sold at \$9 per hundred and bulls

of lighter weights at \$8. An increase of thirteen hundred calves over the number offered during the previous week, was entirely due to large receipts from districts east of Montreal. While prices were firm for good quality calves, sales of inferior stock, of which the offering was large, were made at 50 cents to \$1 below the quotations of the previous week. Owing to the prices being paid by Canadian Packers, only a few cars of calves went out on United States account.

Lambs sold for \$20 per hundred and at \$14 each for the best, while sheep, which were mostly of poor quality, realized \$13 per hundred. Receipts were about similar in volume with those of the previous week.

Hogs sold at \$19.50 per hundred, off car weights. Sows sold at \$3 per hundred lower than selects, and stags from \$4 to \$5 per hundred lower. A rather large number of sows were included in the offering.

PT. ST. CHARLES.—Of the disposition from the Yards for the week ending July 4, Canadian packing houses and local butchers purchased 2,157 calves, 58 bulls, 235 butcher cattle, 1,349 hogs and 704 lambs. Canadian shipments consisted of 22 milk cows and 56 butcher

Food Board  
apple articles  
prices:

1914
.30
.28
.02
.30
.12
.40
.25

ired to pro-  
clothed. In  
f sheep per

Incorporated 1855

**Farmers Who Call**  
at any of the Branches of  
**THE MOLSONS BANK**  
are always made welcome.

Especially at this time when  
increased production is so  
essential, our Managers will  
cheerfully discuss with  
farmers their financial  
situation.

Savings Department at all Branches  
Interest at Highest Current Rate.

cattle. There were no shipments to  
United States points.

The total receipts from January 1  
to July 4, inclusive, were: 17,181 cattle,  
41,227 calves, 31,718 hogs and 7,836  
sheep; compared to 18,340 cattle, 38,408  
calves, 45,025 hogs and 6,465 sheep,  
received during the corresponding period  
of 1917.

**EAST END.**—Of the disposition from the  
Yards for the week ending July 4, Cana-  
dian packing houses and local butchers  
purchased 1,316 calves, 605 butcher  
cattle, 866 hogs and 542 lambs. Canadian  
shipments consisted of 143 calves, 12  
butcher cattle and 116 lambs. Shipments  
to United States points consisted of 256  
calves.

The total receipts from January 1 to  
July 4, inclusive, were: 15,701 cattle,  
22,808 calves, 20,174 hogs, and 7,676  
sheep; compared to 19,331 cattle, 30,912  
calves, 24,616 hogs and 7,998 sheep,  
received during the corresponding period  
of 1917.

### Buffalo.

Cattle.—Trade, with offerings running  
only to moderate numbers the past week,  
was not what sellers generally desired,  
shipping steers selling from steady on  
down to a quarter lower, while on  
butchering grades generally market ruled  
strong to a quarter above the preceding  
week. Demand was not on the urgent  
order for anything in the shipping steer  
line and the big killers at the present  
time appear to be on the hunt for the  
more medium priced steers. Bulk of the  
offerings in the shipping steer line were  
Canadians, running mainly to a medium  
and fair grassy kind, best of which sold for  
\$16 to \$16.55, with best dry-fed natives  
running from \$17.25 to \$17.40. In the  
handy butchering line there was a scarcity  
of real choice steers with the general  
range being from \$15 to \$16, some on the  
yearling order and very desirable selling  
up close around \$17 but were no criterion  
to the general trade in this division.  
Stocker and feeder trade about steady, bulls  
sold generally at strong prices, no change  
being noted on dairy cows. Offerings for  
the week totaled 3,900 head, as against  
2,975 for the preceding week and as  
against 4,850 head for the corresponding  
week a year ago. Quotations:

Shipping Steers—Natives—Choice to  
prime, \$17 to \$17.40; fair to good, \$16.50  
to \$16.75; plain and medium, \$13.50 to  
\$15; coarse and common, \$11.50 to \$12.50.

Shipping Steers—Canadians—Best,  
\$15.50 to \$16.25; fair to good, \$14.25 to  
\$15.25; common and plain, \$12.50 to  
\$13.25.

Butchering Steers—Choice heavy,  
\$16.75 to \$17.50; fair to good, \$15.25 to  
\$16.50; best handy, \$15 to \$15.50; fair  
to good, \$14 to \$14.50; light and common,  
\$9.50 to \$10.50; yearlings, choice to prime,  
\$16 to \$17; fair to good, \$13 to \$15.

Cows and Heifers.—Best heavy heifers,  
\$13 to \$13.25; fair to good, \$12 to \$12.50;  
good butchering heifers, \$11 to \$11.75;  
fair butchering heifers, \$9 to \$10; common  
\$8 to \$8.50; very fancy fat cows, \$11 to  
\$12; best heavy fat cows, \$9.50 to \$10.50;  
good butchering cows, \$9 to \$9.25;  
medium to fair, \$8.50 to \$8.75; cutters,  
\$7.25 to \$7.50; canners, \$6.75 to \$7.25.

Bulls.—Best heavy, \$11.50 to \$12;  
good butchering, \$10.50 to \$11; sausage,  
\$9.50 to \$10.50; light bulls, \$7.50 to \$8.50;  
oxen, \$10 to \$12.

Stocker and Feeders.—Best feeders,  
\$10 to \$10.50; common to fair \$9 to \$9.75;

## Prompt Returns From Shipments



13

When you ship Live Stock, Grain,  
Butter, Cheese or Fruit, put through  
The Merchants Bank a Draft on the  
buyer. This is the business way of  
securing prompt and satisfactory  
settlement.

It saves time and possible loss.

## THE MERCHANTS BANK

Head Office: Montreal. OF CANADA. Established 1854.

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21 Branches in Saskatchewan, 53 Branches in Alberta, and 8 Branches in British  
Columbia serves Rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.

best stockers, \$9.50 to \$10; fair to good,  
\$8.75 to \$9.25; common, \$7.50 to \$8.

Milchers and Springers.—Good to best  
(small lots), \$100 to \$140; in carloads,  
\$80 to \$100; medium to fair, (small lots),  
\$75 to \$85; in carloads, \$65 to \$80; com-  
mon, \$45 to \$50.

Hogs.—Prices were higher every day  
last week, light receipts being responsible  
for the advance. Monday, with only 30  
cars offered, values were jumped 25  
to 40 cents. Some mixed grades reached  
\$18.10 and \$18.15 but most of the packers  
kinds landed at \$18. Two decks of very  
extreme heavies, one deck of which  
averaged close to 500 pounds, sold at \$17.  
Yorkers brought from \$18 to \$18.15 and  
pigs reached \$18.25, with one deck \$18.35.  
Tuesday's market was steady to a dime  
higher, Wednesday values were up a  
quarter to forty cents and Thursday  
values showed a further gain of 10 to 15  
cents. Friday's market was mostly a  
dime higher than Thursday or from 50  
to 75 cents higher than Monday. Light  
hogs sold at \$18.75, one deck made \$18.80,  
mixed grades ranged from \$18.65 to  
\$18.75 and packers paid up to \$18.65  
for some that weighed over 240 pounds.  
Roughs \$15.25 to \$16 and stags \$12 down.  
For the past week receipts were 12,100  
head, being against 15,439 head for the  
week before and 19,300 head for the same  
week a year ago.

Sheep and Lambs.—Receipts were  
exceedingly light last week, there being  
only 1,800 head. Offerings were against  
1,895 head for the week before and 2,500  
head for the same week a year ago. As a  
result of the limited supply market was  
active and strong. Monday spring lambs  
sold up to \$19 and \$19.25, few \$19.50  
and best yearling lambs ranged from \$16  
to \$16.50. Top for wether sheep was  
\$14, mixed sheep sold at \$13.50 and ewes  
went from \$13 down. These were the  
prevailing prices all week.

Calves.—Last week started with top  
veals selling at \$18.25 and \$18.50 and  
culls ranged from \$17 down. The next  
three days the market ruled steady and  
Friday, under a keen demand prices  
showed a jump of 75 cents to \$1.00. Choice  
lots brought up to \$19.25 and \$19.50 and  
culls went from \$18 down, some on the  
drinker order selling around \$11.50.

### Toronto Produce.

Live stock receipts at the Union Stock  
Yards, West Toronto, on Monday, July  
15, consisted of 142 cars, 2,543 cattle,  
359 calves, 1,016 hogs, 646 sheep and  
lambs. The market was slow. Butcher  
steers, heifers, cows and bulls at prices  
steady with last week; top price \$15 for  
20 head, average weight 1,325 lbs. Stockers  
feeders, milkers and springers very slow.  
Lambs 25 to 75 cents lower; choice sheep  
steady. Fat sheep slow and lower. Calves  
steady. Hogs \$18.25, fed and watered.

### Breadstuffs.

Wheat.—Ontario, No. 2, winter, per  
car lot, \$2.22; (basis in store Montreal).  
Manitoba wheat, in store, Ft. William—  
including 2½c. tax.—No. 1 northern,  
\$2.23½; No. 2 northern, \$2.20½; No. 3  
northern, \$2.17½; No. 4 wheat, \$2.10½.

Oats.—(According to freights outside)  
Ontario, No. 2 white, 83c. to 84c., nominal,  
No. 3 white, 82c. to 83c., nominal.  
Manitoba oats, No. 2 C. W., 90½c.; No.  
3, C. W., 87½c. (in store, Fort William);  
extra No. 1 feed, 87½c.; No. 1 feed,  
84½c.

Barley.—Malting, \$1.24 to \$1.26,  
nominal.

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

Corn.—American (track, Toronto), No.  
3 yellow kiln dried, nominal; No. 4 yellow  
kiln dried, nominal.

Rye.—No. 2, \$1.90, nominal.

Flour.—Manitoba flour, war quality,  
\$10.95. Ontario flour, war quality,  
\$10.65, in bags, Montreal; \$10.65, in bags,  
Toronto.

### Hay and Millfeed.

Hay.—Track, Toronto, No. 1, \$13 to  
\$14 per ton; mixed, per ton, \$11 to \$12.

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

Bran.—Per ton, \$35.

Shorts.—Per ton, \$40.

### Hides and Skins.

Prices delivered, Toronto:

City Hides.—City butcher hides, green,  
flat, 13½c.; calf skins, green, flat, 30c.;  
veal kip, 22c.; horse hides, city take-off,  
\$6 to \$7; sheep, \$3.50 to \$5.00.

Country Markets.—Beef hides, flat,  
cured, 15c. to 17c.; green, 12c. to 13c.;  
deacons or bob calf, \$2.25 to \$2.75 each;  
horse hides, country take-off, No. 1, \$6  
to \$7; No. 2, \$5 to \$6; No. 1 sheep skins,  
\$2.50 to \$5; horse hair, farmers' stock,  
\$25.

Tallow.—City rendered, solids, in  
barrels, 16c. to 17c.; country solids, in  
barrels, No. 1, 15c. to 16c.; cakes, No. 1,  
18c. to 19c.

Wool.—Unwashed fleece wool, as to  
quality, fine, 60c. to 65c.; washed wool,  
fine, 80c. to 90c.

### Farm Produce.

Butter.—All classes of butter remained  
fairly stationary in price, selling as fol-  
lows on the wholesales: Creamery, fresh-  
made, pound squares, at 45c. to 47c. per  
lb.; creamery solids, at 44c. to 45c. per  
lb.; dairy, 38c. to 40c. per lb.

Oleomargarine.—32c. to 33c. per lb.

Eggs.—The egg market again firmed  
slightly, selling as follows, wholesale: No.  
1's selling at 48c. to 49c. per doz.; and  
selects at 51c. per dozen.

Poultry.—The demand for poultry has  
been very light during the past week,  
prices keeping stationary. The follow-  
ing prices were quoted for live weight:  
Spring chickens, 45 cents per lb.; roosters,  
20c. per lb.; fowl, 24c. to 26c. per lb.;  
ducklings, per lb.; 30c.; turkeys, per lb.,  
30c.; turkeys, old, per lb., 25c.

Cheese.—Cheese sold at unchanged  
prices during the past week: New cheese  
selling at 25c. per lb. wholesale, and twins  
at 25½c. per lb.

### Chicago.

Hogs.—Butchers, \$17.45 to \$17.85;  
packing, \$16.75 to \$17.50; light, \$17.50  
to \$17.90; rough, \$16 to \$16.65; pigs,  
\$16.50 to \$17.25.

Cattle.—Beef cattle, good, choice and  
prime, \$16.75 to \$18.10; common and  
medium, \$11.50 to \$16.75; butcher stock  
cows and heifers, \$8.25 to \$14.75. Can-  
ners and cutters, \$7.15 to \$8.25; stockers  
and feeders, good choice and fancy,  
\$10.50 to \$13; common and medium,  
\$8.25 to \$10.50. Veal calves, good and  
choice, \$16 to \$16.75.

Sheep.—Prime Western ewes, \$13.50.  
Lambs, choice and prime, \$18.60 to  
\$18.85; medium and good, \$17.75 to  
\$18.60; culls, \$13 to \$16. Ewes, choice  
and prime, \$13 to \$13.35; medium and  
good, \$10.50 to \$13; culls, \$5 to \$9.50.

## THE ROYAL BANK OF CANADA

Capital Authorized - - \$ 25,000,000  
Capital Paid Up - - - 12,911,700  
Reserve Funds - - - - 14,564,000  
Total Assets - - - - 321,000,000

HEAD OFFICE, MONTREAL

Branches throughout every Province  
of the Dominion of Canada

ACCOUNTS OF FARMERS INVITED  
SALE NOTES COLLECTED

SAVINGS DEPARTMENT  
AT ALL BRANCHES

### Montreal.

Horses.—Dealers report that no trade  
worthy of the name passed. Receipts were  
next to nil, so far as the regular com-  
mercial trade was concerned. Prices were  
nominally unchanged, as follows: Heavy  
draft horses, weighing 1,500 to 1,700 lbs.,  
\$250 to \$300 each; light draft horses,  
weighing 1,400 to 1,500 lbs., \$200 to \$250  
each; light horses, \$125 to \$175 each;  
culls, \$50 to \$75 each; fine saddle and  
carriage horses, \$175 to \$250 each.

Dressed Hogs and Provisions.—Owing  
to continued firmness in the market for  
live hogs, dressed hogs were selling at the  
high range quoted a week ago, it being  
difficult to obtain any under 29c. per lb.  
for finest abattoir dressed. Dressed and  
cured meats sold well. Sales of light  
hams continued to take place at 38c.;  
mediums weighing 12 to 15 lbs., sold at  
34c. to 35c.; and heavies, 32c. to 33c.  
Breakfast bacon was in fair demand, and  
prices were unchanged at 41c. to 42c.  
per lb., while Windsor selects were 44c.  
to 45c., and Windsor boneless, 46c.  
Clear fat back pork was steady at \$56  
per barrel, while short cut clear was  
\$49.50, and American bean pork, \$44 per  
barrel. Lard was unchanged at 32c. to  
34½c. for pure leaf, and 27½c. to 28c.  
for compound.

Potatoes.—Consumption is running  
more and more to new, imported potatoes,  
and sales were taking place at \$8.25 per  
barrel, for choicest, and \$7 for No. 2  
ex-store. This compared with old Green  
Mountain potatoes ranging at \$2.75 to  
\$2.85 per bag of 90 lbs., ex-store.

Maple Syrup.—Nothing new was re-  
ported in this market. Supplies were  
light, and barrels of 15 to 20 gallons con-  
tinued to be quoted at \$1.80 per gallon;  
5-gallon tins being \$1.85 per gal., and  
gallon tins \$2 and \$2.15. Sugar ranged  
from 23c. to 24c. per lb.

Eggs.—The market for eggs continued  
to advance, and was very firm. In some  
quarters, dollar eggs were spoken of as a  
possibility for next winter. Meantime,  
it was declared that shippers from coun-  
try points were receiving as high as 45c.  
per dozen, f.o.b., though the prevailing  
price was a few cents below this. Select  
new-laid stock was quoted here at 48c.;  
with No. 1 at 45c., and No. 2, 40c.

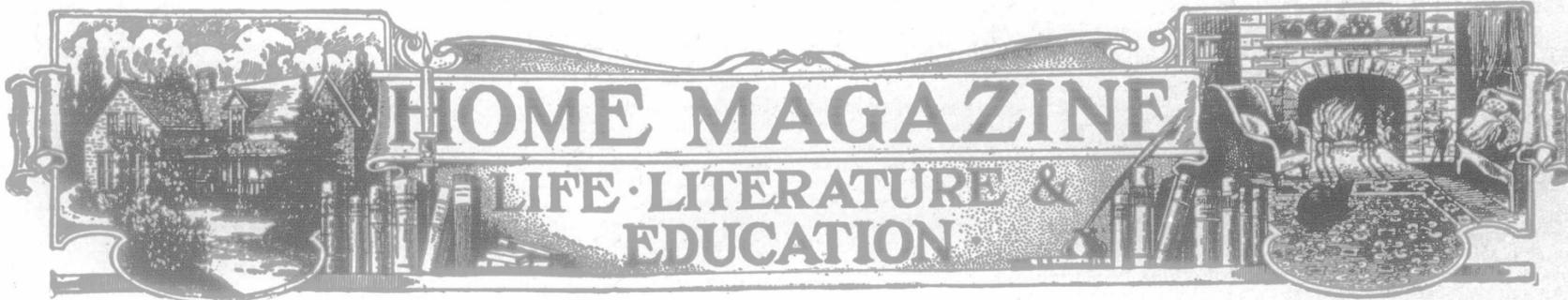
Butter.—No change took place during  
the week in the market for butter. The  
pasture is good, recent rains having been  
very helpful in many instances, though  
too much rain had fallen for other sections.  
The cool weather was helpful. Finest  
creamery was quoted at 43½c. to 44c.;  
with fine 1c. under; and dairies ranging  
from 37c. to 39c.

Cheese.—Commission prices were un-  
changed, at 23c. for No. 1 cheese; 22½c.  
for No. 2, and 22c. for No. 3.

Grain.—The market for oats was firm,  
with No. 2 Canadian Western selling at  
99½c.; tough No. 2, and No. 3, selling at  
96½c.; extra No. 1 feed, 96½c.; No. 1  
feed, 93½c.; No. 2 feed, 90½c.; ex-store.  
American No. 3 yellow corn, \$1.92; No.  
4 yellow, \$1.82 per bushel, ex-store.  
Manitoba barley was easier, carloads of  
rejected being \$1.26½c., and feed \$1.24½,  
ex-store.

Flour.—Prices altered very little,  
though rye flour was down to \$14 to  
\$14.50 per barrel; buckwheat flour was  
\$14.50; oat flour, a rather new product,  
\$12.80; barley flour was down to \$12.50;

Continued on page 1222.



### Harry Lauder.

BY AMELIA JOSEPHINE BURR.

He stood behind the footlights and he set the crowd a-laughing  
 With the same old crooning chuckle that we loved in other years,  
 And only those who knew could guess the grief behind the daffing—  
 But for those who knew, the laughter had a secret salt of tears.  
 Then at last he came out in his grass-green coat and bonnet,  
 With his gaudy tartans colored like a garden in the sun,  
 The same quaint little figure—but a different face was one it  
 When he sang us of the laddies that fought and won.

A face lined hard with furrows where the plow of pain had driven,  
 Blue eyes that had grown shadow-set through many a sleepless night.  
 The face of one who more than life ungrudgingly had given,  
 Who called on us to do as well—and, ah, we owned his right!  
 We saw in him the Fiery Cross of Scotland, charred and gory,  
 And the spirits burned within us to the challenge that he gave,  
 For the player was a prophet as he spoke his people's glory—  
 "We're a wee land, and a puir land, but, by God, we're brave!"—Sel.

### Through the Eyes of a Canadian Woman in England.

June 18th.

THE days have passed in such rapid succession that I have scarcely realized how long it is since I have had my one-sided gossip with my Canadian friends. My thoughts seem to be very scattered and I find it rather difficult to retain passing events while so many things keep moving—not the great but the little things of life. One feels like a tiny bit of mosaic which fills a small but necessary place in the whole scheme. This is the hostel, that cares for the girls, that sew the wings, that carry the aeroplanes, that win the war. Does it sound anything like "The house that Jack built?"

To-day brought a much-looked-for Canadian mail. I noticed large lettering in most of the papers urging people to grow more food. It gives one an added feeling of comfort and safety to realize that Canada is seeing the great need, and is so ready to help the mother country in men, money and food. I am sure if the Germans were able to fully realize the extent of the loyalty of the Overseas Dominions to the Motherland, they would be more discouraged than they are.

I went to the little church nearby on Sunday morning. It is the first new one I have been in over here, and its fresh, though not aggressive coloring, and clear glass windows gave my senses a shock after the quiet tones, mellowed with age, and the glorious blending of soft colors in the windows of all other churches I have attended. I do not mean that I found it uninviting for everywhere were decorations of white rhododendrons and huge scarlet poppies—but it was new and modernity does not commend itself to English surroundings. But as I glanced about, it looked quite familiar after all, for opposite me were the usual rows of school boys in black satin suits and shining collars to match their morning faces, under the vigilant eye of the school-master, who sat in the last row in order to see ahead and on each side of him—as he had no eyes in the back of his head. But the boys were very good, no more than two pennies being dropped during the service. One could almost

hear the congregation prick up their ears when the text was announced, "Love your enemies." A wounded soldier immediately rose and hobbled out (as if it were more than he could bear) and left us all wondering.—It was a difficult subject, and firstly, secondly and thirdly seemed to arrive at the same conclusion that "we must try to love our enemies." I felt the clergyman must be a very good man, but a very lonesome one, and admire his fearlessness in choosing such a subject at such a time. I enjoyed the fresh voices of the choir boys, and the congregation was inspiring in its numbers, although there were few men except for the convalescent soldiers in hospital blue; but my early training made me rebellious at the continental custom, which seems to be growing here, of people walking casually in and out all through the service. We sang the new war hymns of intercession, and the prayers included always "our fighting men on land, and sea, and in the air." When the Rector came to call he told us his Bishop had released him for he had asked to be allowed to go to France soon as a stretcher-bearer. So he is the right sort, for it takes a courageous man to engage in that perilous work.

HOW I sometimes long to see a fine high-stepping Canadian horse! With the exception of the noble heavy horse used for drawing great loads, I have not seen two real horses in a year. They have all been commandeered for the army, and the little ponies left at home. It has always seemed an imposition for anyone but a child to drive behind these little animals, but now it is a common sight to see them drawing whole families and jogging along very cheerfully with their heavy burden. I hesitated when invited to go for a drive, but when finally persuaded to get into the cart, was relieved to find that my added weight did not disturb the sturdy little animal who trotted along as willing as before with very short steps and seeming to take an age to arrive anywhere. But it is a treat to drive, for the hard roads, which have been so many centuries in the making, though perfect for bicycling, tire one's feet exceedingly. By degrees we keep on having heavier soles added to our shoes until they feel like iron weights. All vanity concerning daintily-shod feet leaves us and a striving after comfort takes its place. There are such enticing walks too! The roads are all curved and one never knows what beautiful scene the next turn will present. One evening lately my friend and I took a walk which I shall never forget. Stately homes stood back in gardens that made one think of fairyland. It is the rhododendron season and everywhere were great clumps of these beautiful bushes with masses of bloom in every shade of rose and lavender, a white one here and there by way of contrast. The rose season, too, is beginning and their beauty is beyond description. Besides these, the tallest foxgloves I have ever seen are peeping over the high stone walls and hedges, behind which the Englishman loves to dwell. Everywhere the air was redolent of honeysuckles. It was with regret that we turned towards home where our duties lay, for we had fast begun to feel that we wandered in the land of dreams, each step we took bringing us into scenes of greater enchantment. It is at times like these that one understands the willingness of the English people to fight to the bitter end for their country. In some former letters I confess I did not rhapsodize like this, when winds were chilly, and we dwelt in an atmosphere of fog. But it cannot be always summer. A letter from France brought me one day lately a pressed bouquet of purple pansies and forget-me-nots, sent by an old French woman to "Madame." Everywhere, I am told, in that devastated country, among shell-holes, and uprooted gardens, these simple, sweet

flowers turn their faces still to the sun as if to say, "There is no death." The same letter spoke sadly of the bombing of our hospitals and many towns and villages, and described the passing out of long processions of homeless people carrying what belongings they could in their hands, in search of some place of refuge from the deadly bombs of the Huns. Though they have nothing to look forward to for the present but depredations and cruelties, I am told they are not by any means discouraged, but accept it all with calm courage. "C'est la guerre."

NOT far from here is an American camp, and when doing our morning shopping—"fighting for food" we call it—we often meet these big, husky, earnest soldiers, whose departure from the conventional uniform makes them very noticeable. There is a picturesqueness about their loose khaki shirts which we have come to think very becoming. They must be very comfortable and practical as well. The eyes of these men seem very wide-awake to the newness—or rather oldness—of the scenes about them. They even stared with evident interest at our uniforms of rose color with white accessories, as if wondering what form of service they represented. All outdoors is very interesting in this old-world village, the chief attraction being, of course, above us, for the sky is rarely free of aircraft, beside which all other forms of soldiering must seem tame. So many of our younger men resign from other branches of the service to connect themselves with it. I heard of one yesterday who had been wounded twice in the back, and as soon as he unexpectedly recovered, insisted upon flying, and is now quite an expert. I can never resist the temptation to loiter and gaze into the sky when I hear one of these great bird-like machines whirring above me. Some girls who were playing finals in a tennis tournament this week actually stopped at the most critical moment to watch the gyrations of an aviator who chose to do stunts directly above them.

THIS afternoon I found I had an hour to spare, so I changed into "civies" and went to a gymkhana, arranged by the patients of a convalescent hospital here. Although for many weeks we have been hoping for rain, none came until this afternoon. The boys who had gone to such trouble to prepare a programme of original sports, in which broken men could participate, must have been somewhat disappointed, but did not show it, and everyone looked very cheerful.

Fruit reports are most pessimistic on account of the dry season, and bread and jam is the chief food of English people, especially the poorer classes. The Government permitted people to buy, some time ago, so much sugar per family for preserving purposes, and inspectors were appointed to visit orchards in order to ascertain how much each householder was entitled to. Now most of the sugar is, I hear, being recalled. So far I have seen few strawberries, and people have been obliged also to deny themselves their favorite "green gooseberry tart." I think we Canadians long for fruit more than anything else, for to us it has always been a regular part of our diet, while here it has been a luxury. But to come back to the gymkhana—the blessed rain fell so heavily that all guests had to take refuge indoors, and had tea around a big table in the hall with nurses and patients. Blythewood is a very lovely home which has been given for a hospital. The rooms are spacious and it accommodates about seventy patients. The matron sent a V. A. D. nurse to conduct us all over the building, and I congratulated her on the exquisite cleanliness and neatness of it all. It was all finished in white

paint, which has been kept spotless by the hard-working V. A. D's.

Having done hospital work for a period myself it is not permitted for me to reveal all that is in my heart in regard to the V. A. D's., but I will say that they are deserving of the highest praise. The professional nurse has the most interesting part of the work and has numerous assistants at her beck and call, but the ordinary V. A. D. does the drudgery and undergoes the severest discipline. (This latter, of course, is not so distasteful to the English girl who is more amenable to it than the "Overseas.") though it is entirely voluntary.

ALMOST every day we hear of sad messages to some English or Canadian home, and everything for a time is darkness, in spite of the shining sun, and the gorgeous bloom of Nature out of doors. It all seems very heartless. What must German mothers and wives be feeling in that oppressed country where the life of a man is of so little value! We must not despair, for in spite of these years of fighting, Paris, the goal, has not yet been reached.

"How many wear a smile upon their face  
 Although their hearts may hold an empty place?  
 None know the heights nor depths of their regrets  
 But God remembers when the world forgets."  
 SIBYL.

### Garden Notes.

AFTER removing early cabbage sow lettuce and radishes. Follow the early pears with beets or carrots to have young and tender ones ready for use in the late fall. Fill the place from which early potatoes were dug with celery. Transplant some lettuce, for heading, in the space between cabbage plants. Prune out all useless suckers of the tomato, and when the fruit is about half-grown cut the lower leaves in half; this will hasten the ripening of the fruit. When enough fruit is set on squash and melon vines, pinch off the tips of the vines.

When watering is necessary be sure to put on enough to go right down to the roots; put it on in the evening, and next morning stir the surface of the soil to form a dust mulch that will prevent the moisture from evaporating. Remember the water must be plentiful enough to go right down to the roots, else more harm than good will be done. As a rule, after plants have been well established, unless in time of prolonged drouth watering is not greatly necessary except for such shallow-rooted plants as cucumbers, squash, melons and lettuce. For the others persistent surface cultivation, at least twice a week, will usually be sufficient. Cultivate as close to the plants as possible without injuring them, and be very careful about not harming the roots of plants such as corn, which are near the surface.

Apply weak liquid manure at times to the lettuce roots, and shade by a frame covered with cotton when the sun is hot. This will prevent bitterness. Keep a sharp watch for fungous diseases and insect pests on plants subject to these, and apply the proper remedies. Mildew on the lilacs and roses, rust on hollyhocks, and spot on peonies may be controlled by spraying with Bordeaux mixture. Hellebore may be put on cabbage to combat the cabbage worms; some prefer to drench the plants with warm salt water. Nicotine spray is good for aphid or lice on roses, early turnips, etc. If you have hybrid perpetuals cut them back a little to secure second bloom, and mulch with well decayed cow manure or sheep manure.

## Hope's Quiet Hour.

### Children of Light.

Walk in love. . . . walk as children of light.—Eph. V. 2, 8.

This morning the world is filled with horror (the civilized world, at least) because a Canadian hospital ship has been brutally attacked, and those who were rushing to help the sick and wounded were foully murdered. Many people show their horror at such dastardly deeds by furiously demanding that our nation shall imitate them, and sink to the level of cowardly murder. What a strange way of showing that we hate a deed of shame! We are horrified at the cold-blooded murder of doctors and nurses—therefore, we want to soil our hands and rear our souls by descending to the awful depths of infamy ourselves!

When I read the flaming headlines in this morning's paper my thoughts flew to our Great Leader. On that morning when He was enduring pain and shame without complaint, some pitying women wept for His sufferings. They pitied

who is not angry at such a deed of wickedness as is reported to-day is not a follower of God, for His "wrath" cometh upon the children of disobedience (V. 6). And yet, if we are to be followers of God, as His dear children, we must put away all bitterness, clamour and malice, and "walk in love, as Christ also hath loved us. . . . walk as children of light." St. Paul declares that the wrath of God is upon the children of disobedience; and, therefore, he solemnly warns the children of light, saying: "Be not ye, therefore, partakers with them. . . . have no fellowship with the unfruitful works of darkness, but rather reprove them." How can we reprove a murderer if we want to copy his deeds? They say that imitation is the sincerest proof of admiration; therefore, if we want to copy the methods of an unscrupulous foe, it is evident that we think those methods are worthy of imitation—which we certainly don't think!

Besides, such methods are desperately foolish as well as criminal. The sinking of the Lusitania and the murder of Miss Cavell were of no military advantage to Germany whatsoever, but they brought millions of half-hearted men into the ranks of Germany's determined foes. Such deeds of shameful wickedness never pay. They not only rouse the terrible

in its bracing breath, no thought of defeat or surrender can live, and no despondency or gloom can for an instant penetrate. At home, where there are no shells, one's nerves are occasionally jarred by contact with a pessimist. There are no pessimists at the front."

Each hospital ship that is deliberately sunk tells its knell for Germany's doom. The news might well rouse fear in the hearts of those who are ranging themselves on the side of "frightfulness," who "walk in the vanity of their mind, having the understanding darkened, being alienated from the life of God through the ignorance that is in them, because of the blindness of their heart; who being past feeling have given themselves over unto lasciviousness to work all uncleanness with greediness."

If you study the context of St. Paul's warning to "walk as children of light," you will see that I am still quoting from it. "Ye have not so learned Christ," he says hopefully, and he pleads that Christians shall walk in love, as dear children and followers of God, being "kind to one another, tenderhearted, forgiving one another, even as God for Christ's sake has forgiven us."

Show your abhorrence of cruelty by refusing to copy it. Hate evil with a

people of Smyrna that, because they did not share His hatred of the doctrine of the Nicolaitans, He would come quickly and fight against them with the sword of His mouth—unless they repented.

The children of light belong to a "militant" church—the sworn foe of all dark deeds. It is not by weak submission to wickedness in the high places of earth that real peace can be obtained, but by unrelenting battle with it. But we must pray for the great gift of love, lest righteous anger degenerate into bitter malice and race hatred. On every deed of shameful wickedness is written the word "DEFEAT"—the word which declares its doom. On every deed of righteousness is written the glorious word "VICTORY." Christ was the Great Victor; and, though Satan seemed to have won in the great conflict, it was only seeming. Light must always conquer darkness. It was Luther—that splendid German hero—who wrote:

"And were this world all devils o'er  
And watching to devour us,  
We lay it not to heart so sore;  
Not they can overpower us.  
And let the prince of ill  
Look grim as e'er he will,  
He harms us not a whit;  
For why?—his doom is writ."  
DORA FARNCOMB.

### Gifts for the Needy.

Yesterday a gift of \$5.00, from a "Watford" reader, was poured into the Q. H. P. This will be divided among two or three needy families. I was also glad to receive several parcels of S. S. papers and two copies of "The Daily Mirror" for the shut-in. I expect to be away from home for a month—from the middle of July to the middle of August—and my mail will not reach me very promptly, as I shall move from place to place.

Probably you will all be too busy to write to me at that time, anyway.

With sincerest thanks for many kindnesses.  
DORA FARNCOMB,  
6 West Ave., Toronto.

"Country Woman" (who first started the Quiet Hour Purse) has again sent a donation of \$5.00. Two dollars for H. K., and one dollar from M. J. C. also reached me last week. As \$8.00 also went out of the purse (to help four needy families) it is evident that your gifts are not allowed to rust—not that the Q. H. P. is empty! I expect to dip into it again this afternoon, for a poor woman whose husband died suddenly a few days ago.

I expect to be away from home from the middle of July until nearly the middle of August, so any letters addressed to me will probably be delayed. Many thanks for the S. S. and illustrated papers for the "shut-in."  
D. F.

### Our Allies.

CALLIE MILLER-FREEMAN.

On that day, that great, great day  
When freedom is proclaimed,  
O, my own God, I fear the truth  
That I should be ashamed—

To know that I no welcome have  
With strong men, noble, free,  
Who made the way and saved the day  
For our blest liberty.

For why should I with able hands  
Find nothing I can do?  
O, time may sift my heart outright  
And prove it so untrue!

But yesterday, full panged with grief,  
I read it, and again,  
How good brave dogs, our Red Cross dogs,  
Are saving lives of men!

And now to-day another truth—  
I scarce believe the words—  
That Liberty shall, too, be won  
Through help of white-winged birds!

Our allies, yes, these speechless ones—  
Dear God, I truly see,  
That even these have power to do  
And work for liberty!

Then, God, may I, who am a man  
Play willingly my part,  
As willingly as white-winged bird,  
And dog of noble heart.



Scene After Bombing of Canadian Hospital.

Three Canadian sisters, a Canadian doctor and an American doctor were among the victims of this hospital. The hat and collar of one of the sisters who was killed is on her coffin.—Canadian War Records.

Him, but He—with clearer vision—poured out His pity on them and on their nation. "Weep not for Me," He said sadly, "but weep for yourselves, and for your children. . . . for if they do these things in a green tree, what shall be done in the dry." It was His nation, too; and He was filled with intensest love of country and people. He was ashamed of His nation's deeds. The weight of national guilt crushed Him with heavier weight than the wooden cross.

Have we had reason to weep because our nation has encouraged brutal and shameful murder of non-combatants? Have British guns been aimed at men and women struggling for life in the sea? If we have reason to be proud of our nation's high and honorable dealings in the past, let us pray that we may never have to hide our heads in shame. Criminals should be punished, of course. That is just and necessary. But we are not executioners, but murderers, if we kill the helpless and innocent in revenge for the wicked deeds of their countrymen.

What has all this to do with our text? Read the context and you will see. St. Paul demanded that Christians should sometimes be "angry" (IV. 26)—anyone

wrath of God, but they also quicken to a fierce blaze the wrath of men. They come back a thousand-fold on the heads of the criminals. May I quote from "After Victory," a book by an amateur officer?

"There are certain things which cannot be. The final triumph of inhumanity in a world which has turned its face toward chivalry and gentleness and the succour of the fallen cannot be. There are certain events which must be. The failure of evil is a necessity of the universe. Evil has already failed in a world which has sentenced evil to destruction. Victory is ours not, indeed, because we thought ourselves worthy to champion the right, but because men have proved their nations worthy with their own blood."

The writer of those words declared that the men at the front had a vision of certain victory. "We had always believed in victory," he wrote. "The men in the firing line never think of anything else. It is not that they consciously argue the certainty of victory for a cause that is right. It is not, indeed, that they consciously reason at all. Such a spirit of cheerfulness and confidence pervades the very atmosphere of billet and truck, that,

passionate zeal, but walk as a child of light and a follower of the Light of the world. This war seems to be an awful necessity. The world is determined to use its whole strength to stop piracy and unjust oppression. Should we be followers of God if we permitted Might to crush Right under its iron heel?

I am trying to write a Quiet Hour, but I can't shut myself in a hermit's cell in peace and refuse to listen to the noise of war outside. Christianity does not encourage us to be "goodnaturedly" tolerant of wrong-doing. Our Master openly expressed His sentiments about the rulers of the people, who oppressed widows and orphans, yet made long prayers in public in order to show how "religious" they were. It was the King of Love Himself Who sent—sent through the great apostle of love—this message of commendation to the church of Ephesus: "This thou hast, that thou hatest the deeds of the Nicolaitans, which I also hate." That church had failed in many things, and had left its first love, but in this thing it had not failed: "thou canst not bear them which are evil"—(Rev. 2)—is a word of approval from the Lord of the Church. It was the Prince of Peace Who told the

### The Ingle Nook.

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

### Medical Inspection of Schools in Peel County, Ontario.

ONCE more we open our pages to tell something about medical inspection in rural schools,—this time of what has been done in Peel, which is the first county in all Canada that has completed a systematic inspection of every part of the county, 77 schools having been visited and 2,100 children examined.

While on a recent visit to Brampton, the District Representative of the Department of Agriculture, Mr. J. W. Stark, to whom so much credit for the carrying out of the enterprise is due, was good enough to give me details of how the experiment was launched and conducted, and so I am very glad to pass on the story of such good work to you.

IN the very beginning it was agreed that the Department of Agriculture and the 21 local branches of the Women's Institute should co-operate, and the arrangement was made that if the rural districts were willing to have the inspection, the Department of Agriculture should pay the salary and expenses of the visiting doctor, transportation and clerical help to be supplied by the local branches.

The next step was to write to the Trustee Boards, making full explanation and asking permission for the inspection to be made. In no case was there refusal, hence the field was open for Doctor Mackenzie Smith to begin at once.

In November, Caledon township was covered, the trustees and parents being invited to attend each inspection. In some cases an enthusiast or two drove around and called on the mothers, but as the news of the enterprise spread about this ceased to be necessary. "The trustees and mothers came", remarked Mr. Stark, with evident satisfaction. In very few cases was there any demur. In one instance a trustee was dubious, but he attended the inspection and asked that one be made the next year too. In another section a well-to-do farmer declared there was nothing the matter with any of his children, and was inclined to throw a wet blanket on the whole proceeding, but he was induced to attend and found out for himself that one of his children was deficient in the sight of one eye. He too became a convert, and the child was fitted with glasses.

DOCTOR Mackenzie Smith's method throughout was to first give a talk or lecture about general health topics, telling how to take care of the teeth, eyes, etc., the food-value of milk and other foods, the necessity for an erect position in sitting and walking, and similar topics.

Afterwards the inspection was begun, those present being asked to help with the measuring and so on. Vision tests were made of the children's eyes, their hearing was tested, their height taken, and throats and teeth examined. Apropos of the latter it may be said that the children that ate most candy had the worst teeth.

In every case where expert attention was evidently necessary the doctor advised taking the children to a specialist. She found that in many cases permanent molars, that could have been saved with proper dental care, had been allowed to go "bad". Diseased tonsils and adenoids were quite common in poorly ventilated schools; very little of these troubles being found in the well-ventilated ones. Hearts and lungs were tested with the stethoscope, and a few cases called for urgent attention. Trouble from eye-strain was very common, and was invariably found in badly lighted schoolhouses. Also a number of cases of goitre were discovered, this disease proving to be worse in some sections than in others.

PRACTICALLY all of the school buildings, except those in the villages, were found to be old, the children being obliged to live according to the "school ideas" of 25 or 50 years ago.

The ceilings were too high, (12 feet is the right height) and the heating as a rule, very poor. There were a few basement furnaces, but the great majority of the buildings were heated either by a box stove in the middle of the school or by a furnace put in one corner, neither of these giving any chance to the children to dry their feet.

Almost invariably the windows were on both sides, and no regard was paid to the rule that the lighting area should be one-sixth of the floor space. Blackboards, too, were often shiny, and much harm was done by the old idea that green on the walls is restful for the eyes—which is not true when a dark green is chosen, as it absorbs the light. Cream and light buff, with a light ceiling, are the colors recommended for school-room walls nowadays. Opaque blinds, also should be supplied in order that the light may be modified as necessary.

In nearly all cases the floors were found very dirty, and enquiry brought

ALL this was found as a result of the inspection—and, please mark this—the conditions discovered were exactly those to be found in nearly every other rural school in the country. Peel is by no means unique in these things.

It is time we got our eyes opened to defects in our own neighborhoods, and we should gladly welcome any agency that will open them. To fail in having proper school conditions means the impairment of the health and prosperity of the children who will have to carry this country on their backs to-morrow. Diseased children mean unhappy children and, some day, diseased and unhappy men and women.

Peel County submitted to having its eyes opened, and Peel County is glad. Wrong school conditions there are being made right. Hundreds of children have received medical and dental attention who, otherwise, would have missed it. One woman said she wouldn't take \$50 for what she had learned about caring for her child's eyes.

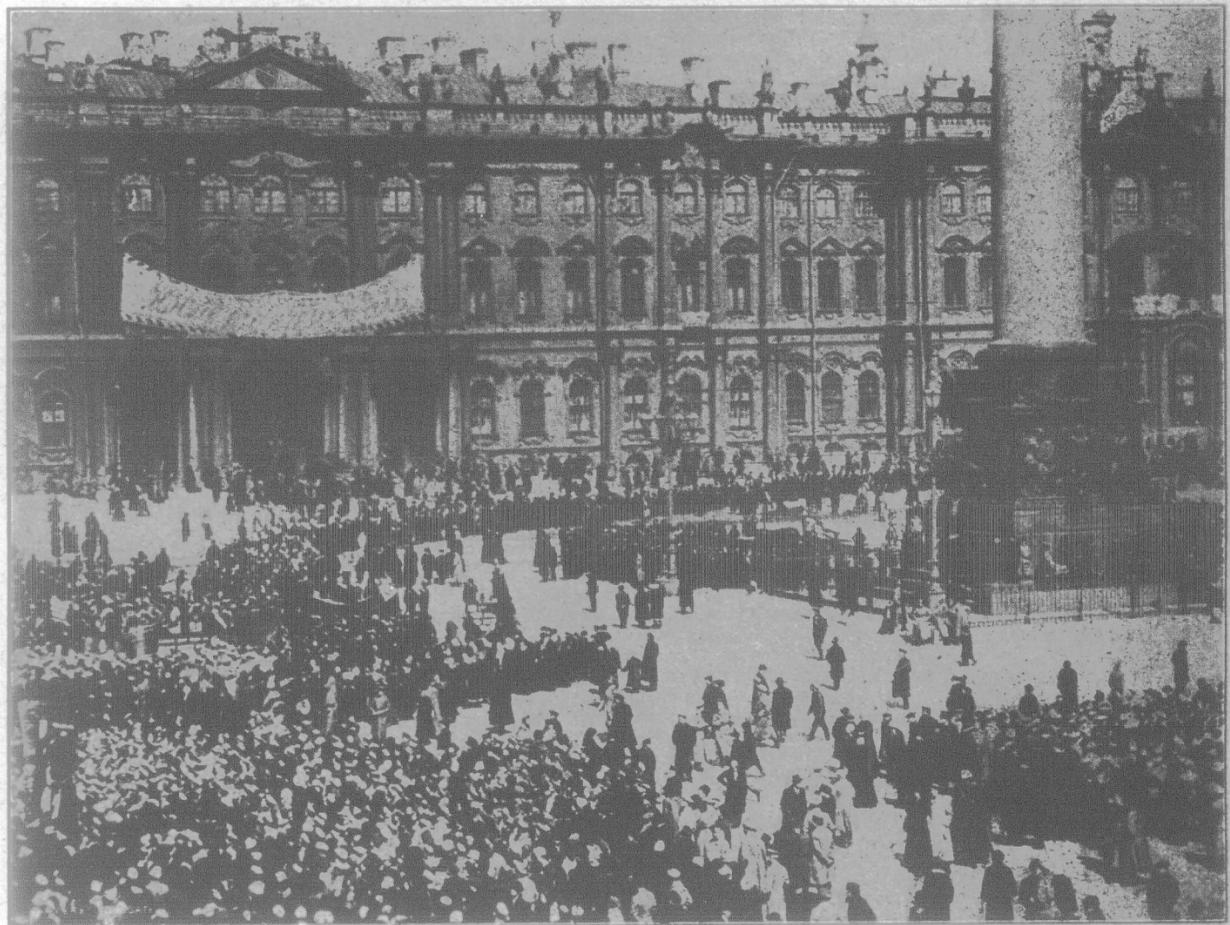
And clinics were held. The largest of these were in Alton, Port Credit, and, as described recently in this paper, at Brampton. At Alton

If it is not, the cost is not more than 5 or 10 cents to cover postage, etc.

As Doctor McCullough said at Brampton, 107 out of every 1,000 babies born in Ontario die before they reach their first birthday. This is a very high mortality. The percentage in Great Britain, even since the war began, is only 91 out of every 1,000; that of Norway 68 per thousand; of Sweden, 70 per thousand; and of New Zealand only 50 per thousand—the best record in the world. In New Zealand, by the way, the Government has placed a trained nurse in every small community to inspect the schools and teach the parents. Babies die largely because the mothers do not know how to give scientific care to them.

Such mortality as exists in Ontario is appalling. And babies mean so tremendously much to the whole world nowadays, do they not? Don't you think it is "up to" the mothers to leave no stone unturned which will help to preserve baby life from this time on?—And securing a bulletin is such an easy, easy matter.

I want to tell you, too, of a home-made fireless cooker that I saw in the District Representative's office on



The Winter Palace, Petrograd.

Disorder, famine and cholera now rule in Petrograd. The above picture was taken during the revolution. It was at the Winter Palace that the famous women's "Battalion of Death" fought for four hours before they were forced to give way before the Bolsheviks.

out that they were scrubbed only 2 or 3 times a year. Nowhere was "dust-bane" or any similar preventive supplied, and the result, of course, was a hurricane of dust that lodged on walls and everywhere else, at every sweeping.

Cloakrooms, if provided at all, were invariably cold, so that the children were obliged to put on ice-cold clothes.

Ventilation was particularly neglected, ventilation systems being nowhere installed. A recommendation given was to put glass sashes in front of the window to deflect the currents of air coming in below the raised outer sash, a device that prevents draughts from striking on the heads of the children.

Seating was found very deficient—the fact that bad seating is a prolific cause of spinal curvatures being evidently overlooked. Sometimes seats or desks were too high, sometimes too low for the children who had to use them, and often the desks were too far from the seats, so that the children had to hunch when writing. In every case a seat should be three inches in from the edge of the desk. In too many instances, also, the children were too far from the blackboards.

Decoration—especially artistic decoration, had been almost entirely overlooked.

28 children—26 of whom were anaesthetic cases—were treated, a private house being used as the hospital *pro tem*. In cases where the parents could pay, a fee of \$15 was charged for one child, \$25 for 2 children and \$30 for three children in one family. Where the parents could not afford to pay no charge was made. At Port Credit 40 children were operated on.

Everywhere the people have been well pleased. One man dropped into the Representative's office months afterwards to say, "Bob has always had sore throat and colds and has nearly lost the winters from school. Since he was operated on he hasn't lost a day, and the teacher says he has made more progress."

SO now I have told you the story as it was given to me. You may find it suggestive, and I am sure some of you will.

Just one word more. Have those of you who have babies secured the little booklet "The Baby", by Dr. J. W. S. McCullough, of Toronto? At Brampton I heard it praised, again and again,—and it can be secured so easily, by writing to the Bureau of Child Welfare, Provincial Board of Health, Parliament Buildings, Toronto. I think it is free.

that same visit to Brampton. It was made of a big candy-pail, with a galvanized iron cylinder in the middle of it in which to place the cooking vessel. All about and below was packed with sawdust, straw or excelsior would do as well, and the whole packing was kept in place tidily by a casing of asbestos paper, which also served to conserve the heat. Possibly the cylinder might also be made, with advantage, of the asbestos paper. Finally a neat cushion was made to fit over the top, inside of the lid, and a couple of soapstones had been secured to help with the cooking when necessary. The whole cost about \$2.90 if I remember rightly.

And now I think I have exhausted all the gossip which I brought with me from the pretty little capital of Peel, so no more for this time.

JUNIA.

### Needle Points of Thought.

"It is not gain and grabbing that count to-day, but giving and serving." —Hon. Dr. Cody.

"A tomato with legs walked from the home garden to the factory and back to its own table in a tin can, and cost 18 cents. Its brother, which stepped from the garden to its own

kitchen window and into the home can, arrived at the table costing 4 cents."—*Ethel M. Chapman.*

"It is a mistake to think that rag carpets or rugs have anything undignified about them. When carefully chosen for pattern and color and well laid on good lining, they can be made to play an important and effective part in not a few attractive decorative schemes."—*The Independent.*

#### Letter From "Rosebud".

Dear Junia and Friends of the Nook.—I have been silent a long time, so long in fact, that the Nookers may have forgotten the country "Rosebud", but the time of roses is here so I make my appearance again, too.

Isn't the country beautiful just now? Everything is so green and growing, getting ready for the great harvest, when the ripened grain will be gathered in to feed the hungry world. Who would want to live in the city in June? They do not know what they miss, these city folk, who see nothing of the country except from car windows and an occasional week end. It is to those that have childhood memories of all the well loved spots on the farm which early associations have made dear that the real life asserts itself. Some people think country folk do not appreciate nature but I know different.

Soon the hay will be cut then the farmerettes can prove their worth. To work in the hot sun from morning to night is no joke, and when the girls come in with aching limbs, tired, hot and dusty, they will realize the great task they have undertaken. It will bring the city people into closer sympathy with their country cousins, as they get a clearer understanding of their hard tasks. But cheer up, girls; may the thought that you are helping feed the world help you over the rough spots. The experience will be worth while.

At last the farmer is coming to his own. For a long time the tide seemed to be away from the farms to the city but now it is slowly but surely turning back. No longer is the farmer merely a hayseed unworthy of notice. In the nation's crisis he has proved his worth, proved beyond doubt that he is absolutely indispensable, and the one who can say "I have worked on a farm all my life" has a record to be proud of.

Well Junia I know I have overstayed my welcome. (If I had any) so I will bring my rambling pen to a stop. Though not a farmerette I help with the farm chores besides housework and now it is time to feed the chickens.

Wishing you and the Nook all success.  
"ROSEBUD".

You have a very warm welcome,  
Rosebud. J.

#### Letter of Thanks.

I take this opportunity to thank all those who so kindly responded to my request for the words of "The Veteran's Song". The many copies I received surely indicate a united feeling among the readers of the "Advocate".

Mrs. I. J. M.

#### Recipes of Jam Making.

The following recipes, which call for the smallest possible amount of sugar, have been sent out by the Canada Food Board.

**Currant Jelly.**—Four lbs. currant juice, 3 lbs. sugar. Boil the currant juice without the sugar about 10 minutes, or until the quantity is reduced. Heat the sugar in the oven, and add when very hot to the liquid, so that the temperature will not be greatly reduced. When all is dissolved, bring to a boil again, and continue from three to five minutes. Test, and when done remove and put away in unsealed jars. When cool, seal with melted paraffin.

**Apple and Plum Jam.**—Four lbs. crab apples, 4 lbs. plums, 6 lbs. sugar. Cut the crab apples into quarters and cook in just sufficient water to extract the juice. Strain through a double cheesecloth, and add the sugar to the crab apple juice. Put over the fire and bring to a boil. Stir until the sugar is melted. Then add the plums, and boil until the plums are thoroughly cooked.

NOTE.—Other apples can be used if crab apples be not obtainable, but on no account must the skins and cores be taken away, as the pectin is contained

largely in the cores, and directly under the skin. Any sweet plum can be used for jam. The Damson is considered quite satisfactory. Because of its acid nature, the Lombard plum will not make a good jam with the proportion of sugar prescribed above.

**Plum Jam.**—Eight lbs. plums, 6 lbs. sugar. Put the plums and sugar together in a preserving kettle over the fire, with just sufficient water to start cooking. Boil gently until the fruit is thoroughly cooked. Stir as little as possible.

**Black Currant Jam.**—For 1 lb. of fruit, not over ripe, allow  $\frac{3}{4}$  lb. of sugar. Put the currants in a granite saucepan and mash to allow the juice to escape. Add no water. Bring to a boil, stirring occasionally to ensure that all the fruit is being cooked, and to prevent burning. Cook without sugar until the quantity is reduced and the fruit is all broken. The time will vary with the quality of the fruit. Heat the sugar in the oven and add to the fruit, stirring until it is all dissolved. Then boil without stirring from three to five minutes. Remove from the fire and put into sterile jars, glasses or stone crocks. Seal when cold, by pouring melted paraffin over the top.

In making Black Currant Jam, the sugar must NOT be boiled from the beginning with the fruit, as in some jams; otherwise the currants will become hard and unpalatable.

**Raspberry Jam.**—Pick over the raspberries and put the sugar on. Let the fruit remain this way over night. In the morning, set the kettle over the fire, and bring the contents to a boil slowly, stirring until all the sugar is dissolved. Then cook without stirring until the quantity is reduced, and until, when tested on a cold plate, the jam is found to be sufficiently thick.

**Raspberry Jam With Currant Juice.**—Seven lbs. of fruit; 1 lb. or 1 pint of red currant juice; 6 lbs. sugar. Follow the same directions as for Raspberry Jam, but, because of the juice of the currants that is added, it will require a little longer cooking, as some of the water will have to be evaporated.

**Old-Fashioned Blackberry Jam.**—For each pound of blackberries use three-fourths of a pound of brown sugar. Pick over berries and mash them slightly. Add sugar and cook slowly until thick. Seal in jelly glasses.

**Spiced Pears.**—Seven lbs. hard pears, 4 lbs. sugar, 1 pint vinegar, 4 oz. bruised ginger root, 1 lemon, 2 oz. stick cinnamon, 2 tablespoons whole clove. Peel, quarter and core the pears. Make a syrup of vinegar and sugar. Put spiced and ginger root in a cheesecloth bag and boil in the syrup for ten minutes. Add the pears and lemon rind grated. Cook until the pears are soft. Remove pears from syrup and pack them in hot jars. Boil the syrup down. When thick, add it to the fruit in the jars. Seal while hot.

#### War Time Cookery.

**Shepherd's Fish Pie.**—Two cups cooked fish, 1 tablespoon fat, 1 tablespoon flour,  $\frac{1}{2}$  teaspoon salt,  $\frac{1}{4}$  teaspoon pepper, 1 cup soup broth, 2 cups mashed potato. Put the fish in a baking dish. Add a sauce made of the fat, flour, seasoning and broth cooked together. Cover with mashed potatoes, brush with sweet cream and brown in a hot oven.

**Potato Pudding.**—One and one-quarter cups mashed potatoes, 4 tablespoons fat, 2 eggs well beaten,  $\frac{1}{2}$  cup milk,  $\frac{1}{4}$  teaspoon salt,  $\frac{1}{2}$  lemon (juice and rind), 1 tablespoon sugar,  $\frac{1}{2}$  cup raisins and nut meats. To the potatoes add fat, eggs, milk, lemon and sugar. The lemon rind should be grated before the lemon is cut open. Beat all together and bake in a greased dish  $\frac{3}{4}$  hour. Serve with cream.

**Barley Pop-Overs.**—Beat 2 eggs, then beat in 1 cup barley flour, 1 teaspoon sugar,  $\frac{1}{2}$  teaspoon salt, and 1 cup milk until smooth, beating very hard and fast. Bake in hot buttered gem pans about 40 minutes. The pop-overs are good, but will not rise quite so high as those made of wheat flour.

**Baked Cornmeal Mush.**—When the cornmeal porridge is partly done pour it into a shallow greased dish, making a layer about 2 inches thick, and bake in the oven until well browned. Serve with syrup, honey or jam.

**War Biscuits.**—One and one-half cups Graham flour,  $\frac{1}{2}$  cup corn meal,  $\frac{1}{4}$  cup shortening, 4 teaspoons sugar, 4 teaspoons baking powder, 4 teaspoons salt (all

measurements are level), about  $\frac{3}{4}$  cup cold water. Sift flour, sugar, salt and baking-powder together, then mix in the cornmeal. Cut in the shortening and make with a soft dough with the water. Roll out  $\frac{1}{4}$ -inch thick, cut into cakes and bake on a hot griddle, covered, on top of the stove until the biscuits are well browned on the under side, then turn with a spatula knife and brown on the other. Watch carefully as the biscuits cook quickly.

**Graham Nut Bread.**—Stir 1 teaspoon baking powder into  $\frac{1}{2}$  cup molasses, Add 2 cups sweet or sour milk,  $\frac{1}{2}$  cup sugar, 1 teaspoon salt, 1 cup white flour, 2 cups Graham flour, 1 cup nut meats cut in bits. Mix well and pour into a long, narrow, greased pan. Bake in a moderate oven 1 hour. This bread is delicious for most kinds of sandwiches, but not for those made with ham.

**Raspberry Short Cake.**—Make a layer cake and put between the layers and on top a thick layer of crushed raspberries sweetened with honey. Let stand an hour, then serve with whipped cream.

#### Summer Drinks.

**Cream Tonic.**—Shake together  $\frac{1}{2}$  pint fresh sweet cream,  $\frac{1}{2}$  pint fresh milk and a little powdered sugar. Add a few grains soda and keep in a cool place if it cannot all be used at once. If persisted in every day this will be found excellent for building up a run-down body, or for invalids. For a change use one of the following:

**Egg Drinks.**—Break an egg into the shaker (a sealer or closely corked pickle-bottle will do), add a little of any kind of fruit-syrup, that is, fruit juice boiled down with sugar, also a little water and shake well. A little crushed ice may be added.

**Chocolate Drink.**—Make chocolate or cocoa by boiling in a little water, then adding milk. Let get cold on ice or in cold water, then add a little cream and a dash of salt. Serve very cold in glasses.

The drinks given above are very nourishing. Those that follow are refreshing and stimulating but do not contain much food value. Nevertheless they are very nice on a hot day, when served with cake or cookies.

**Russian Tea.**—Make good strong tea, pouring it off the leaves when it has steeped 3 minutes. Sweeten and chill. When serving do not use cream, but add a little squeeze of lemon juice and put a slice of lemon on top.

**Iced Fruit Syrup.**—To a spoonful of any kind of thick fruit syrup add a little lemon juice. Fill up the glass with cold water, adding more sugar if necessary. Put in a little cracked ice and serve.

**Iced Coffee.**—Make rich coffee and chill. Add sweet cream and serve very cold in glasses with whipped cream on top.

#### The Scrap Bag.

##### To Prevent Burning.

When preserving, sprinkle a little ashes on the lid beneath the fruit to prevent scorching.

##### Fireless Cooker Hint.

Keep the fireless cooker free from odor by keeping a piece of charcoal in it.

##### For Short-Stemmed Flowers.

Short stemmed flowers such as pansies and daisies look well in a shallow vessel filled with moist sand into which the stems may be stuck.

##### Old Chemises.

When the tops of chemises have worn past recovery, cut off the tops below the armholes and sew on a wide piece of embroider or lace with shoulder straps to match. If the shoulder straps are placed pretty well towards the center at the back they will not readily slip off the shoulders. Beading and ribbon may be added if liked.

##### Open Pantry Shelves.

Pantry shelves may be protected from dust by window shades which fit them perfectly. Put a hook on the lowest shelf to catch the ring in the shade.

##### Save All The Scraps.

Keep a bag in which is placed even the tiniest scraps of lace and ribbon. The lace will come in usefully many a time for mending the worn lace of

corset covers, shirts, curtains, etc., while the bits of ribbon may be used for sachet bags, etc. A bag of cotton patches of all kinds should also be in every house, also one with scraps of cloth. Do not throw away buttons on any discarded garment. Cut them off and keep them in a button-bag. They may be used over and over.

##### Barley Flour.

If you cannot get barley flour from your dealer, you can make a very good substitute by sifting barley meal two or three times, keeping a bag around the sifter so that none will be lost.

## The Beaver Circle

[Rules for Beaver Circle: Write on one side of the paper only. Do not use pen-name. Put name, age, class and address at end of letters.]

### The Road.

BY VICTOR STARBUCK.

The road it slips between the hills  
And wanders up and down;  
It idles past the country store,  
It hurries through the town.  
Its shining wheel-ruts cross the creek  
Beneath the gum-trees tall;  
It travels far through many lands,  
Yet never moves at all.

And many pass along the road  
By night-time and by day;  
It greets them all with smiling face  
And helps them on their way.  
And still they come, with horse and cart,  
With steers and creaking wains,  
And still they come and still they go  
And still the road remains.

I would that I the road might be,  
And like the road could roam—  
From town to town, from sea to sea—  
Yet always stay at home.  
To aid the gentle and the squire,  
The beggar-man and dame,  
To be a friend to all the world,  
But still remain the same.

To help them all upon their way  
Along my shining track,  
The farmer with his heavy load,  
The pedlar with his pack.  
Yet since I cannot be the road—  
As I can never be—  
Then who will take the twining road,  
The shining road with me?

### Little Bits of Fun.

George (to Tom, fishing): "How many have you caught?"  
Tom (airily): "Oh, I couldn't count 'em."  
George (peering into can): "Why, you haven't caught any at all!"  
Tom: "That's why I can't count 'em."  
—Exchange.

"And now, children, we come to that important country, Germany, that is governed by a man called a kaiser," said the teacher. "Can any one tell me what a kaiser is? Yes, Willie!"  
"Please, ma'am, a kaiser is a stream of hot water springin' up in the air and disturbin' the earth."—"Life."

Baby's uncle met her in the street one day, and asked her whether she was going with a picnic party from her school.

"No," replied the eight-year-old niece. "I ain't going."  
"My dear," said the uncle, "you must not say 'I ain't going.' You must say 'I am not going.'"

And he proceeded to give her a little lesson in grammar.  
"You are not going. He is not going. We are not going. They are not going. Now, can you say all that?"  
"Oh, yes," responded Babs heartily. "There ain't nobody going."—London Answers.

### Beavers and War Work.

Dear Beavers.—As it is now so late in the season we cannot print any more of the prize letters on war-work begun in the spring by our Beavers, but we shall be glad to hear from any of you who care to write to tell us how you are getting along.  
No doubt the work is very hard sometimes, but doesn't it make you proud and

happy to think that you are a part of the great "Soldiers of the Soil" army that is working all over this continent to raise food to help our armies?

All over Canada boys and girls are working, and all over the United States too. Someone sent us a letter the other day telling about 49 boys and girls of Huerfano County who have joined "pig clubs." The clubs were organized last fall, and a large number of registered Duroc-Jersey and Poland China pigs were shipped in for the club members, who take all the care of them.

And now, just to help you along I want to give you a motto:

"A Motto?" the old man said, with a smile,

To the boy who came one day.  
"Some good advice in the nutshell style,  
To cheer you along the way?"

"Well, here is a plan—and I ought to know,

For I've found it powerful good:  
*The grin will come and the grouch will go,  
If you keep on sawing wood."*

Senior Beavers' Letter Box.

Dear Puck and Beavers.—No doubt you will think that I have forgotten to write, but I have not. I have been intending to write this long time, but now I am making a start. As I said I would tell you about our trip out West I had better do so.

Last fall my father decided to take a trip out West, and if he liked the country he would try to get a farm. He was out here a month and, as he liked the place he bought a farm. Everything seemed all right until Christmas holidays. I thought I would like to go to Ottawa and spend a few days with friends there. As scarlet fever was prevalent, of course, I took it and did not know it until I went home. In about a week afterwards my little brother (aged four years) took it from me, and then we had the doctor. We were quarantined for six weeks; that left us only two weeks until we would be leaving for the West.

On Monday, February 25th, our stuff was taken to Stittsville station and loaded on the car. The horses and the rest were taken up on Tuesday and loaded and on Wednesday morning about 4 a.m. the train started out on its long journey.

We were staying at a friend's all this time, and on Thursday morning we left for South March Station. There were many friends there to say "good-bye," and at 9.45 the train left for the West. We enjoyed our trip very much. We saw most beautiful sights on our way. We passed over long bridges (and high ones too), through five tunnels, through lots of bush and high rocks that made it almost dark. The tunnels seemed to be enjoyed by all who were in the car with us. Everyone was in the dark.

There were eleven of us, my uncle, returning to the West, my aunt and four children, my two brothers and my father and mother. On March 3rd we arrived at Leney, Sask., at 12.30 p.m., and did not feel a bit tired. There were a lot of friends there to meet us. It was snowing a little and kept getting worse. We stayed at our uncle's for a week or more, and then when we got our stuff we got settled down in our own house. We like the place very well and are enjoying ourselves, too. Our wheat is up and looks very nice and green. We are also having nice weather. Well, as my story is getting long I guess I will close for now. With wishes for success to the Beaver Circle.

I remain,  
BEATRICE BOUCHER.  
R. R. 1, Leney, Sask.

Dear Puck and Beavers.—As it has been so long since I wrote to your Circle, I thought I would write again. I just got home a few days ago from trying the Entrance, but do not know whether I passed or not. I suppose all the Beavers are glad that holidays are here, and they can have a good time for a while. Last year my father and brother and I took off the hay. The girls helped some also. We won't have so much hay to take off this year, but expect to have more grain than last year if the crops are good. I suppose all the Beavers are helping to win the war this year. We have two more pieces of land worked up this year for gardens, and I planted most of the

garden stuff this year, and I have two plots to take care of also.

I read the prize essays in the Advocate, and I think that if all the boys and girls would pitch in and do as much as the ones who wrote the letters are doing there would not be such a food shortage. I will close, hoping the Beaver Circle every success, and I hope the w.-p. b. is out hoeing. I remain.

LLOYD WAGG.  
(Age 11.)  
Tehkummah, Ont.

Dear Puck and Beavers.—As I have never written to your charming Circle before, I thought I would try my luck. My father has taken "The Farmer's Advocate" for a long time and I like to read the letters of the Beaver Circle. I tried my Entrance examination for the first time but do not know whether I passed or not. I hope the w.-p. b. is full when this reaches it. I have read a few books, some of them are "Rebecca of Sunnybrook Farm," "Christmas with Grandma Elsie," and I am reading "The Red Cross Girls in Belgium" now. Isn't this a terrible war? I have one cousin in France and another in England and two in London, Ontario.

I am glad that it is summer holidays. I expect to spend my holidays at my cousin's, down at Black Creek. Well, as my letter is getting long I will close.

L. MILDRED MCGREGOR.  
Wilkesport P.O., R. R. No. 1.  
(Age 12.)

[We hope you and Lloyd Wagg have both "passed." You know by this time, don't you?—Puck.]

Honor Roll.—Marie Mason, Harvey Bell, Olga Hoerner, Norine Haynes, Eva Dunbar, Freida Held.

Beaver Circle Notes.

Marie Mason, R. R. 1, Baltimore, Ont., wishes "Laura" to write her, sending full name and address.

Olga Hoerner, (age 11) Magnetawan, Ont.; wishes some of the Beavers to write to her.

Norine Haynes, R. R. 1, Brantford, Ont., wishes Evelyn Hartley to write to her.

Junior Beavers' Letter Box.

Dear Puck and Beavers.—This is my second letter to your charming Circle. As I did not see my other in print I thought I would try to have courage to try again. I go to school every day I can. I am at home spending my summer holidays now. There were four in my class; there were three boys and I was the only girl. There were two of us passed. One of the boys and I. We will be in the senior second class when school starts again next September. I go to Sunday School, too. Papa is manager of the Sunday School and I go every Sunday that I can. We drive to Sunday School with the double buggy and the horses. Their names are Fan and Charley, they are both quiet. My brother and I went down to the pasture and got them this morning. We took them home and watered them and put them in the stable. I have a pet lamb which I call "Lambey." It will eat bread and butter, but won't eat the bread without butter on it. It runs with the sheep now and hardly ever comes near the house at all.

We live about a half of a mile from the shore of the St. Mary's River. It is very nice, we can go fishing or boating any time we like. My brother has a boat and we have it down at the shore. It is very pleasant when we can go bathing, or any other fun we can have on the water.

Well, as my letter is getting long I guess I will close, hoping the waste-paper basket is away getting his dinner some place else when this reaches your office. Yours truly,  
MacLennan, Ont. RUBY IRWIN.

Dear Puck and Beavers.—This is my second letter to your charming Circle. I enjoy reading your letters very much. I guess the w.-p. b. was hungry when I wrote my last letter. My father has taken "The Farmer's Advocate" for some time. I go to school every day I can. My teacher's name is Miss McCann. I took garden peas for the fall fair. The subjects I like best are composition

and arithmetic. I like going to school fine. I guess I will close now.

I hope the w.-p. b. has had a good supper and is not hungry.

ROSANNA LUCAS.  
Lefroy, Ont., R. R. No. 1. (Age 10.)

Dear Puck and Beavers.—This is my first letter to your charming Circle. I have been reading your Beaver members' letters and liked them very much, so I decided to write and tell you a story which is a true story.

Our Dog Togo.

One time not very long ago we had a dog, his name was Togo. We had great fun with him. He would chase cows and follow us to school and everywhere we would go, and if we would put a stick in his mouth he would run away with it. But one day something happened. He got very ill and was not well for several days, and he died in the month of September, 1917, at the age of 12. We were very sorry of his death. We never had a dog since.

As my letter is getting long I will close with a riddle.

How many B's in a hive?  
Good-bye.

HELEN MACDONALD.  
Georgetown, P. E. Island, (Morar Farm).

The Windrow

The farmers in Texas are this year growing 85,000 acres of castor beans, castor oil having been found the best lubricator for airplanes.

Sir Clive Phillips-Wolley, a noted author, traveller and hunter, died at his home at Somenos, B. C., on July 8th at the age of 64 years. His son, a Lieut.-Commander in the Royal navy, was the first Canadian-born British subject killed in the present war. He met his death in the naval battle near the Falkland Islands.

At the annual shoe and leather style show held in Boston on July 8th, it was stated that next spring no shoe will be over 8 inches in height. The heels will be low and the colors black, white and two shades of brown.

The spruce turpentine, which was formerly wasted during the preparation of pulpwood for making it into paper, is now to be collected and saved, as it is found valuable in the manufacture of toluol, which is the basis of the high explosive trinitrotoluol, better known as "T. N. T."

A fortnight ago at Savannah, U. S., the "composite" ship "Quinnsec", the first of its kind, was launched, and before she struck the water the keel of another ship was laid in the record-breaking time of 1 3/4 minutes.

General Mannerheim, the Finnish officer who organized the White Guard to put down the Bolshevik rising and invited the Germans to help, has resigned now that he finds the Germans determined to rule in Finland. The German General von der Goltz has taken his place and the Germans have taken possession of the arsenals, shipping and fortresses. The Bolshevik Foreign Minister of Russia, M. Tchitcherin, has protested in vain against this violation on the part of the Germans of the treaty of Brest-Litovsk.

Serving on the side of the Allies, since this war began, have been 316,000 mules.

Let us keep it clearly in mind that what our soldiers are fighting for and dying for above all else, according to their own testimony, is "to finish with war." "If we have to begin again some day," they say "all that's been done and suffered will have been in vain".

On one occasion a Scotch minister knocked at the door of a house where a husband and wife were quarreling. When admitted, he inquired:

"Wha's the head of this house?"  
The man quietly replied:  
"Sit yersel' doon, mon; sit yersel' doon, we're just trying to settle that noo."

Man and the Machine.

(By A. G. G., in the "Daily News and Leader," London.)

It is probable that if we could see the events of to-day from the point of view say, of an industrious successor of mine writing a centenary article for "The Daily News" in August, 2,017, we should be less concerned with the externals of the war than with its social consequences. In the huge bonfire which the world is making of society a good deal more is being reduced to ashes than we can at present estimate. We are absorbed by the main issue, which, as President Wilson points out so steadily, is that humanity shall be delivered from the dominion of force in its international relationships, and set free to deal with the real problems of civilization. There can be no compromise on this issue. The sword has got to be broken and on the rubbish heap for ever before we can set about rebuilding our ruined structure. That fact is becoming clear to every mind in every land.

It is becoming clearest of all in the trenches. It is there that the real mind of the future is being fashioned in the school of mud and blood and misery. No one comes from that school without the knowledge that this thing is impossible, that the cause of it must be rooted out, and that nations have got to find some sane basis of common existence in place of a recurrent orgy of murder and destruction. If that basis is not found, civilization is at an end, for all the activities of the world will be devoted to preparing for war and waging war, until all the available material is rubbish and all the available men are dust. It is the sword against democracy, and President Wilson does well to keep the mind of the world fixed on the central truth that no end is possible until the last Autocracy that lives by the sword is overthrown.

When Apollyon is in the ditch and the death rattle is in his throat humanity will be able to go on its way without fear. The differences of nations will settle themselves as naturally and as equitably as the differences between neighbors, and with that change of atmosphere the hostilities and racial hates, which are the creation of the governance of force, will disappear. Nationalism and internationalism will find their accommodation and in mutual aid and co-operation human society will discover the key to a more abundant and more widely diffused life than it has ever enjoyed. In those days, we can conceive our children looking back with wonder at the insane world of their fathers which, under the dominion of the sword, spent fifty thousand million pounds in order to strew land and sea with ten million corpses.

But to our commentator of 2017 not the least attractive theme will be the influence of the catastrophe upon the life of the people of this country. There has been no such social upheaval in our land since the Black Death swept it six centuries ago, and, by creating a labor famine, broke the back of feudalism; and made the bondman free. This is the second Black Death and its consequences will be hardly less fateful than those of the first. That liberated the man from personal slavery; this, we may hope, will emancipate him from the slavery of the economic machine.

Hogan: "Phwat makes ye swally all your dinner in two minutes, Grogan? Are yez atin' on a bet?"

Grogan: "It's for the good ave me dyspepsy, Moike. Sure the doctor tould me to rist an hour after atin' and how else am Oi goin' to git the hour of rist onless Oi ate like the mischief."—"Exchange".

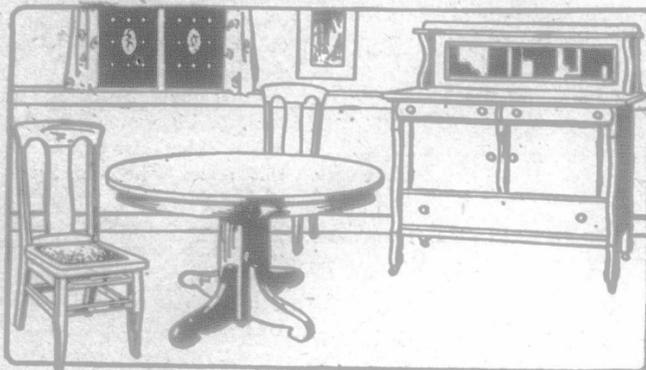
The colored preacher, it is related, was a higher critic and denied all miracles. "But, Caleb, how about the Hebrews crossing the Red Sea?" "I'll 'splain dat. Dey crossed over on solid ice; and next day it was very warm, and de Gyptians just broke trough de ice." "But, Caleb, ice does not form so near the equator." "Dat objection is nuffin'. In dem days dere was no equator."—"Exchange".

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This Beautiful Solid Quarter-Cut Oak Dining Room Suite, \$89.75  
\$20 Cash, \$1.50 Weekly

Set consists extension table, buffet and 6 dining chairs, including one arm-chair, in modern style and finish.

**BURROUGHES** Don't Delay—Send for August Sale Sheet TO-DAY  
DEPT. C Queen Street W., Toronto

Burroughes Furniture Co., Dept. C.  
Queen St. West, Toronto  
Gentlemen: Send me at once August Sale Sheet and Illustrated Furniture Catalogue.

Name.....  
Address.....

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When writing advertisers will you kindly mention The Farmer's Advocate.

## Current Events

All the wheat mills in the Dominion are to be closed for the greater part of August, and possibly until the new wheat crop comes in.

Lieut. George B. McKean, of Edmonton, has been awarded the V. C. for gallant action which saved many lives. He was formerly a Presbyterian minister.

The women of Northern Ontario are to be given an opportunity to take a three-weeks' course in farm work this fall at the Monteith Demonstration Farm. Instruction will be given in cooking, canning, home nursing, sewing, dairying, cheese-making and garden work. Tuition will be free and board supplied at \$5.00 a week.

It is now said that the report of the assassination of ex-Czar Nicholas near Ekaterineburg was not true.

President Wilson has signed the army appropriation bill calling for \$12,000,000,000, to meet the expenses of the army programme for the next year.

Owing to the supply of fuel required in liquor-making, the manufacture of beer in the United States may be stopped in 6 or 8 months.

Robert Clines, a noted Labor man, has been appointed to succeed the late Lord Rhondda as Food Controller in England.

Major John Purroy Mitchel, former Mayor of New York City, was killed while flying in Louisiana. He was an officer in the Army Aviation Service.

The Fourth of July, America's "Independence Day," was officially celebrated in England, France, Italy and South America.

There is a report that Field Marshal von Hindenburg died last week of an apopleptic stroke, following upon a violent altercation with the Kaiser.

The past week has afforded no striking event in the war except the continuation of the victorious advance of the Italians in Albania, where the Austrians have been forced to retire beyond the Skumbi River, the Italians, meanwhile, assisted by French troops west of Lake Ochrida, succeeding in capturing important heights and establishing a front from Lake Ochrida to the Adriatic Sea. Evidently the first step towards recovering Serbia has been taken. . . . On the West front success has attended some minor operations on the part of the Allies. On July 10th the French attacked at Antheuil, between Montdidier and the Oise, using light tanks, and succeeded in penetrating enemy positions to a depth of a mile, capturing 350 prisoners. On July 11th the Australian troops successfully raided German positions near Hamel; and on July 12th the French again made a considerable advance directly east of Amiens, where, on the west bank of the Avre they penetrated enemy lines along a 3-mile front to the depth of over a mile, taking 500 prisoners. Canadians continue to harass the lines opposing them, having made 48 raids during the last 90 days. . . . The Russian situation remains complicated as ever. Everywhere in the country there is unrest, and it was reported last week that the peasants in the Ukraine had arisen against German domination and were marching on Kiev, the capital. On July 6th General von Mirbach, German ambassador to Russia, was assassinated at Moscow, and a general uprising in that city was suppressed by the Bolsheviks. In Petrograd famine and cholera hold high level; while in the north the White Guards—who are really Finns under control of Germany, have occupied Yaroslavl, and thus cut off communication between Moscow and Archangel, central Russia's one way of communication with the outer world. In the east—Siberia—the Czecho-Slovaks hold nearly all of the great railway for several hundred miles, including Irkutsk. They do not wish primarily to fight the Bolsheviks, but, with all the Slav hatred of Germany, only wish to proceed to the west to fight. Meanwhile Slavs in Austro-Hungary, Bohemians and Poles are deserting at every opportunity. The Japanese are now said to be ready to occupy all of the

Siberian railway from the Pacific to the Ural Mountains, but while France and Britain are in favor, President Wilson objects, fearing that such a move might be regarded by the Russians as an unfriendly act. Hungarians, meanwhile, are complaining bitterly that Austria forces them into all the most difficult fighting, and that 68 per cent. of the forces sent to the great Piave battle were Hungarians, whereas the right proportion should have been 20 per cent.

## The Dollar Chain

For the soldiers and all who are suffering because of the war. Contributions from July 5th to July 12: Jas. McLachlan, R. 1, Renfrew, Ont., \$2; "Toronto", \$2.

Previously acknowledged.....\$5,562.00  
Total to July 12th.....\$5,566.00

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

WHILE OTHERS ARE GIVING LIFE AND LIMB, WHAT ARE YOU GIVING?

## Wheat Substitutes.

From the Canada Food Board.

Canada's new wheat crop will not reach the consuming public as flour for three months at least and in the meantime this country will be very short of wheat flour. We have—as has also the United States—shipped as much wheat as possible to the Allies, giving them a considerable share of our own normal supply to help carry them over until the new harvest has come on to the market and the corner has been turned. The use of substitutes, therefore, becomes an imperative necessity in this country and our people should familiarize themselves with methods successfully used in baking these substitute flours.

On the 1st of July the Canada Food Board Order became effective requiring all public bakeries, and private households also, to use 10% substitute flour. On the 15th of July this percentage was increased to 20% in all of Canada east of Port Arthur. The question then will arise in each housekeeper's mind, what are substitutes for wheat flour, where can they be had and how are they to be used? Substitutes, as defined by the new law, include bran, shorts, corn flour, cornmeal, edible cornstarch, hominy, corn grits, barley flour, rolled oats, oatmeal, rice, rice flour, buckwheat flour, potato flour, tapioca flour, rye flour and rye meal. Potatoes are also classed as a substitute for wheat flour, in proportion of four pounds of potatoes to one of the other substitutes mentioned, on account of the higher percentage of water in potatoes. A large number of millers are ready with these different flours and as soon as the public demand calls for them they will be distributed throughout the trade, and are now procurable by dealers.

There has been some talk about the price of substitutes being high in proportion to flour but it is expected that this condition will remedy itself as the new flours get into general circulation throughout the trade. In the case of cornmeal, the price has advanced for corn in Chicago on account of market conditions. Canadian millers were depending on American corn and advanced the price of cornmeal accordingly on all new contracts. It is not expected that this market condition will continue, however, as there has been plenty of corn in the United States since last harvest, although difficulty of distribution arose through lack of sufficient transportation facilities and similar causes. With the 1918 crop in prospect, it is expected that there will be a still more plentiful supply for the coming season.

It may be necessary to experiment with these substitute flours a few times before succeeding in producing a satisfactory loaf and opportunity should be taken to study the effect of these substitutes and the different methods of mixing, handling, fermenting and "proofing" of the doughs. As most of the wheat flour substitutes accelerate the fermentation, it will be better not to work the dough as long as usual. About four hours for fermentation will be sufficient

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in a room of moderate temperature,  
divided as follows:

Two hours 45 minutes for the first  
punch, 45 minutes for the second punch,  
30 minutes is allowed before the dough  
is finally taken out, kneaded and cut  
into loaves. After being set in the pan,  
45 minutes is enough for "proofing",  
when it is ready for the oven.

When cornmeal, oatmeal or other meal  
is used the moisture retaining qualities  
of the loaf may be improved by scalding  
these ingredients at a temperature  
of 150° Fahrenheit and allowing two  
hours for cooling. Most of the wheat  
flour substitutes retain the moisture  
in the loaf longer than will the wheat  
flour and yield an increased amount of  
bread on account of their higher ab-  
sorption of water, thus reducing the  
amount of yeast and shortening necessary.  
The following are a few of the recipes  
recommended to bakers. They will be  
useful also in private households when  
substitutes are to be mixed with wheat  
flour for bread.

**Corn Flour Bread.**—Two and one-half  
pounds standard flour, one-third pound  
corn flour, 1 tablespoon brown sugar,  
2 tablespoon salt, 1/2 oz. yeast, 1 table-  
spoon fat, 3 cups of water. This should  
produce 4 1/2 pounds of bread.

**Barley Flour Bread.**—Five and two-  
thirds cups wheat flour, one and one-third  
cups barley flour, 2 cups milk and water,  
1 cake of compressed yeast, 2 tablespoons  
sugar, 2 tablespoons fat, 2 teaspoons salt.  
This should make two loaves.

**Rice Yeast Bread.**—Eight cups standard  
flour, 7 cups boiled rice, 1/2 cup milk and  
water, 1/4 cup warm water (for yeast),  
1/2 cake compressed yeast, 4 teaspoons  
sugar, 4 teaspoons fat, 1 1/2 teaspoons  
salt. When ready for the pans will  
look like a stiff drop batter. The quanti-  
ties mentioned make two loaves.

**Milk Tests 3.2 to 4.5 Per Cent.—  
Especially Good For Babies  
and Invalids.**

The milk goat in Europe is said to  
be the peasant's cow, the baby's foster  
mother, a blessing to the invalid and a  
Godsend to the poor.

A good milk goat will produce two  
quarts of milk a day, testing 2.3 and 4.5  
per cent. The milk is pure white, the  
cream rises slowly. If handled in a  
cleanly way, there is no objectionable  
odor. Goat's milk can be made into  
good cheese, but it is not satisfactory for  
butter production. It is especially good  
for babies and invalids.

Whether the average goat in America  
is really more profitable than the dairy  
cow remains to be proven. At the New  
York Station goat milk was produced at  
a feed cost of 6.4 cents per gallon. In ex-  
periments conducted at Buffalo, New  
York, goat's milk was given to 18 children  
that were not doing well on other foods.  
In 17 cases goat's milk filled the bill en-  
tirely, some cases showing a very great  
improvement over the previous condition.

The principal breeds of milk goats are  
the Saanen, Toggenburg, Nubian, and  
the common American goat. Pure-bred  
milking does are scarce. The best way  
for the average person to get the milking  
goat is to breed up the common goat by  
using pure-bred bucks of milking breeds.  
Goats are credited with being immune to  
tuberculosis, though they will contract  
this disease if exposed to it to any serious  
extent.—C. I. Bray, Colorado Agricul-  
tural College, Fort Collins, Colorado.

**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, other-  
wise satisfactory replies cannot be given.

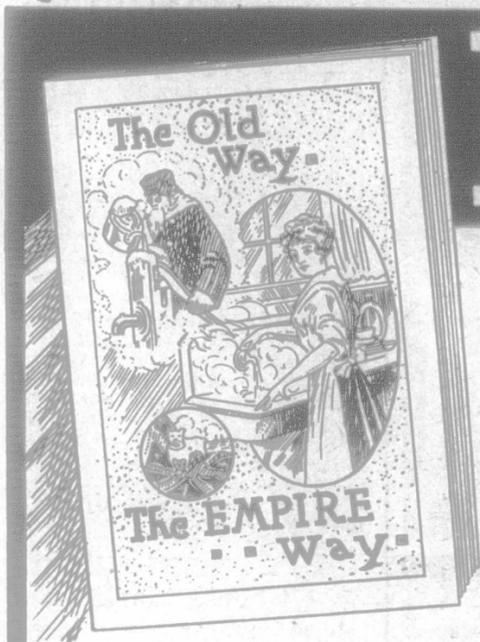
4th—When a reply by mail is required to urgent  
veterinary or legal enquiries, \$1.00 must be  
enclosed.

**Veterinary.**

**Ailing Mare and Foal.**

Four-year-old Percheron mare shows  
symptoms of rheumatism. Her 2-weeks-  
old foal was unable to stand without as-  
sistance at first, but has improved some,  
but is stiff in hind legs when rising and its  
joints crack. W. B. W.

Ans.—Give the mare 2 drams salicylic  
acid 3 times daily. Bathe the affected  
joints of both mare and foal well with  
hot water 4 or 5 times daily, and after  
bathing rub well with camphorated oil.  
Allow them out on grass during fine  
weather, but avoid wet and cold. V.



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faction guaranteed. Tay Poultry Farm, Perth, Ont.

**CANADIAN RINGLET BARRED ROCKS.**  
Bred-to-lay strain; 241-egg kind; trap-nested;  
heavy winter layers. Eggs, \$1.50 per setting,  
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**Choice Eggs** for hatching, from free range  
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Rocks—\$3 per 15, \$10 per 100. Fawn I. R. Duck  
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of Tamworths just weaned, also state price and  
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field Park, St. Lambert, P. Q.

**FOR SALE—AIREDALE PUPS, PEDIGREED.**  
Whelped March 17. Males (fifteen), females  
(ten dollars each). C. H. Chalmers, R. 1, Smith's  
Falls, Ont.

**FIRST CLASSEXPERIENCED MAN(SINGLE)**  
desires engagement for 2 months on good up-to-  
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ever used.

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is confirmed by the growth and de-  
velopment of our business, which is  
unparalleled in the history of the  
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be convinced.

**Brantford Cordage Company**  
Brantford, Ontario

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School for Girls)  
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Thorough courses in Music, Art, Oratory,  
High School, Business College, Domestic  
Science and Superior Physical Training  
For terms, address: R. I. Warner, M.A.,  
D.D., President, St. Thomas, Ont. 33

## Don't Let Rats Defeat Us.

The following from an American  
Magazine, carries a warning equal-  
ly applicable to Canada:

"Did you know that the estimated rat  
population in the United States is greater  
than the human population?"

"Rats waste in foodstuffs, alone, more  
than our wheatless days save. The rat  
waste would float a Liberty Loan! Let  
that fact sink in. Rats waste enough  
food per annum in the United States to  
feed all Belgium for a year! This waste  
totals from \$200,000,000 to a billion  
dollars. Don't let the rats get started.  
They begin to breed when only three  
months old, average about ten rats to a  
litter, and about twelve litters a year—and  
each female may keep this up for six  
years. On this basis the descendants  
from one rat in a year would total about  
210,620! Use the approved rat poisons.  
Trap them. Induce the boys to hunt  
and shoot them with air-rifles. Above  
all things, don't leave food in places  
where rats or mice can get at it.

Rats—and mice, too, of course—are  
an ally of Germany. It is the duty of  
every patriotic American to exterminate  
all rats and mice—particularly so now  
that we are at war. This is no alarmist's  
dream. It is a fact."



72 page catalog  
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*Save Cream, Time and Labor*

**Save Cream:** If you are trying to get along without a cream separator, or are using an inferior or half-worn-out machine, with butter at 40 to 50 cents a pound, a De Laval would soon save enough cream to pay for itself.

**Save Labor:** A good cream separator is a big time and labor saver. And this year, more than ever before, time saving and labor saving on the farm mean money saving.

There is no other cream separator that can compare with the De Laval in clean skimming, capacity, ease of operation, freedom from repairs, and durability.

Order your De Laval now and let it begin saving cream for you tight away. Remember that a De Laval may be bought for cash or on such liberal terms as to save its own cost. See the local De Laval agent, or, if you don't know him, write to the nearest De Laval office as below.

### THE DE LAVAL COMPANY, Ltd.

LARGEST MANUFACTURERS OF DAIRY SUPPLIES IN CANADA.  
Sole manufacturers in Canada of the famous De Laval Cream Separators and Ideal Green Feed Sijes, Alpha Gas Engines, Alpha Churns and Butter-Workers. Catalogues of any of our lines mailed upon request.

MONTREAL PETERBORO WINNIPEG VANCOUVER

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G. H. FERGUSON, Minister of Lands, Forests and Mines.

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If considering draining your farm or orchard, we can supply all sizes, best quality Hard Burned Clay Tile, and will guarantee prompt shipment. Write for prices.

**National Fire Proofing Company of Canada, Limited**  
Drainage Dept., Dominion Bank Bldg., Toronto

#### Scales Should be a Part of Kitchen Equipment.

Every household kitchen should be provided with a set of small scales for weighing small articles purchased by the pound. We are so in the habit of assuming that all weights are correct that this little precaution against unfair weights

and unavoidable mistakes is omitted. The honest merchant will welcome your checking your dealings with him, and will appreciate the co-operation. A small balance of the platform type can be had for \$2.00 or a little less and will be of great value to the household.—Fred. G. Person, Colorado Agricultural College, Fort Collins, Colorado.

### Markets

Continued from page 1214.

corn flour steady at \$12; and Graham flour at \$11.05; Manitoba spring wheat standard flour, \$1.95 per barrel in bags, f.o.b. cars, Montreal, and 10c. more delivered. Ontario winter wheat flour, \$11.40 per barrel, in new cotton bags.

Millfeed.—Bran continued steady at \$35 per ton, including bags; shorts, \$40; feed cornmeal, \$68; pure barley feed, \$61; mixed mouille, \$51; pure grain mouille, \$62.

Hay.—Prices were steady, with No. 2 hay quoted at \$14.50 to \$15; No. 3, at \$13; clover mixed at \$6 to \$10; and inferior at \$4.

Hides.—Shearling lambs sold at \$2 each; cow hides, 18c. per lb.; bull's hides, 16c., and steers, 24c., flat, or 20c., 21c. and 22c. per lb. for Montreal inspection. Milk calf skins, 55c. each; horse hides, \$5 to \$6.50 each; tallow, 3½c. per lb. for scrap fat; 8c. for abattoir fat; and 16c. to 16½c. for rendered.

#### Cheese Markets.

Iroquois, 22½c.; Mont Joli, Que., 22c.; Cornwall, 22½c.; Picton, 22½c.; Alexandria, 22½c.; Napanee, 22½c.

#### Ways and Means.

The Bar story of a wee Irish child who was called as a witness, and tested as to her knowledge of the nature of an oath, relates how when the Judge asked her what would happen to her if she did not tell the truth, he was met by the unexpected answer, "Please, sir, I should not get my expinses." In this terrible war, now in its fourth year, we are proud of our soldiers, but, like the little girl in the witness-box, we and our allies, and the enemy countries no less and probably more than we do, feel qualms at times, as to how we shall come out of it in the matter of "expinses."

Many are of opinion that England in the future must learn from the experiences of other countries, and adopt a more intensive system of cultivation, that we must not rest satisfied with an agricultural system which employs five men to the hundred acres, when other countries are employing fifteen men to the same acreage.

When Bernadotte became King of Norway and Sweden in 1814, thirty noblemen owned agricultural Norway, and 1,200 gentlemen owned Sweden, with 70,000 tenants in the two countries cultivating 1,400,000 acres. By the year 1840 the peasantry of Norway and Sweden had purchased 16,000,000 acres, and the area under tillage had risen to 5,200,000 acres, that is nearly quadrupled. In 1800 Denmark belonged to 614 noblemen. In 1808 a law was passed compelling them to sell their lands to their tenants at £6 an acre, and by 1840 the tenants had bought up half the kingdom. In 1818 the valuation of the agricultural land of Denmark amounted to £15,000,000 only, but in 1886 it had risen to £205,000,000, or fourteen times as much.

Prussia under the Stein law completely changed her internal condition. Previous to that law her land was in the possession of 30,000 landowners, whereas at present the number approaches two millions. The land was not confiscated, the landowners were allowed to retain one-half of their estates, while the other half went to the tenants. The landowners received Prussian Consols equivalent to eighteen years purchase of the rent of the land.

In Austria much the same has happened. The revolution of 1848 led to the breaking up of estates. The peasantry at that time had none, the land being all owned by the Crown, the nobles, and religious or other corporations. In 1848 one-half of each landowner's estate was broken into farm lots for the peasants, subject to an annual payment of 2½ per cent. on the amount paid to the landlord for his land. This gave a great impulse to agriculture, and in less than twenty years the value of the agricultural land doubled in price, so that the half

left to the landlords was equal to the whole value of their property when partitioned. At the present time one-third of Austria is held by the Crown, one-third by the landowning nobles, and one-third by the peasant proprietors, whose average holding is twenty acres. The agricultural output has considerably more than doubled. In England we have never done more than play with the question of rooting a splendid peasantry on the land, but times are ripe for a change. More men on the land means more produce, and the war has brought home to us that we need both. In this direction, at any rate, we can see one promising outlook for an increase of wealth after the war.

From every generation in turn comes the cry that national expenditure and taxation have reached the limit of oppressiveness.

"The present time," wrote Macaulay, in 1830, is one of great distress. But think over the last forty years, a war with which all other wars sink into insignificance: taxation such as the most heavily-taxed people of former times could not have conceived; a larger debt than all the public debts that ever existed. Yet is the country poorer? . . . If we were to prophesy that in the year 1930 a population better fed, clad, and lodged than in the England of our time will cover these islands, that cultivation rich as that of a flower garden, will be carried to the tops of Ben Nevis and Helvellyn, that machines constructed on principles yet undiscovered will be in every house, no travelling but by steam, that our debt, vast as it seems to us (£800,000,000) will appear to our great-grandchildren a trifling encumbrance, which might easily be paid off in a year or two, many people would think us insane. If any person had told the Parliament which met in perplexity and terror in 1720, that in 1830 the wealth of England would surpass their wildest dreams, and that the annual revenue would equal the principal of that debt which they considered as an intolerable burden, our ancestors would have given as much credit to the prediction as they gave to Gulliver's Travels."

The year 1930 is still some little distance away. We cannot in the time left to us carry cultivation to the tops of Ben Nevis and Helvellyn, but we may do much, and do wisely, to convert the rich land of England by intensive culture into a "storehouse" for the nation.—Sir Robert Edgcumbe in the "Daily News and Leader", London, England.

#### Since Father Bought the Phonograph.

BY AUGUSTA KORTRECHT.

Since father bought the phonograph  
Our home is full of song;  
We eat and drink and live and breathe  
To music all day long.  
For in the early morning,  
When it's creepy still, and dark,  
McCormack starts the concert off,  
As tuneful as a lark:  
Then Schuman-Heink, and mother,  
And Lauder, full of glee,  
And Sarah in the kitchen,  
Ranging squeakily to C.  
They all seem, to be warbling  
That they hear him calling me.

We fox-trot in to breakfast,  
To the "Wicki Wacki Woo,"  
With "A Little Bit of Heaven,"  
On a harp and 'cello too;  
And when that record's over,  
Without a moment's rest,  
The golden-voiced Caruso  
Deigns to soothe our savage breast:  
Then father in his study,  
Buried deep in legal clause,  
And my wheezy Uncle William,  
Loosening up his ancient jaws—  
They hum and buzz and whistle  
Tunes from Tosca and Because!

And in the evening shadows,  
While I learn my Latin prose,  
I'm distracted by "Aida"  
As a "Little Irish Rose,"  
Till the strains of martial music  
Clear the atmosphere of cloud,  
As "The Stars and Stripes Forever"  
Burst upon us, fine and loud:  
Then mother dear, and father,  
And my uncle gaunt and gray,  
And Sarah in the pantry  
Putting cups and plates away,  
And Rover, softly howling,  
Hail the end of perfect day.—Sel.

Questions and Answers. Miscellaneous.

Cow Falls to Let Down Milk.

What can a person do to make a cow let down her milk? I have a valuable cow that is a good milker, but she appears to hold up her milk. S. S.

Ans.—We doubt if very much can be done to relieve the trouble. Possibly giving her a little feed at the time of milking or doing something to attract her attention, may help. Holding up the milk is characteristic of some individuals.

Corn Pruning.

1. In growing sweet corn for table use and field corn for the production of seed ears will it be of sufficient benefit to make it profitable to remove all suckers or small stalks?

2. At what stage should it be done to secure best results and avoid second growths? W. G.

Ans.—1. In the case of sweet corn or field corn where early maturity and grain is desirable, removing the suckers would undoubtedly give results. Unless labor were plentiful, we doubt if it would be practicable to go through a large field and remove all suckers.

2. We cannot say definitely as to what stage of development of the crop the suckers should be removed. When the corn is from 2 to 3 feet high they can be taken out much easier than when the corn is small.

Potatoes Wilting.

My potatoes were planted about May 1 and have been in bloom for a week. Some of the leaves are curling and appear to be drying up. Is this a disease? If so, what is a remedy? R. C.

Ans.—The symptoms are somewhat like those of tip-burn. This trouble occurs most seriously during dry weather, and is a result of the drying out of the parts most exposed to the dry atmosphere. The tips and margins of the leaves are the first to die. Frequent shallow cultivation to make a dust mulch, which prevents evaporation of soil mixture, is one remedy for the trouble. Spraying with Bordeaux mixture also aids in warding off tip-burn. It is possible that the plants are affected with blight, which causes a dying of the leaves and stems. In the early blight, brown spots which develop concentric markings appear on the leaves. These spots are sometimes so numerous as to kill the foliage, causing a loss in crop results. The late blight of potato is frequently very destructive. Dark, watery areas appear on the leaves. These develop rapidly in size according to weather conditions, and the disease extends down the stem, causing a rot in the tuber. Spraying with Bordeaux at intervals of ten days to two weeks will materially aid in preventing this disease. Without a specimen of the affected plants, it is rather difficult for us to definitely say what disease is affecting your crop.

Gossip.

G. G. Gould, of Essex, writes that his Poland Chinas, including over fifty head of young pigs, are an extra choice lot and practically all are from imported stock. His offering of Chesters are also by an imported son of the great Schoolmaster.

The Pettit Shorthorn Importations.

Shorthorn breeders who are readers of these columns will be pleased to learn that Messrs. J. A. & H. M. Pettit, of Freeman, Ontario, have their new importation of 40 head of Scotch Shorthorns now home from quarantine. The importation is made up of 30 females and one young fourteen months bull. Five of the females are cows with calves at foot, while the balance are nearly all two-year-old heifers, all of which are supposed to be in calf to Scottish service. The best families are nearly all represented, and we understand that the entire importation arrived in good flesh. Parties wishing to strengthen their herds with something good in new imported blood should get in communication with Messrs. Pettit at once. Their selection in home-bred cattle also numbers well on to one hundred head.

McCormick's Jersey Cream Sodas advertisement featuring a box of sodas, the Canadian Food Control logo, and contact information for The McCormick Manufacturing Co., Limited.

When You are Old advertisement featuring a portrait of an elderly man and text promoting The Imperial Life Assurance Company of Canada.

Williams New Scale Pianos advertisement featuring an image of a piano and text describing its features and availability from The Williams Piano Co., Limited.

There Was Enough Left. When an Irishman recently caught a youngster stealing apples off his farm he proceeded to administer a regular thrashing to the boy, whereupon the latter screamed and howled until the Irishman desisted a moment. "Don't lick me," yelled the lad. "I ain't to blame for this." "Ye ain't to blame? Why ain't ye, I'd like to know?" "Cause people say I ain't all there," screeched the boy. "Well, then, I'll lick what there is of ye."

Did the Best He Could.

The difference, not merely of degree but of kind, which is supposed to separate the rector from the inferior order of curates, is exemplified in the following: Returning to his parish after his autumn holiday, a dignified country clergyman, noticing a woman at her cottage door with a baby in her arms, asked: "Has the baby been baptized?" "Well, sir," replied the curtsying mother, "I should like to say as much as that, but your young man came and did what he could."

## Introduction to Y.M.C.A. Statement

The National Council of the Y.M.C.A. herewith presents a complete statement of its finances for the year 1917, covering its entire service Overseas and in Canada.

The Executive Committee of the Council arranged last November to have a complete statement for the year 1917 ready for publication before the recent Red Triangle Fund Campaign, but owing to conditions arising out of Military operations in France, this has been unavoidably delayed. It is presented now at the earliest date that existing conditions have permitted.

The portion of the following statement which concerns England and France has already been submitted to the Overseas Military authorities. Audited statements of the funds handled have been submitted to the Militia Department at Ottawa and for the past two years regular accounting has been made as well to the authorities in England and in France. In addition to the regular audit in France, the canteen business is checked every month by the Military Field cashiers, to determine the amount which is paid to Military units as indicated in the Expenditures. Printed copies of the audited statements are posted up in the huts for the information of the soldiers.

The *General Operation Account* shows on the one hand the entire receipts of the National Council; first, from the gross sales of its Military canteens in Canada, England and France, and second, from subscriptions received during the year. On the other hand, there is shown the entire expenditures for the year, including, first, the cost of the goods sold in the canteens and, second, the expenditures connected with the entire service which is carried on under the direction of the National Council.

The *Balance* represents the excess of receipts over expenditures. Of this the sum of \$118,351.43 was the balance at the National Headquarters at Toronto, and the remainder was Overseas. This balance at the end of the calendar year represents the amount available to carry on operations until the time of the campaign in 1918. While the financial statement is drawn up on the basis of the calendar year, the receipts from the campaign of one year have to serve until the campaign of the next year. The above balance at the National Headquarters was by April 30th, just before the new campaign, not only used up but changed to a deficit of \$237,930.13. This deficit was, however, offset by the balance overseas, which has to be maintained there as a working balance to carry on operations.

The item of \$240,524.86 is a special amount which had to be expended for the purchase of canteen and other supplies in Canada for shipment to France. Beginning with June, 1917, on account of the scarcity of supplies in Great Britain, much of the purchasing formerly done there had to be transferred to Canada. The long period of time required for the shipment of these supplies to France involves the continuous employment of a large sum. The amount expended for this purpose, as at December 31st, has had to be treated as an expenditure and placed in a Reserve Account against the merchandise in hand. It is, however, a possible asset and will, when realized upon, be devoted to other forms of service to the soldiers, when it is no longer required to maintain the canteen service in France.

It was possible to provide for this expenditure only because the amount asked by the National Council in 1917 was oversubscribed by more than the amount required just at the time the Canadian Purchasing had to be undertaken. But for this it would have been necessary either to borrow this large amount or greatly curtail the service in France.

It is to be remembered that the goods at the front in France, where the greater part of the stock is carried, are subject to enormous risks. The English Y.M.C.A. in the

German offensive of March and April suffered losses in huts and canteen supplies of nearly One Million Dollars. In the more recent offensive the American Y.M.C.A. has suffered losses nearly as large, and the National Executive have deemed it a matter of prudence to be prepared to meet a similar loss if it should fall on the Canadian Y.M.C.A.

The National Council has from the first declared the policy of devoting to the service of the soldiers whatever balance remains in the military fund at the close of the war. This policy has been made known to and accepted by the Overseas Military authorities. The need for the Y.M.C.A. service will continue all through the period of demobilization and the plan of the National Council is to use whatever balance then exists to keep up the efficiency of the service to the soldiers during that important period.

The National Council of the Y.M.C.A., under which the Military Work is conducted, is a representative body of the various Y.M.C.A.'s throughout Canada, but it has no authority over or financial responsibility for any local branch. The funds which it handles have no connection with those of any local branch of the regular Y.M.C.A. It wishes to make clear, therefore, that the funds which are acquired in or subscribed for the Y.M.C.A. Military Work have not been and will not be used in connection with the regular work of any of these branches, but will, according to the policy already announced, be kept in the Military Work and devoted exclusively to the service of soldiers.

The service represented in the expenditures of the accompanying statement covered at the opening of the present year, 96 centres of operation in France and 76 in England, including all regular camps and units, base camps, convalescent camps, hospitals, railway troops, cavalry, London and Paris, and forestry units from the north of Scotland to the South of France.

There were on the Overseas staff 133 Secretaries carrying honorary commissions, 50 of whom were at the expense of the Y.M.C.A. for pay and allowances and the remainder at the expense of the Government. There are also a considerable number of other ranks, non-commissioned officers and men, detailed to the Y.M.C.A. staff by the Military authorities. A number of these, who are given non-commissioned rank because of special responsibility, are at the expense of the Y.M.C.A. for the extra pay over that of their regular rank. Civilian help is also employed where required and where circumstances permit.

In Canada the soldiers are served in 38 centres, including camps, barracks, Red Triangle Clubs, hospitals, naval stations and on troop trains. This has required approximately 100 Secretaries, who work on a civilian basis and are entirely at Y.M.C.A. expense. There is also required a considerable staff of employed helpers, exclusive of the committees of ladies who render their service free.

The scope and variety of the entire service, in so far as expenditures can reveal them, are indicated in the statement on opposite page.

Signed on behalf of the National Council of the Y.M.C.A.

G. H. WOOD,  
Chairman.

CHAS. W. BISHOP,  
General Secretary.

F. L. RATCLIFF,  
Chairman of Finance Committee.

# Consolidated Financial Statement of the National Council, Y.M.C.A. of Canada

(CANADA - ENGLAND - FRANCE)

General Operations for the Year ended 31st December, 1917

RECEIPTS	
Operating Balances brought forward from 1916:—	\$ 6,730.22
(a) At National Headquarters.....	59,863.43
(b) In England and France.....	\$ 66,593.65
Remittances from Canada in 1916 received Overseas in 1917.....	123,606.67
Gross Canteen Sales:	\$ 153,544.03
In Canada.....	594,263.21
In England.....	2,233,990.00
In France.....	2,981,797.33
Subscriptions received in Canada:	\$ 765,227.55
Ontario and Quebec.....	226,826.16
Western Provinces.....	134,736.48
Maritime Provinces.....	4,601.42
Interest earned.....	1,131,391.61
Subscriptions received Overseas:	\$ 14,328.93
France.....	3,821.42
England.....	2,397.74
Interest earned.....	20,548.09
Adjustment of Exchange between Canada, England and France.....	5,716.62
	\$ 4,329,653.97

EXPENDITURES				
	CANADA	ENGLAND	FRANCE	TOTAL
Cost of Goods sold in Canteens.....	\$ 103,683.67	\$ 462,890.46	\$ 1,801,912.22	\$ 2,368,486.35
Transportation and Transport Equipment for Canteen Goods.....		7,753.96	13,168.72	20,922.68
Loss from Damaged Goods, Fire, Shell Fire and Submarines.....			33,886.01	33,886.01
Canteen Equipment.....	2,131.25	15,202.21	14,159.95	31,493.41
Administration of Canteen Service, including Warehouse expenses.....	7,214.45	2,340.44	8,058.12	17,613.01
Huts, Hut Equipment, Tents and Decorations.....	18,312.80	103,418.29	121,031.11	242,762.20
Percentage of Canteen Sales given in Cash to Military Units for Extra Rations, Comforts, etc.....			71,587.28	71,587.28
Free Distribution of Drinks, etc., including Service to Wounded.....			84,807.08	84,807.08
Free Distribution of Athletic Supplies and Prizes.....		12,179.31	39,509.20	51,688.51
Free Distribution of Stationery, Magazines, Religious and other Literature.....	9,009.45	24,103.92	37,061.81	70,175.18
Free Cinemas, Concerts, Lectures, Pianos, Music and Gramophones.....	5,100.36	35,019.24	60,254.23	100,373.83
Automobile and Transport Equipment and Maintenance.....	1,925.85	8,700.35	23,189.34	33,815.54
Supervision of Military Camps (Canadian figures include Salaries).....	14,456.66	4,043.29		18,499.95
Administration Headquarters, including Office Expenses (Canadian figures include Salaries).....	14,106.52	8,777.40	4,544.82	27,428.74
Pay and allowances of Overseas Secretaries, not on Government pay; extra pay and rations of non-commissioned officers and men on Y.M.C.A. staff Overseas; wages and board of civilian help Overseas, and salaries of Secretaries in Military tranches in Canada.....	40,976.68	47,640.03	33,509.54	122,126.25
Rents, Rates, Heating and Lighting.....	5,766.82	10,469.43	15,828.34	32,064.59
Office Equipment.....		3,204.27		3,204.27
General and Sundry Expenses, including Travelling, Postages, Telephones, etc.....	16,913.78	7,333.03	2,731.65	26,978.46
Interest and Exchange.....		448.85		448.85
Information and Records.....		874.41		874.41
Educational Work.....		7,532.69		7,532.69
Hospitality League Work in London.....		973.33		973.33
Expenses of sending workers Overseas.....	5,327.60			5,327.60
Amount paid to the British Y.M.C.A. for work among Canadian Soldiers.....		35,797.50	35,797.50	71,595.00
For work among troops in Mesopotamia.....	5,400.00			5,400.00
Cash paid in Canada for Purchases of Canteen and other supplies for France, still in transit.....			240,524.86	240,524.86
For work in Military Barracks, Hospitals, Discharge Depots, on Troop Trains, etc.:—	28,535.18			28,535.18
In Ontario and Quebec.....	27,350.31			27,350.31
In Western Provinces.....	15,753.62			15,753.62
In Maritime Provinces.....	14,463.25			14,463.25
For work on Transports, in Munitions Plants and Internment Camps.....	9,640.04			9,640.04
Naval work at Halifax.....	9,573.91			9,573.91
For work with Boys on Farm Service.....				\$3,795,406.39
Advertising, Printing, Organization and Collection Expenses in connection with Financial Campaigns.....				54,243.09
For General Work of National Council, part of which is Military Administration and the remainder National supervision of Territories, Boys' Work, Student, Industrial and Railroad Departments, funds for which were subscribed in conjunction with Military Funds by agreement of regular contributors.....				64,155.62
Balance of Receipts and Expenditures carried forward to 1918, of which \$118,351.43 was at National Headquarters, Toronto.....				415,848.87
				\$4,329,653.97

### AUDITOR'S CERTIFICATE

We have audited the books, vouchers and accounts of the National Council Headquarters at Toronto, and of the Central Territorial Division, for the year ended 31st December, 1917, and have been furnished with the audited statements of the Maritime and Western Divisions of the National Council for the same period. We have also been furnished with the Annual Statement for England for 1917, duly audited, and the Annual Statement for France for 1917 with the auditor's Certified Statement for the six months to June 30th. Owing, we understand, to Military restriction on civilian travel between England and France, it was impossible for the auditor to go to France and complete the audit to 31st December, 1917. We have agreed the Canadian and Overseas statements with the above General Statement, which combines them, and, according to the books and statements furnished, the above statement in our opinion, correctly sets forth the operations of the National Council at home and overseas.

OSCAR HUDSON & COMPANY,  
Chartered Accountants.

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## Questions and Answers.

### Miscellaneous.

#### Ants in House.

Is there any way to prevent black ants from getting into the house? W. G.

Ans.—It is sometimes very difficult to keep these pests out of the house. A search should be made for ant-hills in the vicinity of the house and when they are found they should be deluged with boiling water. The use of carbon-bisulphide will also destroy the ants, but this material is poisonous and must be used with care. When the ants are in the house they may be collected and destroyed by using a sponge on which has been deposited some syrup or other sweet material. When the sponge becomes filled with ants it may be dipped in boiling water.

#### Gains in Weight of Steers.

What gains should an animal make during the winter months? that is, when finishing them for the block? When feeding cattle in Scotland I had as high as 6½ lbs. gain in twenty-four hours, with three-year-old heifers. J. M.

Ans.—Six and a half pounds is an exceptionally big gain and we doubt if you could make the same gain the following twenty-four hours. From a pound and a half to a pound and three-quarters per day is the average gain for an animal to make from November until the following spring. Of course, it is possible to make a little better gain than this with certain individual animals.

#### Heating a Potato Field.

I am purchasing a piece of land in New Ontario. The soil is sandy loam and quite suited for growing potatoes but frosts are frequent in the locality. I was thinking of putting in a boiler on the north side of the land and putting pipes through the field, with small holes drilled in them so that on frosty nights I can fire up the boiler and drive steam through the pipes which will come through the holes and form a mist or fog which should prevent the potatoes being nipped by the frost. How many lines of pipe will be required in a field 20 rods wide and 60 rods long? What size of boiler will be required? M. G.

Ans.—The system outlined might prevent the frost from injuring the potatoes, but we doubt the practicability of the scheme. In the first place, with the present price of piping and labor the expense would run very high and it would take a good crop of potatoes to pay for the equipment. We are unable to give definite information regarding the size of boiler. The pipes should be about two rods apart to be of much benefit.

#### Removing Timber — Closing Road — Shore Roads.

1. A sold his timber to B, and contract called for B to have all timber off in five years. Time is up, and B has logs skidded on lake shore. Can A claim them? These logs are within sixty-six feet of water's edge.

2. Has township council any power to close a road without advertising it?

3. A put a fence across concession where it runs through his farm to lake shore. Neighbors put up a kick and he got the council to pass some kind of a by-law to close it, and has kept it fenced since. Can he be forced to open it?

4. What are considered navigable waters in Parry Sound District?

5. Does a man owning property along a lake shore own the timber to water edge? D. T.

Ans.—1. Probably not. B would not be held too strictly to the time limit fixed by the contract. If A intends to claim the logs he ought to notify B in writing to remove them by a certain date and that, in default, he would be considered to have abandoned them.

2. No; they are bound to publish notice if the proposed by-law for stopping up the highway, in manner prescribed by the municipal Act.

3. No; provided the proceedings taken by the council have been regular.

4. Write to the Provincial Secretary at Toronto respecting the particular body or stream of water about which you are concerned.

5. It depends upon the particular description of land contained in his deed, and the question cannot be answered without an inspection of such deed.



## Few People Know How to Make Tea!

One is served "boiled" Tea, "second-hand" Tea, and flavoured water; rarely does one obtain that real Tea—tasty Tea, that has been called the "Nectar of the Gods."

The way to get it is to buy Lipton's Tea and follow these directions in making it:

- 1—Always use an earthenware or china teapot.
- 2—Thoroughly warm the teapot by rinsing with hot water.
- 3—Put enough tea into the pot to suit requirements. Two teaspoonfuls of Lipton's is ample for five cups.
- 4—Always use freshly-drawn water, and have it briskly boiling when poured on the tea.
- 5—Allow the tea to stand not longer than five minutes.
- 6—Add cream and sugar to suit taste.

But be sure to get Lipton's, because it is the only **GUARANTEED QUALITY TEA**. Grown, blended, packed, and sold by the same firm.

No other firm can give this guarantee.

## LIPTON'S

TEA PLANTER, CEYLON

THE UNIVERSAL TEA

300 CUPS TO THE POUND

SOLD EVERYWHERE



## Lake Marie Farm Shorthorns

Herd Sire—Golden Hope, an Orange Blossom by the great Archer's Hope. We have several young bulls by him and four other 8 months calves by the R. O. P. sire St. Clare. All are priced to sell. We are also pricing a few fresh Dutch Belted cows and heifers. This breed although not well known in Canada are extra heavy milkers. Correspondence solicited.

LAKE MARIE FARMS, KING, ONT.

SIR HENRY FELLATT, Owner

THOS. McVITTIE, Manager.

### PINEHURST STOCK FARM

Young Shorthorn bull for sale, rising 2 years, of good dual-purpose type and out of a record cow—large size—good handler and sure getter. Will sell right to quick purchaser.

G. W. CARTER, Proprietor

R.R. No. 4, Ingersoll, Ont.

### MAPLE HALL SHORTHORNS

Present offering, 7 yearling bulls; One Cruickshank Duchess of Gloster. Five Cruickshank Butterflys. One Shepherd Rosemary. All pure Scotch, and extra good; also a few young cows with calves, and yearling heifers.

D. BIRRELL & SON, CLAREMONT, ONTARIO

### Dual-Purpose Shorthorns

—CROWN JEWEL still heads the herd. Present offering is 5 bulls, from 13 to 18 months. Prices from \$200 to \$250. Also some good breeding

emales, either bred or with calves at foot. All registered and priced to sell.

JNO. ELDER, HENSALL, ONTARIO

## GLENGOW SHORTHORNS

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

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

### Robert Miller, Stouffville, Ontario

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

Write for anything in Shorthorns. One hour from Toronto.

## IMPORTED SCOTCH SHORTHORNS

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

## SPRING VALLEY SHORTHORNS

Herd of seventy head, straight Scotch, good individuals. Headed by the great show and breeding bull, Sea Gem's Pride 96365, and Nonpareil Ramsden 83422. We have for sale four as good young bulls as we ever had, and a few females. KYLE BROS., Drumbo, Ont. (Phone and telegraph via Ayr.)

## BLAIRGOWRIE SHORTHORNS

I have females all ages and bulls of serviceable age. Worth while to come and see, or write, JOHN MILLER Myrtle Station, C.P.R., G.T.R. ASHBURN, ONTARIO

### ESCANA FARM SHORTHORNS

Five Bulls for Sale. One roan senior yearling; one choice twelve months white calf; by Right Sort (Imp.); one select, dark roan, ten months calf; one roan yearling, by Raphael (Imp.); one roan red yearling, for grade herd. Farm ¼ mile from Burlington Jct., G.T.R.

J. F. MITCHELL, Limited BURLINGTON, ONTARIO

### SEVENTY-THREE HEAD OF SHORTHORNS.

Four good young bulls of serviceable age; Nonpareil Ramsden =101081= and Royal Red Blood, =77521=, at the head of the herd. These young bulls range in age from 8 to 15 months, and are for immediate sale. They are out of good dams, which will bear inspection. Our cows and heifers will please, and you'll like the bulls. Also three extra-good grade heifers, from heavy milk-producing dams. James McPherson & Sons, Dundalk, Ontario

**DOUGLAS EGYPTIAN LINIMENT**



**Sure Cure For POISON IVY**

For Sale By All Dealers

DOUGLAS & COMPANY MFRS. TORONTO, ONTARIO

### Flintstone Farm

Breeders of Milking Shorthorn Cattle, Berkshire Swine, Belgian Draft Horses.

The misfortune that follows the unwise selection of animals for a herd need hardly be dwelt upon.

Certainly, if it was not economical to maintain an inefficient animal before the war, now it is uneconomical and unpatriotic.

Many men are buying the best pure-bred stock, who in a less critical time might have worked with animals of lower merit.

But in the present situation they do not care to chance even the trial of inferior animals for the sake of a temporary saving in the purchase price.

**DALTON**  
Massachusetts

### SHORTHORNS FOR SALE

Good animals of both sexes. Burlington phone and G.T.R. Jct. Radial every hour from Hamilton.  
**C. N. Blanshard, R. R. 2, Freeman, Ont.**

### Mardella Shorthorns

Herd headed by **The Duke**, the great, massive, 4-year-old sire, whose dam has 13,599 lbs. of milk and 474 lbs. of butter-fat in the R.O.P. test. I have at present two exceptionally good young bulls ready for service, and others younger, as well as females all ages. Some are full of Scotch breeding, and all are priced to sell. Write or call.

**Thos. Graham, R.R. No. 3, Port Perry, Ont.**

### "MAPLE LEAF FARM"

**SHORTHORNS SHROPSHIRE**  
**CLYDESDALES BERKSHIRES**  
**John Baker, R.No.1, Hampton, Ont. Bell Phone**  
**Solina, C.N.R., Bowmanville, G.T.R. and C.P.R.**

**Brownlee Shorthorns.** Offers a choice lot of young bulls, ranging in ages up to nine months, and sired by the Nonpareil bull, Royal Saxon. See these before buying elsewhere. Could also spare a few females. **Douglas Brown, Bright, Ont., R. R. 3, Ayr Station, C. P. R.**

### Locharbar Stock Farm

is offering two right good Scotch Shorthorn bulls, 12 and 18 months; a roan and a red; also some females. **D. A. Graham, R. R. 4, Parkhill, Ont.**

### Evergreen Hill R.O.P. Shorthorns

Herd headed by the R. O. P. bull, St. Clare. Nothing for sale at present.  
**S. W. Jackson, R. R. No. 4, Woodstock, Ont**

**GLENFOYLE SHORTHORNS**  
College Duke 4th in service—a high record son of Rothschild and Taylor's noted stock. Am offering young cows and heifers, bred to this great bull. Have a few bulls of breeding age on hand.  
**Stewart M. Graham, Lindsay, Ontario**

**Shorthorns and Shropshires**—We still have a few extra well covered shearing rams. Also a choice lot of ram and ewe lambs. Prices right. We can supply young bulls or heifers, both of which are from high-record dams.  
**P. CHRISTIE & SON, Port Perry, Ont.**

**Please mention this paper**

### Questions and Answers. Miscellaneous.

#### Wound on Fetlock.

I have a mare which got a rope around her fetlock and caused a raw surface, which has since cracked and now fails to heal. I bathed it with balsam of myrrh and am now using a solution of creolin. What treatment do you advise? **C. A.**

**Ans.**—Dressing the raw surface with one part carbolic acid to twenty-five parts sweet oil should effect a cure.

#### Registering a Calf.

How long after a cow is bred should she freshen in order that the calf may be registered? If she went three or four weeks over the nine months would the calf be eligible for registration? **G. L. P.**

**Ans.**—Nine months roughly speaking is the gestation period for a cow, but freshening may take place some time before or after the nine months is up. If a cow goes much more than three weeks over her time it is an indication that she did not conceive on the date booked and as a result was served at a later date. In registry a calf date of service and date of birth must be given. The progeny of a cow that goes slightly over or under the average gestation period may be registered.

#### Lymphangitis.

I have a 12-year-old mare weighing about 1,700 lbs. which has had two attacks of lymphangitis. She has been doing heavy work, and receives all the clover and timothy hay she will eat and also 5 quarts of oats three times a day. Are these attacks liable to recur and do they prove fatal? Can they be prevented by proper feeding or medicinal treatment? **D. R.**

**Ans.**—This trouble is usually brought on by too high feeding and lack of exercise. Unless precautions are taken, it is possible that the attacks may recur and the mare may be left with a chronically enlarged leg. Regular exercise and reducing the grain ration will go a long way in preventing a recurrence of the trouble. Care should be taken to reduce the oat ration on Saturday nights, or previous to when the mare is to have a day off work. Treatment for the trouble consists in administering a purgative followed by three drams nitrate of potash three times daily. Long-continued bathing of the limb with hot water, exclusion of drafts, and the application of a liniment followed by regular exercise as soon as the acute pain disappears are points to consider.

#### Colic in Horses.

I was working a three-year-old colt this spring when it took a severe attack of colic, and I had to send for the veterinarian who gave him a drench and left some tonic powders. The veterinarian lives about fifteen miles from our place. What could I have done to have relieved the trouble without calling the veterinarian? What is a good formula for tonic powders? **E. S.**

**Ans.**—There are two kinds of colic known as spasmodic and flatulent. The former is brought about by improper feed, sudden changes in feed, overfeeding, watering when overheated, or weak digestive powers. The latter may be caused by changes in feed, too much succulent and easily fermented feed, as green clover, frosted grass, etc. In the case of spasmodic colic, the patient will show uneasiness, stamping, pawing, throwing himself down, rolling, getting up, etc. The attacks are spasmodic and during the intervals the patient may appear normal. Treatment consists of drenching with a mixture of 1½ ounces each of laudanum, sweet spirits of nitre and tincture of belladonna in a pint of water. Repeat in two hours if necessary. With flatulent colic, the symptoms are much the same as those of spasmodic, but not so violent and the pain is continuous. Bloating soon occurs which is more noticeable on the right side. For this trouble drench with 2 to 3 ounces oil of turpentine in a pint of raw linseed oil, and if necessary repeat in two hours. In case the pain should be excessive, the same drench as for spasmodic colic might advisedly be given. A good tonic for a horse consists of giving a teaspoonful of the following, three times daily: Equal parts of sulphate of iron, gentian, ginger, and nux vomica. When toning up a horse he should be well fed and given plenty of exercise.

## Profit in Pork IF YOU FEED CALDWELL'S HOG FEED

If you are fattening a "batch" of hogs, or just one in your backyard to be patriotic and to enable Canada to send more bacon to the boys on the battle line, you should use **Caldwell's Hog Feed**.

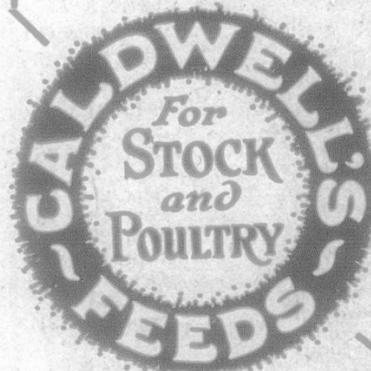
Use it in combination with water or skim milk. No other grain is necessary. It is a balanced ration in itself. You will find our **Hog Feed** supplies all body building elements necessary in a balanced ration, and for rapid development of solid flesh.

Caldwell's Hog Feed is uniform, strictly high grade and guaranteed as to its food content. The analysis is printed on every sack and directions for feeding are also attached.

Sold in any quantity from 100 lbs. up. Dealers everywhere handle Caldwell's. If they cannot supply you write us direct. Dept. 2.

**The Caldwell Feed & Cereal Co. LIMITED**  
Dundas, Ontario

Makers of all kinds of high class stock and poultry feeds. Write us for prices and literature on any food that you require.



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**SHORTHORN CATTLE**



are market toppers from baby beef stage to maturity, grow quickly, fatten rapidly, have high dressing percentage and abundant milking qualities.

**DOMINION SHORTHORN BREEDERS' ASSOCIATION**  
W. A. DRYDEN, Pres., Brooklin, Ont. G. E. DAY, Sec., Box 255, Guelph, Ont.

### Milking Shorthorns

The herd is composed of individuals with high milk records and of splendid beef conformation. Several bulls of breeding age, sired by Dominator 10629, one of the best bred bulls for milk in Canada, are now being offered. They are out of cows with records ranging from 8,000 to 11,000 pounds of milk in one lactation. Prices right.

**Weldwood Farm, Farmer's Advocate, London, Ontario**

### SHORTHORNS LANDED HOME

My new importation of 60 head will be at home to visitors June 20th, and includes representatives of the most popular families of the breed. There are 12 yearling bulls, 7 cows with calves at foot, 24 heifers in calf, of such noted strains as Princess Royal, Golden Drop, Broadhoka, Augusta, Miss Ramsden, Wimple, etc. Make your selection early. **Geo. Isaac, (All Railroads, Bell Phone) Cobourg, Ont.**

### SHORTHORN BULLS Will. A. Dryden

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

### SALEM SHORTHORNS

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

### Shorthorns

Herd headed by **Pride of Escana**, a great son of Right Sort. Several bulls and a few females with calves at-foot for sale. Herd of over seventy head.  
**A. G. FARROW (between Toronto and Hamilton), Oakville, Ont.**

### PLEASANT VALLEY FARMS

Present offering—A number of good young Scotch cows with calves at foot and rebred to (Imp.) **Newton Grand Champion**; also a number of 2-year-old heifers bred to same sire. Suitable for good herd foundations; priced to move them. Inspection invited.  
**GEO. AMOS & SONS, Farm 11 miles east of Guelph, C.P.R. MOFFAT, ONTARIO**

### WILLOW BANK STOCK FARM

**SHORTHORN CATTLE and LEICESTER SHEEP. HERD ESTABLISHED 1855—FLOCK 1848**  
The great show and breeding bull, **Browndale = 80112 =**, by **Avondale**, heads the herd. Extra choice bulls and heifers to offer. Also a particularly good lot of Leicester rams, mostly from Imp. ewes.  
**JAMES DOUGLAS CALEDONIA, ONTARIO**

### SHORTHORNS, SHROPSHIRE

Four richly-bred Lavinia females for sale. Grand lot of bull calves sired by **Lochiel (Imp.)** for next fall's business. Also nice bunch of Shropshire lambs, sired by **Miller ram**. Come and see them.  
**Wm. D. Dyer, R. No. 3, Oshawa, Ont. 2½ miles from Brooklin, G.T.R.; 4 miles from Brooklin, C.N.R., or Myrtle, C.P.R.**

### CREEKSIDE SCOTCH SHORTHORNS

Herd headed by **Gay Monarch 79611**; dam, **Sally 8th imp.**, and sire, the great **Gold Sultan 75411**. My present offering of young bulls includes several 7 to 14 months' youngsters, all thick, mellow well-grown fellows—reds and roans—and priced right. Can also supply females in most any numbers.  
**Geo. Ferguson, Elora Station, G.P.R., G.T.R., Salem, Ont.**

### NICHOLSON'S SHORTHORNS

We have about a dozen young bulls (ages 8 months and upwards), sired by our herd headers, **Best Boy = 85552 =** and **Browndale Winner = 106217 =**. Write or come and see.  
**R. and S. Nicholson, Parkhill, Ontario**

### FLETCHER'S SHORTHORNS

Our herd of Scotch Shorthorns represents **Orange Blossoms, Kilbean Beauties, Matchless, Mysic, Missie, Clementinas, etc.**, and is headed by the **Watt-Stamford bull, Victor Stamford = 95950 =**, a Toronto winner. Present offering—one young bull and several heifers and cows.  
**GEO. D. FLETCHER, ERIN, R. R. 1, ONT. Erin Station, C. P. R., L.D. Phone**

### One Way to Make Money

is to invest your savings in good Bonds, and so make the money you worked for, work for you.

The safest of all Bonds are the Dominion of Canada Bonds.

If you would like to see a Canada Victory Bond before you buy it, we will send one or more to your local bank, and you may pay us for them after inspection.

Decide now to buy, and you will never regret it. Interest commences from date of purchase.

Remember, Victory Bonds at present price yield around 5% interest, and that is surely better than keeping money idle or letting it earn only 3% on funds for which you have no immediate use.

And, remember, they are readily saleable and Free of Federal Income Tax. You can buy Victory Bonds at the following prices:

\$1,000 costs.....	\$995.00
500 costs.....	497.50
100 costs.....	99.50
50 costs.....	49.75

and accrued interest.

Larger amounts \$995 per \$1,000. Interest payable every six months at all Banks.

Mail us this advertisement with your name and name of Bank after first checking off the amount of bond, or bonds, you wish to invest in.

**Graham, Sanson & Co.**  
INVESTMENT BANKERS

Toronto General Trusts Building, Toronto



Ride a "C.C.M." Bicycle

#### "The Fifth Horse on the Farm"

A Bicycle will increase your profits, get you anywhere at a moment's notice, take you to town and back in record time, and enable you to do a better day's work every day. No cost for upkeep—no hitching or unhitching.

This Mark is Your Protection Every "C.C.M." Bicycle bears this design on the rear upright.



Look for These Nameplates All these well-known lines are "C.C.M." Bicycles. Write for Catalogue "E." Canada Cycle & Motor Co., Limited, Weston, Ont. Montreal Toronto Winnipeg Vancouver

Twice as easy as walking  
Three times as fast

### Cream Wanted

We supply cans. We pay express charges. We remit daily and guarantee highest market prices. For prompt service ship your cream to us.

Mutual Dairy & Creamery  
743 King St. W., Toronto, Ont.

### HOLSTEINS

1 bull, 2 years old; 1 bull, 18 mos. old, from a 23 1/2-lb. 3-year-old dam. One bull, 13 mos.; others younger.

R. M. HOLTBY, Port Perry, Ont.

### Dates of Fall Fairs 1918.

The following are dates of Fall Fairs issued by the Agricultural Societies Branch of the Ontario Department of Agriculture, Toronto, of which J. Lockie Wilson is Superintendent:

Aberfoyle.....	Oct. 1
Abingdon.....	Oct. 11 & 12
Acton.....	Sept. 24 & 25
Agincourt (Scarboro).....	Sept. 24 & 25
Ailsa Craig.....	Sept. 19 & 20
Alexandria.....	Sept. 10 & 11
Alfred.....	Sept. 24
Alliston.....	Oct. 3 & 4
Alvinston.....	Oct. 8 & 9
Amherstburg.....	Sept. 30 & Oct. 1
Ancaster.....	Sept. 24 & 25
Arnprior.....	Sept. 17-19
Arthur.....	Sept. 24 & 25
Ashworth.....	Sept. 27
Atwood.....	Sept. 17 & 18
Avonmore.....	Sept. 17 & 18
Aylmer.....	Sept. 26 & 27
Ayton.....	Sept. 18 & 19
Bancroft.....	Sept. 26 & 27
Barrie.....	Sept. 16-18
Baysville.....	Oct. 3
Beachburg.....	Sept. 23-25
Beamsville.....	Sept. 20 & 21
Beeton.....	Oct. 8 & 9
Belleville.....	Sept. 2 & 3
Berwick.....	Sept. 16 & 17
Binbrook.....	Oct. 7 & 8
Blackstock.....	Sept. 24 & 25
Blenheim.....	Oct. 3 & 4
Blyth.....	Sept. 23 & 24
Bobcaygeon.....	Sept. 25 & 26
Bolton.....	Sept. 30 & Oct. 1
Bothwell's Corners.....	Sept. 19 & 20
Bowmanville.....	Sept. 17 & 18
Bradford.....	Oct. 10 & 11
Bracebridge.....	Sept. 26 & 27
Brampton.....	Sept. 20 & 21
Brigden.....	Oct. 1
Brighton.....	Sept. 12 & 13
Brinsley.....	Oct. 8
Bruce Mines.....	Sept. 25
Brussels.....	Sept. 17 & 18
Burk's Falls.....	Sept. 26 & 27
Burford.....	Oct. 1 & 2
Burlington.....	Thanksgiving Day
Caledon.....	Sept. 27 & 28
Caledonia.....	Oct. 10 & 11
Campbellford.....	Sept. 24 & 25
Carp.....	Oct. 24 & 25
Castleton.....	Oct. 1 & 2
Cayuga.....	Sept. 24 & 25
Centreville.....	Sept. 14
Charlton.....	Sept. 17 & 18
Chatham.....	Sept. 17-19
Chatsworth.....	Sept. 12 & 13
Chesley.....	Sept. 17 & 18
Clarence Creek.....	Sept. 19
Clarksburg.....	Sept. 17 & 18
Cobden.....	Sept. 26 & 27
Cobourg.....	Oct. 1 & 2
Cochrane.....	Sept. 26 & 27
Colborne.....	Sept. 16 & 17
Coldwater.....	Sept. 24 & 25
Collingwood.....	Sept. 18-19
Comber.....	Sept. 17 & 18
Cookstown.....	Oct. 1 & 2
Cookville.....	Oct. 2
Cornwall.....	Sept. 5-7
Courtland.....	Oct. 3
Delta.....	Sept. 16-18
Demorestville.....	Sept. 28
Desboro.....	Sept. 19 & 20
Dorchester Station.....	Oct. 2
Drayton.....	Oct. 1 & 2
Dresden.....	Sept. 26 & 27
Drumbo.....	Sept. 24 & 25
Dryden.....	Sept. 26
Dunchurch.....	Oct. 4
Dundalk.....	Oct. 2 & 3
Dungannon.....	Oct. 3 & 4
Dunnville.....	Sept. 19 & 20
Durham.....	Sept. 24 & 25
Elmira.....	Sept. 20 & 21
Elmvale.....	Sept. 24 & 25
Embro.....	Oct. 3
Emsdale.....	Sept. 19 & 20
Emsdale.....	Sept. 24 & 25
Englehart.....	Sept. 19 & 20
Erin.....	Oct. 9 & 10
Essex.....	Sept. 17-19
Fairground.....	Oct. 1
Fenelon Falls.....	Sept. 13 & 14
Fenwick.....	Sept. 24 & 25
Fergus.....	Sept. 26 & 27
Feversham.....	Oct. 1 & 2
Flesherton.....	Sept. 26 & 27
Florence.....	Oct. 3 & 4
Fordwich.....	Oct. 5
Forest.....	Sept. 26 & 27
Fort Erie.....	Sept. 25 & 26
Fort William.....	Sept. 17-19
Frankford.....	Sept. 19 & 20

## Sydney Basic Slag

AND THE PRODUCTION OF FALL WHEAT

As we have now sold every ton of BASIC SLAG we can possibly deliver in Ontario in time for application to fall wheat, our advertising will be discontinued for the present. If, however, you would like to have a ton of our goods and do not know our local agent, drop us a line, and we will see that you are supplied. Even if you are using other fertilizers, with good success, it will pay you to get an experience of SYDNEY BASIC SLAG this season. What every farmer should look for is the best value for his money.

The Cross Fertilizer Co., Limited  
Sydney, Nova Scotia

## HET LOO PIETERTJE

THE \$12,750 HEIFER

Sold at the great Milwaukee Sale, was only one of the many daughters we have of our senior sire, Pontiac Korndyke of Het Loo. We also have sons—brothers to this world's champion heifer; and for the next few weeks, these, along with several other young bulls of serviceable age, are priced exceptionally low. Let us hear from you if interested—at once.

W. L. Shaw, Rayeroff Farm Farm on Yonge St., Toronto & York Radial, 1 1/2 hours from Toronto. New Market, Ont.

## Manor Farm Holstein-Friesians

If it's a herd sire you want, write me. I have sons of both my senior and junior sires, King Segis Pontiac Posch and King Korndyke Sadie Keyes. All are from good record dams.

Choice bull calves at present to offer—average for two nearest dams, up to 34.71 lbs. butter in seven days. Correspondence solicited, visitors welcome.

Gordon S. Gooderham Stations: Clarkson and Oakville Farm on Toronto and Hamilton Highway Clarkson, Ont.

## CHOICE BULLS—Ready for Service

No. 1—By a son of MAY ECHO SYLVIA His two nearest dams (both Canadian champions) average 35.62 lbs. butter in seven days. Price \$1,000.

No. 2—By a son of MAY ECHO SYLVIA. His two nearest dams (one a four-year-old) average 34.17 lbs. butter in seven days. Price \$600.

Some extra choice young bull calves, from \$200 to \$1,000. We have sold 37 bulls this winter.

HIGHLAND LAKE FARMS

R. W. E. Burnaby - Farm at Stop 55, Yonge St. Radial - Jefferson, Ont.

## Hospital for Insane, Hamilton

We offer bulls only for sale, but they are from some of the choicest cows to be seen in any herd, and bulls equal to the best.

—Apply to Superintendent

## SUMMERHILL HOLSTEINS

Present offering:—Two bulls fit for service, both show animals, with excellent breeding, will be sold cheap if taken at once.

D. C. FLATT & SON Long-distance 'phone R.R. 2, HAMILTON, ONT.

## Cloverlea Farm Holstein-Friesians

Offers for sale a choice young bull three months old, out of a 20.3-lb. dam. For price and extended pedigree write to

GRIESBACH BROS., COLLINGWOOD, ONTARIO

## DUMFRIES FARM HOLSTEINS

Cows for sale, bred to Plus Evergreen, son of Evergreen March,

S. G. & ERLE KITCHEN Bell 'phone. ST. GEORGE, ONTARIO

## SILVER STREAM HOLSTEINS

Present Offering—six extra well bred bull calves, sired by bulls with 34-lb. backing, and from tested dams, individually as good as their breeding. For fuller particulars and prices, write, or better come and see them.

J. MOGK & SON, R. R. 1, TAVISTOCK, ONTARIO

PIONEER FARM HOLSTEIN HERD

—the herd that produces champions—offers a very handsome, ready-for-service son of Canary Hartog. His dam a high-testing sister of Calamity Snow Mechthilde 2nd, the new Canadian champion three-year-old in R.O.P. Also bull calves from champions, and from dams' sisters and daughters of champions. Don't take time to write—come at once and see them for yourself.

WALBURN RIVERS & SONS, R. R. 5, Ingersoll, Ont. Phone 343L, Ingersoll Independent Line.

## EVERGREEN STOCK FARM... Registered Holsteins

Just now we are offering one choice yearling bull, ready for heavy service. The records of his five nearest dams average over 31 lbs. butter in 7 days, and over 100 lbs. milk in 1 day. We have also some high-record bull calves, including one whose dam and sire's dam have records that average 37.66 lbs. butter in 7 days and 127 lbs. of milk in 1 day. A. E. HULET, Norwich, Ont. Bell Phone 48-3

## Riverside Holsteins

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My present offering of  
HOLSTEIN BULLS

8 months and younger from Sir Gelsche Walker, whose 7 nearest dams average 30 lbs. butter in 7 days, and officially tested cows. Write for prices and full particulars.

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are the practical heavy load scale for the farm as well as for contractors, builders, hay and grain dealers or coal merchants. Fairbanks Wagon Scales are simple, accurate and fill every weighing requirement in

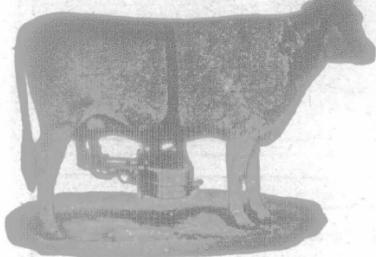
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Dovercourt Road, Toronto, Ontario

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We have bred over one half the world's Jersey champions for large yearly production at the pail. We bred, and have in service, the two grand champion Berkshire boars. If you need a sire for improvement, write us for literature, description and prices.

HOOD FARM, LOWELL, MASS.

**Choice Offering in Ayrshires**  
AT SPECIAL PRICES. Several young bulls of serviceable ages. All from R.O.P. sires and dams. Come and see them.

JOHN 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 Station, G. T. R.

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Established in 1900. One serviceable bull from Record Dam testing 4.64% fat; some choice young stock. James Begg & Son, R.R. 1, St. Thomas

Frankville.....	Sept. 19 & 20
Freelton.....	Thanksgiving Day
Galetta.....	Sept. 25 & 26
Georgetown.....	Oct. 2 & 3
Glencoe.....	Sept. 24 & 25
Goderich.....	Sept. 25-27
Gooderham.....	Oct. 3
Gordon Lake.....	Sept. 27
Gore Bay.....	Oct. 2 & 3
Grand Valley.....	Sept. 19 & 20
Gravenhurst.....	Sept. 19 & 20
Haliburton.....	Sept. 26
Hanover.....	Sept. 26 & 27
Harriston.....	Sept. 26 & 27
Harrow.....	Oct. 8 & 9
Harrowsmith.....	Sept. 19 & 20
Hepworth.....	Sept. 17 & 18
Highgate.....	Oct. 11 & 12
Holstein.....	Sept. 24 & 25
Huntsville.....	Sept. 24 & 25
Hymers.....	Sept. 24
Ingersoll.....	Sept. 30 & Oct. 1
Inverary.....	Sept. 11
Iron Bridge.....	Oct. 5
Jarvis.....	Oct. 3
Kagawong.....	Oct. 4
Kenneb.....	Oct. 2
Kemble.....	Sept. 26 & 27
Kemptville.....	Sept. 5 & 6
Kenora.....	Sept. 5 & 6
Kilsyth.....	Oct. 3 & 4
Kingston.....	Sept. 24-27
Kinmount.....	Sept. 12 & 13
Kirkton.....	Oct. 3 & 4
Lakefield.....	Sept. 17 & 18
Lakeside.....	Sept. 26
Lambeth.....	Sept. 25
Lanark.....	Sept. 12 & 13
Langton.....	Oct. 12
Lansdowne.....	Sept. 19 & 20
Leamington.....	Oct. 2-4
Lindsay.....	Sept. 19-21
Lion's Head.....	Oct. 3 & 4
Listowel.....	Sept. 19 & 20
Lombardy.....	Sept. 7
London (Western Fair).....	Sept. 6-14
Maberly.....	Sept. 25
Madoc.....	Oct. 1 & 2
Magnetawan.....	Sept. 24 & 25
Manitowaning.....	Sept. 26 & 27
Markdale.....	Oct. 8 & 9
Markham.....	Oct. 3-5
Marmora.....	Oct. 1
Matheson.....	Sept. 24 & 25
Mattawa.....	Sept. 25 & 26
Maxville.....	Sept. 26 & 27
McDonald's Corners.....	Sept. 27
Meaford.....	Sept. 26 & 27
Merlin.....	Sept. 19 & 20
Merrickville.....	Sept. 17 & 18
Metcalfe.....	Sept. 17 & 18
Middleville.....	Oct. 4
Mildmay.....	Sept. 16 & 17
Millbrook.....	Oct. 3 & 4
Milton.....	Oct. 8 & 9
Milverton.....	Sept. 26 & 27
Minden.....	Sept. 24
Morrisburg.....	Aug. 6-8
Mount Brydges.....	Oct. 4
Mount Forest.....	Sept. 18 & 19
Muncey.....	Sept. 26
Murillo.....	Oct. 1 & 2
New Hamburg.....	Sept. 12 & 13
Newington.....	Sept. 24 & 25
New Liskeard.....	Sept. 24 & 25
Newmarket.....	Sept. 25-27
Niagara-on-the-Lake.....	Sept. 26 & 27
Noelville.....	Sept. 17
Norwich.....	Sept. 24 & 25
Norwood.....	Oct. 8 & 9
Oakville.....	Sept. 16-18
Odessa.....	Oct. 4
Ohswekin.....	Oct. 2-4
Onondaga.....	Sept. 30, Oct. 1 ]
Orangeville.....	Sept. 17 & 18
Oro.....	Sept. 20
Orono.....	Sept. 26 & 27
Orrville.....	Sept. 25
Oshawa.....	Sept. 9-11
Ottawa (Central Canada).....	Sept. 7-16
Otterville.....	Sept. 26 & 27
Owen Sound.....	Sept. 10-12
Paisley.....	Sept. 24 & 25
Pakenham.....	Sept. 23 & 24
Palmerston.....	Sept. 18 & 19
Paris.....	Sept. 26 & 27
Parham.....	Sept. 17 & 18
Parkhill.....	Sept. 23 & 24
Parry Sound.....	Sept. 25-27
Perth.....	Sept. 5-7
Peterboro.....	Sept. 12-14
Petrolia.....	Sept. 19 & 20
Pictou.....	Sept. 17-19
Pinkerton.....	Sept. 20
Port Carling.....	Sept. 19
Port Elgin.....	Sept. 18 & 19
Port Perry.....	Sept. 26 & 27
Powassan.....	Sept. 25 & 26
Priceville.....	Oct. 3 & 4
Queensville.....	Oct. 8 & 9
Rainham Centre.....	Sept. 17 & 18
Rainy River.....	Sept. 10 & 11
Renfrew.....	Sept. 18-20

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19 West Street, Orillia, Ontario

**GLENHURST AYRSHIRES—ESTABLISHED 50 YEARS**  
For a half-century Glenhurst Ayrshires have been noted for their depth and size, good tests and smoothness of conformation. Our famous Fios family has produced dozens of 60 and 65-lb.-a-day cows, many on twice-a-day milkings. We have young bulls up to twelve months, and females all ages. If you are looking for a combination of size, type and production—plus high butter-fat—write me or visit the farm. JAS. BENNING, Summerstown, G.T.R.; Williamstown, G.T.R., Williamstown, Ont.

### RAVENSDALE AYRSHIRES

A few splendid 12-months-old bulls, out of R.O.P. and imp. high-testing dams. January test averaged 4.06%; also younger bulls and heifers. I have three registered Clydesdales for sale, eight months old. Write for prices or come and see stock. W. F. KAY, PHILIPSBURG, QUEBEC 50 miles south of Montreal. St. Armand Station, G.T.R.

## BRAMPTON JERSEYS

We bred and owned the dam, and imported the sire of the champion R.O.P. butter cow of Canada. We own the champion four-year-old R.O.P. butter cow of Canada. To make room for 1918 importation, expected to arrive in May, we are making special offerings of females and bulls, all ages.

**B. H. BULL & SON** BRAMPTON, ONTARIO

### THE EDGELEY CHAMPION HERD OF JERSEYS

Write us about your next herd sire. We now have sons of our present herd sire, Edgeley's Bright Prince, who is a son of Canada's champion butter cow, Sunbeam of Edgeley. Pay us a visit. Sunbeam of Edgeley is not the only high-record cow we have. We are pleased to show our herd at all times. JAMES BAGG & SONS (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONTARIO

### I HAVE FOR SALE JERSEY COWS and BULLS

Six cows at \$200.00 each; bulls from \$50.00 to \$100 each. T. HETHERINGTON, c/o 451 from Island Blood sires. Strictly guaranteed as represented. Aymer Street, PETERBORO, ONT.

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Imported Champion Rower at its head.  
**JERSEYS** This bull, with his get, won first prize on the island of Jersey, 1914, second in 1916, and again first in 1917. Present offering—A few yearling heifers in calf to our great young bull, Woodview Bright Prince, (7789), and bred from imported sires and dams. We show our work cows and work our show cows.  
**LONDON, ONTARIO**  
Jno. Fringle, Prop.

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**CHOICE BULLS AND FEMALES.** We have six young bulls of serviceable age, all from R.O.P. dams. Three are by our senior sire, Brampton Dairy Farmer, and three are by our junior sire, Brampton Bright Togo. Write for records. We also have females. J. & A. H. BAIRD (G.T.R. Stations—New Hamburg, Bright.) NEW HAMBURG, ONT.

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Besides my regular offering of ram and ewe shearlings, I have the three-year Clydesdale stallion, Cairnbroig Heir 18299. Write quick, don't wait. **W. H. PUGH, Myrtle Station, R. R., Ontario**

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

**Newcastle Herd of Tamworths and Shorthorns** Boars ready for service. Some bred and ready to breed; 2 splendid sows carrying their 2nd and 3rd litters. Boars and sows not akin ready to wean. Mostly descendants of Colwill's Choice, 3-year champion at Toronto Industrial, and Imp. Cholder-ton Golden Secret. A few nice Shorthorn heifers in calf, deep-milking strain. Young cows with calves at foot. Long-distance phone. **A. A. COLWILL, Proprietor, R.R. No. 2, Newcastle, Ont**

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Three importations in 1918. From the leading prize-winning herds in the U. S. Over 100 April and May pigs, by imported sires.

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

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Six large litters of young pigs, about ready to wean; pairs supplied, not akin. Write your wants to **G. W. MINERS, EXETER, ONT., R. R. No. 3.**

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Herd headed by the O. A. C. and Brethour's bred hog, Weldwood 93. Young pigs, either sex, 12 weeks old, for sale. Young sows, ready to breed, carrying the blood of the Toronto champion, Pine Grove Rover 4th. **MOSSIE BUNN, DENFIELD R. R. No. 4.**

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

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Our herd won all champion prizes at Toronto and London, 1916 and 1917. Pairs not akin. Young stock, all ages for sale. Visitors welcome. For further particulars write: **GULBERT MALOTT, No. 3, Wheatley, Ont.**

**SPRINGBANK CHESTER WHITES** Several young sows, ready to breed, and boars fit for service; young pigs, both sexes, ready to wean, by Sunny Mike—15917—, first at Toronto in 1917. Satisfaction guaranteed, inspection invited. **Wm. Stevenson & Son, Science Hill, Ontario**

**Featherston's Yorkshires**—The Pine Grove Herd I have the choicest lot of young sows of breeding age that were ever on the farm. A few are already bred. Also have 10 young litters. Prices reasonable. **J. K. FEATHERSTON, STREETSVILLE, ONT.**

A choice lot of

## Poland China and Chester White

swine, bred from winning stock. Pairs not akin. Prices easy. **Geo. G. Gould, R.R. 4, Essex, Ont.**

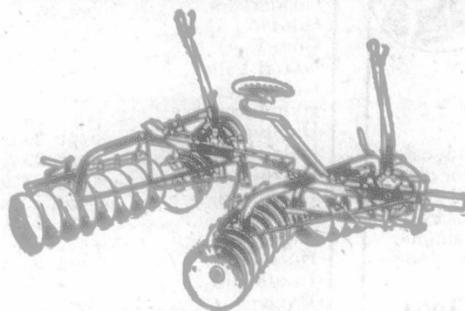
Riceville.....	Sept. 25
Richmond.....	Sept. 20 & 21
Ridgetown.....	Oct. 7-9
Ripley.....	Sept. 24 & 25
Roblins Mills.....	Sept. 20 & 21
Rocklyn.....	Oct. 4
Rockton.....	Oct. 8 & 9
Rockwood.....	Oct. 3 & 4
Rodney.....	Sept. 30, Oct. 1
Roseneath.....	Sept. 26 & 27
Rosseau.....	Sept. 16-18
Sarnia.....	Sept. 24 & 25
Sault Ste. Marie.....	Oct. 2-4
Seaforth.....	Sept. 19 & 20
Shannonville.....	Sept. 14
Shedden.....	Sept. 18
Sheguiandah.....	Oct. 1 & 2
Shelburne.....	Sept. 24 & 25
Simcoe.....	Oct. 7-9
Smithville.....	Sept. 17 & 18
South Mountain.....	Sept. 12 & 13
South River.....	Oct. 3 & 4
Spencerville.....	Sept. 24 & 25
Springfield.....	Sept. 19 & 20
Sprucedale.....	Sept. 23 & 24
Stella.....	Sept. 24
Stirling.....	Sept. 25 & 26
Stratfordville.....	Sept. 18
Stratford.....	Sept. 16-18
Strathroy.....	Sept. 16-18
Streetsville.....	Sept. 25
Sturgeon Falls.....	Sept. 18 & 19
Sunderland.....	Sept. 17 & 18
Sundridge.....	Oct. 1 & 2
Tara.....	Oct. 1 & 2
Tavistock.....	Sept. 30, Oct. 1
Teeswater.....	Oct. 1 & 2
Thamesville.....	Oct. 1 & 2
Thedford.....	Sept. 30, Oct. 1
Thessalon.....	Oct. 1
Thorndale.....	Sept. 23 & 24
Thorold.....	Sept. 16 & 17
Tilsonburg.....	Sept. 16 & 17
Tiverton.....	Oct. 1
Toronto (C. N. E.).....	Aug. 24-Sept. 9
Tweed.....	Oct. 3 & 4
Udora.....	Oct. 1
Underwood.....	Oct. 8
Utterson.....	Oct. 1 & 2
Verner.....	Sept. 24 & 25
Wallaceburg.....	Oct. 1 & 2
Wallacetown.....	Sept. 19 & 20
Walter's Falls.....	Sept. 24 & 25
Warkworth.....	Oct. 3 & 4
Warren.....	Sept. 17 & 18
Waterdown.....	Oct. 1
Waterford.....	Sept. 27
Watford.....	Oct. 2 & 3
Welland.....	Sept. 30, Oct. 2
Wellandport.....	Sept. 26 & 27
Wellesley.....	Sept. 10 & 11
Weston.....	Sept. 13 & 14
Wheatley.....	Sept. 30, Oct. 1
Wiaraton.....	Sept. 24 & 25
Wilkesport.....	Sept. 26
Williamstown.....	Sept. 19 & 20
Windham.....	Oct. 1
Windsor.....	Sept. 23-26
Wingham.....	Oct. 8 & 9
Wolfe Island.....	Sept. 17 & 18
Woodstock.....	Sept. 18-20
Woodville.....	Sept. 12 & 13
Wooler.....	Sept. 6
Wyoming.....	Oct. 10 & 11
Zurich.....	Sept. 18 & 19

## Gossip.

According to the seventh annual report of the Labor Organization in Canada, the Trade Union membership in the Dominion showed numerical strength at the close of the year 1917 of 204,630. There are in all 1,974 local branch unions in Canada, of which 1,702 are affiliated with international organizations. Montreal has the largest number of unions of any city, with Toronto a close second. Since the outbreak of the war in 1914, the report gives a total of 27,130 trade unionists in the ranks, of which the Province of Ontario supplied 9,807.

The first annual sale of the Berkshire County Berkshire Club, held at Flintstone Farm, Massachusetts, was a decided success. Fifty head made an average of practically \$81. This included a considerable number of pigs farrowed late in 1917 and up to March, 1918. Two hundred and thirty dollars was paid for Sterling R., a sow farrowed in March, 1917. She is a daughter of Master R., and out of Sterling Charmadale 3rd, tracing back to Masterpiece. The sum of \$400 was paid for the male pig, Red Cross Premier, farrowed in February, 1918. This pig was sired by Sensational Lord Premier 2nd, and his dam raised forty-five pigs in her first four litters. There were a number of sales made at prices ranging from \$100 to \$200.

# FORESIGHT ON THE FARM



Heavy types for use with tractors

## IN CHOOSING A HARROW INVESTIGATE THE GANGS

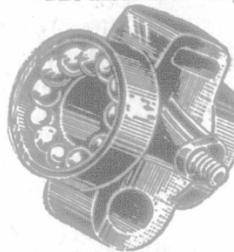
Whenever Disk Harrow gangs crowd, you have trouble. In most Out Throw Harrows they bump together, rock and sway; they are heavy on the horses and when the land is tough or hard, they rise out of the ground. Bissell Disks are a different construction from others. The gangs do not butt together. They have no rocking motion. The draught is steady and even. The team will travel faster, do more work and do it easier. Bissell Disks will work land which is too hard for any other make to handle and have wider field of usefulness. They do not fail where the most work is required.

The Cleaners are built of steel throughout, riveted to stay, and are operated by a locking device—No castings to break, no coil springs to get out of order.

The Bissell Scrapers are the only Scrapers on which the steel clod bars are moveable endwise by a lever, thus keeping the spaces between the plates free from clods. The cutting edges of the plates are kept clean by the steel blades.

### AXLES ON BISSELL GANGS

The axles are heavy—malleable nuts and washers are used so that the complete gang can be drawn up so tight that the axles can not spring or allow the disks to work loose.



The Bissell Bearing is a success. The body parts are all in one piece, manufactured without the use of bolts. No holes to break out. No crevices for dirt to work in. The journal being tapered, the pressure is toward the balls which are elevated on a heavy durable base. This is why Bissell Disk Harrows excel in light draught. The end of the bearing opposite the balls is protected by malleable rings or sand bands, making it impossible for dirt to enter.

The success of Bissell Disk Harrows is beyond dispute—only one is genuine—the one with the name Bissell.

**T. E. BISSELL CO. LTD., ELORA, ONT.**

## Use Power in the House as well as in the Barn

Runs by Motor or Engine. YOU know how much farm work is saved by electric motors and gasoline engines. Why not adopt the same idea in the house? Backaches from washing are out-of-date—successful housekeepers everywhere insist on washing machines, and the best idea of all is the power washer, because it does all the power itself and needs no attention whatever.



**Maxwell**  
Power Bench Washer  
—has proved itself a wonderful friend to others. Let it help you. It will even do the heaviest or daintiest clothes with no tearing or wringing! Handles the biggest or smallest wash, Pays for itself over and over! Made in three sizes. Write for particulars.  
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We have an unusually choice lot of shearing rams of both breeds to offer as flock headers and for show purposes. Inspection and correspondence invited.

**LARKIN FARMS (Please mention Farmer's Advocate) QUEENSTON, ONT.**

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ONE OF THE OLDEST ESTABLISHED FIRMS IN AMERICA

Although we have sold our farm at Arkell we are still in the sheep business, stronger than ever, having secured other land expressly for sheep.

PRESENT OFFERING:—100 yearling rams and 50 yearling ewes. Orders taken for ram and ewe lambs for later delivery. All bred from our own importations. Prices reasonable. Communicate to—

**Henry Arkell & Son, (Phone at present under name of T. Reg. Arkell) 70 Beatty Ave., Toronto, Ont**

## ELMHURST LARGE ENGLISH BERKSHIRES

From our recent importation of sows, together with the stock boar, Suddon Torredor, we can supply select breeding stock, all ages. Satisfaction and safe delivery guaranteed. **H. M. VANDERLIP, Breeder and Importer, R. R. 1, BRANTFORD, ONTARIO** Langford Station on Brantford and Hamilton Radial

# BERKSHIRES

My Berkshires for many years have won the leading prizes at Toronto, London and Guelph. Highcleres and Sallys, the best strain of the breed, both sexes, any age **ADAM THOMPSON, R. R. No. 1, STRATFORD, ONT. Shakespeare Station, G.T.R.**

## ENGLISH LARGE BLACK PIGS

We have some promising young stock from imported dam and sire of both sexes for sale. Large Blacks are greatly approved in England and will be a coming popular breed in Canada, and good for crossing. We also offer some young bulls from milking Shorthorns, imported stock. **LYNNORE STOCK FARM. F. WALLACE COCKSHUTT, BRANTFORD, ONT.**

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THE Viking Cream Separator costs you less but gives you more for your money. It has greater capacity than any other separator of equal rating. It skims to a mere trace. The Viking is easy running and simple to clean, strong and durable. Write today for the Free Separator Book.

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## VIKING CREAM SEPARATOR

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### EASTLAKE GASOLENE. COAL OIL ETC. TANK.

Don't be caught without Gasoline, Coal Oil, etc.—keep a good supply ready in an "Eastlake"—the "tank that never wears out". Made of highest quality, heavy galvanized iron. Double locked, riveted and soldered seam top and bottom; locked, riveted and soldered side seam. Two heavy corrugations, giving extra strength, are pressed *after* Tank is formed (our exclusive process). Screw cap on top for filling and half-inch brass faucet at bottom. Capacities 50 and 100 Imperial gallons. Write for "Storage Tank" booklet and prices to-day. 188

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Manufacturers Limited  
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When ready to sell, write us for prices or ship your wool in. We pay highest prices and make prompt returns. Try us.

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LIMITED  
Woodstock, Ontario

Skilled musicians—men and women who know all about pianos—will tell you that the

### Sherlock-Manning

20th Century Piano is undoubtedly *Canada's Biggest Piano Value*

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#### The Truthful Reader.

Dr. Alexander Meiklejohn, president of Amherst College, told a very pleasant story in his address to the graduating class at Haverford the other day.

It seems that President Lowell, of Harvard, had just published a new book, and had asked his publisher to send complimentary copies to some of his friends. By mistake, two copies of the book were sent to one gentleman, who promptly wrote to Dr. Lowell as follows: "Your new book reached me safely. I have read the first volume with great interest, and am now half-way through the second."

#### Something Sinister.

Dr. William H. Crawford, president of Allegheny College, said, on his departure to do war work at the front:

"Don't ask me for an interview. There's something sinister about an interview. It suggests that I'm never coming back."

"Yes, you make me feel almost as blue as the rich old fellow whose little nephew said:

"Uncle, will you please make a noise, like a frog?"

"Why, Willie!" said the rich uncle, laughing heartily, "why on earth do you desire me to make a noise like a frog?"

"Because," said Willie, "whenever I ask papa to buy me a pony or bicycle or anything, he always says, 'Wait till your uncle croaks.'"

#### What Annoyed Him.

A story is being told in France of a certain colonel, a strict disciplinarian, who has decided views on music. The other day he sent for the chief of his regimental band and delivered this scathing criticism: "I notice a lack of uniformity about the band which must be regulated. Yesterday morning they were out on parade, and the largest man in the band was playing a little bit of an instrument—flute or something of the kind—and you had the big drum played by a small man. That sort of thing doesn't look well, and must be attended to. I want the small men to play small instruments and the big men big instruments. And, another thing, I want the trombone players to slide their instruments in and out in unison. It annoys me to see them all out of step with their hands."

#### What Did the Curate Get?

A bishop of the Church of England had invited the clergymen of his see to a week-end party at the Episcopal residence. The guest of honor was a bishop from an adjoining diocese.

The first morning at breakfast, as the visiting bishop was about to crack the shell of his egg, he suddenly stopped, and, turning to the butler, who was standing at the back of the bishop's chair, he said, all the while holding his fingers tightly to his nose:

"Oh! my man! Take this egg away; the odor of it is atrocious. Take it away, please; take it away."

The butler, taking the egg in his hand and eyeing it closely, said, with great deference:

"My lord, a most regrettable mistake has been made. The stupid servant has given your lordship a curate's egg."

#### Looking Ahead.

A man had been lecturing his wife for exceeding her household expenses.

"I am afraid, my dear," he said, "that you do not practice economy."

His wife cast a contemptuous glance at him. "Come with me to the attic," she commanded.

He obeyed.

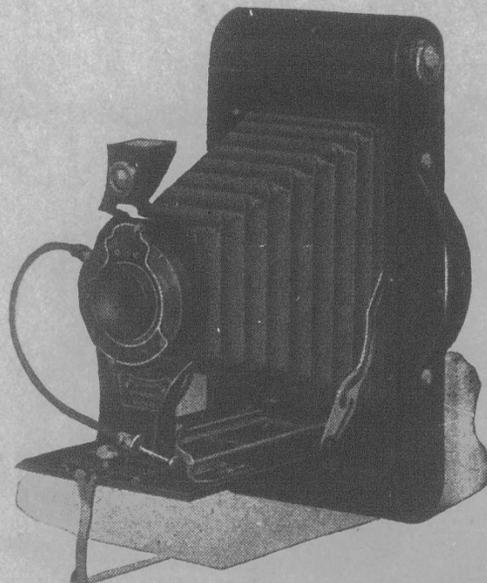
There she opened a trunk and took out a bundle wrapped carefully in tissue paper. Tearing off the wrappings, she disclosed a lovely filmy gown.

"That," she said, "is my wedding dress."

"And do you call it economy to save your wedding dress," he cried contemptuously. "That's not economy, it's sentimentality. It would have been economy to wear that dress and get the money's worth out of it. But lying here it is never likely to be of any use to you or anybody else."

"That's where you are wrong," she said calmly, "I am saving that dress for my next wedding."

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