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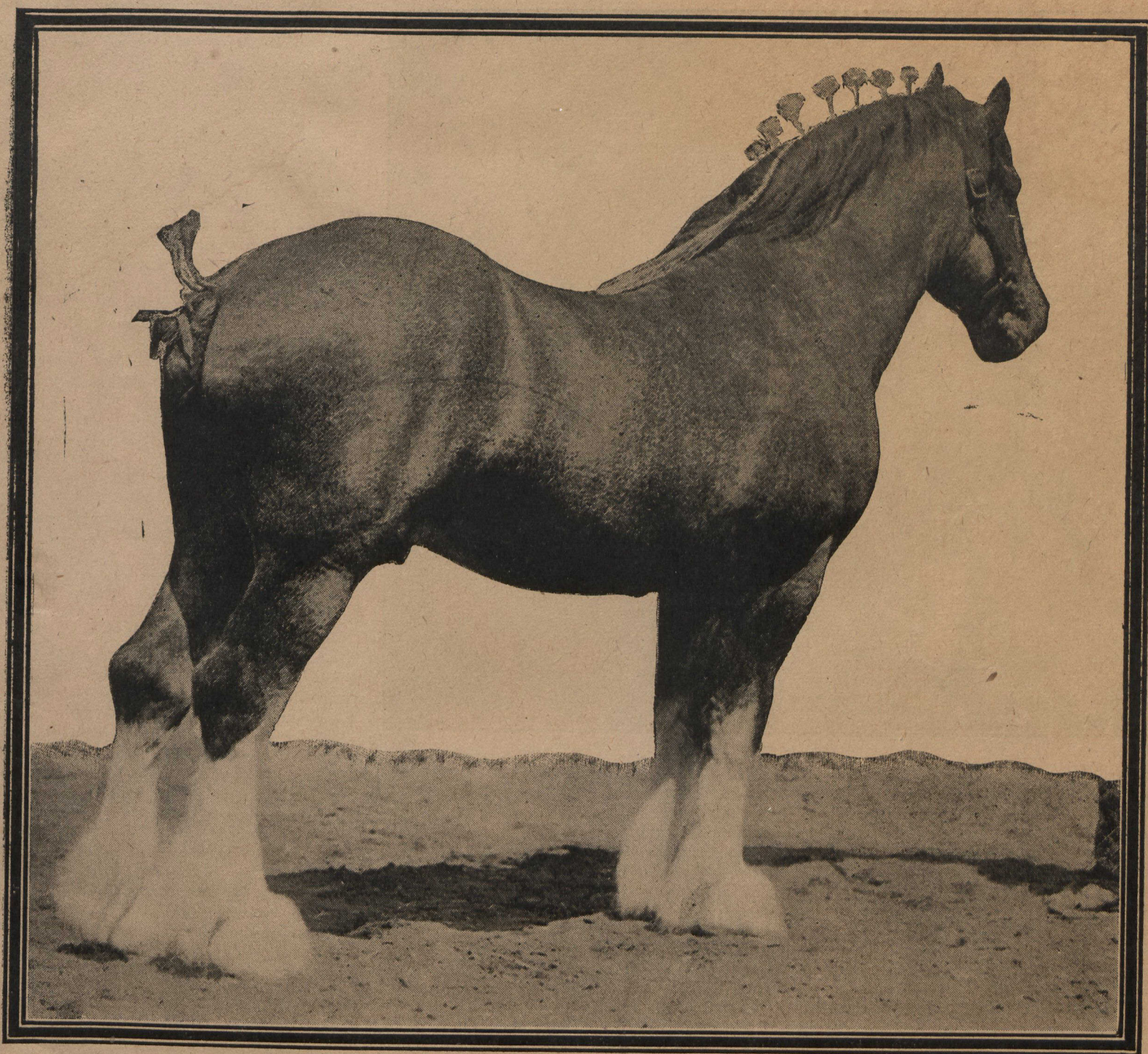
The FARM and RANCH REVIEW

AND THE COUNTRY HOME
THE MIDDLE WEST FAMILY MAGAZINE
Published on the 5th. and 20th. of Each Month

Volume XIV

CALGARY May 20, 1918 CANADA

Number 10



"EDWARD GARNET" 16578 (18900), MAY, 1909—SIRE, "ROYAL EDWARD" (11495) OUT OF "LADY GARNET" (14636), BOTH SIRE AND DAM BEING BY THE CHAMPION "BARON'S PRIDE" (9122)—IMPORTED BY BEN FINLAYSON, OLDS, ALBERTA—BEFORE IMPORTATION, THE WINNER OF NUMEROUS PRIZES IN SCOTLAND, AND SINCE COMING TO CANADA, A CONSISTENT CHAMPION AT THE PRINCIPAL WESTERN FAIRS—THIS HORSE, WHICH HAS BEEN DECLARED BY COMPETENT JUDGES TO BE ONE OF THE OUTSTANDING CLYDESDALE STALLIONS ON THE AMERICAN CONTINENT, HAS RECENTLY BEEN SOLD TO WM. LINDSAY, OF STROME, AND H. S. CURRIE, OF CASTOR, ALBERTA

CALGARY

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CANADA

THE SCIENCE OF SUMMER TILLAGE

The belief that cultivated land needed an occasional rest was doubtless responsible for the practice of "summer fallow"—a practice that is nearly as ancient as agriculture itself and which is still followed by the non-progressive farmers in every community.

The Fallow Field.

The fallow field was a familiar division of the old-time farm and the manner of treatment given this fallow field was a pretty good index of the disposition and intelligence of the farmer. But do not get the idea that this practice was confined to "old fogies" or to the less intelligent farmers in the community. On the contrary, it was taught by the agricultural experts, and in many agricultural bulletins you may still find "summer fallow" in the regular schedule of crop rotation.

The practice of summer fallow varies not only with the disposition and intelligence of the in-

BY RICHARD A. HASTE, EDITOR CAMPBELL'S
SCIENTIFIC FARMER

increased yield was due to this natural fertilizer coupled with the theory of weed fertilization in the practice of summer fallow. No one seemed to realize that weeds, being voracious feeders, take more from the soil while growing than they can possibly give back. No one seemed to remember that the principle of compensation—that you can't get something for nothing—applies to soil culture as well as to trade.

Aside from the eradication of weeds and a slight improvement in the tilth of the land owing to a very small addition of humus from the weed crop, the old process of summer fallow is of little or no value in farm management. In the light of modern scientific methods it is difficult to realize how the old-time farmer came to believe that a crop of grain

shelf with the other dust-covered curios—it is useful only as an index of agricultural progress.

Summer fallow, however, had some value depending on the soil conditions. If a field had become foul with noxious weeds, a plowing in mid-summer before the growth had time to mature would make the cultivation of the next year's crop a much easier task. The yield was likely to be somewhat greater because of the destruction in mid-season of all plant growth, resulting in a slight accumulation of plant food in the soil. If the summer plowing was timely and had been well done, it would perhaps result in a larger and better distributed supply of moisture in the subsoil.

Crop-sick land doubtless was benefited to some extent by the summer fallow. The change in plant growth and the exposure to the elements would naturally assist in clearing the soil of toxic poisons. The theory that the old practice of turning under a crop of weeds benefits the land by adding plant food is, to say the least, questionable. That it adds a slight amount of humus to the soil may be true, but with most soils the game is not worth the candle. This brings us to the subject of cover crops, green manure and humus, each of which will be fully discussed in another place.

Summer Tillage.

We, therefore, will pass to the discussion of summer tillage, a process totally different from summer fallow but which, owing to a lack of definite knowledge of the principles involved, is often confused with summer fallow, many careless writers using the terms interchangeably. The student of scientific tillage is, therefore, cautioned to scan carefully whatever he reads about summer fallow and summer tillage, keeping in mind always the radical difference.

While the essential scientific principles underlying the theories of summer tillage are old, their application is comparatively new. Coming as it did in response to the call of the semi-arid west, the prevailing idea is that summer tillage applies only to the regions of insufficient and unreliable rainfall. Although its application to the conditions of the more humid sections has not been fully proved, yet from results of the application of the principles in the semi-arid sections it seems reasonable to predict that the practice will prove of great value under any and all conditions of soil and climate, especially where fertility has become depleted.

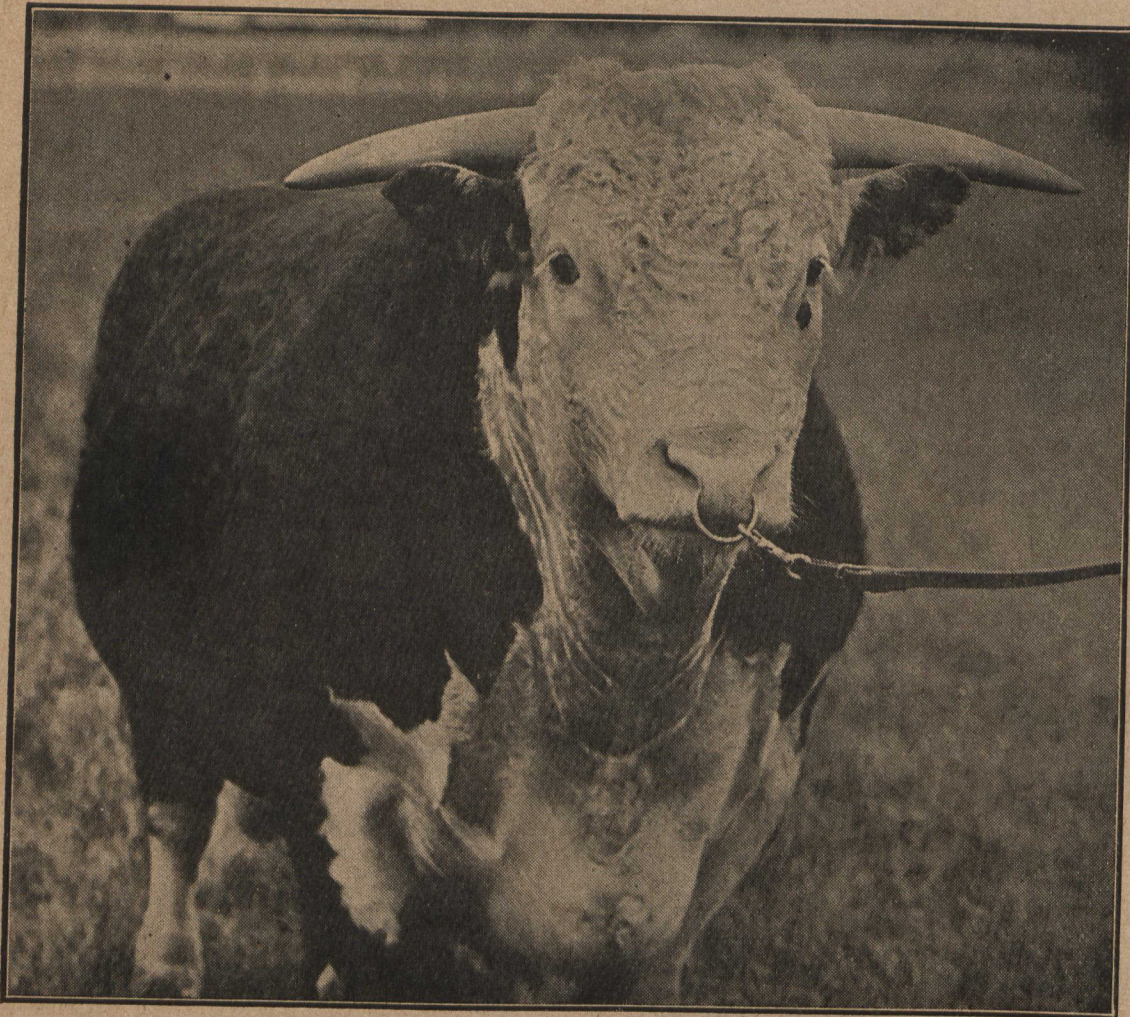
Advantages.

That readers may observe and understand the wide difference between summer fallow and summer tillage we will state briefly the objects sought to be obtained by the latter. First, an increased yield far above what is considered a good crop, not only every second year as is popularly supposed, but when the system has once been applied and the moisture of the soil and sub-soil got under control a bumper crop may be expected each year as long as the water content can be kept at the optimum, providing always that the work in the preparation and tillage of the soil is properly done. Second, the insurance of the crop against failure through drouth. Summer tillage when properly carried out under reasonably favorable conditions is an absolute guaranty against crop failure in drouthy seasons. This is brought about by the storage in the soil of a large amount of the annual precipitation, which is so held that it is made available not only to the plant when needed, but becomes so thoroughly charged with plant food in solution that it becomes possible to carry a crop through a long period of drouth with much less water than would otherwise be required.

Conditions.

The foregoing are the primal objects of summer tillage, but these objects can not be attained by haphazard methods. There are certain conditions that must be carefully observed and their meaning understood if good results are to be secured. The storing and conservation of water is of vital im-

(Continued on page 544)



A TYPICAL "WHITEFACE"

dividual farmer, but with the custom of the community. Here is a farmer who is convinced that his land is tired and needs a period of rest, so he allows his field a complete vacation—abandons it for a year or two to a riot of weeds and native grass; here is another, a shade more thrifty, who lets a field lie fallow but uses it as a pasture for his sheep and young cattle. The grass and weeds are therefore kept closely cropped. Here is another who has a field infected with some persistent weed; being thrifty and something of a thinker as well, he not only pastures his fallow field but plows it in midsummer to destroy the obnoxious weeds by exposing their roots to the summer sun before they have had time to seed. His neighbor did the same, but this field had not been pastured, consequently a rank growth of weeds was turned under before they had time to seed. The result was a slightly increased yield in the next year's crop in both cases. The conclusions, however, regarding the cause of this increased yield were totally different. The first one concluded that the result was due to the rest given the land and the further fact that grass and weeds were kept down. The other was sure that the result was owing to the turning under of the crop of weeds—that this acted as just that much manure and the

was harder on his soil than a crop of weeds. But he did believe it, and many still believe it, in a sort of unthinking way.

A complete revolution in the methods of handling the fallow field has taken place within the last ten years. Clean cultivation intelligently applied, has superseded the old method. This practice has become known as summer tillage and is as different from summer fallow in object, principle, and practice as success is from failure.

Summer Fallow.

Before going further into the subject let us clearly understand what was claimed for summer fallow and what advantages, if any, it had over constant cropping.

The theory that land under cultivation, like a tired work animal, needed a period of rest, failed under the test of investigation. It was found that an exhausted field under certain conditions might require extra food—manure, or an application of some mineral substance in which the soil seemed deficient, in order to secure normal yields, but to allow it to rest for the mere sake of resting was on a par with the practice of planting potatoes in the moon. We, therefore, will put the "rest" theory on the

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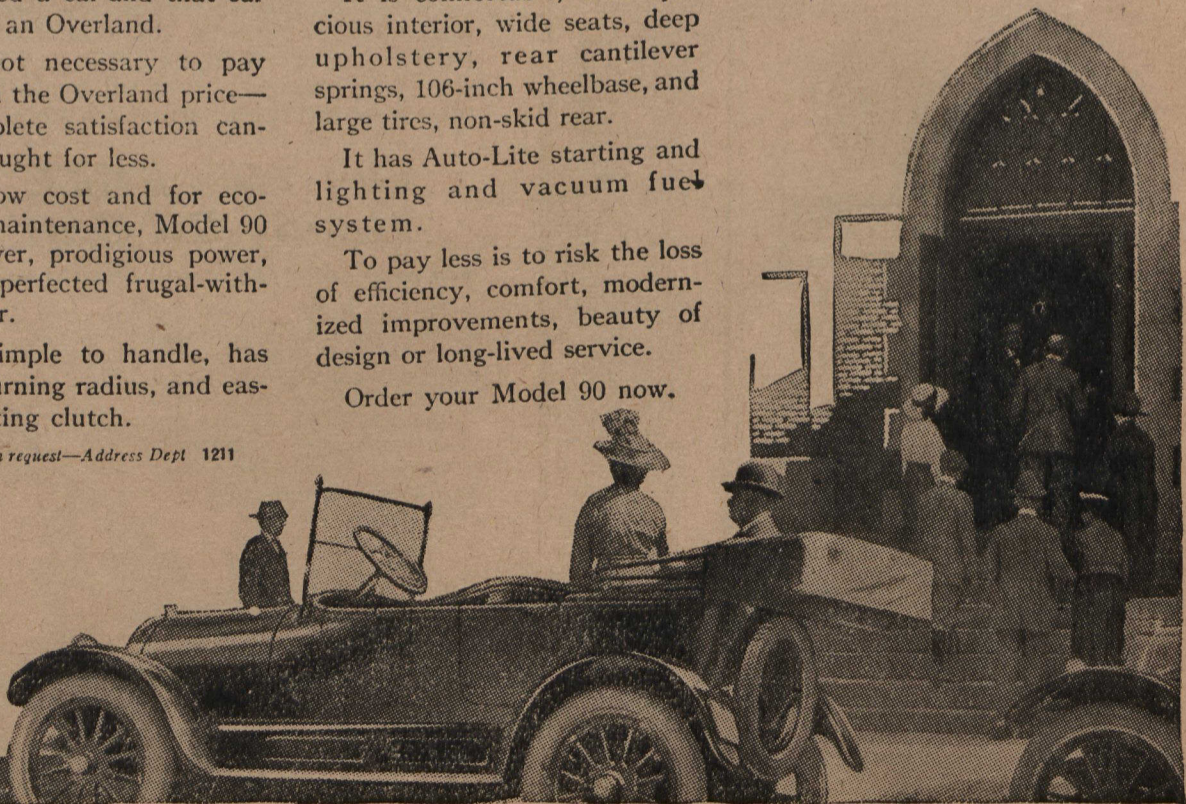
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Farm and Ranch Review

Volume XIV

CALGARY May 20, 1918 CANADA

Number 10

FARM AND RANCH REVIEW

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M. D. GEDDES,
Managing Editor.

AUSTIN SCOFFIELD,
Field Editor.

ANNIE A. GENGE,
Editor Home Department.

EDITORIAL

We cordially invite farmers to write us on any agricultural or economic subject. We ask our correspondents to bear in mind the following rules:

1. Contributions sent to us should not be furnished other papers until after they have appeared in our columns.
2. Letters intended for publication should be written on one side of the paper only. In every case the full name and Post Office address must be given, but need not be used if so desired.
3. The regular rate paid for practical articles accepted by us is ten cents per inch printed matter, unless special arrangements have been made.
4. Manuscript rejected by us will be returned to sender if self-addressed and stamped envelope accompanies the communication.

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Advertising Manager

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CALGARY, CANADA

EDITORIAL

ALFALFA ON THE SICK LIST.

Alfalfa seems to be falling down rather hard in Alberta. Evidences that it is not being grown as extensively as it should be, come to hand from many quarters, and it appears that an "alfalfa revival" is badly needed.

As in all other things, there must be a reason. Possibly indiscriminate advice to intending settlers is responsible for a portion of the present unpopularity, though this is only a suggestion. Broadly speaking, alfalfa is an irrigation crop in this country, but we know that many farmers just newly located were told that it would grow almost anywhere without water, and in some cases that it would produce two or three crops every year for a decade once it became established.

Misinformation of this kind has been responsible for general failure of the crop in many sections where conditions were entirely unsuited to its culture. Alfalfa is a most tenacious crop if raised under the proper environment, but unless the land is irrigated, or sub-irrigated by nature, it fails in the majority of cases; and, if the seed is not genuinely hardy, it will winter-kill, whether irrigated or not. As a matter of fact, failures on irrigated land have not been uncommon. Alfalfa will not thrive on "wet feet," and where the sub-soil is not sufficiently porous to allow the water to penetrate, souring occurs and the plants die.

But if the truth were known, the bulk of the trouble with this greatest of fodder crops in Western Canada has been the seed. Much of the seed peddled throughout the country in the past has been anything but hardy. It was sold as "Grimm," but had no relation whatever to the real Grimm variety.

While it is doubly difficult at this time to insure an adequate supply of good seed, something should be done by either the Provincial or Dominion Government looking to a reasonable supply of good, hardy seed that will stand up under our rigid conditions of climate, and the quicker these steps are taken the better it will be for all concerned. Alfalfa is too valuable a crop to be passed up for the reasons mentioned.

DON'T FAIL TO DIP.

No serious-minded sheepman will go through the year without dipping his flock at least once. It is impossible for sheep to make any progress when they are covered with ticks and lice which annoy them day and night. And it would be difficult to estimate how much feed is wasted, and how much flesh is lost when ticks are present in a flock. It is certain, however, that a great portion of the feed consumed goes to support these pests. They live from the blood of the animal, and the blood so lost must be restored through the feed. In these times of high feed cost, it is doubly important that all parasites be eliminated, and this applies to cattle and other animals as well as to sheep.

In dipping sheep for ticks, although it is an important consideration to secure immediate destruction of those parasites which are alive in the fleece at the time of dipping, it is even more important to achieve the destruction of the young ticks which subsequently issue from the pupa cases, or "eggs." A dip which kills only the live ticks and does not last long enough in the fleece to destroy the ticks which hatch out after dipping cannot possibly yield effective results. In buying dip see that it complies with this condition, and also that it has no detrimental effect upon either sheep or wool. Prepare now to dip your flock immediately after shearing.

MORE ABOUT HORSE FLESH

In our Christmas issue we had an editorial entitled "Horse Flesh—A War-Time Measure," and since then we notice many individuals and papers have been discussing this important subject quite freely.

George Hoadley, M.L.A. for Okotoks, a well-known Alberta horseman, is a strong advocate of converting Western scrub horses into human food. He has gone so far as to take this matter up with the Food Board at Ottawa, and one of the excellent suggestions he makes is to feed it to German prisoners. It is well known that the people of France, Belgium and Germany are quite accustomed to horse flesh.

In discussing his interviews with members of the Food Board, Mr. Hoadley said:

"I found that they had the general idea that there is no large supply of horse flesh available in the West, and they were considerably surprised when I gave some figures concerning the numbers of scrub stock available for meat use. They asked me to forward them detailed information on the subject, and I am going to get at it immediately."

A prominent American writer recently said: "Sentiment alone is responsible for the prejudice against horse meat for food in this country.

"In certain European countries horse meat has long been eaten, and in face of the present shortage of meats, the horse may be a practical solution of the problem. The horse is cleanly in his habits, particular in the selection of foods, has very few communicable diseases and lives on a vegetable diet. He is not subject to tuberculosis,

as are cattle and hogs. His meat is sweet, wholesome, and in competition with other meats, is sought at the same price, in countries where it is not barred by sentiment.

"There is a world shortage of meats. Why not open markets for the sale of horse flesh for food?"

Those who read our recent editorial will remember this is all in accordance with it; and, further, we pointed out the advantage to horsemen, if the undesirable animals were thus weeded out, and the great benefit which would accrue from the utilization of the hides for leather. Then, in every large city, there are many cases annually where young fat horses are injured by falling on slippery pavements. Such animals should be slaughtered at once for food.

It is far more humane to slaughter the old family horse for food than to sell him for five or ten dollars to a huckster who will half starve and mistreat him for a year or two and then turn him out to die.

We are not advocating breeders to produce horse flesh primarily for human consumption, but to use the misfits, undersized and blemished animals we already have to help relieve the food shortage.

THE CONSEQUENCES OF A RUTHLESS WAR

Germany is well versed in the science of war. Her war machine was geared up, oiled, and ready for operation in August, 1914. No other war machine was in such perfect order. The wonder is not that she did so well at the start, but why she failed to get through to Paris; why she broke down at the Marne. She chose the time and planned the stroke with true German thoroughness. Belgium and France were almost subject provinces before they had time to load their guns. The world never before faced such an emergency, but it rose to the occasion with a resolution which sets a new standard of national and racial sacrifice.

And yet to-day, after over three and a half years, the militarists in Germany seem as firmly fixed in the saddle as ever. Their hollow and deceptive victories over democracy in Russia have persuaded them that Might is indeed Right. Having taken the sword to impose their creed of Teutonic kultur upon the world, and having gained the semblance of initial victory, they show themselves prepared to rely upon the sword to the bitter end.

It is true they have gained, for the time being, a considerable area of territory, but stop a moment and ponder what Germany has lost!

To put it briefly, she has lost her high seas commerce, therefore, her foreign trade.

She has lost her last colony, with the successful conclusion of the East African campaign.

She has lost the respect and confidence of most of the nations.

She has lost her former leadership in many realms.

She has lost her monopoly of the dye trade.

She has lost many of her patent rights, that were once a source of great wealth.

She has lost her supply sources of many raw materials that are essential to her industrial life.

She has lost millions of her sons.

And worst of all, for the time being at least, she has Nationally lost her soul.

SMILES WITH THRIFT.

In every smile there is a good punch. There is nothing in a grouch but waste. Waste breaks down instead of building up the country, and nothing should be encouraged except that which builds.

In all walks of life there should be practiced an economy which conserves yet does not weaken. In the administration of the public affairs of our state every dollar necessary to public service, intelli-

gently and economically administered, should be provided, but not one penny for purposes unnecessary.

Needless expenditures drain the people's substance. In this hour of our country's need our public officials should take prompt action looking to the elimination of every condition or influence operating against highest efficiency, whether it be of man-power, food-power or other of the state's resources.

We who remain at home have a task to do, much less exacting than have the boys in the trenches, it is true, but no less important nor imperative. If we are sincere we will chance nothing upon waste, an insidious enemy at home, while our country needs our full strength abroad. And the more cheerfully we go about our task, the lighter it will be and the more we will be able to do. Then, too, it will be more agreeable to our own consciences.

Let us "cut out" waste and "cut in" more thrift and smiles. In each of these later there are good stiff punches and our country needs punches ringing good and true.

VALUABLE ADDITION TO "REVIEW" STAFF.

Our many readers, and particularly the livestock men, will be pleased to know that Mr. C. M. McLennan, formerly of the staffs of the Lethbridge Herald, Nor' West Farmer and more recently agricultural editor of the Calgary Herald and Alberta Farmer, has joined the "Review" staff.

In addition to these positions, Mr. McLennan was for some considerable time managing-editor of "The American Sheep Breeder and Wool Grower," so our sheep readers particularly will feel that from now on the "Review's" pages will be strengthened with up-to-date sheep lore. Mr. McLennan's early life was spent on the farm, after which he took a course at the Ontario Agricultural College, Guelph, before branching into his life's work—agricultural journalism. He has also had considerable experi-

ence in advertising and has joined the "Review" to take charge of that department, and, in addition, work off some of his surplus energy through the various editorial departments.

As already stated to many of our readers he is an old friend, and we predict, as others know him, this circle will increase rapidly.

REDUCING FIRE LOSSES.

Preventable fire is more than a private misfortune. It is a public dereliction. At a time like this of emergency and of manifest necessity for the conservation of national resources, it is more than ever a matter of deep and pressing consequences that every means should be taken to prevent this evil.—Woodrow Wilson.

Our annual fire losses that could be prevented are enormous. This is waste that the people of this country can ill-afford to sustain. Every dollar's worth of wealth destroyed means a dollar less for the people who are to sustain a war to defend their homes.

While we hear of destruction of homes and other property in cities and towns and are often appalled at its magnitude, it is a fact that millions of dollars in homes, barns, crops and livestock are consumed in preventable fires on farms every year. Farmers have very poor facilities for controlling fires as a rule. Without water under pressure it is a very difficult matter to protect the farm buildings in case fire starts from an accident unavoidable. For this reason, the greatest possible precaution should be taken to prevent fires.

One of the first things needed is usually a ladder, so make it a practice to have one or more handy. A good fire extinguisher is another timely precaution, and when used promptly, when a fire is just starting, gives excellent results. Having the buildings a fair distance apart, and keeping straw and rubbish away from barns, sheds and granaries, as much as possible, makes it easier to keep fires from spreading.

The practice of erecting fire-proof buildings and

using materials more nearly fire-proof is a wise and economical plan. The first cost of such structures may be more, but in general the ultimate cost will be less and the insurance such buildings afford will be worth having.

PRODUCING ECONOMICALLY

It must be apparent to all who understand the condition in which the people of the world are placed on account of war that our nation, along with others, is being tested for patriotism, endurance and economic strength. How well we maintain our traditions and earn our right to demand universal peace at the close of the war time only can tell.

There is only one way to adjust our affairs and mobilize our resources to meet the needs of the present demand. That is for every individual to adjust his own business and put his affairs in such a condition that he can render the greatest possible service.

Every farmer, regardless of higher prices for what is produced, should strive to reduce the cost of producing crops and animals. Food for the people is now of paramount importance and it is the duty of every individual to reduce the cost of service to a minimum. The producer has his responsibilities as well as the dealers, the transportation companies and the consumer. The time has come when every individual should search his own work and see whether or not he is giving economic service.

Those who prepare our food products from the raw materials are being asked to give better service at less cost. In most instances manufacturing plants are responding readily to this request. This is commendable. Let farmers strive to produce as economically as possible and exact no more for food and feed than is just under existing conditions.

As citizens of a just nation we must maintain our honor and that of democracy and Christian citizenship.

Some Pointers Regarding Shearing

BY C. M. McLENNAN.

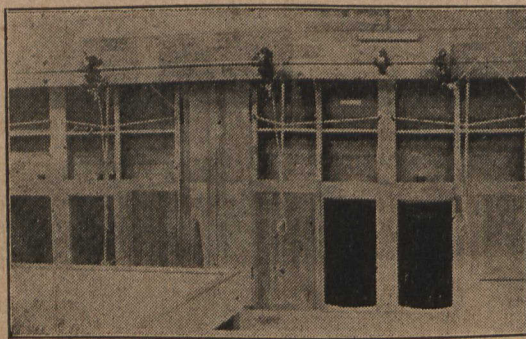
Of prime importance to the war cause is the question of wool supply. Some authorities have gone so far as to say that wool will win the war. That is a rather sweeping declaration, but nevertheless the army that is best clothed will have the advantage, other things being equal. Men cannot stand the rigors of trench life in rough weather without ample protection, and wool is the only commodity that gives satisfaction. Substitutes have been tried and found wanting. The German army appeared in a new outfit of uniforms on the eve of the big offensive, but the fabrics were industrially very inferior. They were 40 per cent. paper, 40 per cent. cotton and 20 per cent. wool, and while they may have had a psychological effect for a few hours, they could not stand the gaff of war, and in the end would prove a poor investment, notwithstanding the type of mind of the wearers.

Germany's position with regard to wool is one of the most vexing with which the "All Highest" has to cope. The Kaiser would almost give his birthright for an ample supply of this commodity. He has access to very small stocks, and everything on hand at the beginning of the war was used up long ago. Even the mohair produced in Turkey has been fed to the maw of war, and the sheep and goat stocks of the central empires have been ravished unmercifully for food.

The allies have the advantage so far as wool supplies are concerned, but that does not signify plenitude. Consider that there are close to 60,000,000 less wool-bearing animals in the world to-day than in 1914, and the situation is readily grasped. In addition to that, much of the wool utilized in army fabrics is never recovered in the shape of rags to be used in shoddy trade.

Great Britain controls two-thirds of the world's wool production, but there are complications surrounding the transport and conversion of this wool into uniforms. South Africa, Australia, New Zealand and South America are a long way off, and the

shipping problem affects these countries in the same way as it does with foodstuffs. The North Atlantic route has got to be used in preference to longer ones, and the North American continent must supply as much wool and as many uniforms as is possible. England has her own army to look out for, and in addition must supply France to a large extent and Italy to a smaller degree.



A view of the shearing board at the Walcott shed, Wyoming. The dark spaces are the entrance to the chutes which lead to the tally pens. After the sheep is shorn, all the shearer has to do is turn the sheep loose down one of these chutes, which necessitates very little effort. The sheep then runs toward the light, out into the tally pen without any wrangling. The catching pens are kept closed by heavy swing doors, and the shearer cannot reach in and leg a sheep. He must enter the pen and catch the animal and lead it out to the shearing board. This guarantees against injuries.

Eliminate Waste.

Thus it is up to us to produce every pound of wool possible, and to exercise the greatest care at the shearing season this year in order that useless waste may be eliminated. With the lamb crop safely harvested, the next consideration will be the shearing of the fleece, and with a labor shortage staring us in the face every effort should be made now to see

that nothing that will contribute to conservation of energy and material is left undone. We are assured that fair prices will be paid, and we should guard against laxity in our methods, simply because the price is set. There should be no diminution in the movement for better methods of shearing and packing, and aside from the advantage that proper "system" will render to the cause of the allies, it will place us in a position to command discrimination after the war is over.

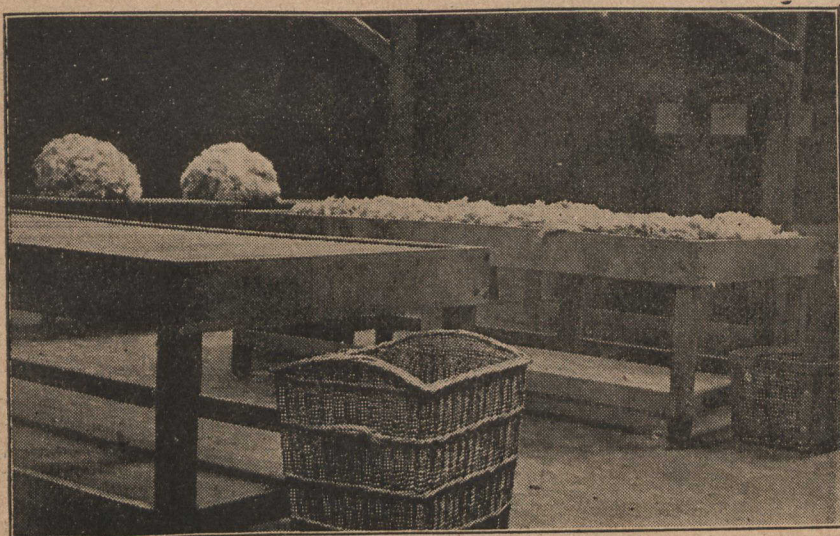
Australian Sheds.

It is most regrettable that more sheepmen could not have heard the addresses made by Mr. W. T. Ritch, the Australian expert, while in Alberta. Though it is generally agreed that we are not yet ready for the advanced methods practiced in Australia, we would be considerably ahead if we had a number of Australian shearing sheds in operation in the West. They have proven of inestimable value in Wyoming and Utah, and save many a hand at shearing time. For instance, the sheds themselves as well as the runways and pens, are so constructed that the sheep will practically wrangle themselves. There is SYSTEM in every board and nail, almost. Brain-work was utilized in the construction of every detail, so that unnecessary labor could be saved. One boy can wrangle sheep for a whole plant, where in the average shearing shed it takes a crew of kicking, yelling, swearing men, who bang the sheep around unmercifully. The same minute attention to detail is carried out in every department of the plant, and with the exception of the shearers and classers, the labor is done by agricultural college students.

How far would we be ahead of our present status if we had half a dozen of these sheds in Alberta? It is almost impossible to estimate.

The Shearing Board.

However, since we must work with what we have, there are a few general hints that may be of



Fleece unrolled on skirter's table; two rolled fleeces on classer's table. The baskets are to receive pieces and locks. Note cleanliness of the floor although shearing had been in progress for more than a week.



The sheepman's harvest. A view of the shearing board at the Bitter Creek shearing shed, built on the Australian plan. This is a 32 machine plant. Shaft runs overhead, with drop shaft for each shearer. The hum of the machines is now general throughout the south and central western states.

service, particularly to the beginner. A great deal of waste, and unnecessary hardship on the sheep follows careless preparation for shearing. In the first place, it is essential to have a dry, clean, well-lighted shearing board. The amount of wool saved by a solid floor would easily pay for its construction, and when laying such a floor don't fail to get the boards well matched so as not to leave big cracks into which tags and locks can be trapped. In selecting the place for penning the sheep, it is well to remember that a sheep will always travel toward the light. If the light can be so arranged that the last pen be the brightest, the sheep will wrangle with much less effort. The shearing pens should be at least 12 feet square, and the shearing board should be elevated slightly so that it will be more easily cleaned.

Machine Shearing.

Shearing with the blades is already an obsolete practice in most of the leading sheep countries, and while we are not fully prepared to recommend machine shears for use on range flocks unless shelter can be provided for the first night or two after shearing, we emphatically say that the machine is a thoroughly safe proposition for the farm flock, where shelter is invariably available. They are not only safe, but greatly to be preferred over the blades. They do a better job, are easier on the sheep as well as the operator, and will turn off a larger yield. Hand shearing is always a laborious task, and we have yet to see a crew of shearers that cares a "hang" how they treat the animals' hide and flesh. Their only consideration is the tally, and if a little hide is clipped along with the wool, the average shearer worries not at all. Of course, there are exceptions as in everything else.

The machines eliminate a lot of this butchery. It is not difficult to get into the hide with a pair of clippers, but once the operator becomes thoroughly familiar with his tools, injuries to the sheep are reduced to a minimum. It is easier to shear wool than it is to plow through flesh and hide with the machines, and it is to the shearer's own interest to avoid cutting the same if he would show a good tally.

Another feature of the machine shears that counts in times like these is the fact that they can

be used more readily by the novice. An amateur makes slow headway with the blades, but can pick up the machine with little trouble. This is a distinct advantage when labor is so scarce.

Where a flock of sufficient size is to be handled, a two or three machine plant, operated by a gasoline motor, would suit better than a single machine, and would save considerable time. For range flocks, multiple plants can be installed.

On the Range.

In regard to the use of machine shears on range bands, we believe that the majority of range sheep will eventually be sheared by machinery. Thousands of instances might be cited where machine shearing has resulted in wholesale losses. The late Captain Angle, who sold Stewart machines in every sheep country in the world, and who pioneered for the machine, probably witnessed more losses than any man who ever lived, but his faith in the clippers never once wavered. In the countries where they were condemned the loudest in the early days, they are now in universal use. The perfection of the Stewart-Elder thick comb practically guarantees against too close shearing, and we have personally witnessed shearing demonstrations with this comb, where a competent shearer left as deep a nap on the sheep's back as he desired, thus insuring ample protection to the animal in case of undue exposure from cold and storms. Much of the trouble with the machine in the past has been due to incompetent operators who did not understand how to adjust the knives and combs properly. Correct operation would guarantee against loss, and where shelter can be given the first night, machines will prove thoroughly reliable on large bands. The chief objection to them now is the high cost and difficulty in securing shipment.

Fooling the Wool Buyer.

After complete arrangements have been made to handle the wool in a cleanly and economical manner, the main thing is to see that buck, ewe black and yearling fleeces are sacked separately and so marked on the bags. It is hardly possible to imagine how a sheep man of the present day could put the tags in with good clean wool, but, for the sake of beginners, a word of caution may be

necessary. Skirt the fleece before rolling, and pull off all the dung and dirt locks. Remember that a wool buyer pays you only for the clean content of your clip, and if you think to deceive him by adding weight in the shape of dirt, manure, sand or other foreign material, you fool yourself, not the wool buyer. Your product will be depreciated, and you will be discredited the following year. A wool buyer buys wool, not dirt, and before he offers a price on your clip, he goes through it carefully to figure on the shrinkage. And, if there is any discrepancy in his estimate, it is usually in the buyer's favor, not the producer's.

Sweating the Sheep.

American shepherds make a practice of "sweating" their sheep previous to shearing. Specially arranged pens are constructed for this purpose though any sheltered place free from draughts will answer. Sweating gives the wool a "rise," renders the progress of the shears more rapid and less difficult, giving, as it does, a rise to the grease or yolk.

When the fleece falls from the sheep, see that the shearer does not kick it apart, as the fibers are torn and twisted in this way. Keep it as compact as possible, and avoid undue handling.

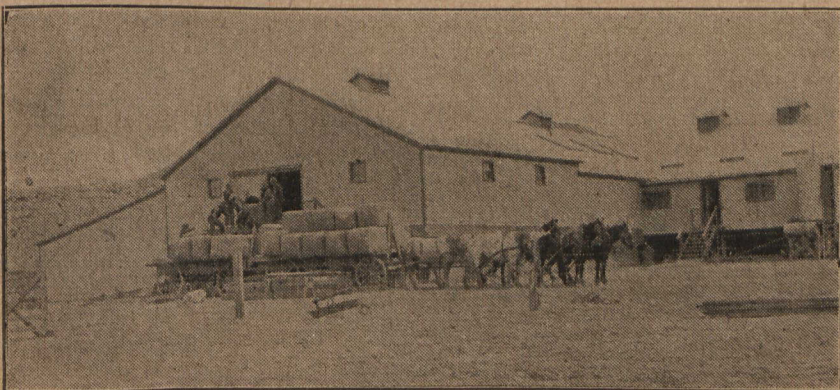
When tying the fleece always put the best side marketward. A well-tied fleece attracts more attention than that which is indifferently tied. It always pays to take a little care in folding and tying the fleece. On Western ranches wool is sacked in a loose condition. In the east the wool-box is generally used in tying the fleece. The edges of the fleece should be folded over toward the center (the ends also) and then rolled up from head to tail or vice versa as tightly as possible.

Sisal or binder twine should never be used in tying wool, for it causes a good deal of trouble to the manufacturer, as it will not take the dye, and pieces of it will show up as imperfections in the fabric.

Paper fleece twine is the proper material to use, for it dissolves in the scouring process.

Sacking.

In sacking, it is essential to have a properly constructed standard, high enough to give the bags a clearance of about two feet. The wool should



Pioneer Australian Shearing Shed at Rawlins, Wyoming. This was one of the first sheds to be built in America after the Australian method. Constructed under the supervision of W. T. Ritch.



Taking the tally at the Boyer shed, Bitter Creek, Wyoming. Note the manner in which the sheep wrangle themselves, coming out of the dark chutes after being shorn, running toward the light without the necessity of yelling, "cussing" and kicking on the part of inhuman wranglers.

be tramped as tightly as possible and carefully sewn. Once the wool is in the bags, it requires little care until shipped. It is of prime importance, however, to see that no moisture reaches it either from above or below. Wool draws the moisture from the ground, and if wet in this manner, or by rains, the ammonia is released and the fibre eaten so that it is almost impossible to comb.

When the sheep are sheared, don't brand them with paint, for ordinary colors will not dissolve and the portions containing it must be clipped out of the fleece when it reaches the mill.

As far as the marketing of this year's fleece is concerned, any sheepman who consigns his wool to a private firm, is working directly against his own interests. This will be a consignment year, and the various dealers will be allowed a fixed commission by the government. If you ship to your own company, a part of this commission comes back to you. And, by consigning to the Canadian Co-operative Wool Growers you lend assistance to a growers' institution, and such assistance is badly needed this year, when the company is just getting on its feet. You will be sure of a square deal on your product in the bargain.

THE SCIENCE OF SUMMER TILLAGE

(Continued from page 538)

portance, yet the kind of cultivation and the specific conditions of the soil at the time of cultivation are also important and must be watched. The work must be carefully and timely done if the phenomenally large yields are to be obtained.

The persistent destruction of weeds is a condition that must be insisted upon, for we have learned by experience that even small weeds are great drinkers and pump the water out of the soil wonderfully fast. Therefore, a summer tilled field must be kept absolutely clear of weeds at all times.

Increase Soil Fertility.

The first and most important result from summer tillage is the release of the natural fertility of the soil—the inorganic elements, and to render it available as plant food. This is brought about by various chemical agencies that act with the greatest efficiency when the soil carries a certain per cent. of both moisture and air. Just what the per cent. is that gives the best results is not accurately known—it doubtless varies with the texture of the soil—but experience indicates that the water content should be near the highest limit of capillarity and that there should be sufficient air to supply the oxygen needed by the roots in the process of cell formation. To secure this ideal combination of air and water the soil composing the seed and root beds should be made fine and firm with a loose mulch covering the surface to prevent loss of moisture by evaporation, for the moment the moisture content is reduced either by direct evaporation from the surface or by transpiration through weeds the delicate balance is disturbed and the chemical action in the soil is checked in the same proportion.

Less Water Needed.

A second result of summer tillage, in fact, a direct corollary of the first, is a marked decrease in the amount of water necessary to produce a pound of dry matter. The amount is less owing to a decrease in the demand of the growing crop, due to an increase in available fertility. The effect of the liberation of soil fertility on the amount of water transpired by a growing crop will be fully discussed later on.

Not Necessary Every Alternate Year.

It must be thoroughly understood that in order to obtain the largest annual profits from your fields, summer tilling is by no means advisable each and every alternate year, except where the average annual rainfall is less than fifteen inches, and even then with certain soils and a well distributed rainfall it is possible to store the available moisture so that two and possibly three crops may be grown in succession. This will depend, however, upon the care with which you handle your soil and the persistency with which you conserve the moisture. Your guide in this matter should be always the condition of your soil and the amount of soil water you have

in reserve at the close of each crop season. With a close consideration of these two points you can easily determine whether there is a sufficient amount of moisture in reserve and whether the land is in condition to grow another good crop, or whether it should be summer tilled again.

The First Step.

Summer tillage cannot be carried out in its entirety and the best results obtained until one or two crops have been grown. The first step—a thorough double disking of the ground—should be done as soon after the crop is removed as possible.

The advantages of double disking the land immediately after the crop is removed, especially if it be a crop of small grain, are four-fold:

First, by forming a surface mulch it conserves the moisture already in the soil.

Second, by presenting a loose surface the autumn rains are more readily absorbed and retained by the subsoil.

Third, the stirring of the surface soil hastens the germination of all weed seeds and volunteer grain, the young growth of which would be destroyed by subsequent cultivation.

Fourth, the condition of the soil as to water content thus produced, together with the high soil temperature of late summer favors bacterial activity and brings about a chemical action that results in the liberation of inorganic plant food.

No time should be lost in beginning the work. In the case of a field of small grain the disk should follow the binder, for what moisture is left in the ground will evaporate very quickly after the shading effect of the standing crop is removed and the hot rays of the sun are allowed to beat upon the compact surface and dead stubble.

It is very important to conserve this moisture. The loosening of the surface by the disk checks the upward movement of the soil moisture, causing it to accumulate in the firm soil just beneath the mulch. This regulation of the water content not only increases chemical action in the soil, but also increases the capacity of the soil for absorbing and retaining subsequent rainfall.

The importance of this early fall work is governed largely by local climatic conditions and the amount of annual precipitation that may be expected. In sections of the country where the average annual rainfall is less than eighteen inches it should never be omitted as the harvest may be followed by a droughty year, and the moisture that may be conserved by this early work may be just enough when added to the regular precipitation to carry the crop to maturity, when without it—although the amount may be small—the crop would fail. It is often the little and not the big things that make for success or failure. It must be remembered that plant growth continues just as long as there is available moisture at hand—not that moisture is the only necessary element, but all other elements are worthless without it.

How to Begin.

As stated in the preceding paragraph, the first step in summer tillage after a crop has been removed is to double disk the land. If the crop on the field to be summer tilled was small grain the disk breaks up the surface into small lumps, and mixes the stubble with the loosened soil, forming a mulch, the efficiency of which is not easily destroyed by subsequent rains, because the stubble, by keeping the mulch from becoming compact, prevents the heavy rains from completely re-establishing capillary connection with the moist under soil and consequent rapid upward movement of moisture and evaporation.

Destroy Weeds and Volunteer Grain.

When heavy autumn rains follow harvest, causing ideal growing conditions, weeds and volunteer grain will spring up wherever the seed has fallen. This growth can usually be destroyed on the land that has been double disked by the common steel disk if the work is done quickly before the grain and weeds become too well rooted.

No time should be lost in getting into the field as soon as the weeds appear above the ground. Here a "stitch in time saves nine," for weeds are not only great drinkers, and when still very young use an immense amount of water, but every day they are

left unmolested they become more firmly rooted and are the harder to eradicate. A growing weed is the most expensive thing that can be kept about a farm.

THE CANADIAN PACIFIC RAILWAY

Of particular interest to Canadians at this time, and especially to residents of the Western plains, is the annual report of Lord Shaughnessy, President of the Canadian Pacific Railway. This document is a virtual history of the greatest industrial concern in the country, from the time of its organization until the present day, and woven through it is a romance of the Canadian West that every Canadian should read thoroughly and thoughtfully.

Aside from the financial phase of the report, many points which have been generally misunderstood by the public are covered in such a way that an entirely new light is placed on the company's operations. This is especially applicable to the West, for it has devoted more energy and money toward the development of the great prairie areas traversed by its steel, than to any other portion of the Dominion.

This was only logical in view of the comparative newness, and the fact that the big land grants made to the company by the government were located here.

In this connection, we ask every reader to study the references to land grants in the company's report. We hear a great deal of complaining over the "hold," which the company has on Western Canada. But we forget that millions of dollars had to be spent on these lands before they became productive, and also that settlers had to be brought in and their products carried out. The whole land grant question is summed up graphically in the phrase which declares that: "In 1904 the company was willing to expend, and forthwith proceeded to expend with a view to making useless land productive and to encourage the settlement of territory adjacent to its railway, a sum of money in excess of the amount that it would have been willing to accept for the entire land grant 16 years before." And it will surprise a great many people to learn that of the 14,000,000 acres of the original Canadian Pacific land grant sold to date, the average yield has been less than \$5 per acre.

It is a significant fact that every share of \$100 ordinary stock in the hands of the public represents the payment into the company's treasury of \$143. It has been the policy to avoid mortgage debt and mandatory interest charges with their attendant dangers. It is also interesting to note that the average rates per passenger, and per ton mile, were lower than those received by American railways for the same services; that the wages paid C.P.R. employees are equal, and the cost of materials higher than in the United States. And the company's effort to keep its capitalization below the real value of the property is a very commendable one.

At this time, when we are all somewhat apt to criticize railway corporations, we confess that Lord Shaughnessy's report has done much to open our eyes, and we feel constrained to be at least fair in our judgment of their operations.

PERSONALITY OF THE SELLER.

The men who succeed on farms in the future will be the men who can produce economically and market their products with a minimum of cost. Not only must farmers know how to produce but they must also know how to sell what they produce.

Capable, honest, dependable personality must be the qualification for a successful business man. The business that thrives today is the business that has been built by honest men; men who have attained great skill in production and who have enough confidence in their products to advertise them upon their merits, and then guarantee that the products are as represented.

This is true in producing and selling farm, garden and poultry products, just as it is with large manufacturing enterprises. Buyers read and keep up with progress these days; they are looking for economy in service; they seek to buy where a dollar buys a dollar's worth of products.

Livestock

POEM ON HORSE'S TEETH.

A trusty great poet once wrote,
 "A sonnet to a child with a cough,"
 Perhaps the subject was rather un-
 poetical and I am tempted to think
 impractical also, for sonnets have never
 achieved fame as cough medicine.
 The following "poem" on "A Horses'
 Teeth," while lacking the beauty of the
 cough song is certainly more practical.
 Let the farm boys memorize it and then
 examine all the horses than can find.

To tell the age of any horse,
 Inspect the lower jaw of course;
 The sixth front tooth the tale will
 tell,
 And every doubt and fear dispel.

Two middle "nippers" you behold
 Before the colt is two weeks old.
 Before eight weeks two more will
 come;

Eight months, the "corners" cut the
 gums.

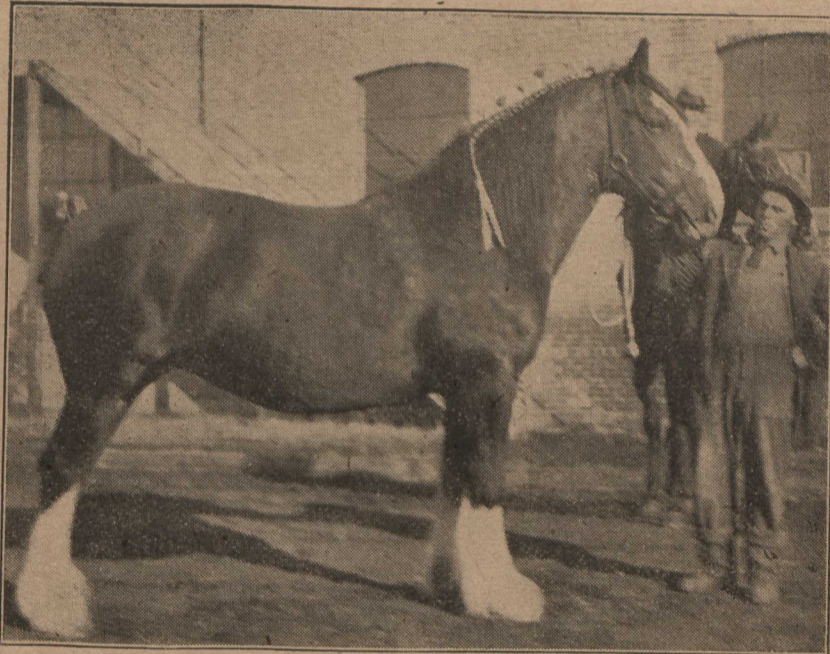
Two outside grooves will disappear
 From middle two in just one year,
 In two years from the second pair;
 In three the corners, too, are bare.

At three the middle "nippers" drop;
 At four the second pair can't stop,
 When five years old the third pair goes,
 And then a full new set he shows.

and a slight knowledge of the grade
 Percheron as seen and judged in certain
 parts of Britain where he is engaged
 in gun team work, one embarked upon
 this visit of inspection and criticism
 with all the leanings and bias that might
 arise from a close and intimate connec-
 tion with the three predominant heavy
 horse breeds of Britain. Realizing,
 further, the undoubted determination
 of a coterie of some twenty English ladies
 and gentlemen to see to the very end of
 their venture into the domains of horse
 breeding as friends of the product
 of the Perche, one felt that this visit
 was a severe test of his judgment against
 that of a score of breeders who have
 been brought to the conviction that one
 of the outstanding lessons of the Europ-
 ean War is that Britain lacks the neces-
 sary foundation horse stocks to pro-
 duce field artillery and transport horses.

New Foundation Stock.

"Bearing that in mind, one inspected
 the Percheron mares and considered
 them not only as a breed deserving
 of every praise for their undeniable
 usefulness as a true heavy haulage
 horse, but as potential foundations of a
 new race so far as British types go,
 and one that may in the fullness of time
 take its place in the forefront of our
 pure breeds, and one also that may be
 the long-looked-for means by which



"Poppy" (19283), Clydesdale Mare; Sire, "Baron of Buchclyvie" (5353), 2nd in Aged Females class and 1st in Draft Mare, exhibited by farmer, class at Edmonton Spring Show. This Veteran Show and Breeding Mare was still in fair bloom, although now 10 years of age, and heavy in foal.

The deep black spots will pass from
 view
 At six years from the middle two,
 The second pair at seven years;
 At eight the spot each "corner" clears.

From middle nippers, upper jaw,
 At nine the black spots will with-
 draw,
 The second pair at ten are white;
 Eleven finds the "corners" light.

As time goes on, the horsemen know,
 The oval teeth three sided grow,
 They longer get, project before,
 Till twenty, when we know no more.

—O. R. GLEASON.

PERCHERON MARES IN BRITAIN.

The following is by "Ubique," in
 the "Live Stock Journal," and tells of
 the importation of a number of pure-
 bred Percheron mares into Great Bri-
 tain.

"Ere they were distributed to the
 studs of their respective owners I took
 the opportunity last week-end of ac-
 cepting an invitation to visit and view
 thirty-three of the Percheron mares
 brought over to England in the recent
 importation from France. One might
 be perfectly frank at the outset, and
 state that, except for an acquaintance
 of the Percheron breed "on paper,"

the countless thousands of people
 who still dabble in haphazard horse-
 raising may secure some greater fixity
 of type in their horses when guaran-
 teed utility stocks have to be enumer-
 ated or are wanted for an emergency
 such as war. The common ground of
 argument used by the score or so of
 breeders who are behind the Percheron
 importation is that as between the
 hunter-bred horse and our recognized
 heavy horses we have no fixed type, or
 even approximately fixed, which can
 be turned to advantage when the call
 comes for large numbers of field artillery
 or reliable transport horses. That ex-
 plains why Canada and America are
 still sending to Britain thousands of
 grade Percherons, the like of which
 cannot be matched in any country in
 the world, and the stamp of which
 is marked as definitely as anything can
 be upon the horse stocks that come and
 go week by week in and out of our great
 remount depots.

"The Percheron enthusiast argues,
 further, that could British breeds
 definitely promise in the future a stamp
 like this long continuous train of grade
 Percherons, there would be no need for
 this importation, but as forty years or
 more have been spent in a wilderness
 of plans and good intentions all gone
 astray, with nothing done towards
 realizing a want so manifest to-day,
 their action is justified twice over,

BAR U PERCHERONS

The Greatest Percheron Breeding Establishment in the World
70 YOUNG STALLIONS FOR SALE

Sired by HALIFAX, PINSON, GAROU, AMERICAIN and ICARE

ICARE is our largest and heaviest stallion in service. He stands about 17.2 hands and weighs, in good condition, 2,400 lbs. He is bred from an ancestry noted for size and substance combined with quality, and his colts are showing remarkable promise as draft horses. We have five listed for sale, sired by this horse. Breeders wishing to increase the size and weight of their horses should inspect the colts by this horse.

PRICES \$600 TO \$1800 CASH

ADDRESS ALL ENQUIRIES TO

GEO. LANE
 CALGARY, ALBERTA

or

A. FLEMING, Salesman
 HIGH RIVER, ALBERTA

FARMERS! BREED PERCHERONS

You are deciding for a whole year now. Upon your decision and action to-day depends the colt you will boast next Spring and the horses you will have hereafter. Seek out a Percheron Sire in your district. Go and look him over. Look at the colts you have been getting. Isn't it time you tried a Percheron Sire? Get some colts with the Percheron deep rib, compact bodies and large heart girth which denotes constitution and endurance, the clean strong legs which do not carry the mud and insure against scratches and grease heels, the quiet yet active disposition which is so desirable in draft horses, the carriage that tells of sprightliness and vigor.

Do not fear to make the change. Your colts will be uniform favoring the Sire. No misfits and every one a real drafter if your Sire is of the draughty type. Look the Sire and his colts over. "Like produces like" is particularly true of the Percheron.

Write for literature.

CANADIAN PERCHERON HORSE BREEDERS' ASSOCIATION

W. H. WILLSON, Secretary,

Calgary, Alberta.

(Read our advertisement next issue.)

STILL ANOTHER Importation

of high-class CLYDESDALE and
 PERCHERON STALLIONS and
 a few choice CLYDESDALE
 MARES in foal arrived at Ed-
 monton, April 16th.

This gives us more INTER-
 NATIONAL PRIZE WINNERS
 than all other breeders and im-
 porters put together, and every
 animal is for sale very reason-
 ably.

REMEMBER that the Breeders'
 Gazette says:—

"A Galbraith Horse is a guaran-
 tee in itself."

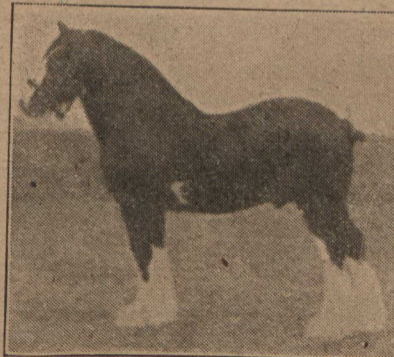


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PERCHERONS AND CLYDESDALES



Having purchased the well-known
 Q Ranch south of Maple Creek, I am
 offering over 1,000 head of high-class
 grade Percherons and Clydesdales. The
 best of Percheron sires have been used,
 many of them brought from Iowa and
 some purchased from Mr. Geo. Lane.
 I am using such Clydesdale sires as
 "Slogarie," "Dunoon," "Maythorn," etc.
 These are well-known prize winning
 horses.

This offering consists of:

150 Yearlings, 150 Two-year-olds,
 200 Three-year-olds, and 575 Mares,
 of which about 350 are in foal.

During the past 8 to 10 years this bunch
 has been closely culled so that only the
 very best mares have been retained for
 breeding. Weights of matured animals
 from 13 to 17 cwt.

Will sell at reasonable prices, in lots to
 suit purchasers, after June 1st. Ranch
 is 60 miles south of Maple Creek, Sask.
 Have made arrangements to have motor

cars meet intending purchasers at Maple Creek, after June 1st. So make your ar-
 rangements prior to June 1st by mail, addressed to—

P. D. BOWLEN,

Morley, Alberta

PERCHERONS - BELGIANS - SHIRES

As a producer of Champions this herd has no superior My 5-year-old 2250 lb. stallion won First and Grand Championship over all ages at the 1917 Nebraska, South Dakota and Iowa Inter-State Fairs. This is a dependable farm to come to for young stallions to grow into money, mature 2000 and 2200 lb. stallions ready for heavy stand, young registered mares in foal to Champion sires. 60 stallions and 75 mares for sale.

FRED. CHANDLER, R7, CHARITON, IOWA. Direct Below St. Paul



EATON PRICED SADDLES

FOR THE FARMER OR STOCKMAN

Built in the West, for Western use, an Eaton Imperial Saddle represents economy and performance. We illustrate two lines, favorites in their respective styles, either one of which is wonderful Saddle value, every cent expended in their build being put into genuine honest materials and workmanship.



FARMERS' PRIDE SADDLE

A handy knockabout Farm Saddle, for everyday use. Sturdy build, double rig style.

DESCRIPTION

- Tree — 13½-inch Morgan, Steel Horn, canvas covered.
- Horn. Leather covered.
- Skirts—Square, felt lined, 23½x11 inches.
- Seat—Full covered, easy riding, comfortable.
- Stirrup Leathers — 1½-in. wide, good stock, buckle.
- Fenders — 16x6 inches embossed border.
- Cinchas — 16 strand Texas rope front, with web rear made to tie.
- Stirrups—Wood, 2½-inch.

937NA683. Farm Saddle—Shipping weight about 15 lbs. Takes first class freight rate. Price .. **\$26.50**
Order from Winnipeg.

THE PRIDE OF THE WEST UTILITY RANCH SADDLE

A saddle that will give good satisfaction. Style and quality combined. ¾ rig style

DESCRIPTION

- Tree—Monarch style, rawhide covered, bulge front, steel horn.
- Horn—Rawhide wrapped.
- Skirts—Sheepskin wool lined Square style; size 26½x13 inches.
- Seat—Full, cantle, jockeys and seat in one piece. Basket stamped front and cantle.
- Fenders — 18x7½ inch heavy stock.
- Stirrup Leathers — 3 inches wide, heavy leather to lace, narrow wheel, embossed border.
- Cinchas—6-inch cotton strand, leather safes, wool lined, to buckle.
- Stirrups — Oxbow style, brass bound and laced leather tread.



937NA684— **\$52.00**
Price ..
Shipping weight about 30 lbs.
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See pages 390-391 of our Spring & Summer General Catalogue for complete descriptions of Eaton Saddles.

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WINNIPEG CANADA

See pages 390-391 of our Spring & Summer General Catalogue for complete descriptions of Eaton Saddles.

inasmuch as they bring in a pure breed that will well serve its own purpose and duties on farm and field and leave as residue a certain fixed type of horse that can be fitted to a dozen or more army uses. The plain truth as it has been revealed to these Percheron enthusiasts, who are all mainly army men, is that the Thoroughbred stallion has failed in its duty as a sire of clean or moderately clean-legged grade utility horses. They concede that it gets hunters of a peerless type, and the envy of all European nations, but when used on divers mares of alien, or, say, cold blood the offspring does not come within the category of being useful, army horses. Therefore, they argue use the Percheron instead, and by his aid get a long run of grade horses from the wonderful and varied kinds of mares that abound in Britain. Having written that much as being the prime articles of faith of these Percheron enthusiasts, one may leave a very debatable subject, as yet, and pass on to a criticism of the thirty-three mares now on their way to their new studs.

A Hardy and Robust Horse.

"Seen as they were in-rough, typical open-air military "lines," neither pampered nor unduly protected from the biting east winds which have prevailed of late, the mares presented a picture of robust health, and are all that their friends have claimed for them, judged upon what an average insular and impartial Englishman can be expected to say when asked to criticise a foreign breed in the light of what he knows of his own much-prized Shire, Clydesdale, and Suffolk breeds.

"The mares have immense size, are symmetrical to a degree, despite the first impression that they give one of being big-topped and comparatively light of limb. A noble headpiece, with plenty of width between the eyes, is adorned with a massive crest and neck; the back is short and level, and well joined to strong shoulders, of nice slope, with hindquarters that denote tremendous power. Viewed from behind, the great mass of muscle that meets the eye is somewhat alarming, especially in the bigger mares. Very little hair adorns the hoof, which is not of the same fullness as that of our Shire or Clydesdale, albeit the foot is akin in size and shape to that of the Suffolk. Only a slight tuft of hair decorates the limbs, which are a study and a revelation in the matter of deception. They deceive one as to the large amount of strong tough muscle they do really carry, and they would further mislead the casual critic in the matter of the girth of the limbs below the knee and hock. There you have power written in very large letters, for the bone is of a flinty, hard and flat kind, and it is to be found in great substance. It is only by properly appreciating the tremendous strength of the limbs of the Percheron that one can understand how such chunky and muscle-laden tops can be properly balanced and sustained on four hard-wearing legs and feet. Standing still, the Percheron will not, I say emphatically, strike the average British horse breeder as being pleasing to look upon. There is a something about his contour, from below the knees and the hocks, which is not English. It is not a "fault" as we understand faults; it is just a peculiarity of the type. It is an inexplicable straightness of limb which seems old to British eyes, but all thoughts as to its being a detriment are removed when the horse is set in motion and one realizes the wonderful "purchase" that the animal has. It is master of its load from the first pull, for limbs and feet and top all combine and move in unison, and the suggestion or appearance of ungainliness of shape is lost in the resultant symmetrical action, one that can well be described as the poetry of industrious motion.

"An intelligent-looking horse, too; docile, yet not soft because of that docility; undoubtedly generous, patient and long-enduring the general make and shape of the Percheron is reminiscent of the Suffolk Punch of a few years ago. If the Punch had not gone up so much on his leg as he has done these last ten years or so, no doubt in imitation of Shire size, the Percheron would be nearer to the Suffolk stamp than to any other British breed, judged on conformation.

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Blackleg Filtrate and Blackleg Tissue Aggressin

The New, Safe and Efficient Agents for Protecting Calves from Blackleg.

Cutter's Blackleg Filtrate positively protects against Blackleg.

Cutter's Blackleg Aggressin, made directly from animal tissues, affords even greater protection and is recommended for Pure Breds.

Neither the Filtrate nor the Aggressin can possibly produce Blackleg in even the most susceptible animals since both are germ free.

Both have given 100% protection wherever used.

Prices—

10 dose pkge. Filtrate....	\$2.00
50 " " " "	8.00
100 " " " "	15.00
10 dose pkge. Tissue Aggressin	4.00

N. B.—Cutter's Filtrate (a "cultural product" aggressin) is full 5 c.c. to the dose, as we believe that smaller doses, whether concentrated or not, afford less protection.

Write for booklet telling what germ free vaccines are and wherein "cultural product" Aggressins differ from Cutter's Aggressin made from animal tissues.

While these new "germ free vaccines" have advantages that should be known to every stockraiser, we see no reason for a quick change to them by stockraisers who have had satisfactory results from the use of

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Cutter's Pill Injector....	1.50

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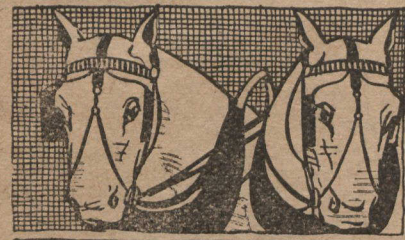
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Puffs, and all lameness from Spavin,
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Make their work easier. They are faithful friends and deserve the best treatment.

MICA AXLE GREASE

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THE CARE OF OUR HORSES

By HENRY C. MERWIN.

Remember that the horse is an extremely timid animal and must be handled very gently, though firmly. Always speak when approaching the horse; take hold of his headstall care fully, pat him on the neck and draw his head slowly toward you. In tying him, be sure that the rope is not so long that he can get his leg or foot over it, as painful wounds are often caused in this way. In entering a stall do not put your hand on the animal, as that might cause a vicious or stupid horse to kick, especially if you are a stranger to him; but tell him to "get over," and then step in quickly on the left of the horse.

In leading a horse take a firm grip of his headstall or bridle with your right hand, hold the end of the halter rope in your left hand and keep beside him, not in front of him. If he rears or pulls back, you can let go of the headstall and hold by the rope—not trying to struggle with him, keeping your face turned from the animal, but stepping toward him as he goes backward. He must move slowly in going backward and will soon tire of it. Do not mount a horse equipped only with a halter; and do not attempt to ride a strange horse unless he is bridled and there is some one with you to hold him and lead him about at first. You may be willing to take a chance yourself; but a horse never forgets anything and if he bolts or throws his rider once, he may do the same thing again at a critical moment.

The stomach of the horse is extremely small, and therefore he should be watered at least three or four times a day and fed grain three times a day. The less work he does the more important it is to give him hay often, because a hungry, idle horse is apt to take up some bad habit such as biting, kicking, cribbing or weaving. If the horse gnaws the manger or stall it is certain that salt is needed unless he is very hungry. Keep a lump of salt always before him. Horses should be watered first and fed afterward; and if possible watered again an hour or two after eating grain. Never water or grain a horse that is much heated—to do that is likely to founder and so ruin him. Never give grain to a tired horse; let him rest for an hour or two first. Otherwise he is very likely to have indigestion and colic. More horses die from colic than from anything else.

Bring the horse into the stable or camp cool and breathing easily if possible. Nothing is worse for a horse than a chill after being heated. But if for any reason it is necessary to halt or encamp when the horse is sweating—then blanket him and walk him about, or put him in a sheltered spot and rub him—according to circumstances. A horse is cold when his ears are cold. Get in the habit of feeling his ears. Use the curry-comb very lightly, if at all. It is apt to hurt the skin of the horse. A stiff brush is better and much more efficacious if the horse's coat is long. The head and legs should never be touched with the currycomb. You can clean a horse with a wisp of hay or straw vigorously used, or even with the bare hands. This helps the circulation, removes dead skin and dirt, and makes the horse feel right and look right. Look out for frosted bits in winter.

Avoid sore backs and shoulders by keeping the inside of the saddle or harness perfectly clean and by sponging or cleaning off the saddle or harness marks. The dandruff in the horse's hair is very salt and when this dandruff dries on the horse or on equipment, it irritates the skin. On reaching camp or stable, do not remove the saddle, unless you can at once clean and dry the hair underneath. If that cannot be done immediately, loosen the girth and leave the saddle and blanket on until the hair is dry. In order to avoid scratches, rub the horse's legs dry when coming in wet or muddy. This is hard work, but it can be done.

Clydesdale Stallions

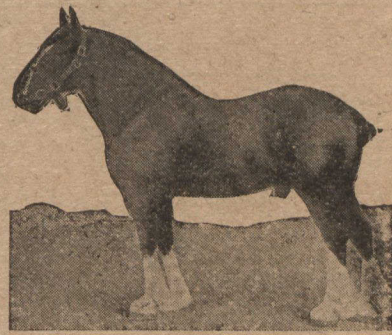
We have a large and very fine selection of real draft stallions of all ages for sale; many of them range broke. See us before buying elsewhere. Our prices are low and reasonable.

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20 CLYDESDALES FOR SALE 20

I have for immediate sale 20 Clyde Stallions and Mares, ranging from 2 to 5 years of age, from such noted sires as "Royal Apukwa," "Ruby Pride," "Baron Gartley," "Ryecroft - Model," "Scotland's Duke," "Matchless Drumflower," "Marcellus" and others.

These were all imported last fall, are of excellent quality with good snappy action, the best of breeding and are in good condition.



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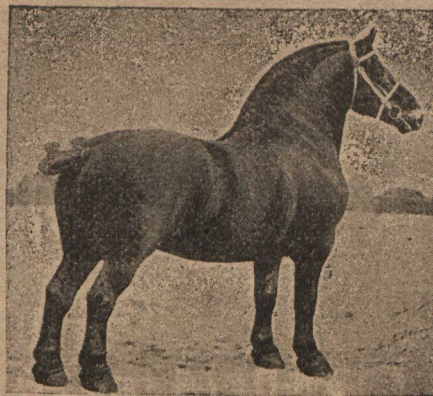
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We have an over supply of good CLYDESDALE COLTS rising 2. We will sell these out at half price. All are good size well-bred classy colts but we need the room. Some Clydes taken in exchange—sound, quiet, well-broken horses but thin for sale at work-horse price. Our Guarantee Goes with them All.

Do not wait to write, but wire when you will be here.

WE CAN PLEASE YOU

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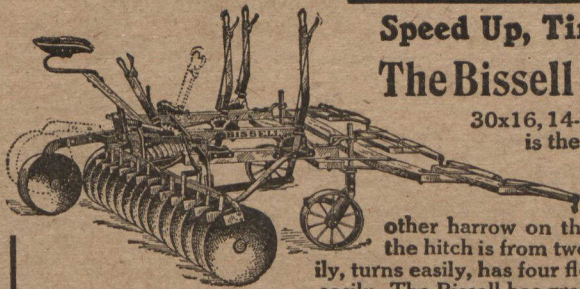
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The Bissell Disc Harrow

30x16, 14-ft. wide, six-horse hitch is the implement to buy. It will do better work and cover more ground than any other harrow on the market. Note that the hitch is from two points. It runs steadily, turns easily, has four flexible gangs, and rides easily. The Bissell has great business capacity.



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Write any branch of the John Deere Plow Co., Ltd., addressing Dept. B

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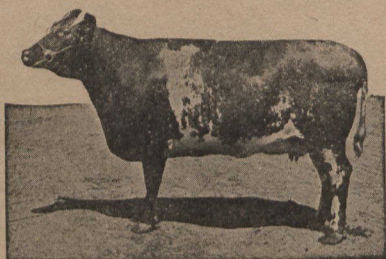
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Herd Headed by Oak Bluff Hero, one of the greatest breeding sons of the Imported Oakland Star.

Special offering of 15 HEAD OF SCOTCH BRED COWS many of them sired by imported bulls--ALL of them either in calf, to calve this spring, or with calves by side now. If you need some good foundation cows write me, or, better still, visit the farm

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FRENCH COACH MARES and GELDINGS—the best all-round light Farm horse on the market.

Several Good Clydesdale Mares and Geldings, purebred and grade. The imported French Coach Stallion, "Fradiavolo," for sale or trade.

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SHEEP RAISING ON FARMS

My experience with sheep has been but four years, yet in that time I have learned that sheep raising on the farm is one of the most important industries for a diversified farm. The capital invested will double every year with very little attention, but if well managed will exceed that. Another fact, they are the only weeders for the farm by which you can turn all foul and obnoxious vegetations into money without any expense. For instance, Jim Hill mustard, one of our most prolific weeds, has proven to be valuable in this country for hay. If cut at the proper time sheep like it and will thrive on it exclusively.

There are some things that are drawbacks in raising sheep. The coyotes are bad, but we must fight them. On the farm we must fence sheep-tight and I find the fence must be A1, for they will reach through and push it down, or eventually learn to jump it. Yet with all of these expenses and losses you will profit by keeping a few sheep. My farm consists of 400 acres with about 100 acres in pasture, with a creek running through, and I keep 200 sheep on an average. My stock is Hampshire and I have been breeding with the best blood I can find—that

everyone should do in order to better the wool grades as well as for mutton. There are several of my neighbors who have sheep and all of them have made good. Therefore, no one need be afraid to start in the business. Just give it the same amount of attention as you would your other stock and you will find your profits will be much greater on sheep on the capital invested. This year my proceeds from a flock of 280 sheep were \$2,082 sold in mutton and wool alone, and I sold a buck which I have not included, and still have left, with the lambs, 200 head.—J. S. ROCKWELL.

LAMB FEEDING VERY REMUNERATIVE.

Lamb feeding, as an industry, has made more millionaires in the United States than any other branch of agriculture. That is a bold statement, but it is true. Forty years ago, mutton was considered vulgar on this continent. Gradually, people came to appreciate its food qualities, however, until to-day it is considered by the epicure as a distinct delicacy. When the taste of the consuming public became accustomed to "sheep meat," mutton was anything from old "bucks" to toothless ewes. Sheepmen had been raising their flocks chiefly for the wool return, but when the demand for mutton grew so enormously and rapidly, and right on the crest of serious wool tariff agitation, there was a wholesale diversion to the mutton and largely the English breeds. But the fancy of the American epicure, and the demand of the average family called for handy-weight cuts of more palatable meat. This demand started the lamb-feeding industry, and to-day the mutton markets of America are on a lamb basis almost entirely.

Feeders who may market as many as 100,000 lambs a year, contract their material from breeders and rangemen, in many cases before the lambs are born. When delivered in the fall, they are put on feed for varying periods, and marketed at 70 to 80 pounds live weight, and nine times out of ten at an enormous profit.

In Canada the lamb industry has not developed so rapidly, owing chiefly to the fact that Canadian taste is not so discriminating in regard to mutton. The public seems to prefer the yearling or two-year-old wether, and is satisfied to accept the larger cuts rather than to call for handy-sized legs, loins, etc. Nevertheless, there are wonderful opportunities for the feeding of lambs in Canada, and especially in Alberta, where an abundance of rough feed can be obtained with comparative ease. Particularly in the irrigated areas does the lamb-feeding industry pay. Well-bred lambs of a quick-maturing breed will need little grain in addition to good alfalfa hay in order to put on profitable gains. Many farmers in the Lethbridge district have proven the truth of this assertion and have developed quite a feeding industry.

The Canada Land and Irrigation Company, of Medicine Hat, have made some nice records in this direction, too. Last spring, this company shipped 275 lambs to Calgary, selling them for \$16.00 per hundred, which at that time was a record price. They were on feed a little more than 100 days, and weighed 97 lbs. at the time of shipment.

This past winter the company put 325 pounds lambs on feed Nov. 20, and on the 12th of January, after 43 days' feeding, 202 head of them were sold at 16 cents per pound, fed, watered and weighed at the Ronalane irrigated farm, and, as this would mean 17 cents per pound in Calgary, it was a record by a large margin.

A lamb weighing from 70 to 80 pounds is an economic product, and while wool is high in price and badly needed, the feed required to raise a lamb to yearling or two-year-old form would be almost as valuable as human food, and proportionate gains are not commensurate, in many cases, to the actual cost of feed consumed. This refers to farm conditions of course. Where plenty of natural pasture is available, the feed bill is a negligible quantity.

Those who love the feeding game will find pleasure and profit in the feeding of lambs. It would not surprise competent authorities if the lamb market

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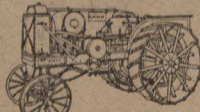

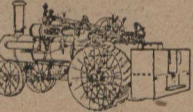
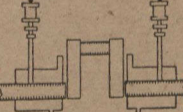
HUMOR YOUR MACHINERY

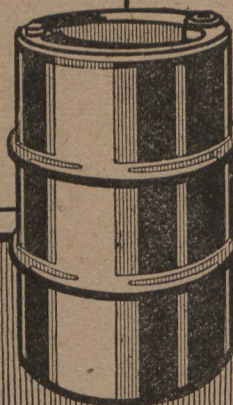
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A Correct Lubricant for every Farm Machine

 <p>For Gasoline Engines, Tractor, Auto or Stationary POLARINE OIL STANDARD GAS ENGINE OIL</p> <p>For Kerosene Engines, Tractor or Stationary POLARINE OIL HEAVY IMPERIAL KEROSENE TRACTOR OIL <small>(Recommended by International Harvester Co.)</small></p>	 <p>For Open Bearings of Farm Machinery PRAIRIE HARVESTER OIL —very heavy body, resists cold, won't thin out with moisture ELDORADO CASTOR OIL —a thick oil for worn and loose bearings</p>	 <p>For Steam Cylinder Lubrication, whether Tractor or Stationary Type CAPITOL CYLINDER OIL —the standard product for steam cylinder lubrication</p>	 <p>THRESHER HARD OIL</p> <p>For Grease Cup Lubrication of Bearings a clean solidified oil high melting point</p>
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CHAMBERLAIN, S. D. : JUNE 7

62 HEAD: 36 BULLS and 26 COWS

Never before has there been a female sold from this herd, established 14 years ago. Now numbers over 400 head, and buyers attending will have the privilege of buying privately from the main herd in case they do not find what they want in the offering. Herd heading bulls and range bulls singly or in carlots. Big-boned, outdoor types that have made the breed famous with feeder and butcher as well as breeder. Many cows with calves at foot and ready to calve. Plenty of pedigree aristocracy for those wanting pedigree with practical animals.

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140 HEAD 140

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HARLAN - IOWA

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**120 COWS with 80 CALVES FREE with DAMS
20 HERD-HEADING BULLS
46 BLACKBIRDS, of which 22 are BLACKCAPS
50 TROJAN ERICAS 24 PRIDES OF ABERDEEN**

BLACKBIRDS: Black Caps, Blue Ribbons, Victoria Blackbirds, Ballindalloch Blackbirds and Blackbirds of the First, Second and Third Branches.

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BALLINDALLOCH K. PRIDES: 20 Head, the like of which have never graced any one sale ring.

PRIDES OF ABERDEEN: Representatives of all the sub-branches of this great family.

Bulls fit to head any herd. Cows with big calves at foot, and heifers yet to calve. The greatest offering of BLACKCAPS ever in a sale. All leading pedigrees represented. Such a richness of pedigree has never been combined with such superlative individual excellence. ESCHER & RYAN Feeding and Breeding has been developed hand in hand to build America's first beef breeding herd.

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BOTNA - IOWA

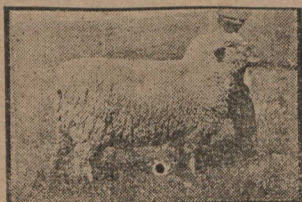
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Bruce 112. Champion and Sire of Champion.

I will have for sale this fall approximately 75 HEAD of SHEARLING and RAM LAMBS.

As there is every probability of a heavy demand for these Champion Oxfords it will be advisable for you to place your order NOW for fall delivery.

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CASTOR, ALTA.



75 ABERDEEN-ANGUS 75

**28 BLACKBIRDS 13 TROJAN ERICAS
12 PRIDES and K. PRIDES
and other good families**

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WAVERLY - IOWA - MAY 29

6 Outstanding Bulls, fit to head any herd.
25 Calves at foot and the other cows bred to Blackcap bulls.

Located on three main lines of railroad from Canada, via St. Paul.

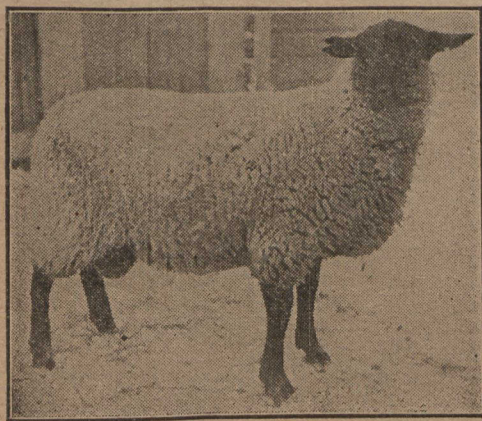
AMERICAN ABERDEEN-ANGUS BREEDERS' ASSOCIATION co-operating to get Export Licenses for Canadian Buyers

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WAVERLY, IOWA

Suffolk Sheep For Sale



This ram Jaques (2941) was Champion at Calgary Show, Dec., 1917. I also won 1st and Reserve Championship in Ewe Lamb Class in strong competition and 1st with pen of ewes, and 2nd in Carcass Class in 23 entries.

If in need of all-round mutton and wool sheep look to the Suffolk.

I also have a number of Grade Ewes for sale, also Berkshire Hogs and Shorthorn Cattle.

LESTER LEVERS

NORTHERN STAR RANCH
Importer and Breeder of
Suffolk Sheep

Phone 404 P.O. Box 263
CASTOR - ALBERTA

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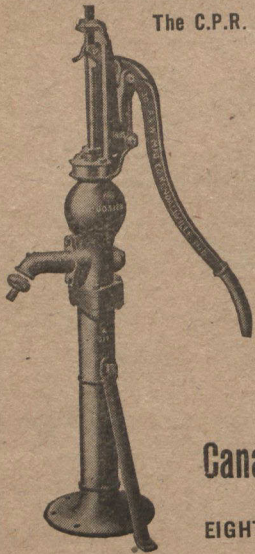
100 Registered Angus Cows, 3 to 6 years old, some with calves at foot; 30 yearling heifers extra good. 50 young bulls, including a number of choice herd bulls. These cattle are priced for quick sale. Five champion bulls in service. I will arrange to deliver cattle for you.

L. R. KERSHAW

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When You Buy A Pump — Get Quality First

The C.P.R. Use a Lot of these Pumps on their Improved Farms



You expect a pump to last a long time. It will, too, if you buy the right one. You can't tell much by looking at the outside—buy on reputation.

HOOSIER Deep Well PUMPS

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have satisfaction built right into them through correct principle—good material and skilled workmanship. Buy a "Hoosier" for long, faithful pump service. Ask about the kind you want. We also supply air-cooled gas engines, windmills, well casing pipe, etc. Information and catalog waiting. What's your address?

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Better Be Safe Than Sorry

"But, Jim, I made my seed bed just as you did and used the same amount and kind of seed—and I used gopher poison, too. Now look at my skinny crop."

"Did you use Kill-Em-Quick?"

"No. Another kind that they told me was just as good and the package was bigger."

"Who is 'they'?"

"That's what the man who sold it said. Nobody around here was using it."

"That's the trouble. You buy a poison because it comes in a big package. The package doesn't count. You want killing power. It's dead gophers that count."

"Multiply that by my acreage. Figure it up. Wheat ought to bring at least \$1.50 this year. See what a lot I've saved. Several hundred times what the Kill-Em-Quick cost. It would be the cheapest at ten times its price for you can depend on it. It makes gophers as scarce as hens' teeth."

"Any poison will fail sometimes."

"Kill-Em-Quick doesn't, John. I've used it for years and it always killed them for me. I can't afford to experiment. And besides, they will pay back my money, if Kill-Em-Quick doesn't satisfy me."

"What does it cost you?"

"That's not the point. You ought to ask how much it has saved. That is more than you would believe. It has kept my farm free from gophers—and mortgages. My crops are always better than average. Compare mine and yours."

"Your crop will beat mine five or six bushels."

Strongest Endorsement

Kill-Em-Quick is recommended by the Manitoba Agricultural College as the "most effective gopher poison." The Dominion analysis shows it to be the strongest, most concentrated gopher poison sold. Hundreds of Municipalities and Growers' Associations buy it year after year and give it their hearty endorsement. If it were not all it is claimed to be, would it receive this endorsement?



Experiments Are Costly, Get the BIG Crop! Use Kill-Em-Quick—It's Sure!

The **Kill-Em-Quick** Guaranteed Gopher Killer

Gopher Poison

40 acre size, 50c; 100 acre size, \$1.00. From your dealer or from us prepaid upon receipt of the price.

Kill-Em-Quick Co., Ltd.

Dept. Winnipeg, Canada.

Urge your Councillor to furnish Kill-Em-Quick. It will increase your crop and tickle the Gophers To Death!

exceeded the 20-cent. mark locally in the near future, and with very little extra effort a bunch of range lambs can be fattened in short periods.

In selecting suitable feeders, it is well to give the preference to lambs sired by Down rams. Hampshires are used more extensively than any other breed in the United States for this purpose, but Shropshires and Oxfords are also very popular. Early maturity is a prime essential. If a lamb attains growth of frame and bone early in its life, the feed consumed after the animal enters the feed-lot can be utilized for the finishing process and the laying on of flesh more economically than with a breed of slow-maturing qualities.

Feeding lambs should weigh around 55 pounds when they go on the finishing ration. Fed four or five months on the proper allowance of grain and hay, they should make an average gain of from 25 to 30 pounds, plus shipping shrinkage. Alfalfa hay has figured largely in the feed-lots of Colorado, and the grain ration consists chiefly of barley followed by whole corn. Lambs can be fattened on rape pasture with a little grain, and a mixture of peas and oats will make up for alfalfa where this fodder crop cannot be grown. Corn is out of the question in Western Canada to-day, though a great many farmers are figuring on this crop as a regular thing. Oats and barley, in the meantime, can be successfully substituted where corn cannot be matured. "The Review" would be pleased to have accounts of the feeding experiments of any who have tried the game in this territory. Your experiences will benefit those who are just beginning to appreciate the remunerative phase of the industry. There is certainly a field for development here and the pioneers could give us many valuable suggestions.

MEAT BUYING FOR ALLIED NATIONS.

Features of the American meat sales to the Allies not generally understood are explained as follows by Joseph P. Cotton, chief of the meat division of the Food Administration:

The U. S. Food Administration during this winter has been able to establish a \$15.50 minimum price on hogs at Chicago and maintain that minimum, not by any virtue of any price-fixing law but by the simple commercial method of regulating the foreign buying so that the heavy buying should be done when the hogs were plentiful and prices kept reasonably steady at all times. With a steady market the producer can feel reasonably certain of getting a price when his hog is ready, and he does not have to watch his market and is not subject to the power of the buyer to cut the price as low as he wishes in times when hogs are plentiful.

On Dec. 1, 1917, the Food Administration began an entirely new system of buying meats in the United States for the Allies. Before that time the Allied nations had bought meat in this country as best they could—in competition with the domestic market and each other—often feverishly, and to meet emergencies.

As was inevitable, such buying was a large factor in the sky-rocketing process of meats last fall. Not only did that demand help put prices up, but it put prices up irregularly. The fatback of the hog, for instance, had been in especial demand for France and Italy, and as a result of that demand the relative value of the fatback (as compared with other cuts of the hog) went up out of proportion. The English had been accustomed to a particular cure of lean hogs, and in consequence lean hogs were at a market premium as compared with fat hogs. That has had a bad effect, because hogs were being killed before they were ready to market—and at a time when soft corn would be wasted unless it went into making weight on the hog.

The problem was to find a way to end these difficulties; first, to adjust the supply to the demand so that temporary shortages should not be used by speculators to boost the market or permit speculative profits; and, second, to stabilize prices to that the army and navy, the domestic trade and the Allied nations should all buy on the same general price level and yet protect the producer.

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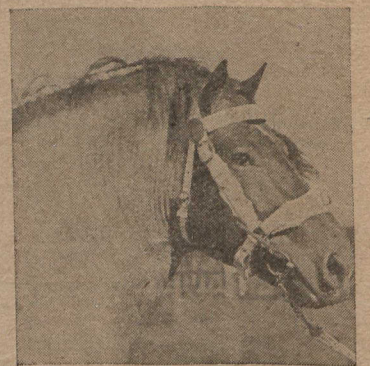
Have hardy constitutions
Excel as grass cattle
Ripen at any age
Excel in the feed lot
Fatten quickly
On the range they multiply
Return big profits
Demand is unlimited
Sell like hot cakes

AND

If you want to know anything more about Herefords, write

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Allied Buying Power Centralized

As the first step, the Allied nations all came together and established a single buying commission for handling meats and similar products. This commission pooled all the orders, standardized specifications and contracts, and adopted a system of regular buying so that the trade would know a reasonable time in advance what was required and would be ready to meet the demands with the minimum of inconvenience to the domestic business.

To handle the business, the Food Administration established an executive organization which should place the order and advise with the Federal Trade Commission and other established organizations as to prices.

At the threshold of its work, that organization had to meet and determine several questions.

The first question was prices. As to prices, one thing was obvious. There must be a standard price on every specified product to every packer and no discrimination between packers. What the price is to be is an expert question which differs in every case. I will speak of these prices later.

The second question was: Which packers shall get a share of foreign orders? The answer to that was somewhat diffi-

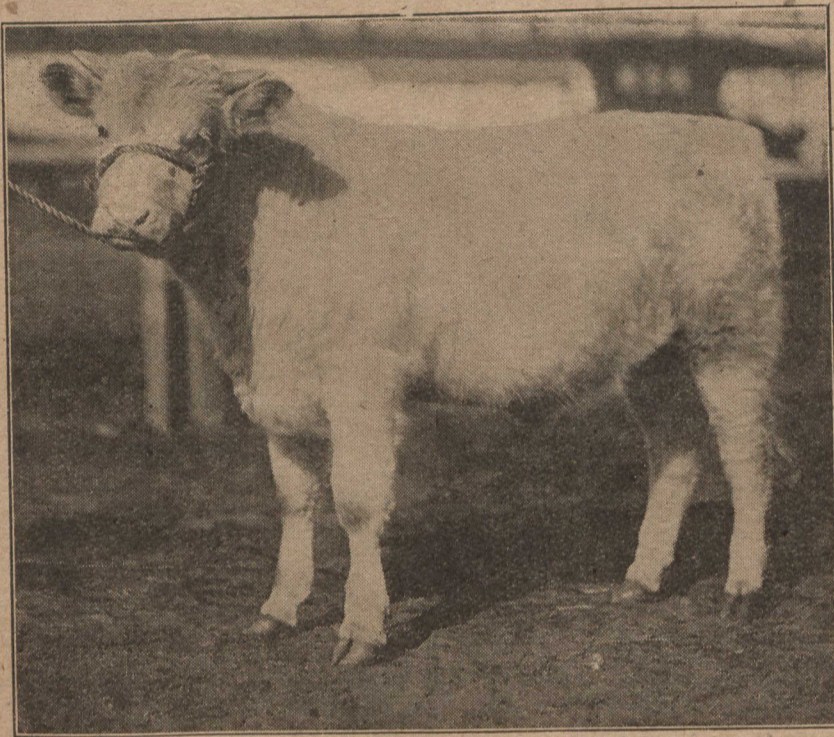
French, Italian and Belgian business, and the needs of the Commission for Relief of Belgium, it was not found that any particular packing concerns had any particular established trade in those countries, so the business of them all is divided among those concerns (apportioned by the buyers as fit) in proportion to their share in the hog kill at the central markets in the past. This has resulted in dividing the business among about the same number, 40, of packing concerns.

Determination of Prices.

The question of prices in the Allied buying is determined on the following lines: Buying experts first ascertain the cost to the packers of the hogs, the cut-up value of the hogs, that is, the percentage of the hog which is meat, and the proportion of the value in the several cuts. These tables or figures are revised at least monthly. Then these prices are compared with other markets, with the Army and Navy competitive prices, until a price is finally made.

The price made as to any one item may be somewhat too high or too low; in handling so great a volume of orders nothing like precise or mathematical accuracy is obtainable as to every

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cult. The business could not go by favor. It must not unduly disturb the distribution of meats to the people of the United States; it must be divided on some sound, fair theory which would produce results.

How Foreign Orders Were Allotted.

On going over the trade it was found that the shipments must all be in carload lots, and of standard quality, which would meet foreign requirements. That meant that it was an absolute necessity to confine the foreign business to packers who had equipment enough and experience enough to handle the business economically and efficiently, and—above all—promptly. Then it was found that many of the packers, particularly the smaller ones, for a long time had had a substantial British business and made a specialty of British trade. They had spent much money to establish—and had established—trade names and good will in Great Britain. It would be foolish to take them out of the British business and force them to find new markets in the United States for their products; that would mean new agents and new branches. Therefore, the principle was adopted of placing the British business with those packers who had done the business before, (who were approved as to efficiency by the Allied purchasing commission) in substantially the proportions that they had done the British business before. In general, that principle has been followed, resulting in the distribution of the business among about 40 packing concerns. In regard to the

separate order, for in every month one or more million pounds of pork products must be shipped. But approximate fairness can be reached; and, inasmuch as the packers' total profits are regulated, any error will be averaged up. Up to Feb. 1, 1918, the packers have been able to answer all calls for product made upon them, and there has been no failure in prompt handling. The system has not been working long enough to form any final judgment, and doubtless it can be much improved; but it is working better than the unco-ordinated buying.

The new system of buying has been for the benefit of the Allied nations in that their supply has been assured at not excessive prices. It has benefited the American consumer in that the menace to the market of unrestricted foreign buying, which tended to skyrocketing of prices, has been removed.

Benefits to the Producer.

It has benefited the producer. First, it has benefited him in that the foreign buying orders thus held in a single hand have been used to uphold slumps in the market when the run of hogs was heavy and have protected the minimum of \$15.50 a hundred pounds for the average of the packers' droves on the Chicago market. This minimum, established by the Food Administration, has made it possible for the producer to breed with confidence of a fair price when his hogs come to market and has thus helped to keep up production. Second, the producer is benefited in that the foreign buying in a single hand

The Cheapest Way To Pull Stumps

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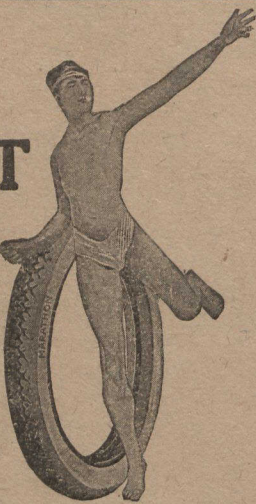
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5 AMERICAN PLANT AT CUYAHOGA FALLS, OHIO

should furnish a protection from unduly high prices in time of scarcity of hogs. If you had told a farmer a year ago that high prices of hogs did not help him, he would think you were trying to put something over on him; but he is beginning to realize that high varying prices are an evil to his business. High prices of hogs and cattle shoot up the feed prices so that they are out of reach. Sharp rises in the market are the speculators' paradise. In every rapid market the speculator finds his way in, and he—not the farmer—reaps the reward. Sharp rises are followed by sharp falls that catch the unlucky. The American farmer takes enough chances with the weather without taking a chance in the market. Third, for the reasons stated the producer of hogs is better able to do his bit in helping the war with confidence that he knows where he will come out.

Much as the Food Administration wants hogs, we do not urge every man, woman and child to go into the hog-raising business on a large scale. We do want everyone to raise and send to market as many hogs as he can find feed for at a reasonable price.

The new system of foreign buying helps the producer to know what he can get for his hogs—so that he can know how far he can help in the war. And never before has the need of the Allies been so great.

ANNUAL REPORT OF THE ALBERTA DEPARTMENT OF AGRICULTURE.

It is a significant fact that the activities of the Provincial Department of Agriculture during the past year have been dominated by a desire to increase production. The annual report at the Department, tabled at the recent session of the legislature, is one of the most interesting documents ever published by our government. In all of the various branches of the department there is a consistent spirit of progress that augurs well for the future.

Large numbers of the officials of the department have been addressing meetings and holding short courses in livestock, cultivation and household economy.

Demonstration Farms.

The demonstration farms report by Mr. Carlyle is always read with considerable interest, as all the farmers are closely interested in the projects which the Minister of Agriculture is working out for the education of those engaged in agriculture. Mr. Carlyle gives a very straightforward account of his work and puts himself into the class with all the farmers of the Province who are trying to work out the best system in cropping, rotations, etc., suited to the district in which each is situated. We quote two or three significant paragraphs from his report:

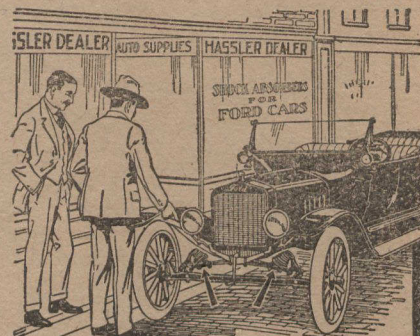
"The work of the demonstration farms is subject to the same limitations as is the work of the settler due to rather sharply varying climate and soil conditions in different parts of the Province and likewise to the difficulty of establishing safe conclusions as to cultivation and cropping practices where the opportunities for trial and observations are limited to a very few years. The success of all farm enterprises depends directly on the observance of right fundamental general principles that stand for a combination of immediate success and conservation, and on the fitting of these in application to special and local conditions.

"It is becoming more evident every year that a system of mixed farming, as constantly emphasized by the Department of Agriculture, is the only safe type of work for the farmers of Alberta to follow.

Soil Drifting.

"The past six years' experience has shown that on light soils it will pay to seed to grass even though the crop of hay harvested does not pay for the labor expended. The value of the sod turned under will more than offset any loss in hay by the increase in subsequent crops. This is especially true on farms like those at Athabasca, Vermilion and Sedgewick."

Mr. Carlyle deals with a number of topics separately which are of great interest. They include such matters as forage crops, possibilities of the silo



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May 20, 1918

and also his experience with this kind of crop on the farm. In spite of the fact that these are institutional farms, of which the chief aim is education rather than profit, Mr. Carlyle has managed to come out with a nice little balance on the right side of the ledger.

Livestock Commissioner.

The livestock commissioner has an interesting report to present. He puts down very succinctly a number of points of progress in livestock work during the year. They are as follows:

The year 1917 marked the beginning of a considerable number of departures in livestock history. Briefly enumerated these are:

1. The organization of breed associations for the three leading beef breeds of cattle, namely, the Aberdeen-Angus, Hereford and Shorthorn.
2. Government assistance to settlers in purchasing female cattle.
3. The movement of sheep by rail from the prairie districts to the forest reserves for summer grazing.
4. The putting on of big feeding competitions for boys and girls by the sheep, and swine breeding associations of Edmonton.
5. The putting on of a baby beef competition at the Calgary Fat Stock Show on December 11 to 14.
6. The entrance of an Alberta herd of cattle in the Chicago International Fat Stock Show.
7. Supplying brood sows to farmers at cost.

The Cow Bill.

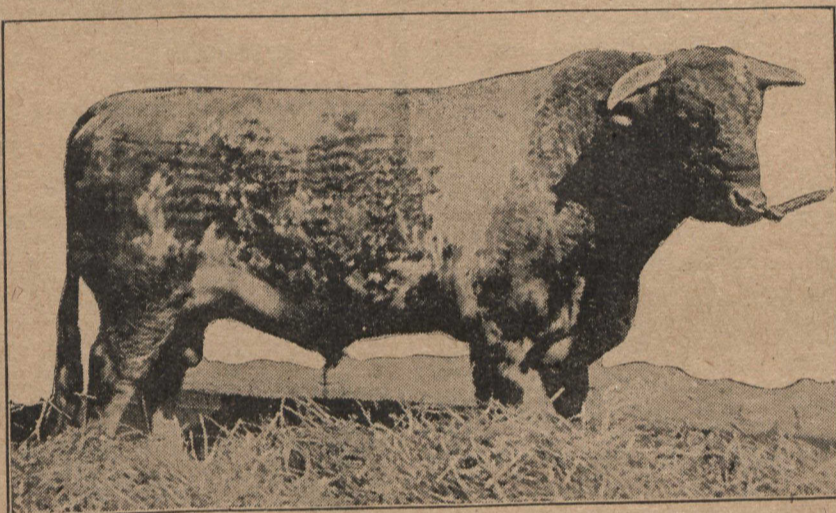
Under the heading of "Government Assistance for Settlers," Mr. Stevens

lying parts of the Province. Among the diseases that have troubled cattle during the year, the chief seem to be blackleg and contagious abortion. The report contains considerable material on the control of these troubles.

Sheep and swine are reported to be rather free from trouble. There is no scab in the Province. Hog cholera is handled by the Dominion Department. The chief trouble with sheep relates to improper feeding and to weed poisoning. Among horses, typhoid, swamp fever and infectious abortion are mentioned. The report of the veterinarian contains a highly valuable article on weed poisoning of livestock. He states that there is more loss from poisoning than from any other trouble in the Province. He advises the study of the different kinds of plants and emphasizes the need of keeping stock away from plants on the edges of sloughs in the early part of the spring. The plans dealt with include water hemlock, larkspur and death camas. His report will give value to the annual report for the stock man.

ESCHER'S ABERDEEN-ANGUS SALES.

At Harlan, Iowa, June 4 and 5, occurs the greatest auction sale of Aberdeen-Angus breeding cattle in America when 140 head of bulls, cows with calves and heifers will be sold at the annual events of Escher & Ryan and Charles Escher, Jr. This will be the greatest gathering of that aristocratic branch of the Blackbird family, the Blackcaps, ever offered. Not only are the Escher sales the annual "top"



"Gold Dust" 100567—Sire, "Gainford Ideal" 90892; Dam, "Fanny B. 38th" (67941). Shorthorn Bull, recently purchased by Messrs. J. A. Shuttleworth & Son, Blackie, Alberta, from J. A. Watt, Elora, Ont., the owner of "Gainford Marquis" who is Grandsire of "Gold Dust."

gives some attention to the Cow Bill, which he regards as a very effective measure in the organization for rural credit, on account of its simplicity of operation and on account of the very direct and immediate benefit of the act to the small settler. He reports that during the year 220 applications for loans were guaranteed which represented \$455,620 of capital. It is a noteworthy fact that practically all of the borrowers under the act were north of township 27, and one-half of the total number were from the north and east of Edmonton, chiefly the Peace River district.

The other topics dealt with in the livestock report relate to such matters as bull sales, wool marketing, and the increase in the swine breeding.

Statistics.


The statistical report contains some interesting figures. During the year 3,978 homesteads were taken up, and 272 pre-emptions. The immigration of the province by ocean ports and from the United States amounted to \$12,000.

Veterinary.

The provincial veterinarians' office is a place of very active service in the interests of livestock in the Province. Besides doing a great deal of lecture work at the University and at the Schools of Agriculture, and looking after the health of the livestock at the demonstration farms. Dr. Talbot takes part in the extension work of the department, and, as well, looks after cases of prevalent diseases that are giving undue trouble, especially in the out-

events in the Aberdeen-Angus world because of the choice pedigrees offered, but the individuality that goes with the pedigrees is the best that American and Scotch herds have been able to produce. Four importations from the Old Country since 1892, plus the "tops" from leading American shows, has put style and class into the pedigrees made at Long Ranch and Pleasant View farms. With Iowa the seed house of Aberdeen-Angus, the Eschers have furnished the best seed. The great steer feeding and showing of the Eschers, beginning with the late Charles Escher, Sr., back in the '90's, has kept the pedigree building founded on the markets of the packers and farmers, the soundest foundation of all.

Followers of steer show-ring history need no refreshing of the memory as to what the Escher steers have done at the world's greatest steer show, the Chicago International Livestock Exposition. On carlots, they have shown at Chicago six times and at the Pittsburgh Fat Stock Show once, never dropping below second place, and carrying away the grand championship over all breeds four times. The Pittsburgh show load of 1901 gave the herds world-wide fame, the record price of 21½¢ a pound on the hoof for a carload of steers never having been even approached until the last two International shows, when war-time prices surpassed them. The grand champion at the Internationals of 1902, 1911 and 1913 went to Eschers, and the reserve grand championships of the last two mentioned dates were also theirs.




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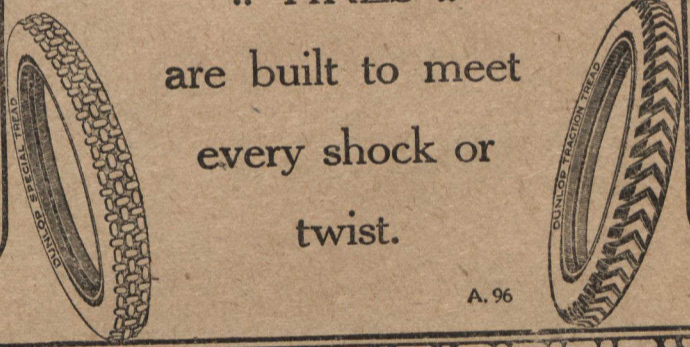


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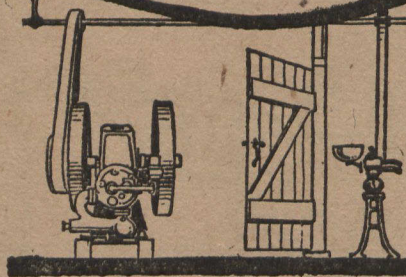
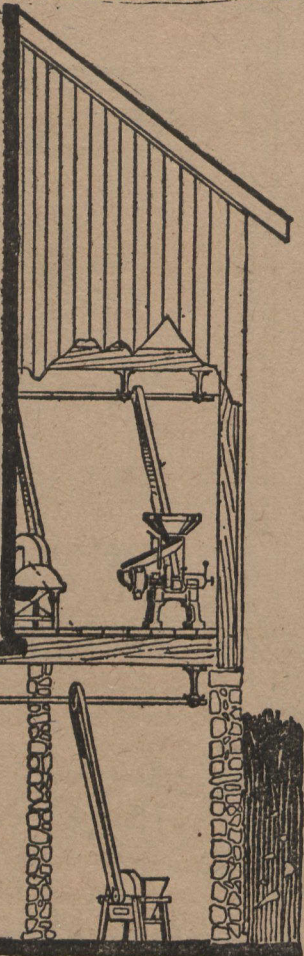
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 Branches: Winnipeg, Calgary



The grand champion steers herd of three animals over all breeds at the 1916 International was also shown by Escher & Ryan. In 1911, and again in 1913, many of the carlot steers were led out and shown as single steers in the International Show arena, something never attempted before by an exhibitor. These carlot steers as individuals won second, fourth, fifth, eighth and ninth in the two-year-old pure-bred steer class; first, fifth, sixth, seventh and ninth in the class under one year; and, second, fourth, sixth seventh and eighth in the yearling class; besides, in groups of three steers, first, second, fourth and fifth. In these single and group classes, they were competing against the great steers from the colleges, which usually win the single and group grand championships, it must be remembered, as well as demonstrating the practicability of the pedigree for the average farmer who feeds cattle.

Secretary Gray, of the American Aberdeen-Angus Breeders' Association, unhesitatingly says that the Escher & Ryan and the Charles Escher, Jr., herds are the greatest beef-making plants in America, and if not in the world. Mr. J. J. Cridlan, former president of the British Aberdeen-Angus Society, when at Chicago to judge the grades and cross-bred steers in 1911, stated that the Escher & Ryan carloads that were grand champion and reserve grand champion steers of the show over all breeds that year were the most impressive example of constructive breeding and feeding work he had ever seen.

USE WELL-BRED SIRES.

The sire is half the herd. There is usually one sire for every twenty to forty females, hence the characteristics of the male are inherited by from twenty to forty times as many animals as those of a given female. Efficient sires are those bred for a particular purpose, and are thus able to transmit to their offspring the characteristics for which they have been bred.

A GOOD TURNOVER.

The Edmonton Exhibition Association in totalling up accounts of the 1918 Spring Show estimate that with Association and private sales held in connection with the show, there was a turnover of \$100,000 in the week.

STALLION FOR POUCE COUPEE

E. Knudson, of Pouce Coupee, Peace River, has purchased a four-year-old black Percheron stallion from Galbraith & Son, Edmonton, for \$1,600; and Messrs. Bell & Bell, of Grand Prairie, have disposed of their Percheron stallion to a syndicate at Waterhole at a figure of \$2,500.00.

A REAL CONSIGNMENT.

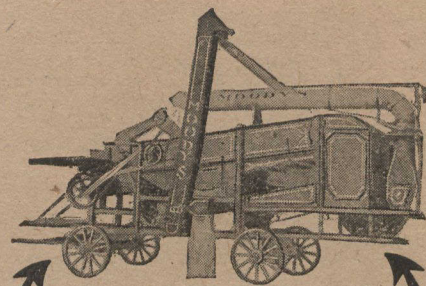
A remarkable sale, making what is said to be the top so far for the 1918 market, and the greatest amount of money secured by a single owner, in one sum, as a result of his winter's feeding operations, was made recently at the Chicago Union Stock Yards by Edward Hickey & Sons, of Sarpy County, Nebraska. The sale was made through Messrs. Clay, Robinson & Co., the big commission house, to Sturtevant & Haley, of Boston, Mass.

On Monday, April 29th, he sent in a trainload of stock, 25 cars of cattle and 6 cars of hogs. There were 320 head of cattle in all, and 17 head averaged 1,987 lbs., and grossed \$349.72 per head, or \$17.60 per cwt. For 242 head, a figure of \$17.50 was secured. For 61 head \$17.45. General average of weight being 1,720 lbs., the 320 head grossed \$97,148.60.

These cattle were all horned and branded Shorthorns and Herefords, and, as the horns and brands affects the market, 25c. per 100 lbs., the figure is a very notable one.

The six cars of hogs sold at \$17.50 and \$17.30, netting \$17,775.53, thus making a total net on the 31 cars of \$113,222.85.

Mr. Hickey handled 681 head of cattle this winter, and three weeks prior to the above sale had sent in 20 carloads, or 286 head. Those ran about 1,507-lb. steers, and sold at \$15.60 per cwt.



Those Straw Pile Dollars

Put them in your pocket this year. Every bushel of wheat in the straw pile represents lost dollars. Buy a Moody, it is the greatest grain-saving separator in existence. Note the weed seed bagger attachment. Keeps the land clean by putting all the weed seeds in a bag separate from the grain. Made in four sizes, suitable for any size farm, ranging in price from \$405.00 to \$1525.00, and in sizes suitable for small, stationary and portable or tractor engines. Write for catalogs, terms and prices to the following distributors for Western Canada:

FRANCOEUR BROS.
 Camrose, Alberta

NEW HOME MACHINERY CO., Ltd.
 Saskatoon, Sask.

MITCHELL & MCGREGOR
 Brandon, Man.

NOTICE!



In the matter of the Enforcement of "The Motor Vehicle Act."

NOTICE is hereby given that the provisions of The Motor Vehicle Act are to be rigidly enforced. There is no defence for a person operating an unlicensed motor vehicle at this date, as immediate delivery of Automobile Number Plates may be obtained not only at the Departmental offices at Edmonton, Calgary and Lethbridge, but also from the Clerks of the Court at Peace River, Wetaskiwin, Camrose, Stettler, Red Deer, Medicine Hat, Bassano, Macleod and Taber, and from the Process Issuers at Fort Saskatchewan, Vegreville, Lloydminster, Sedgewick, Hardisty, Coronation, Vermilion, Wainwright, Oyen and Youngstown.

The Motor Vehicle Inspectors of the Department have instructions to see that the Act is strictly enforced in its entirety.

DATED at Edmonton, this 11th day of April A.D. 1918.

E. TROWBRIDGE,
 Deputy Provincial Secretary.

Steam Plowers, ATTENTION!



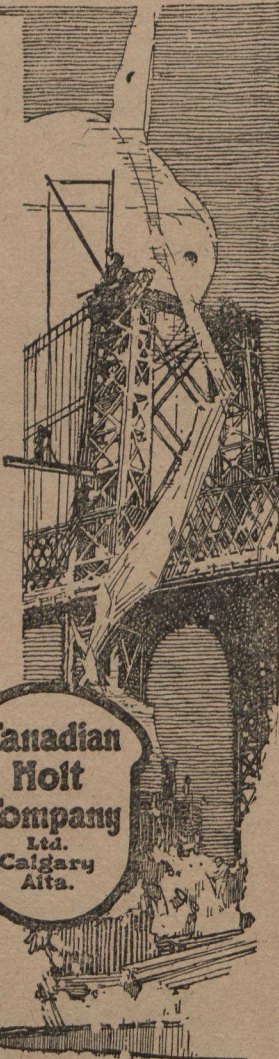
Highest Grade Steam Coal Produced in Canada

Canadian Coal for Canadian Farmers Equal to the best American Steam Coal. Semi-Anthracite. Smokeless, Sparkless Low Ash. 14491 B.T.U's. Ask your dealer or write us for descriptive circular.

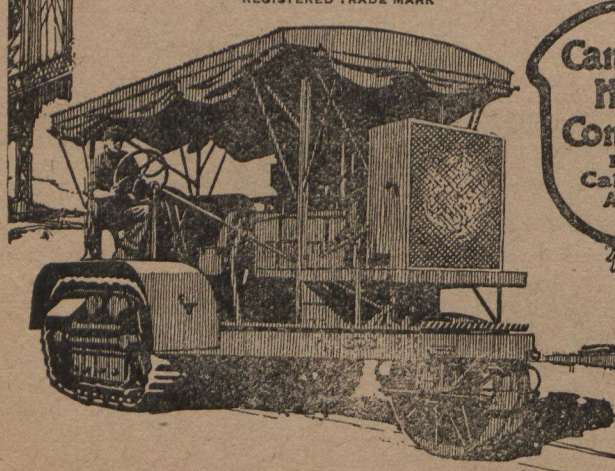
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 CALGARY, CANADA

It's Construction That Insures Lasting "Caterpillar" Tractor Service

No other tractor is built to as high standards of construction as the "Caterpillar" Tractor. That is why no other tractor equals the "Caterpillar" in service and low cost of upkeep. It not only does, better and cheaper, the ordinary work that other tractors do, but also handles work that no other tractor can do successfully. It won't slip, won't mire and won't pack the soil. It is supreme in military work as well as farm work. It reduces farm costs, increases farm profits. Investigate the "Caterpillar" 75 Tractor now, before you are seriously handicapped by horse and labor shortage. Full information on request.



Canadian Holt Company Ltd.
 Calgary
 Alta.



If you do not see what you want advertised in these columns, write us and we will put you in touch with the makers

THE DOVE ABERDEEN-ANGUS SALE.

Right next to the Escher & Ryan sale and on an equal footing with the Cooper, Tudor & Donohoe annual sales of Aberdeen-Angus breeding cattle in Iowa, stands the Dove sale. Mr. Dove, who is part owner and manager of the Willow Lawn Farm, near Waverly, Iowa, has been a consistent buyer of the best offered at the great Iowa Aberdeen-Angus sales of the past few years. Price has never stood in the way in getting animals he wanted to make the Willow Lawn herd the best. The fruits of this careful buying and breeding are making each succeeding annual sale better. With the farm located on the main lines of the Illinois Central; Chicago, Rock Island and Pacific; and the Chicago Great Western, Canadian buyers going by way of Minneapolis and St. Paul will find railroad connections perfect. attending the Tudor, Cooper & Donohoe sales, less than a week earlier, can include the Willow Lawn sale with little additional time and cost. In fact, it would be a splendid opportunity for visitors and buyers at the first sales to see the leading Iowa herds, as here are concentrated in a comparative small area many of the leading herds in North America. Western Field Representative, E. T. Davis, of the American Aberdeen-Angus Breeders' Association, will be available to those hunting Aberdeen-Angus cattle as guide in finding what is wanted among the Iowa herds at this time.

RAILWAY COMPANIES' READINESS TO BUILD FENCES TO TURN SHEEP AND SWINE.

The railway companies have indicated their readiness to construct along their right of way a fence suitable to turn sheep and pigs in all cases where a farmer has his field fenced in a similar way. This is something that should be appreciated by every one interested in sheep-raising, where a line of railway runs through or along side his property. All the farmer or rancher has to do is to inform the general manager's office of any of the different railways that his property is fenced, or that he is about to fence it. The railway company will then proceed to have its fence constructed to meet the requirements. This is evidence that the railway companies realize the importance of the livestock business, and are prepared to co-operate in its upbuilding.

MORE CEREALS NEEDED

While wheat must be acknowledged as the main item, there are many other cereals of almost equal importance, such as barley, oats, corn and rye—and an increase in production will be necessary this year over that of previous years. A comparison of the import requirements of Great Britain, France and Italy covering these five cereals shows:—

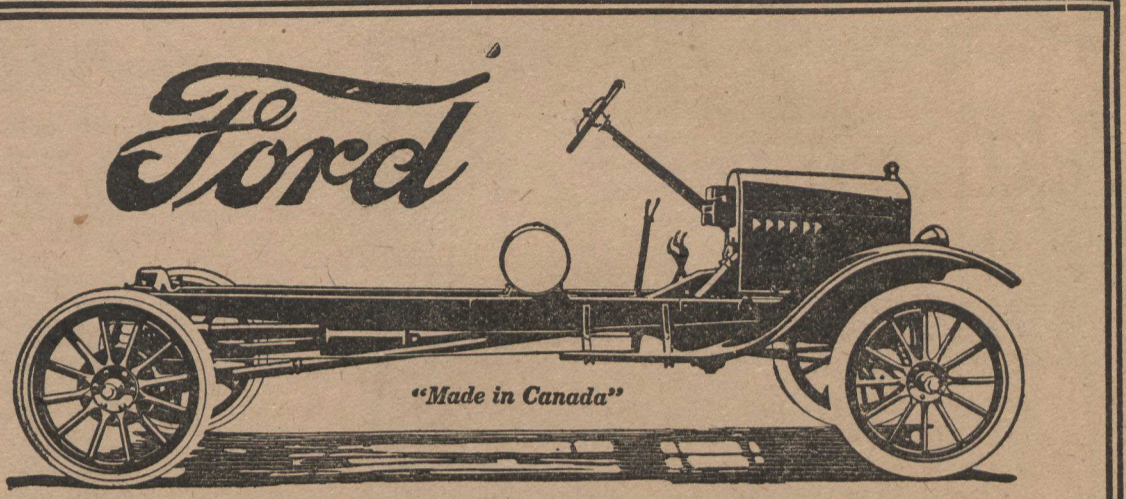
	Pre-war	1918.
Wheat.....	312,684,000	525,085,000
Barley.....	54,000,000	69,000,000
Oats.....	97,000,000	171,000,000
Rye.....	5,549,000	28,271,000
Corn.....	115,048,000	151,135,000

BIG GAME HUNTERS GET FINE TROPHIES IN WESTERN CANADA.

According to statistics given out by Grand Trunk Pacific officials here twenty-two hundred and fifty licenses to hunt were issued in the Province of Saskatchewan last year, and the hunters secured twelve hundred and fifteen moose, one hundred and fifty elk, three hundred and seventy-five deer and sixty-four caribou. The estimated weight of big game of all kinds killed during the year amounted to two million pounds. More than twelve thousand game bird licenses were issued in the province during the year.

* * *

Look over the harness frequently and bear in mind that a strap worn nearly through should be repaired at once. Safety first.



A Truck for the Farmer

FARM equipment which will effect a time and labor-saving, and therefore a money-saving, must be carefully considered by every good farmer now-a-days.

The farm wagon, which for years was the most useful of all farm equipment, is now being replaced on the best farms by a sturdy, dependable motor truck. The truck will haul any farm product—fruit, grain, vegetables, stock, fertilizer, or wood—around the farm, or to the town or city many miles distant, in half the time, and at a much lower cost.

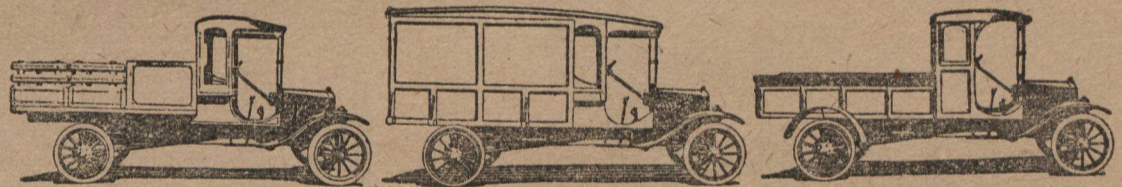
The Ford One-Ton truck is a rapid, economical and very serviceable means of transport. One of these on your farm will save you weeks of time in a single season and will enable you to pass through a crisis of labor shortage with less difficulty.

The Ford truck is supplied as a chassis only. This permits you to select any of the many body styles especially designed for the Ford truck and already on the market. Thus you can mount the one which suits your individual requirements.

Price \$750 f.o.b. Ford, Ont.

See any Ford Dealer in Canada, or write for a catalog

**Ford Motor Company of Canada, Limited
Ford, Ontario**



Three of the many body styles that may be mounted on the Ford truck chassis

HAIL INSURANCE

Liberal Treatment

Prompt Service



Full Government Deposit

Absolute Security

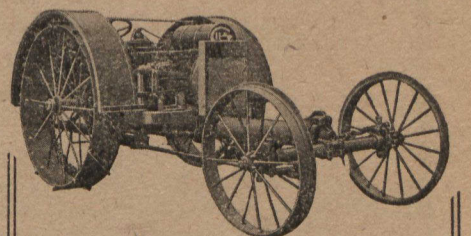
**THE BRITISH CROWN
—HAIL UNDERWRITERS LIMITED—**

Agents in every town. Get full particulars from one of them, or write to the Company at

36 Canada Life Building
REGINA - SASK.

315 Beveridge Building
CALGARY, ALBERTA

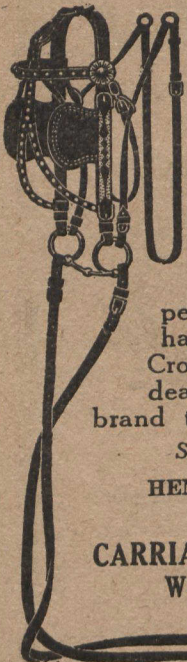
LION TRACTORS



20 H. P., 3 & 4 WHEEL TYPE
ROLLER BEARINGS
HIGH TENSION MAGNETOS
SEND FOR CATALOG

Canadian Tool & Machinery Co.
Box 416 WINNIPEG, MAN.

Heney Harness

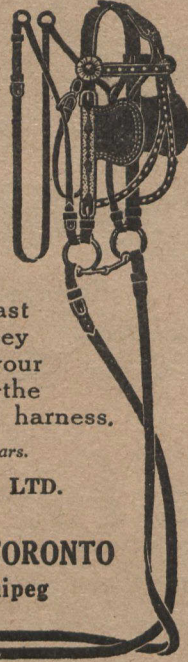


Examine a set of Heney Harness. Look at every detail, every inch of stitching, every inch of leather. Note the extreme precision and carefulness of detail with which every bit of workmanship is finished. Such an examination will be your own "eye-proof" of the superiority of the Heney Harness and will explain why experienced harness buyers for the last half century have preferred Heney Crown Brand Harness. Insist that your dealer show you the Heney Brand—the brand that guarantees a perfect set of harness.

Sold by dealers all over the Dominion for fifty years.

HENEY CARRIAGE AND HARNESS CO., LTD.

Under Management of
CARRIAGE FACTORIES, LIMITED - TORONTO
Western Branch, 150 Princess St., Winnipeg



About the Farm

THE CARE OF A TRACTOR

By H. L. THOMSON.

Two things should never be allowed to get out of order in a tractor—the steering device and the brake. Carelessness in this, as many accidents have shown, is almost criminal. Use a good grade of gas engine oil for the lubrication of the cylinder and keep it free from dust and grit. In a kerosene engine it is especially important to use the kind of oil recommended by the makers. Do not expect the transmission to last long if the proper lubricant is not regularly used. Never use gyp or alkali water in the cooling system of the engine; there will soon be trouble. The magneto should be carefully studied from the direction book, but the armature should never be taken out nor the bar magnetos removed. This will seriously weaken the magneto. If it absolutely will not work it should be taken back to the dealer and let him fix it up. A magneto, however, rarely gets completely out of whack and attention is easy to give. Hard starting on cold mornings is often attributed to the magneto, but is really due to a difficulty in vaporizing the fuel. Ten gallons of high-test gasoline, 68 degrees or 72 degrees, will save hours of cranking and language, too. The carburetor should always be adjusted under load and after a correct setting has been

cellent for this use and can carry the fuel, water, oil and whatever tools and supplies are necessary. This will save many trips and enable the work to go right ahead. Watch the machine. Learn how it should sound when running all right. Keep an eye on the wearing parts and order supplies in time. Have a regular system of taking care of the machine.

THE FLAG.

We have recently had forwarded to us for review a concise and interesting little book entitled "The Flag" by Chas. P. Band and Emilie L. Stovel. This book, which is published in Canada, gives the history of the evolution of the British and Canadian flags, from the time of the English Jack, or St. George's Cross, in the year 1194. The book is well illustrated, and gives the regulations for the making and use of the various flags and ensigns, and a list of the authorities quoted.

The little book, which is of more than usual interest, just at this time, is published by The Musson Book Co., Ltd., Toronto.

FLAX STRAW IN DEMAND.

Unthreshed flax straw, standing crops of frozen flax which have not been harvested, and flax straw which has passed through small threshing outfits

THE PAGE WIRE FENCE COMPANY OF CANADA, LIMITED ANNOUNCES

The taking over of the business of the Page Wire Fence Company of Ontario.

Winnipeg is one of several important centres at which branch offices and warehouses are being established.

Our Winnipeg branch, located at 45 Notre Dame Street East, is already prepared to supply the requirements of the Western farmer.

PAGE FENCING, as manufactured by us to-day, is of the same high standard as set by the original Page Fence Company. It is made on the same looms, at the Walkerville plant.

You can rely upon PAGE FENCING for the same good service that it has given the farmers throughout Canada for the past 25 years.

PRICES

Subject to Change Without Notice Twelve Tons Make a Minimum Car

ASK FOR OUR CAR-LOT PRICES

Style	Rod	Price
10 bar 54 in. Light Empire	8 4-5	54 1-5
8 bar 48 in. Light Empire	7 1-3	45
9 bar 36 in. Light Empire	8 1-4	50 3-4
6 bar 42 in. Light Empire	6	37
10 bar 52 in. Heavy 12 stays	13 3-4	85
9 bar 52 in. Heavy	12 5-8	78
10 bar 520 in. Star 9 stays	12 2-3	77 1-4
10 bar 48 in. Star 12 stays	13 1-2	84 1-4
10 bar 480 in. Star 9 stays	12 1-2	77
9 bar 51 in. Star 12 stays	12 5-8	78
9 bar 510 in. Star 9 stays	11 2-5	70 1-4
9 bar 48 in. Star 12 stays	12 1-2	77
9 bar 480 in. Star 9 stays	11 1-5	69
8 bar 47 in. Star 12 stays	11 1-3	70
8 bar 470 in. Star 9 stays	10 2-3	65 3-4
7 bar 480 in. Star	9 1-2	58 5-8
7 bar 400 in. Star	8 7-8	54 2-3
6 bar 400 in. Star	8	49 1-5
5 bar 370 in. Star	6 3-4	41 1-2
4 bar 300 in. Star	5 1-2	34
20 bar 60 in. Special Poultry	12	73 5-8
18 bar 48 in. Special Poultry	11	67 1-2

GATES

PAGE "RAILROAD" GATES	Price	PAGE "DIAMOND MESH" GATES	Price
10 ft. x 48 in.	\$6.50	10 ft. x 48 in.	\$7.25
12 ft. x 48 in.	7.25	12 ft. x 48 in.	8.35
14 ft. x 48 in.	8.00	14 ft. x 48 in.	9.00
16 ft. x 48 in.	8.75	16 ft. x 48 in.	9.75

STANDARD GATES, PAGOL FILLED

3 ft. x 36 in.	\$3.35	3 ft. x 48 in.	\$3.90
3 1/2 ft. x 36 in.	3.80	3 1/2 ft. x 48 in.	4.30
3 ft. x 42 in.	3.80	4 ft. x 48 in.	4.50
3 1/2 ft. x 42 in.	3.90	12 ft. x 48 in.	9.00
12 ft. x 42 in.	8.60	ACME filled Gates at 10 per cent. higher than PAGOL filled.	

Lawn Fence Prices on Application

GALVANIZED FENCE STAPLES

100 lb. Boxes	\$6.25	50 lb. Boxes	\$3.40	25 lb. Boxes	\$1.75
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No. 9 GALVANIZED SOFT BRACE WIRE

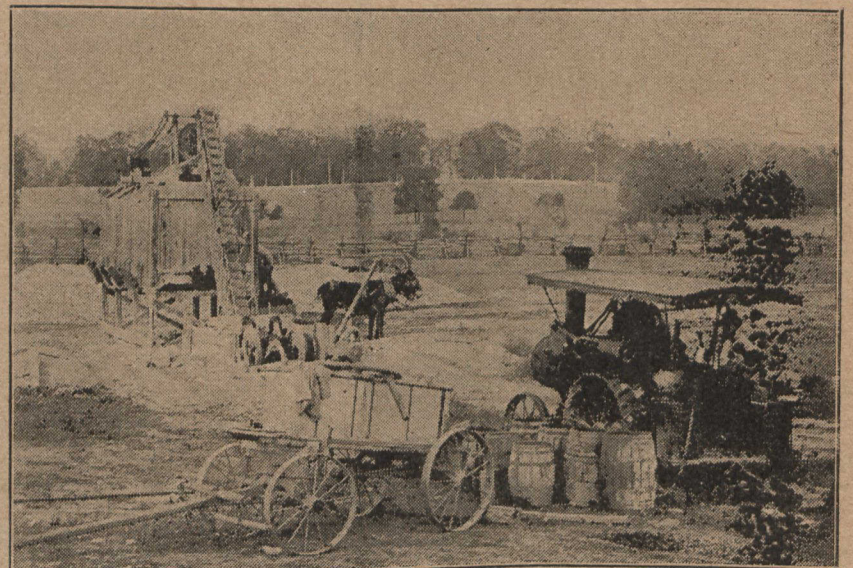
100 lb. Bundles	\$6.00	50 lb. Bundles	\$3.25	25 lb. Bundles	\$1.70
Page Duplex Stretching Tools	\$13.00	Post Hole Diggers			\$1.90

TERMS: Cash with Order, or C.O.D. f.o.b. Winnipeg Warehouse.

Western Branch:

45 Notre Dame St. East - WINNIPEG
G. O. NICOL, Branch Manager.

MONTREAL WINNIPEG TORONTO ST. JOHN



Crushing stones for the construction of a permanent road in one of the older settled districts.

reached it should be left alone. The gasoline should be strained into the tank. It will save delay in stopped-up pipes. Small pieces of waste should be kept away from the oiler and the fuel tanks, when filling. In hard, continuous work, the valves may have to be ground every ten days or two weeks, particularly if heavy fuel is used. The question of what is the most economical fuel is not easily answered and has generally to be worked out for each engine. Kerosene is no doubt the best fuel for the slow speed single or double-double cylinder engines which are made to use it and can use it with good efficiency without undue wear and carbonization. But for the four-cylinder, medium-speed engine of the heavy automobile type, it is a question whether it pays to burn it at all. A tractor manufacturer who has taken prizes in contests for the efficiency with which his tractors burned kerosene, freely admits that under ordinary conditions it will take from one-fourth to one-third more kerosene than gasoline. As a general rule it will not pay to burn kerosene unless it is three to five cents less the gallon than gasoline. Trying to do stunts with the tractor, slamming the clutch, starting forward, and then suddenly backward with a jerk and doing all kinds of useless things just to see if the tractor will stand it, is like loading up a horse to the limit on a hot summer day to see how long the beast will stand it. The result in both cases will in a short time be the same, no tractor and no horse. If two or three days' work is to be done in a field some distance off, supplies should be carried along. An old wagon is ex-

with conveyors rather than blowers for removing the straw, is an article of national value at the present time according to advices which have been received by the Saskatchewan Provincial Department of Agriculture.

Linen supplies from Russia and portions of Belgium and France have been so reduced, while the demand for flax for airplane construction has become so great, that an acute shortage has developed as a result.

Farmers who have such straw or know of such straw being available anywhere in the Province are invited to communicate by letter with F. H. Auld, Deputy Minister of Agriculture, Regina, stating how much of this material is available and where it is located.

PAINTING FARM BUILDINGS

By WILLIAM F. PURDUE

There is no question about the profit in keeping all buildings thoroughly painted, but while painting with poor materials is possibly better than not painting at all, yet by far the greatest profit will be derived by using only good materials in painting farm buildings. Really, the cost of good paint is only a minor item in the keeping of buildings well painted, the cost of the labor required to apply it being the larger factor, so that where home labor is used to apply it the greater expense in painting is eliminated. In any event, one cannot afford to use any but the best paint on account of the time required to apply it, and the resulting cost of the application since the good paint will last much

Are You an Investor?

or are you seeking information on Investments? If so, send immediately and obtain a free copy of our latest list of Government, Municipal and other Bonds, which on investments of \$50, \$100 and upwards will give an income yield of

5 $\frac{3}{4}$ % to 8 $\frac{1}{2}$ %

This book came off the press, May 6th. Write for your copy now. It will well repay you. Address: Dept. "K".

Graham, Sanson & Co.
INVESTMENT BANKERS

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MEDICINE EDUCATION
APPLIED SCIENCE

Mining, Chemical, Civil, Mechanical and Electrical Engineering.

HOME STUDY

Arts Course by correspondence. Degree with one year's attendance or four summer sessions.

Summer School Navigation School
July and August December to April

19 GEO. Y. CHOWN, Registrar

longer and application will not need to be so frequent as where the poorer grades of paint are used. The cheap grades of paint may give a good appearance to the job for a time, but they will not preserve the wood as will paints mixed with linseed oil, which not only gives the paint a bright and glossy appearance, but acts as a preservative of the wood by keeping out the moisture and the germs which cause decay.

Any of the standard makes of prepared paints can be used by anyone who will carefully follow the printed instructions accompanying them. However, where the best results are wanted from paint, the practical painter's knowledge makes it well worth what it costs to employ him.

A new building may be primed with prepared paint or with a coat of lead and oil mixed in the proportion of five points of lead to one gallon of oil. Something always depends upon the character of the wood, however, as to how thin the priming coat should be. If the wood is soft and absorbent, the paint should be made very thin for the priming coat. If a ready-mixed paint is used it must be thinned with about two quarts of raw linseed oil and one pint of turpentine to the gallon of paint. If the timber is hard and non-absorbent the priming coat must be thicker. One quart of oil and an equal quantity of turpentine will be a sufficient addition to each gallon of paint. Great care should be exercised in putting on the priming coat; brush it well into the wood. This coat is the foundation for the succeeding coats, and it must be put on right. The priming coat, if properly mixed and applied, will dry with a dead surface—that is, without gloss. The next coat will adhere to such a surface far more firmly than to a glossy surface.

A building that has been painted so long that the paint is dry and cracked or chalking should be gone over and the old paint which is peeling scraped off with a steel scraper; sandpaper the worst spots where the paint cannot be detached. If the old paint is dry and absorbent, thin the new paint with oil and turpentine, and put on the finishing application with a second coat of the paint as it comes from the can.

When a building has stood long enough without paint to become weather-beaten the clapboards will be more or less warped, and many of them split at the ends where the nails hold the boards in place. Before the painting is done the old nails should be driven in and, where necessary, put in new nails in order to draw in each board and make it lie close to adjoining boards. Next put the priming on. This is best done with pure linseed oil, for you cannot put a coat of paint on an old, weather-beaten building without showing laps, because the paint sets so quickly. If a coat of clear oil is first applied the pores of the wood will be sealed sufficiently to hold out the oil of the next coat, so that it may be put on smoothly and evenly. This is very important.

A safe rule is to paint only on dry surfaces in dry weather, and to allow a week between coats. Cold weather is really better than hot weather for new paint, provided the thermometer does not fall below 40 degrees before the paint can harden on the building naturally.

WESTERN RYE GRASS.

One of the crops that is attracting attention on the illustration stations in Alberta and Saskatchewan is Western rye grass. On twenty-nine stations, this grass has been grown for the last two seasons with a fair amount of success.

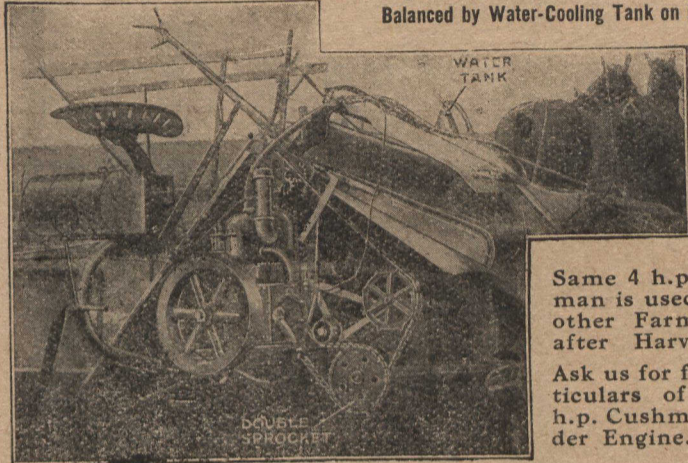
The season of 1916 was a favorable one, there being sufficient moisture to ensure a strong growth during the growing season, and crops harvested throughout both provinces were particularly heavy. Reports gave yields of from 2 $\frac{1}{2}$ to 3 tons per acre of well-cured fodder. The season of 1917 was not so favorable, on account of lack of moisture during the growing season, so that much lower yields were obtained.

When to Harvest for Fodder.—The grass should be cut just before it blooms, or even earlier, as it is most palatable, and has its greatest feeding value before flowering. After flowering,

Cushman Binder Engines For All Farm Work

SAVE A TEAM on the BINDER

Engine Weighs only 167 Pounds
Balanced by Water-Cooling Tank on Front



Same 4 h.p. Cushman is used for all other Farm Work after Harvest.

Ask us for full particulars of the 4 h.p. Cushman Binder Engine.

The 4 H.P. Cushman is the original and only successful Binder Engine. Thousands are in use every harvest—saving horse flesh and saving grain. A binder is not complete without a Cushman Engine.

THE ONE BINDER ENGINE —that is used in the grain fields all over North America from Texas to North Alberta;
—that has ten years of successful field work behind it;
—that has proper attachments to fit any make of binder in use.

The Cushman is water-cooled and cannot overheat on all-day run in hot harvest field like engines not properly cooled.

SAVE HORSES—SAVE GRAIN—SAVE TIME—SAVE THE BINDER

Investigate our 8-15-20 H.P. 2 Cylinder Engines

They are the lightest weight farm engines in the world, yet they are more steady running, quiet and dependable than heavy engines, because of perfect balance and almost no friction or vibration.

May be attached to all farm machines that require stationary power. Easy to move around. Moving parts enclosed and run in bath of oil. Throttle Governor. Run at any speed—speed changed while running. Direct water circulating pump prevents overheating.

Cushman Motor Works of Canada, Limited

BUILDERS OF LIGHT-WEIGHT, HIGH-GRADE GASOLINE ENGINES FOR ALL FARM POWER WORK

Dept. G, WHYTE AVE. and VINE ST., WINNIPEG, MAN.

Fanning Mills—"Hoiland" Wild Oats Separators—Smut and Pickling Machines—Vacuum Washing Machines—Lincoln Grinders—Lincoln Saw—Incubators—Universal Hoists—Langdon Ideal Self Feeders—Portable Grain Elevators—Wagner Hardware Specialties—Combination Threshing Outfits—Shinn-Flat Lightning Conductor.

LUMBER



BY co-operating in buying from us you save the middleman's profit—and secure a higher grade of lumber—also

Save from \$150 to \$250

on every carload you buy.

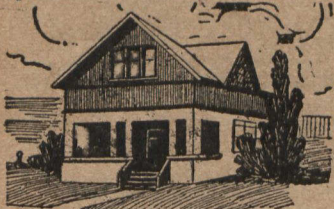


Facts to Consider

High Quality
Immediate Shipment
Low Prices
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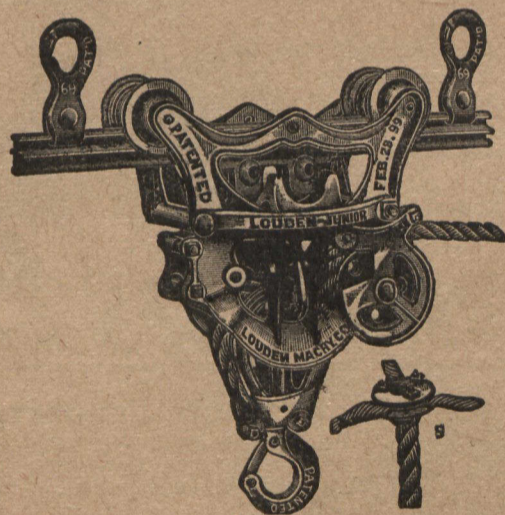


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R. G. LONG & CO., Limited, Toronto, Canada 402

the ripening process begins, the leaves and stems become tough, hard and woody, considerably lessening its value as a fodder.

Seed Growing.—This grass produces big crops of seed. On the illustration stations, yields of 500 to 760 pounds per acre have been obtained. When harvesting, care must be taken not to cut on the green side, nor allow it to get over ripe, or the seed is liable to drop when harvesting. It usually takes three to four weeks of good ripening weather after flowering to ripen the seed.

Cutting.—The best machine for cutting rye grass for seed is the ordinary grain binder. Tie the sheaves and stook them until dry enough to thresh from the stook, or to be stacked and threshed later on.

Threshing.—The threshing is usually done with the regular grain separator. If care is used in regulating the sieves and wind the seed can be made clean.

How and When to Sow.—The seed should be sown at the rate of 14 pounds per acre. If in a dry belt, where the humidity is low, a smaller quantity of seed will give better results. The seed, which is light, weighing only 14 pounds per bushel, may be sown by hand or with the ordinary grain drill. The seed can be sown with the grain drill alone, or may be sown mixed with twice the quantity of broken wheat. It will be found best to have an extra man to attend the drill to see that the seed is coming out evenly. Before going to the field, it is a good plan to regulate the seed drill, so as to get the quantity of seed desired on each acre. A good place to test the seed drill is on a hard road, where every seed can be seen. It is advisable to sow quite shallow, but deep enough to get the seed into the moist earth. Should the soil be loose from cultivation and the seed drill, it is advisable to pack the soil before and after the seed is sown. During the first season, it is well to cut all growth up to about August, and as often as the growth gets high enough for the mower to work properly, not cutting the plants too close to the ground at any time, and leaving all material on the ground to form a mulch. This with the autumn growth should be a good protection for winter.

Place in Rotation.—Western rye grass does best when sown on a well-prepared summerfallow, but this method is found to be rather expensive owing to the loss of two seasons' crops.

A second plan, and one often adopted, is to plow a clean stubble field early in the spring, keep the cultivator going at intervals until June 1st, then sow the seed and pack the land if required. Weeds and some volunteer grain will come up with the grass, but they can be cut down with the mower before they seed, without injuring the growth of the young grass.

The grass may also be sown with a grain crop, just before or after the grain is sown, when one harrowing will cover both lots of seed. Care must be taken not to bury the grass seed too deep; it should not be sown on rough unprepared land. One of the objections to sowing this grass with a crop of grain is that, should a drought follow, the grain having the stronger growth absorbs all the moisture, leaving the tiny grass plants to perish, and should the season be a wet one, or the soil strong, the grain will lodge and smother out the grass plants.—Experimental Farm Note.

DRY FARMING AND IRRIGATION.

There is an opinion in the public mind that dry farming and irrigation are two methods of agriculture directly opposed to each other. Nothing could well be farther from the truth. The fact is, dry farming and irrigation are methods of agriculture very closely allied to each other. Both are practiced in countries where precipitation is less than the growing crop requires; both are designed to forego low precipitation, and by providing moisture where it is required, and when it is required by means at the command of the farmer and of the civil engineer.

It is only natural that of these two methods dry farming should be better known and the more widely adopted in



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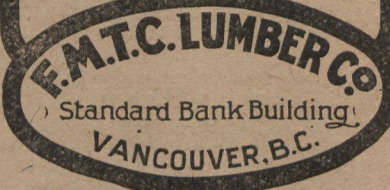
C. Stewart, Pandora, Alta: "I saved enough on my lumber to pay my carpenter. Everybody says my lumber is best seen in this country." J. Foulston, Eyebrow, Sask.: "Am well pleased with my lumber. Consider I saved \$300 on the car by buying from you."

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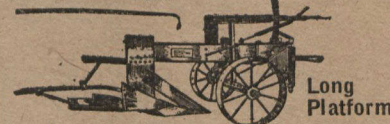
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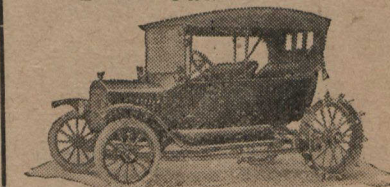
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a country such as Western Canada. This country has been settled for the most part by farmers who have had no experience in irrigation farming, but were more or less familiar with the principals of dry farming. There is also to be considered the fact that dry farming may be practiced anywhere, but irrigation is dependent upon supplies of water being available and certain engineering works being carried out without which it is impossible. These works involve a large investment of capital, and it is, therefore, natural that irrigated areas should be comparatively small in proportion to areas devoted to dry farming.

It is not the purpose of this article to discuss in detail the advantages of one method of farming as compared with the other. Each has its advocates and each has doubtless its advantages which may vary with local conditions. For example, it has been stated dry farming is not dependent upon engineering works, water supply, or topographical conditions. Its principles can readily be acquired and practiced by any one familiar with the general business of agriculture. It does not involve the capital outlay necessary in connection with irrigation projects. On the other hand, dry farming necessitates the purchase and cultivation of large areas of land, as a certain percentage of the farm running as high as fifty per cent. in the higher districts

the most important of Alberta's crops. The following table shows the alfalfa acreage and production in the various provinces of Canada.

Province.	Acreage, acres.	Production, tons.
Prince Edward Island	None	None
Nova Scotia	30	100
New Brunswick	None	None
Quebec	3,818	8,600
Ontario	52,000	142,500
Manitoba	4,400	9,100
Saskatchewan	9,500	15,300
Alberta	31,396	64,400
British Columbia	8,681	22,400

The pre-eminent position occupied by Alberta among the Western Provinces in this respect is due entirely to the irrigation enterprises which have been carried out in this Province. It should be stated also that the alfalfa production of Saskatchewan and British Columbia is also due mainly to the irrigation enterprise in this province. Alfalfa may be said to be the most valuable crop that can be produced on a farm; it has a food value equal to its own weight, and, pound for pound, is equal to bran. It has been demonstrated that an acre of alfalfa will produce 591 pounds of pork as compared with 365 pounds from an acre of corn. It has also been demonstrated that with milk at \$2.00 per hundred pounds, the value of an acre of alfalfa for milk



Sheep and Patriotism are closely akin these days

must be left fallow each year in order to store up the necessary moisture to produce the next year's crop. Dry farming, too, is only a partial remedy for low precipitation. If the precipitation is too low, not even the methods of the most advanced dry farmer can induce the soil to bring forth a crop. In order to practice irrigation farming it is necessary that engineering works, frequently of a very expensive nature should be installed, and this is possible only where the topography of the country lends itself to such an enterprise. It is also necessary that nature should provide an ample supply of water available for use through these engineering works. Where the foregoing conditions exist certain very great advantages are found in favor of irrigation farming, and it may be said that probably nowhere are they found under more favorable circumstances than in Southern Alberta. The irrigation farmer requires less land than his neighbor who follows dry farming because he is not obliged to allow any of it to remain fallow, and while he may pay more per acre for his farm his total investment may be less. He has the advantage of absolute insurance against drouth. He can raise much heavier crops of grasses, vegetables and fodders than is possible under any method of dry farming, and he can raise some crops which are not usually successful without irrigation. Such a crop for example is alfalfa. Although alfalfa is grown to some extent on dry land, its natural home is in the irrigation districts. It is the greatest of all irrigation crops produced in the United States, and is readily becoming one of

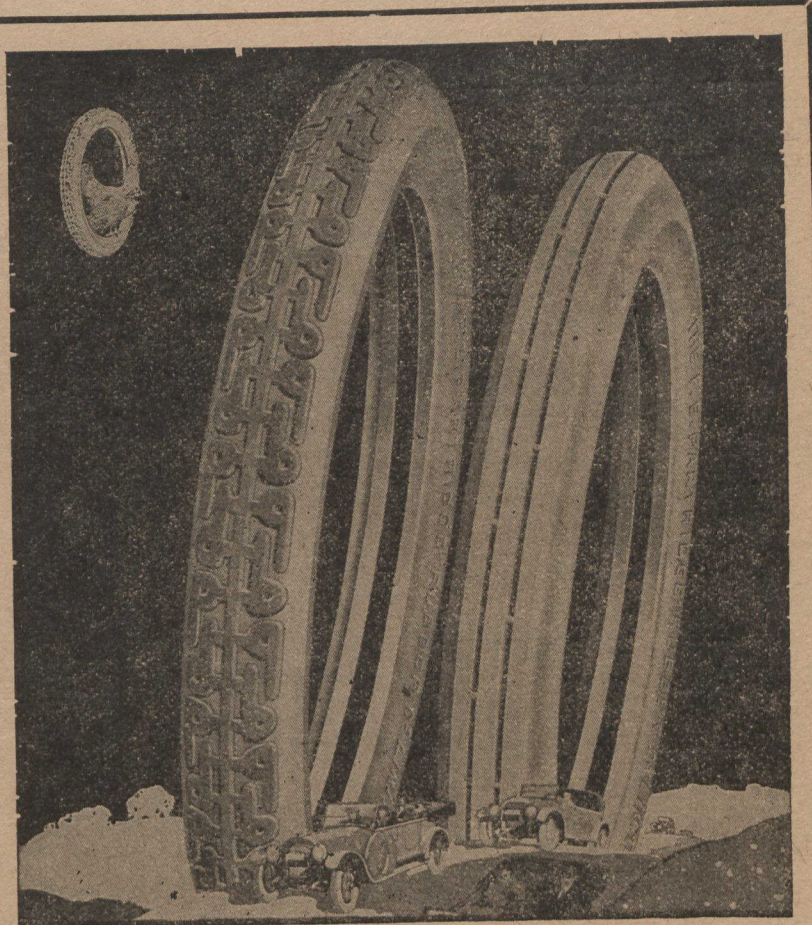
production is \$91.88, compared with \$16.72 for an acre of timothy. In addition to its great feeding value, alfalfa has the advantage that instead of impoverishing the land it makes the land richer; it calls for comparatively little labor, being sown only once in several years. It requires no binder twine or threshing, and the farmer can either export it, or can consume the entire crop on the premises by feeding it to livestock.

There is little doubt that the large area in Southern Alberta which has been brought under irrigation by the Canadian Pacific Railway will become one of the greatest livestock centers in Canada as a result of the fodder crops rendered possible through irrigation. At the same time, the non-irrigated areas will continue to be worked on the dry farming principle, and instead of dry farming and irrigation being in opposition to each other, they will be found—as they now are found—practiced by the same farmer on the same farm, the irrigation farming below the ditch, and the dry farming on the higher land which cannot be reached by irrigation.

CANADA'S MOTOR TRADE GROWING FAST.

There are now registered in the Dominion of Canada well over 200,000 cars and trucks. There is owned and operated in Canada one car for less than 40 of population, as compared with a ratio of one to about 60 shown in last year's figures.

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PARTRIDGE TIRES ride easier because they are made of the purest of rubber which gives them the maximum of resiliency. They look better because the finish is perfect and is one of the most important parts of their manufacture.

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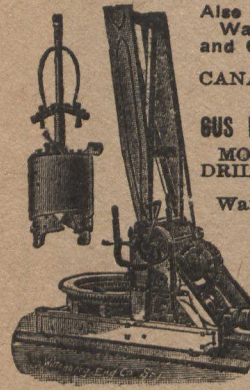
Write for literature; or, when in Calgary, Phone W1555 for demonstration.

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For further information see the Kill-Em-Quick Gopher Poison Advertisement on page 550.

LUMP JAW



For twenty years the only sure cure has been Fleming's Lump Jaw Cure. Use it no matter how old the case. It must cure or we will refund the full price paid. Fleming's Vest Pocket Veterinary Adviser is free.
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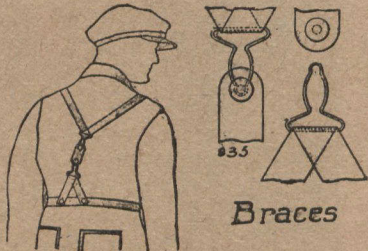
IMPORTER OF PERCHERONS
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than in any previous year. Particularly in the West has this been noticeable, but it is apparent that all rural communities have been large buyers, whether due to the increasing measure of prosperity enjoyed by the farming classes, but the intensified good roads propaganda or by the general campaign of motor education.

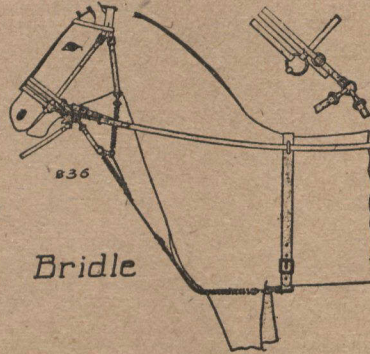
INVENTIONS AND APPLIANCES OF INTEREST TO AGRICULTURE.

C. J. LYNDE, MACDONALD COLLEGE, QUEBEC, CANADA.

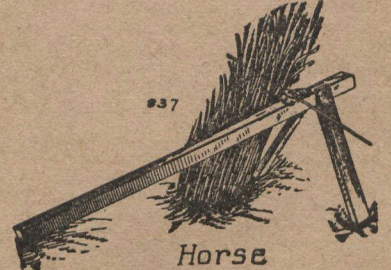
Overall Braces.—The new feature here is a broad strip of elastic cloth between the upper and lower parts of the braces. It is removed while the over-



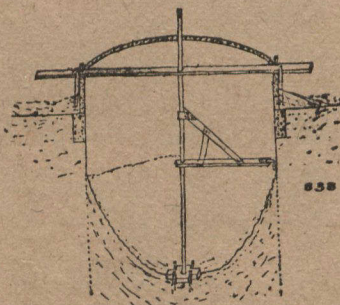
Braces



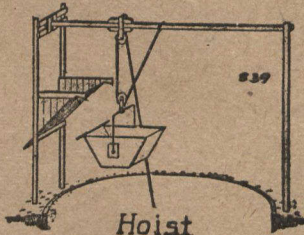
Bridle



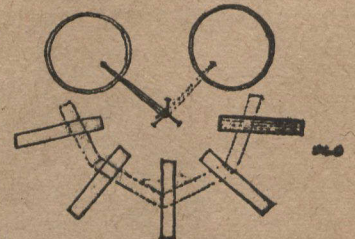
Horse



Guide



Hoist



Troughs

alls are being washed, and is readily renewed when the elastic gives out. See cut 835. (Oscar A. Berman, Cincinnati, Ohio, U. S. Patent 1,252,221.)

Bridle.—The extra band on this bridle passes around the nose and jaws of the horse and is attached to the martingale and reins. It is tightened by a strong pull on the reins, or by the upward jerk of a frightened horse's head, and brings the animal under control. See cut 836. (John G. Heivner, Orland, California. U. S. Patent 1,251,519.)

Shocking Horse.—The iron arms of this shocking horse swing about bolts at their inner end. They are out when the shock is built, but are turned in

or burning; (3) the uniform temperature cures the ensilage better; (4) they require less power to fill. See cut 838.

How to Build.—Draw a double circle on the ground, the one circumference 6 in. inside the other. Dig a trench 18 in. deep and 6 in. wide, and fill with concrete. This is the collar of the silo. Above it build a cover collar 4 ft. high and 4 in. thick. Dig out the silo and keep the walls smooth and perpendicular by the device shown in Fig. 838. The first coat of plaster is 1 in. thick, and is made of 1 part cement to 3 parts sand. The second coat is 1/4 in. thick, and is 1 part cement to 1 1/2 sand. The last coat is a white-wash of cement and water as thick as cream. A homemade discharge hoist for the ensilage is shown in Fig. 839, and two methods of arranging the

cause they give us pleasure, but they have an even greater claim upon our esteem because they give us protection. Birds are voracious eaters of nearly all insect pests and exert a steady influence in keeping down the rising tide of insect life. For economic and esthetic reasons then we should make every effort to protect birds and increase their numbers. To aid in this work the U. S. Dept. of Agriculture has issued a number of bulletins on birds. A list of 42 of these bulletins will be found on the back page of Farmers' Bulletin 844, "How to Attract Birds," from which our illustrations are taken. Illustration 868 shows a cat-proof fence and metal shields to prevent cats, squirrels, and snakes from reaching tree nests. Illustration 869 shows two methods of feeding birds, and 870 two

troughs, crane and silos for outdoor feeding are shown in Fig. 840. For further particulars write University of Arizona, Tucson, Arizona, for circular 8 "Pit Silos."

Tractor Draw Bar.—When the operator of this tractor revolves the crank handle in one direction or the other, he sets in motion a worm and pinion mechanism which shifts the draw bar to the right or left. See cut 865. (A. J. Kniertiem, Schribner, Nebraska, U. S. Patent 1,213,385.)

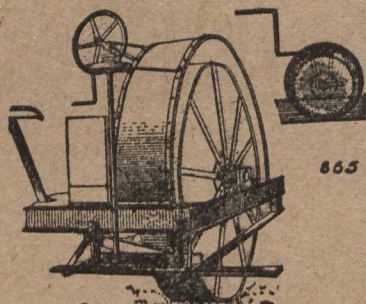
Prevents Side Draft.—It is claimed for this draft connection that it prevents side draft on a wheeled plow drawn by four horses, even when the horses pull side by side with one in the furrow and the other three on the un-

bird baths. See cuts 868, 869 and 870. For further information write Supt. of Documents, Washington, D. C., for Farmers' Bulletin, 844, "How to Attract Birds," price 5 cents.

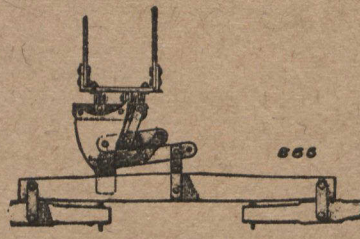
CHILDREN POISONED BY EATING WEEDS.

Several children were made very ill and two died, at the Denver State Home for Dependent Children, from eating of the roots of a plant, found growing on a ditch bank. It was at first thought that the plant was parsnip, but investigation showed it to be water hemlock, probably the most deadly plant that grows wild in Colorado.

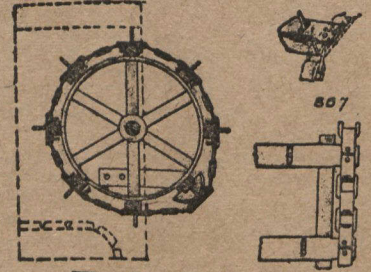
The water hemlock (*Cicuta occidentalis*) looks to the casual observer much



Draw Bar



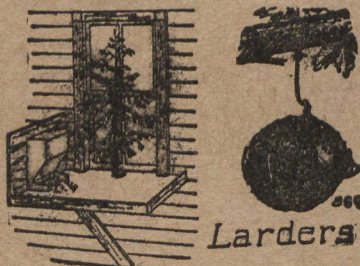
Plow Draft



Teeth Cleaner



Cat Proof



Larders



Baths

when the horse is moved to the site of the next shock. See cut 837. (H. M. Schreckengast, Avis, Penn. U. S. Patent 1,251,428.)

Pit Silos.—Pit silos, as the name indicates, are silos built underground. They are used in dry farming regions where there is no danger from seepage water. The advantages claimed for them are: (1) They cost from one-fourth to one-third the cost of the above ground silos; (2) there is no danger of their blowing over, drying out, cracking

plowed ground. See cut 866. (Illinois Iron & Bolt Co., Carpentersville, Ill., U. S. Patent 1,242,793.)

Cleans Spreader Teeth.—Each of the tooth-carrying bars of the beater cylinder here has an inverted channel with slots for the teeth. The channels are raised once in each revolution and this movement cleans the teeth. See cut 867. (J. W. A. McGilvray, Albia, Iowa. U. S. Patent 1,227,919.)

How to Attract Birds.—Birds appeal to our interest and affection be-

like the parsnip and this no doubt accounts for the confusion in the identity of the two plants. The wild parsnip, however, has a single, thick, fleshy root, while the water hemlock has a cluster of roots.

Children should be warned by their teachers and parents against eating of the roots, fruit, or any part of wild plants, with which they are not perfectly familiar. The warning against eating of any plant that looks like a parsnip should be emphasized.

Extension Bulletin No. 139, now on the press, gives information regarding water hemlock, its identification, symptoms of its poisoning in both man and beast, treatment for the poisoning, and methods of eradicating the plant. The bulletin may be obtained free by writing to The Extension Service, Colorado Agricultural College, Fort Collins, Colorado.—GEORGE H. GLOVER.

LAND SALES

As emphasizing the steady demand for land in the West and the desire for greater production in the interests of the Allies, sales continue to be reported to us in ever-increasing volume, the latest reasonably large sales being 960 acres, 640 acres and 160 acres, all being in the Lethbridge or Raymond districts, in Southern Alberta, at \$17.50 to \$25 per acre unimproved, also 480 acres in the Edwell district, southeast of Red Deer, also unimproved, at \$15.00 for immediate development purposes.

These sales were made by The Standard Trusts Company as public administrators, and they advise us that in the past few months, they have realized on estates under their care not less than five hundred thousand dollars worth of wild lands for development and productive purposes.

The same company holds two auction sales soon, one at Lethbridge, on the 4th June next, for the sale of about 9,920 acres at an upset price, and another one at Beausejour, Manitoba, on May 31st, when an area of 26,000 acres en bloc will be offered and at both of which active bidding is anticipated.

GLENCARNOCK OFFERINGS

Intending purchasers of Angus cattle, either bulls or females, will do well to look over the offerings of J. D. McGregor, as made in another section of this issue. Fifteen bulls, aged from fifteen months to two years, are ready to leave this famous establishment. They are a grand lot of bulls, and are conservatively priced for the farmer or ranchman. They are ready to go into service and some excellent show material is included in the offering. There need be no hesitation whatever in buying these animals by letter as they are guaranteed to be right in every particular, and the Glencarnock Farm does not need a bond—their word is just as good. There are also some splendid young cows with calves at foot, ready for the breeding herd. In these times of high production costs, it is well to purchase stock that you know will render a good account of itself. Market discrimination in favor of the well-bred steers will amply repay any breeder for elimination of scrub-breeding stock.

STOCK UP EARLY.

Consumers are urged, by John T. Stirling, Fuel Administrator for Alberta, to stock up early if a coal famine is to be avoided this coming winter. Immediate steps should be taken, wherever possible, to obtain a supply of coal before the railways are engaged in moving grain as the movement of wheat will later cut off transportation facilities.

As explained in our last issue, it is practically certain that no American anthracite coal will be shipped west of Winnipeg, so that an increased quantity will have to be shipped during the next three months from Alberta in order to supply the wants in Manitoba.

Coal Cheaper Now.

“Coal, undoubtedly, can be obtained now at a less price than in the near future, and as there are better facilities owing to climatic conditions for preparing it at the mines during the summer months than in the winter months, a better product can be obtained.

“In order to relieve the serious situation which will have to be faced next fall, it cannot be too strongly urged that the farmers should get in a supply of coal immediately seeding operations are completed. If this is done and the coal kept under cover sufficiently to protect it from weather conditions, no deterioration need be feared.

Many farmers have found that by scooping out a shallow hole in the ground the coal will store well, when covered with straw and a little covering of soil. The coal will deteriorate but very little, if this method is adopted.

EXPLAINS SUMMER BUTTER-MAKING.

During the present food crisis it is of utmost importance that every ounce of butterfat used for buttermaking be turned into a wholesome food product with the least possible loss. The buttermaker is cautioned to keep the following points in mind:

It is essential to have good milk to begin with. If a centrifugal separator is used, it is not difficult to obtain cream of good quality. The cream should be cooled to 50 degrees Fahrenheit before being mixed with the cream from previous milkings. When sufficient cream has been gathered for a churning, it should stand about 12 hours in a temperature of 65 to 75 degrees to ripen. The cream should become thicker and assume a glossy appearance. It should be only mildly sour. Cool to churning temperature (52 to 60 degrees Fahrenheit in summer) and hold for two hours before churning. Too much care cannot be taken to clean churn and utensils and free them from odors. Stop churning when the butter granules are the size of a wheat kernel and drain off the butter milk. Then thoroughly wash the butter, using water of about the same temperature as the buttermilk.

If the butter becomes too soft, the wash water may be a few degrees below the churning temperature. Use about three-fourths ounce of salt per pound of butter. Work sufficiently to dissolve the salt and remove the water, but guard against overworking which gives the butter a salty texture.

ACORN SCREW JOINT WELL CASING



We positively guarantee our WELL CASING to be superior to any other Screw Joint Casing procurable in Canada.

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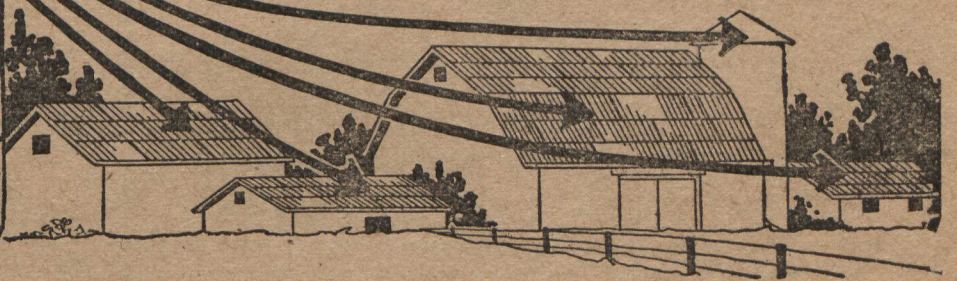
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RANCH—320 acres excellent ranch land in the Foot Hills 45 miles west of Calgary. Located in a nice valley with evergreen trees on hills all around. Good fishing. Good shooting. Lots of very best spring water. Well protected from all storms. Very little snow. Serviceable log buildings. Lots open range. A splendid place to run stock. Price \$15.00 acre with terms arranged. J. C. Leslie & Co. 302 Beveridge Block. Calgary 658

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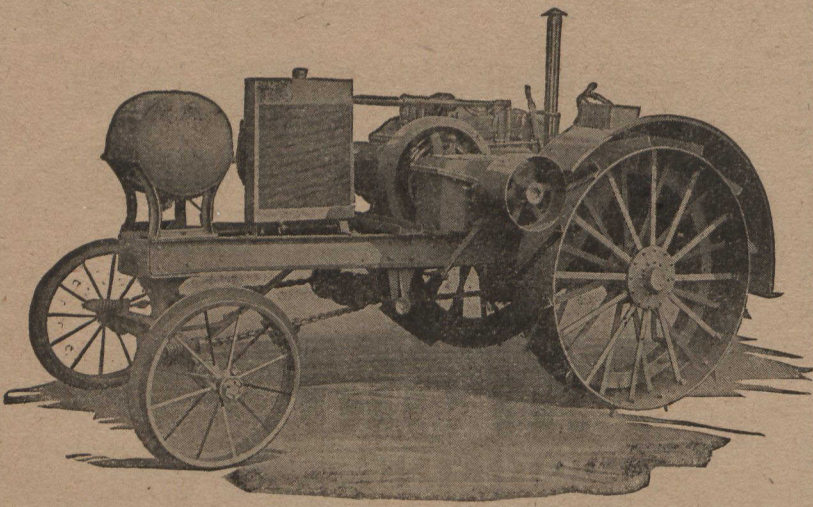
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SECOND-HAND STUMP PULLERS—One hand-power and one horse-power. These machines have been slightly used but are good as new. Both machines have given every satisfaction. Apply, Box 144, FARM AND RANCH REVIEW, Calgary, Alta. 508

UNIVERSAL TRACTOR (New)—Will pull 3 14-inch bottoms, \$700.00. FORD tractor, first-class working condition, only plowed 20 acres, will pull 2 14-inch bottoms, \$600.00. Tractor, two cylinder motor (New), 25 H.P., never been uncrated, \$250.00. Four-cylinder truck motor, 30 H.P. (New), high tension magneto, \$185.00. P. & O. Engine Gang, 3 14-inch bottom (Power Lift). John Deere Engine Gang, 4 14-inch bottoms. The Canadian Tool & Machinery Co., Box 416, Winnipeg, Man. 608

STEAM COAL

Of highest heating quality. Either coking or non-coking. Write NORTH WEST COAL CO. EDMONTON Box 1765

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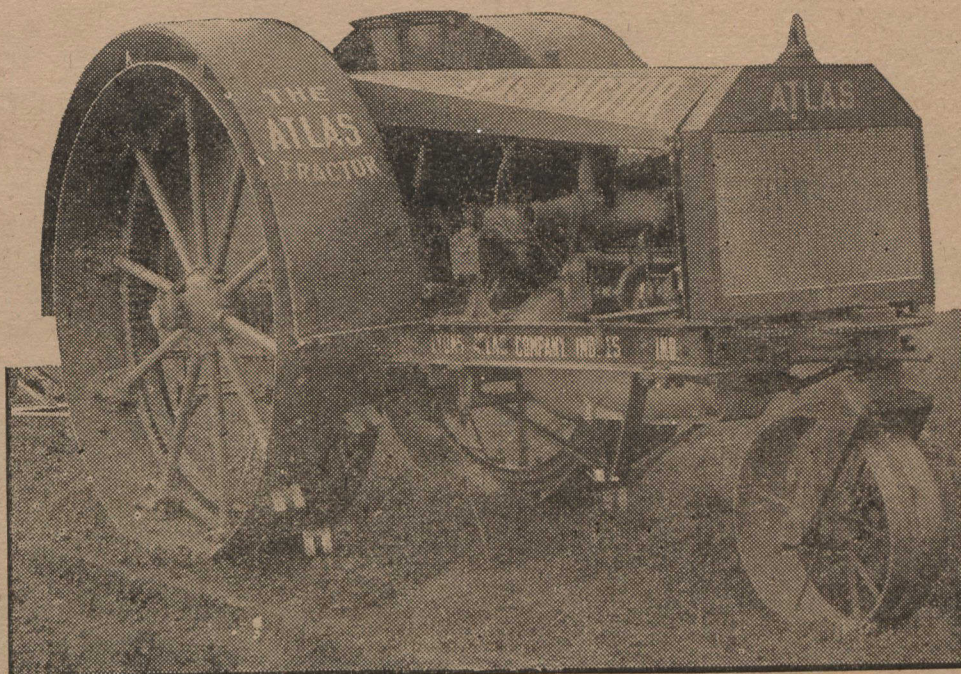
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The ATLAS TRACTOR is very SIMPLE in construction and operation and its PERFORMANCE is unequalled by any other tractor in its price class.

Extra Equipment at Small Additional Cost

- Self guide attachment.
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- Electric light equipment consisting of two adjustable headlights, trouble light, storage battery and generator.

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WE GUARANTEE THE ATLAS TRACTOR to do the work that four three-horse teams will do day in and day out. Every farmer knows that one three-horse team will plow an average of 2½ to 3 acres per day; day in and day out. THE ATLAS TRACTOR will plow from 12 to 14 acres per day; will PLOW AT LEAST 7 inches deep under any imaginable plowing conditions without overloading. THE ATLAS TRACTOR is sold and guaranteed as a three-plow outfit and as such will prove entirely satisfactory in your hands as it has in the hands of many owners in a great many different states, under all conditions of soil and climate.

Obtain facts and figures of the demonstration at Calgary on May 20th.

SPECIAL ANNOUNCEMENT:

We are also in a position to guarantee immediate delivery for some months to come, as from three to four carloads of ATLAS TRACTORS are now being shipped from the factory every week direct to Calgary, but owing to the very large demand for this type of tractor, we would suggest the desirability of placing orders at an early date. Full line of parts always carried, and expert mechanics are at your service, if needed.

Please bear in mind that the Lyons Atlas Company, manufacturers of the ATLAS TRACTORS, have been engine manufacturers for nearly fifty years, and have been manufacturing ATLAS TRACTORS for six years, and that the factory is one of the largest and best equipped in the United States, having its own foundries, chemical laboratories, heat treating and drop-forging departments, and large and fully equipped machine shops.

Some Specifications of the ATLAS TRACTOR:

26 H. P. at belt.
16 H. P. at draw bar.
2,800 lbs. draw bar pull at plowing speed.
2½ to 2¾ miles per hour.

Pulls three 14-inch bottoms.
Pulls two 7-ft. double tandem discs.
Runs 26 or 28-inch separator.
Drives 17-inch ensilage cutter.
9-ft. turning radius.

Operating weight, 5,200 lbs.
4 cyl. vertical motor, L head.
Bore, 4¼ in. Stroke, 5¾ inches.
Engine runs 1,000 R.P.M.
Fuel—kerosene, gasoline or distillate.

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- Simon Downie, Carstairs.
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HEREFORD BULLS

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 HEREFORDS have Size, Quality, Vigor, Early Maturity, Uniformity.
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 All Hereford breeders in Alberta should become members of the Alberta Hereford Breeders' Association. Write the Secretary.

FOR SALE AT A BARGAIN—ONE 60-H.P. Hart-Parr engine; one Advance separator, 32-56; also one 8-furrow plow, Cockshutt. All in good working order. Will sell separately. Cheap for cash. Apply P. H. Cox. Box 653, Bagot, Manitoba. 658A

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FOR SALE—A Seven Passenger Car—one of the very best makes, in excellent repair, only driven 6,000 miles; used in private family only and cost \$5,500.00—now only \$800.00. This is a real snap for anyone requiring a large car or could be converted into a truck if desired. Box 145, FARM AND RANCH REVIEW, Calgary.

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CALGARY SUMMER SHOW.

The prize list of the Calgary Industrial Exhibition, June 28th to July 6th, has now been issued, and may be had by writing to E. L. Richardson, Manager, Calgary, Alberta. The list in-



The Kind that Produce Herd Headers

cludes many special features, and special attention should be called to the \$3,500 prize list for girls and boys, possibly the largest ever offered for them exclusively at an exhibition. The judging of their classes will be on Saturday, June 29th, which day will be devoted almost entirely to girls' and boys' work, and will be on one of the most interesting exhibition days ever conducted by the Calgary Exhibition.

The entertainment programme of the Calgary Exhibition will be an outstanding one. The best attractions to be found anywhere on the continent have been engaged, and there will be horse racing on the afternoons of the first four days. On July 4th and 5th there will be automobile races with the fastest drivers to be found anywhere taking part.

Prospects are bright for the best exhibition of live stock ever held, even surpassing the wonderful display of last year.

SALES OF SCHOOL AND INDIAN LANDS ASKED TO BE CONDITIONED.

The Lethbridge Board of Trade recently memorialized the cabinet ministers of the Dominion and Provincial governments, the boards of trade of Manitoba, Saskatchewan and Alberta, the various organizations of grain growers and farmers throughout the West asking for their support and influence in favor of having the sales of school and Indian Reserve lands made subject to conditions of cultivation and residence.

Instances are cited of the evils resulting from the present system, and,

from the information given, it would appear quite desirable that the regulations governing the sales of such lands be so amended.

It is, therefore, to be hoped that sufficient pressure be brought to bear on the Dominion Government to induce it to condition the sales and thus remove the injustice to those sections of the country affected.

HIGH-PRICED BOAR FOR ALBERTA.

Wm. Gilbert, of Sunny Brook Farm, Stony Plain, Alta., has imported from the United States another outstanding Berkshire boar.

This boar which was grand champion at the Kentucky State Fair, weighs 650 lbs., although but a yearling, and Mr. Gilbert says that in another year he will easily develop a weight of half a ton.

Mr. Gilbert, and many of the other prominent Berkshire breeders of Canada, have for some time been on the outlook for a boar of the breed suitable to produce the type of Berkshire needed and appreciated most by the packers and feeders of this country. The desired type was one which would retain the true Berk. character, and yet have the improved bacon body—smooth from end to end and with no wrinkles.

In this new importation, Mr. Gilbert feels he has a boar of the desired type and with his other imported boar, Ames Rival 148th, he is confident he now has a pair, second to none in breeding, and as individuals, to any on the continent. He expects to be able, with these boars, to breed some of the best Berkshires, of the right type, ever seen in Western Canada.

SLOATMAN ANGUS SALE

The beef-making qualities of the Aberdeen-Angus need no eulogy here. Canadians have seen this breed top all the leading calf competitions in the Dominion during the past year, as well as carry off the single steer grand championships over all breeds at our Western shows. The steer winnings of the "Doddies" at the Chicago International are even more conclusive. The McGregors have proved with their steer grand championships at Chicago that Aberdeen-Angus from the states are easily acclimated to our conditions. The Adams and Sloatman offering is nearer our territory than any other of the leading United States sales this spring. They are bred for range and farm conditions very similar to much of our territory. The co-operation of the American Aberdeen-Angus Breeders' Association in getting the war export certificates is sufficient guarantee that these breeders and their products are right. With our awakening to the need of more and better livestock, the Sloatman offering is an opportunity to get the right kind.

CHANGES IN THE HAIL ACT.

The hail conditions for this season are to a great extent the same as those used last year by the companies in this province. Last year the insurance commissioners of the three prairie provinces had decided to adopt the conditions as used in Saskatchewan, but Alberta failed to make it statutory, and as a result they were merely a matter of contract between the companies and the assured. At the last session of the Alberta house, statutory conditions were adopted.

R. S. ROBINSON

BUYER AND EXPORTER OF FURS, HIDES, WOOL, PELTS AND SENECA ROOT
 157 RUPERT AVE. & 150-152 PACIFIC AVE. E., WINNIPEG, MAN.

To My Ever-Increasing Shippers:

It affords me very much pleasure to advise you that my excellent outlets enable me to pay you for IMMEDIATE shipments of MUSKRATS the following exceptionally high prices

	Ex. Large.	Large.	Medium.	Small.
No. 1. Springs	\$1.20	\$1.00	\$0.75	\$0.50
No. 2. Winters, part prime Springs or light weights	.90	.70	.50	.35
No. 3. Falls and Early Winters	.70	.60	.40	.30

Shot, Speared and Damaged, 15c to 30c. Kitts, 5c to 15c.

COYOTES AND BRUSH WOLVES

No. 1. Cased	\$19.00	\$15.00	\$10.00	\$ 7.50
No. 2. Cased	15.00	12.00	8.00	5.00
No. 3—\$2.00 to \$3.00.	No. 4. 50c.	Open—one-fourth less.		

BEAVER

	Ex. Large.	Large.	Medium.	Small.
Dark, No. 1	\$25.00	\$22.00	\$17.00	\$10.00
Dark, No. 2	18.00	15.00	10.00	7.00
Dark, No. 3	7.00	6.00	4.00	2.00
Brown or Pale, No. 1	\$22.00	\$18.00	\$14.00	\$ 8.00
Brown or Pale, No. 2	15.00	13.00	8.00	6.00
Brown or Pale, No. 3	6.00	5.00	3.00	1.50

RED and CROSS FOXES, WEASEL, MARTEN and LYNX are very high. I also pay all express charges or refund postage charges. NOTE:—Postal Regulations demand contents must be marked outside all mail packages of "FURS," to avoid delays or confiscation. Forward everything promptly.

COL. E. H. TAYLOR, JR.'S Woodford-Beau Donald Sale

HEREFORD FARMS

FRANKFORT, KENTUCKY : FRIDAY, JUNE 7

65	9 Young Bulls	56 Cows and Heifers	65
HEAD	<small>More Prize Winners than ever before offered in one breeder's sale. More Champions and Grand Champions than were ever before offered at one breeder's sale.</small>		HEAD

The Greatest Offering ever presented in a Draft Sale. Champions and Grand Champions and First-Prize Winners galore. These cattle have been weighed in the balance and never found wanting. No such opportunity has ever been offered the breeder and exhibitor. The cream of England and America, collected by expert judges without regard to time or expense, will meet in one sale.

FIVE SONS AND GRANDSONS OF WOODFORD

Of the 9 Grand Young Bulls in the offering, 5 are sons and grandsons of Woodford—more Woodford bulls than the public has ever before been privileged to bid upon in a public sale. Paragon 12th, Bright Donald, Premier Donald, and Imp. Weston Prince each contributes a choice son.

Great Array of Show Cows and Heifers

The 56 Cows and Heifers include practically all of the 1917 Show Herd—cows and heifers that have won and can win again in royal company—Matron Donald, Belle Blanchard, Maple's Lass 57th, Ma-

jestic Lady, Belle Woodford 8th, Jean Dare, Princess H, Princess T, Princess T 6th, Princess T 8th, Madam Donald 2nd, Marguerite Dare and Lady Aster are included.

Grand Matrons with Woodford Calves at Side

Former Champions and Grand Champions, great breeding matrons with Woodford calves at side and rebred to Woodford bulls; two-year-old heifers bred to the same great sire; and a galaxy of open heifers all sired by noted bulls of the breed.

**CANADIAN BREEDERS KNOW WHAT BEAU DONALD AND WOODFORD BLOOD HAS DONE.
A SPECIAL INVITATION IS EXTENDED TO THEM TO ATTEND THIS GREAT HEREFORD SALE.**

Write To-Day for a Copy of the Handsomely-Illustrated Catalogue, which every Hereford Breeder should have. Address

COL. E. H. TAYLOR, JR.
FRANKFORT - KENTUCKY - U. S. A.

COLS. REPERT, IGLEHEART and MAGNESS BROS. - Auctioneers

COL. E. H. TAYLOR, Jr.

Searched the globe for the cream of the Hereford breed, and then returned to Kentucky for our

BEAU DONALDS And PERFECTIONS

All of his herd bulls were bred by us and everything in his coming sale with the exception of a few females was either bred by us, or from the world's original BEAU DONALD herd, founded by Col. W. H. Curtice, and from our strain of PERFECTION blood. Watch this sale for record prices and remember that the famous Beau Donald's are now at home on the Pleasant Valley Ranch, southeast of Calgary.

We have a DOZEN BULL CALVES, dropped between September and December 1st, NOW ON SALE. They are all members of the great Beau Donald family. Buy them while they are young and get them cheaper.

See us at any of the principal summer fairs, or write

The Curtice Cattle Co.

W. H. CURTICE, Pres.

Curtice Martin, Secretary.

Calgary, Alberta

PLEASANT VALLEY RANCH,

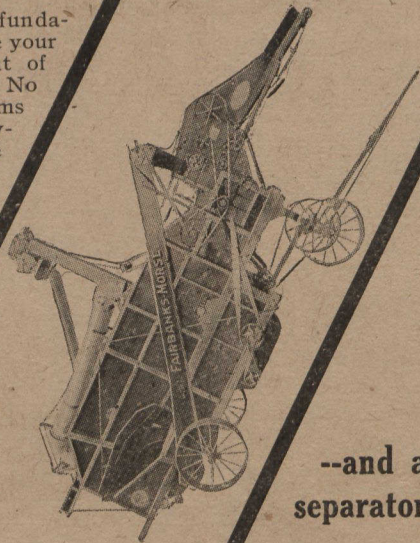
PHONE RURAL 2412.

To Choose a Tractor—

is easy if you follow certain fundamental principles. You can base your opinion on facts, and the element of uncertainty is entirely eliminated. No doubt you are confused by the claims of so many types of tractors: Everyone has the "Best." These mere claims, however, mean nothing to you—

--but if you'll study

the method of power transmission and drive, with the weight and traction surface, you can pick out your tractor in a million. And isn't it the most natural thing in the world to lean towards the big, strong, dependable tractor, that has through years of constant service, proved its endurance, and guaranteed to give a world of power from kerosene at lowest cost? A tractor that has not unbounded claims made in order to find a market for it, but one that is worthy of representing and upholding the integrity of the Canadian Fairbanks-Morse Company.



--and a separator

How many there are being offered to you today, each one assuring you of saving every kernel of your wheat during harvesting—and what a range of prices. But there should not be any confusion in your mind when making your choice if you have studied the specifications of the separators. You cannot fail to be impressed with the supreme mechanical excellence as built in the Fairbanks-Morse threshers, and you will readily understand why it was backed last year by the judgment of Western Canadian farmers who invested their hard earned cash to the extent of half a million dollars.

There is a Fairbanks-Morse dealer in your town who will give you illustrated catalogues with complete specifications on the Townsend Tractor and Fairbanks-Morse Separators. See him today.

The Canadian Fairbanks-Morse Co.,
LIMITED

Saskatoon Winnipeg Calgary

The changes made consisted of an arbitration clause in the event of dispute as to the amount of damage, each party to select an arbitrator; they failing to agree should secure a third party, and if they cannot agree on the third, the judge of the district court shall make said selection, and his decision shall be final.

The act provides that the agent must forward by registered mail, to the company at its head or provincial office, all applications not later than twenty-four hours after they receive same. The insurance does not take effect until accepted at the head or provincial office. If the application is declined, the applicant shall be so notified within forty-eight hours.

The basic rate throughout the province is 9 per cent. In the surcharge districts the rate is 10 per cent. The companies are accepting both cash and notes for premiums, in which case the note rate is 11½ per cent. outside the surcharge districts, and 13¾ per cent. inside the surcharge districts. The notes given for premiums are subject to a discount of 20 per cent. if paid on or before the 1st day of August. Some companies write on a limit of \$10.00 per acre, while others write as high as \$20.00 per acre in some districts, and limiting the amount in other districts to \$3.00 or \$5.00 per acre. Also some companies issue policies giving protection to the 1st of October, and charging 1 per cent. extra, but the application must be made out at the time the insurance is applied for.

The three surcharge districts are as follows:

Mountain district—South boundary of township 12, from mountains, to the eastern boundary of range 26, north to the southern boundary of township 15, east to the eastern boundary of range 22, north to the northern boundary of township 28, west to the eastern boundary of range 26, north on the eastern boundary range 26 to the southern boundary of township 40, east to the eastern boundary of range 22, north to the southern boundary of township 42, west to the eastern boundary of range 24, north to the southern boundary of township 44, west to the mountains.

Also Sedgewick district—Townships 41, 42, 43 and 44, range 11, 12, 13, 14, 15 and townships 42, 43, and 44 in ranges 16, 17, and 18.

Also Stony Plain district—Townships 51, 52 and 53 in ranges 26, 27 and 28 west 4th and townships 51, 52 and 53 in ranges 1 and 2, west 5th.

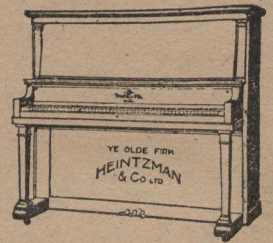
This information is furnished by W. J. Walker, President of the Great North Insurance Company, who is a member of the executive board of the Canadian Underwriters' Association.

MILITARY SERVICE PROCLAMATION.

Attention of our readers is called to the proclamation of the government in this issue re military service. This notice affects all men who have attained the age of 19 years, born on or since October, 1897, and who are unmarried or widowers without children. They are commanded to report in writing by registered post before June 1st, 1918, to the registrar or deputy registrar under the Military Service Act for the registry district in which they reside. These men are deemed to be soldiers from the date of this proclamation, and will be on leave of absence until June 1st and until called for active service. Severe penalties are provided for failure to report and everyone affected should not fail to comply with the conditions set forth in the advertisement which is published on page 542. Turn to this now, and read it over carefully.

CHAS. YULE'S SHORTHORNS

Shorthorn breeders will remember that Charles Yule made some outstanding purchases of cattle in the United States in February, and he reports that they have done exceptionally well since their arrival in Alberta. The new stock bull, Craven Knight, is a tried sire, and Mr. Yule is looking forward to seeing his calves from the good cows in the Yule herd. Craven Knight will be used freely, along with Oakland Marquis.



Musical Instruments

NEW SHOMER PIANO, Fumed Oak case, nice tone, little used,

\$325.00

DOMINION ORGAN, 5 octave, nice tone fine shape, 11 stops, Walnut case,

\$60.00

MOZART PLAYER, 88 note, Mahogany, splendid tone and good condition, little used. Bargain,

\$650.00

BECKWITH ORGAN, Walnut, 6 octave, 17 stops, very full tone and good condition,

\$75.00

MORRIS PIANO, Walnut. Practically new, good condition. Bargain.

BELL ORGAN, Walnut, 5 octave, 10 stops, sweet tone,

\$55.00

NEWMAN ORGAN, G. Oak case, 5 octaves, 12 stops. Snap,

\$45.00

TERMS OF PAYMENT ARRANGED

Look over our Stock of Used Instruments which is very varied and constantly changing.

Our Stock of New Instruments is worth an inspection.

ENQUIRIES SOLICITED

"Ye Olde Firme"

Heintzman & Co., Limited

Showrooms:

322 EIGHTH AVENUE WEST
CALGARY - - ALBERTA

D. J. McCUTCHEON, MGR.

The herd came through the winter in splendid breeding shape, and the calves dropping by Oakland Marquis and Roseberry are very typey, of splendid colors and most pronounced character. This herd was taken over from the Yule and Bowes partnership intact, and Mr. Yule expects to sell cattle at the annual auction this fall much superior to anything yet offered.

Just now Mr. Yule is offering twenty young bulls that will suit anyone. More room is needed for the younger ones coming along, and they will be priced right either individually or as a lot. See Mr. Yule's advertisement in this issue, and write him for further particulars. Address Carstairs, Alberta.

SUPER-WHEAT DISCOVERED BY BURBANK.

Announcement comes from California that Luther Burbank, the botanical wizard has perfected a new variety of wheat after experiments extending over 11 years. The claim is made that the wheat may be grown from Hudson's Bay to Patagonia, and is intended to replace the California variety with its low content of gluten.

The new wheat is said to be of the whiter variety, very hard and producing a very white flour.

Burbank has turned his attention to a new rye and barley in which he hopes to increase the amount of gluten. Whether this discovery will mean much to Western Canada or not re-

mains to be seen. Wheat farmers in this country have been hookwinked a good many times with new varieties of wheat, but this discovery, coming as it does from a man like Luther Burbank, could not be placed in the fake class. Naturally, we are partial to red wheats over the white varieties, but nevertheless are open to be "shown," and sincerely hope that the new wheat will be given a thorough trial under our conditions. A great deal will depend on the early-maturing qualities of the "super-wheat."

Manitoba No. 1 Hard and No. 1 Northern contain all the way from 12 to 15 per cent. gluten, according to the season and crop conditions. A dry season, for instance, will produce a grain containing more than a wet one.

While the larger percentage of gluten contained in the wheat adds to the food value, at the same time this does not necessarily mean that it adds to the value as a flour grain. It really is a matter of quality and not quantity.

ALBERTA WOOL SALES.

Wool will be marketed this year through the Alberta Sheep Breeders' Association as in the past, and growers who are not already aligned with the Association should lose no time in taking out membership, although this is not a condition of co-operative selling. The clip will be graded by experts from the Dominion Livestock Branch. It should be shipped to E. L. Richardson after July 6th, and in the meantime it would be well for those intending to sell through the Association to write the secretary for wool sacks and fleece twine.

* * *

If signs are worth anything, the world is on the verge of the greatest horse boom in history, and the Western plains are going to be the centre of it. Breed all the mares possible,—and breed them to the best stallions you can find. Horseflesh will be at a premium if the war lasts much longer.

Calgary, Alta., May 17, 1918

Editor,
FARM AND RANCH REVIEW,
CITY.

Dear Sir,

Do you think your readers know that the Moline-Universal tractor can be operated by one man alone, whether he uses a binder, drill, plow or what not? Do they know that a man can ride on his drill and see whether it is properly sowing, and drive his tractor at the same time? Do they know that if they harrow as they sow they are liable to get from ten to twenty-five per cent. more crop in an average dry year, and that the Moline tractor will pull a drill and harrow together?

Would it help production if Alberta farmers use the Moline tractor with which a man can sow and harrow fifty acres in a day, double disk and drag thirty acres in a day, or cut and bind thirty-five acres in a day?

Just tell your readers this and let them take a pencil and paper and calculate how much more crop they can handle with the same man power, or how much less help they can do with, and get the same results as they are getting now.

Your readers ought to know that the new Model D Moline tractor has a brilliant head light as well as tail light so that one can work in the field as night as well as day, and if one is moving his separator from one farm to another at night, he can do so with ease, seeing his road.

This tractor is no experiment, being made in the largest tractor plant in the world, by one of the best known machine makers.

Yours truly,

GENERAL SUPPLIES LIMITED
W. G. HUNT



JOHN DEERE PLOW

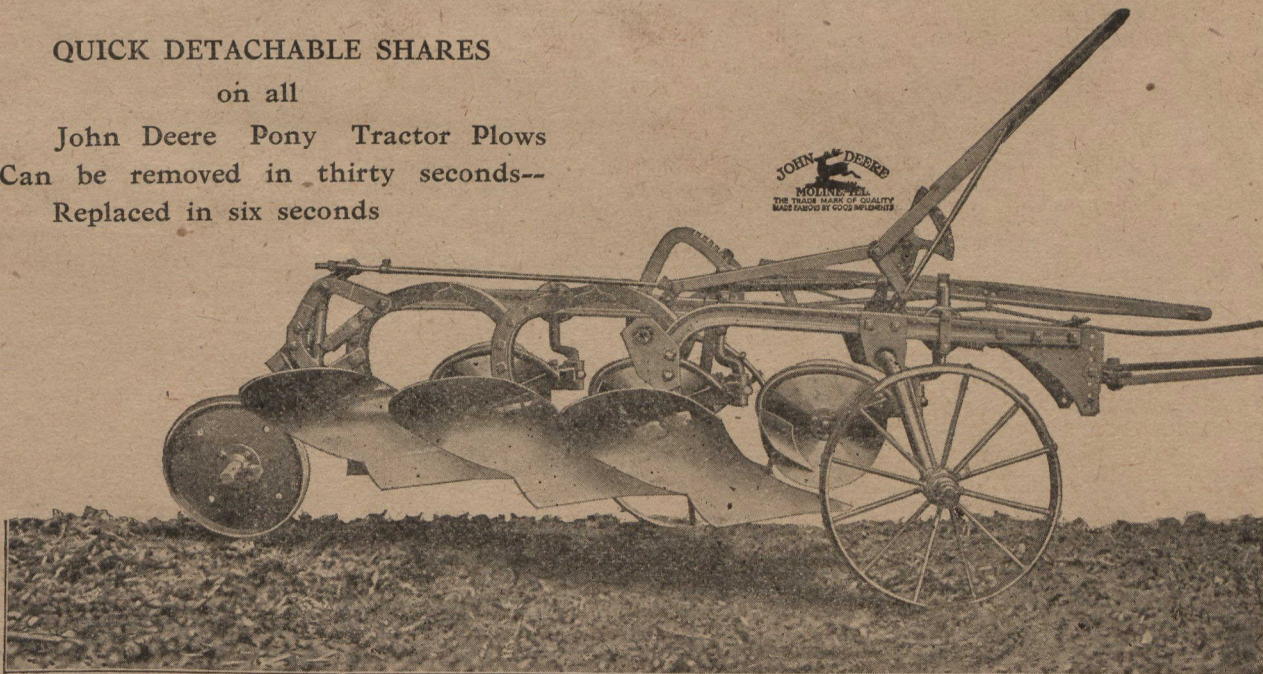
COMPANY LIMITED



QUICK DETACHABLE SHARES

on all

John Deere Pony Tractor Plows
Can be removed in thirty seconds--
Replaced in six seconds



The Beams are John Deere Special Steel, fully tested and amply strong for heavy work.

They are warranted not to spring or break.

Eight Inches clearance between the ground and bottoms.

John Deere Light Tractor Plows can be furnished in Two, Three or Four Bottoms

John Deere Plow Bottoms give a special value to John Deere Pony Tractor Plows. They scour, wear well and make good seed beds.

A Light Power-Lift Tractor Plow, adaptable to any standard make of Tractor.

Built right throughout--that's what John Deere Tractor Plow construction means.

WINNIPEG, MAN.
EDMONTON, ALTA.

BRANCH HOUSES AT:
REGINA, SASK.
SASKATOON, SASK.

CALGARY, ALTA.
LETHBRIDGE., ALTA.



JOHN DEERE PLOW

COMPANY LIMITED



Seager Wheeler's New Wheat

The name of Lord Roberts will be associated for all time with the highest and best traditions of the British and Anglo-Saxon people. It is quite fitting that the name of this great soldier should stand for the best in agriculture. A new variety of wheat of great promise has been named after Lord Roberts. It is also particularly appropriate that this new wheat should be introduced to the farmers of Western Canada at the present time.



Seager Wheeler

So acute has become the food situation that the farmer on his farm in Western Canada today is as important a factor in holding back the enemy as is the soldier in the trenches. The best authorities in the Empire declare without hesitation that unless the food supply is sufficient the Allies cannot possibly win. The necessary food supply must come from Canada and the United States. Wheat is the chief requirement and whatever will tend to increase the wheat crop will help to beat the enemy. In discovering and developing Red Bobs wheat, Seager Wheeler has contributed more than any other farmer to the great work of increasing the food supply on the farms of Western Canada.

Great efforts have been made to secure an early ripening strain of Marquis wheat. No person has contributed more towards this end than Seager Wheeler, of Rosthern, Sask., the world's most famous wheat grower. Mr. Wheeler has four times captured the world's international championship with Marquis wheat. He has taken more prizes for growing wheat than any other man in the world. By his experiments he has vastly improved the quality of Marquis wheat, but he and all others have failed in their efforts to develop an early-ripening strain of Marquis that still retains all the other good qualities of this standard wheat.

The Story of Red Bobs.

But while failing to develop an early ripening Marquis, Seager Wheeler has discovered and developed an entirely new wheat with all the good qualities of Marquis and, in addition ripens from six to ten days earlier than Marquis. This is his famous new wheat, Red Bobs.

The story of Red Bobs is extremely interesting. In the year 1905, a plant breeder named Wm. Farrer, of New South Wales, Australia, sent to Dr. Saunders at the Central Experimental Farm, Ottawa, a sample of what he called White Bobs wheat. He stated that it was obtained by cross-breeding between an unnamed variety of wheat and a variety of hullless and beardless barley known as Nepal. Whether or not this remarkable story is correct, the White Bobs wheat was white in color and absolutely beardless. It is, in fact, the only absolutely beardless wheat grown in Canada today.

Dr. Saunders tested the White Bobs wheat for a couple of years on the Central Experimental Farm. He found it considerably earlier than Marquis in ripening, and in milling and baking tests it proved to be equal to Marquis. It remained, however, a white wheat, very hard, and possessing a good straw and head. It was a splendid wheat in everything but color; being white, however, it would be difficult to make it a commercial success, because of the prejudice against white wheat and the discrimination against it in the Canada Grain Act. Under the Canada Grain Act nothing but hard red wheat can receive a high grade.

In 1907 Dr. Saunders introduced White Bobs wheat at the Experimental Farm at Indian Head, Sask., where it was grown for several years, but was finally discarded, as it

A Wheat that Yields More Bushels per Acre and Ripens Earlier than Marquis.

still remained white. Seager Wheeler, having read of this new Australian wheat, secured a ten-pound sample from the Indian Head Experimental Farm and seeded it. In 1908 it produced 60 bushels per acre on his plot. He found it to be considerably earlier than any other hard wheat he had ever grown. It was to Mr. Wheeler's mind the nearest to the ideal wheat for Western Canada, if it could only be developed to be red in color.

Scientific Search Rewarded.

Seager Wheeler is a man not easily discouraged. The new wheat had everything but the color. He continued to grow it on his plots the second year, determined, if possible, to develop a red strain. In 1909 his search was rewarded, while examining some heads on his White Bobs plots just before harvest, he discovered one with red kernels. Further careful examination of the whole of his plot revealed two or three more heads containing red kernels. The straw, the plant and the head in each case had all the desirable characteristics of the original White Bobs. He allowed these heads to ripen and carefully preserved the seed from them, which he seeded next year in small head rows, and anxiously watched to see if they would reproduce red seed.

In most cases the progeny of the red seed came back red and some of it was very early in ripening. By the process of elimination, Mr. Wheeler selected the best red heads that came true to type and ripened the earliest; from these he developed what he has since called Red Bobs wheat.

Mr. Wheeler was naturally greatly pleased with his discovery but he was determined to be sure of the new wheat before giving

few plants were standing when the storm had passed.

A very severe test of Red Bobs was made by Mr. Wheeler in 1915. He sowed the wheat on stubble land in the first week of June. Even under these conditions his Red Bobs wheat ripened well and yielded him 28 bushels to the acre.

International Sweepstakes

The only time that Mr. Wheeler has exhibited Red Bobs was at the International Dry Farming Congress at Peoria, Ill., in 1917, but exhibited a sheaf only and not any threshed grain. The sheaf won the international sweepstakes.

Mr. Wheeler has selected from his plots heads of Red Bobs wheat that contained as high as 95 perfect kernels. He has never been able to find any such number of kernels in a single head of any other kind of wheat.

Prof. Bracken, at the Saskatchewan University, Saskatoon, tested Red Bobs on his plots in 1917, and found that this wheat ripened nearly a week earlier than Marquis. The season was very dry which would narrow the spread in ripening between the different plots of wheat. At the School of Agriculture, Vermilion, Alberta, a small plot of Red Bobs was grown in 1917 by Prof. Crisdale, and was found to ripen six days earlier than Marquis.

As a milling wheat Red Bobs is equal to Marquis. In 1917 Prof. Bracken had tests made showing Red Bobs to have high milling and baking value. The Grain Growers' Guide sent samples of Red Bobs and Marquis wheats to the Howard Testing Laboratories



Typical head of Red Bobs Wheat, side and front view—natural size, and a field of Red Bobs Wheat.

it to the world. He began immediately making comparative tests with Marquis and Red Bobs. In 1912 he sowed the two wheats on plots side by side on old land on the 22nd day of May. The Red Bobs was ripe and was cut ten days earlier than the Marquis and turned out a beautiful sample. An early frost got the Marquis before it was ripe, and it was frozen black.

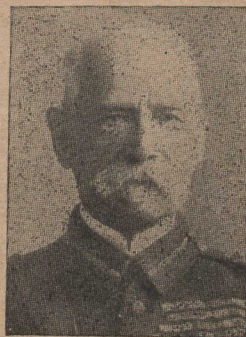
In 1913 hail destroyed Mr. Wheeler's entire crop. A few days after the storm as he was examining his plots he found a few heads of his Red Bobs and Kitchener wheats still standing. These he ripened and secured seed for the following year. While Mr. Wheeler does not claim that Red Bobs straw is proof against hail, it was remarkable that even a

in Minneapolis last fall, and the report from this test showed Red Bobs to be even superior to Marquis as a milling and baking wheat.

In the matter of grading Red Bobs also stands high. A sample of this grain together with milling tests were submitted to Geo. Seris, Chief Grain Inspector for the Dominion Government, at Winnipeg. After examining the sample Mr. Seris graded it No. 1 Hard, showing that Red Bobs will grade as high as Marquis or Red Fife.

The Ideal Wheat.

Mr. Wheeler believes that in Red Bobs he has an ideal wheat for Western Canada and that it will save millions of dollars to grain



Late Field Marshall Earl Roberts.

grows in this country. He has experimented with it and tested it most carefully for seven years, and on the average he found that it ripens from one week to ten days earlier than Marquis and has a deep red fife color. By its early ripening, Mr. Wheeler expects Red Bobs to escape the greater part of the damage now sustained by frost and rust. The black rust, Mr.

Wheeler says, usually appears, the latter part of July or the early part of August; therefore, by advancing the date of ripening by from six to ten days the kernel is mature and immune from rust damage. It is estimated that the loss from rust to the wheat crop of 1916 was not less than \$20,000,000 while in the United States the loss was much greater. If Red Bobs wheat will escape damage by rust the profit to the farmers and to the country will be immense.

In addition to all the other advantages which Mr. Wheeler has found in Red Bobs is that of heavy yields. In his experiments he found that Red Bobs on the average yields considerably heavier than Marquis, and although the straw is strong and upright and the head very compact it nevertheless is not a hard wheat to thresh and does not present as much difficulty as is found with Marquis wheat.

In 1917 Mr. Wheeler had six acres of Red Bobs wheat, part of which he held for seed for 1918. He sold a small quantity of it in small lots at \$48.00 per bushel. The Grain Growers' Guide purchased 85 bushels of Red Bobs from Mr. Wheeler at a very high price and distributed it free to readers of The Guide throughout the three prairie provinces. It was only distributed to those who were willing to assist in introducing The Guide to new subscribers. No person was allowed to secure more than 40 pounds of Red Bobs wheat, and in most cases they received only 10 to 20 pound packages.

The Grain Growers' Guide has arranged with Mr. Wheeler and with other of the most expert growers in the West to grow Red Bobs wheat in 1918. The Guide has made an exclusive contract with Mr. Wheeler and these other growers to purchase all the wheat they have both in 1918 and in 1919. The reason The Guide has made this contract is to insure a wide distribution of this seed to those farmers who really appreciate its value, and will take care of it, keep it clean and make the best possible use of it. The Guide is making arrangements at present to distribute this seed.

Advt.

Have You Got Red Bobs?

SEAGER WHEELER'S NEW WHEAT

None Will be left by Harvest--Get yours NOW

RED BOBS WHEAT

RIPENS Six to Ten Days Earlier than Marquis.

YIELDS More per Acre than Marquis

MILLING VALUE Equal to Marquis

GRADES No. 1 Hard.

Red Bobs Wheat

Red Bobs wheat is the most important agricultural development of recent years. The evidence establishing the superiority of this new variety is conclusive. Under ordinary circumstances this discovery would have been seized upon by private interests and exploited. Enormous prices would have been charged, the middleman would have taken extortionate profits, and only the wealthiest farmers could have purchased the seed. ¶The "Grain Growers' Guide" will distribute all of Mr. Wheeler's different varieties of wheat during the next two years. The Guide has paid a high price for this wheat. Mr. Wheeler is entitled to this, but through its system of distribution, The Guide, instead of cornering the wheat for personal profit, is placing it within easy reach of every farmer in Western Canada. ¶To make it easy for anyone to secure Mr. Wheeler's new wheat all of the available supply will be distributed during the summer months. You cannot buy any of this grain. You can secure as much as you care to earn by aiding us in extending The Guide's field of usefulness. ¶The Guide has published a "Red Bobs" book that tells the secret of Mr. Wheeler's unusual success. It also gives the records of this new wheat and tells the interesting story of its discovery and development. This book should be read by every man that is raising grain in any one of the three Western provinces. ¶Since its organization The Guide has always endeavored to render a practical service—a service that would aid in making agriculture more profitable. The Red Bobs book was published with this end in view.

We will send a copy of this valuable book—Free to any person upon application. There is a copy of this book for YOU. It will be mailed without any obligation on your part. Mail the coupon to-day and your copy will be forwarded by return or post.

The Grain Growers' Guide,
LIMITED
WINNIPEG, MANITOBA

The Red Bobs Book tells the interesting story of the discovery and the development of Red Bobs Wheat and how the seed can be secured. It contains the secret of

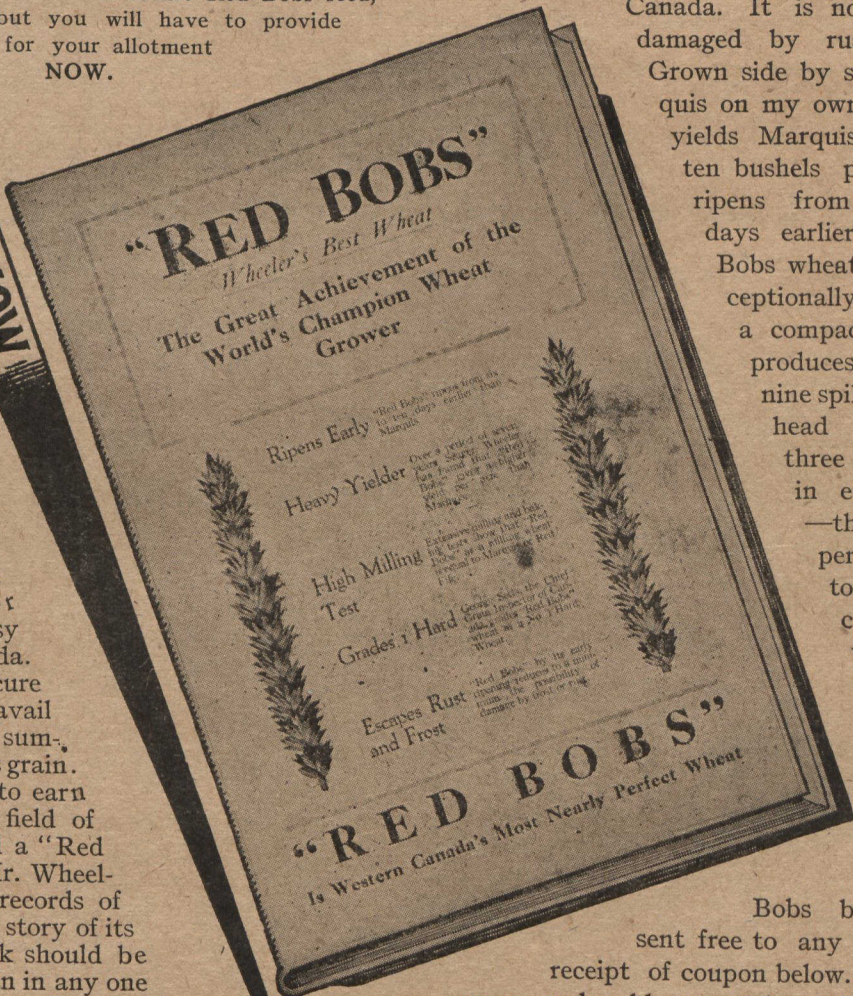
**More Bushels
Better Grades
More Dollars**

It will be sent free to anyone filling in the coupon below.

Due to its early ripening Red Bobs is seldom damaged by rust or frost.

Of this wheat Mr. Wheeler says: "I believe Red Bobs wheat will revolutionize the grain industry of Western Canada. It is not liable to be damaged by rust or frost. Grown side by side with Marquis on my own farm it out-yields Marquis by eight to ten bushels per acre, and ripens from six to ten days earlier. The Red Bobs wheat has an exceptionally strong straw, a compact head that produces from six to nine spikelets on each head with from three to six grains in each spikelet—the head filling perfectly clear to the tip. I consider it the ideal wheat for Western Canada."

YOU can secure Red Bobs seed, but you will have to provide for your allotment NOW.



This Red Bobs book will be sent free to any person upon receipt of coupon below. Fill in your name and address and send the coupon to us. The Red Bobs book will be forwarded by return of post to anyone filling in this coupon.

DO THIS NOW

Coupon Tear this coupon off here Coupon

The Grain Growers' Guide, Winnipeg, Man.
Send me FREE, the Red Bobs Book.

Name

Post Office

Prov.

EVERY FARMER

Should at once take steps to lay in a stock of cordwood for next Winter's fuel requirements. No cars will be available to transport coal after September 30th, as every car must be used to get food to the Army and Civilian population of our Allies. You can avoid serious hardship by ordering your wood at once. Write for price list and full particulars to—

THE PRINCE ALBERT FUEL COMPANY, LTD.
 PRINCE ALBERT SASK.
 WHOLESALE CORDWOOD MERCHANTS

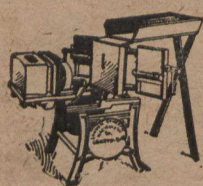
Pure Bred Hereford Bulls

One carload of choicely-bred Hereford bulls, from 13 to 20 months for sale. They are big, growthy fellows, in good condition, at prices to sell quickly.

G. W. HUNTER, - Owner.

Apply to R. J. COOK, Bain Livery Barn
 129 Ninth Avenue East - CALGARY, ALTA.

Build Concrete Barns and Silos



DWELLINGS OR ANY CLASS OF BUILDINGS, from Concrete Blocks.

THE LONDON ADJUSTABLE BLOCK MACHINE makes all sizes and designs of Concrete Blocks. Price \$65.00. Send for catalogue No. 3.

LONDON CONCRETE MACHINERY CO
 Dept. M., London, Ontario.
 World's Largest Manuf'rs of Concrete Machinery.

MIXED FARMING LAND WANTED

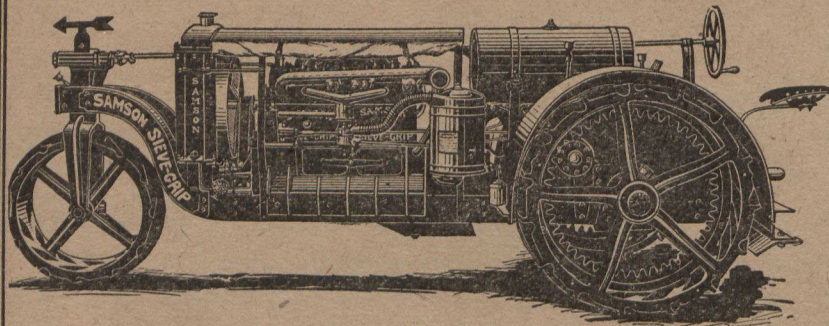
2,000 acres of mixed farming land wanted to exchange for high-class residential property in Toronto.

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Constant Money Making Service For You Too!

All Farm Work is more easily and less expensively done when you Let SAMSON POWER Serve You.



SAMSON SIEVE-GRIP TRACTORS

FURNISH DEPENDABLE, ECONOMICAL, FLEXIBLE AND ADAPTABLE POWER FOR ALL OF YOUR FARMING OPERATIONS

Do your farm work at the right time for BEST RESULTS, better crops, and the bigger profits you should have for your efforts.

SAMSON SIEVE-GRIP TRACTORS can help you to this result. Why not place your order now, when prompt delivery can be made.

ELDRIDGE MOTORS CO., LIMITED
 335 8th Ave. W. Calgary, Alberta

Columbia Dry Batteries

WHAT'S the mystery about a dry cell? If there's any, it's on the inside. For anybody can use it—a boy can wire it up!

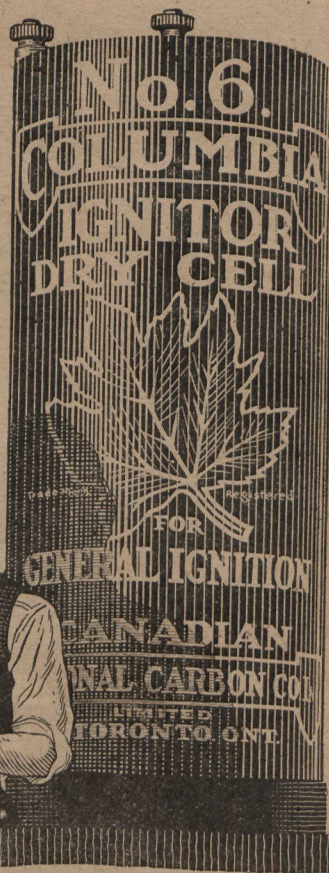
Because it's so simple, thousands prefer it for running autos, engines, motorboats; tractors, trucks, and toys; for lighting lanterns, ringing bells, and carrying talk through telephone wires.

For any battery purpose the old reliable COLUMBIA is it. Its hot, quick flow of current makes things hum. It's sold most everywhere and, while it costs no more, it lasts a lot longer!

Buy them Anywhere Easily and Quickly Wired up

CANADIAN NATIONAL CARBON CO., Limited
 Toronto, Ontario

Fahnestock Spring Binding Posts no extra charge



THE CURTICE HEREFORDS

It is a singular thing that practically every animal to be offered in the Taylor sale in Kentucky on June 7 was either bred, or raised from stock bred by Col. W. H. Curtice, who brought his famous herd of Beau Donalds and Perfections to Alberta some months ago. Woodford 50000, and all of the other herd bulls, are the product of Col. Curtice's master hand, and all of the females, excepting an imported cow and one other individual, come from Curtice stock. Col. Taylor went to England in quest of the world's best Herefords, and searched the whole American continent with a fine-toothed comb, but the Beau Donalds outshone them all. He went back to Kentucky, and while Woodford, (then known as Beau Perfection 24th) was not for sale, he finally succeeded in annexing the animal and he also took every female bred to him.

We inspected the Curtice herd recently, and under the practiced hand of Curtice Martin, who is a veritable prodigy in the art of fitting, the show herd is rapidly rounding into shape for the western circuit. The animals will be seen first at Calgary, and after completing the Canadian circuit will cross the line and take in the coast shows and state fairs, finishing at Chicago in December.

Beau Perfection 48th, champion last year, is in excellent condition, and is speedily putting on that finish and quality which delighted Hereford en-

thusiasts in 1917. There is a two-year-old, however, Beau Donald 192, that looks every inch a champion, and the older bull will need to be on his guard for the youngster will be a strong contender for his honors.

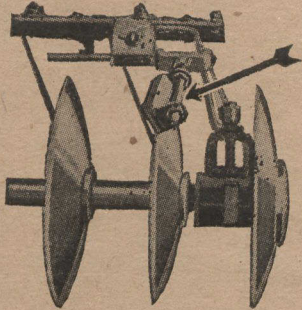
"Willie Wonder," the stable name for Beau Donald 215, the premier youngster that won at Chicago as a six-weeks-old calf, will also be seen in the show rings, and his dam, Belle Perfection 48, and his sire, the two-year-old, Beau Donald 192, will accompany him. Belle Perfection 45th, a handsome matron, will have a charming bull calf at side, and it will take some calf to beat him too. For quality and compactness Belle Donald 235, a two-year-old heifer, would be difficult to better. There is a world of bull and heifer calves that might claim high honors in any show ring, and every one of them is cast in the same mold—the Curtice pattern of massiveness and strength of bone and back that commands such wide-spread attention. Willie Wonder is well named, but he is not the only "wonder" calf in the Curtice herd, by any means. There are a dozen bull calves for sale now, and it will pay Hereford breeders to investigate them quickly.

DO YOU WANT HEREFORDS?

Those of our readers desirous of purchasing Hereford bulls, may notice an advertisement in this issue calling attention to a carload of Hereford bulls

Clamp this Wagner Disc Grinder

To Your Harrow--You will do a much Better Job



You can have sharp disc blades as long as your harrow lasts with one of these grinders. It touches the outside of the cutting edge--no dirt interferes with it. Does its work quickly and without attention. Easy to shift from blade to blade. The block of keen-cutting emery will last several seasons, and can be renewed.

Costs little to buy and nothing at all for upkeep. Does not drag or overload the harrow.

GET FULL PARTICULARS

Cushman Motor Works

of Canada, Ltd.

Builders of High-grade Light-weight Engines

Dept. G, Whyte Ave. and Vine St. WINNIPEG

Combination Threshing Outfits--Langdon Ideal Self Feeders--Vacuum Washing Machines--Lincoln Saws--Shinn-Flat Lightning Conductors--Universal Hoists--Wagner Hardware Specialties.

for sale at the Bain Stables, 9th Ave. East, Calgary, and from the herd of G. W. Hunter of Orangeville, Ont. Four of the bulls are by "Brae Real," by "Bonnie Brae 31st," a noted show and breeding bull in Eastern Canada. One of these was 3rd-prize senior calf at Toronto and London last year. Then another is out of "Ann Donald," who was sired by "Beau Donald 40th," and sired by "Superior Lad," who was also sire of the reserve and junior champions, first-prize yearling and bull calves at Toronto and London last year. These young bulls are from 13 to 20 months old, of good size, and should prove useful individuals in the Hereford interests of Western Canada.

MORE GOOD CLYDES.

Messrs. P. M. Bredt & Co. have some exceptionally high-class, real, drafty Clyde stallions for sale, as well as a number of good medium-weight, so that all classes of prospective buyers have an opportunity of being suited. This well-known firm also have a large selection of Clyde mares and fillies on hand.

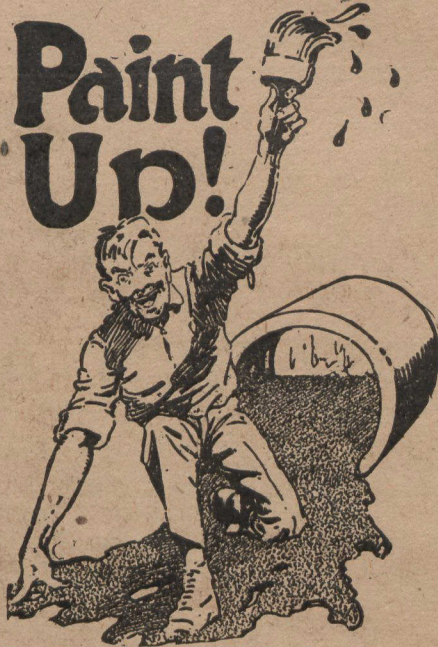
PROBABLY TUBERCULOSIS

Editor, "Farm and Ranch Review": I had a pig about eight months old that I was fattening for my own use, but when I slaughtered it, I found the liver covered with white spots the size of a five-cent piece. As the pig had always seemed healthy, having grown well, I would like information on the cause of these spots, for although I have killed many pigs, this is the first one which I have found affected in this way.—C. M. C., Assiniboia, Sask.

Reply:—From your letter am of the opinion that your stag was tubercular.

* * *

Less worry and more work contribute to happiness, so don't climb the hill before you come to it; if you do you may have to climb it twice.



Paint Up!

With **Bapco Pure Paints**

Varnishes and Kalsomines

AND HAVE "NO REGRETS"

MORE USED THAN ALL OTHERS LEADING DEALERS EVERYWHERE

BRITISH AMERICA PAINT CO., LTD.

CALGARY EDMONTON

Oakland Shorthorns

I am offering twenty young bulls, ready for service, for immediate sale. They are strictly the beef type, are well grown, and they will be priced right for quick sale. All are raised on the farm, and are a combination of the best blood in the herd. Write for prices and description.

J. CHAS. YULE, Proprietor

CARSTAIRS

ALBERTA

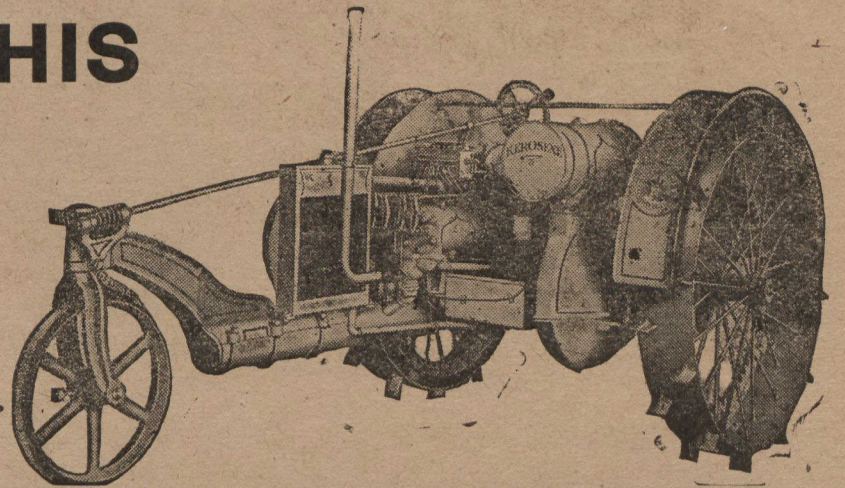
DECIDE ON THIS 3-PLOW TRACTOR

The Perfect Kerosene Burner

HAPPY FARMER TRACTOR

DRAW-BAR 12 h.p.--Belt 24 h.p.

HANDLES 24-INCH CYLINDER SEPARATOR FULLY EQUIPPED.



THIS MONTH

3-bottom J. I. Case Self-lift Plow

With Either Breaker or Stubble Bottom

\$250.00

Ask us about THE HUBER GRAIN SEPARATOR of which we have a complete Line.

Special Proposition on Prices and Terms For May

A big stock of tractors and repairs at Calgary, Edmonton and Lethbridge. Expert service men also at these points. Write for particulars today.

Implement and Automobile Dealers as well as others wishing to get into the Tractor Business on the ground floor should wire immediately.

J. D. ADSHEAD CO.

117 Tenth Avenue East

CALGARY

Devonshire.

[L.S.]



CANADA

PROCLAMATION

GEORGE the FIFTH, by the Grace of God, of the United Kingdom of Great Britain and Ireland and of the British Dominions beyond the Seas, King, Defender of the Faith, Emperor of India.

To all to whom these presents shall come, or whom the same may in anywise concern,—GREETING:

A proclamation calling for reports by the men comprised in the extension of Class 1, authorized by the regulations of 20th April, 1918, under The Military Service Act, 1917.

Deputy Minister of Justice
Canada.

WHEREAS by our Proclamation bearing date the 12th day of October, 1917, we did call out class I under our said Military Service Act, 1917, comprising the men by our Act and Proclamation defined or described as to the said class belonging, on active service in our Canadian Expeditionary Force for the Defence of Canada either in or beyond Canada, as we might in the command or direction of our military forces thereafter order or direct;

And we do hereby declare that all the men by this our proclamation required to report as aforesaid shall, from the date of this our proclamation, be deemed to be soldiers enlisted in the military forces of Canada and subject to military law for the duration of the present war and of demobilization thereafter unless sooner discharged; provided that every such man shall until the first day June next be deemed to be on leave of absence without pay, and that thereafter every such man who shall have duly reported on or before the last mentioned day, as by this our proclamation required, shall be deemed to be on leave of absence without pay until the day upon which he shall be required to report for duty in the Canadian Expeditionary Force and be placed on active service. And we do hereby moreover notify and inform our loving subjects who are hereby required to report, that if, on or before the first day of June, 1918, they report, as by this our proclamation commanded and enjoined, they will not be required to report for duty, or be placed upon active service as aforesaid until a day not earlier than the 1st day of July, 1918, which will, by our registrar or deputy registrar for the registry district in which they are hereby required to report, be notified to them in writing by registered post at their respective addresses as given in their reports, or at such substituted addresses as they may have respectively signified to our said registrar or deputy registrar; and we do hereby inform, forewarn and admonish the men hereby required to report that if any of them shall, without just and sufficient cause, fail to report for duty, at the time and place required by notice in writing so posted or as otherwise by law required he shall, be subject to the procedure, pains and penalties by law prescribed as against deserters.

AND WHEREAS by the regulations approved by our Governor General of Canada in Council on the 20th day of April last, in the execution of the powers conferred by our War Measures Act, 1914, it is among other things in effect provided that Class I under our said Military Service Act, 1917, shall, in addition to the men included therein as in our said Act mentioned, include all men, who are by this our proclamation required to report as hereinafter described, and that all men included in the said Class I by virtue of the regulations aforesaid, shall report to the registrar or deputy registrar under our said Military Service Act, 1917, as required by proclamation, and shall be subject to military law as in such proclamation set out, and shall, in the event of their failing to report, be liable to the penalties specified in our said last mentioned Act and the regulations thereunder;

AND WHEREAS our Governor General of Canada in Council has determined to exercise the power so conferred to require the men of the age and description hereinafter specified, as authorized by the said regulations of 20th April last to report, and to subject them to military law at the time and in the manner by this our proclamation prescribed.

Now, therefore, know ye that we do hereby strictly command, require and enjoin that every man who is a British subject resident in Canada, not within any class of persons described in the exceptions mentioned in the schedule to our said Military Service Act, 1917, who has attained the age of nineteen years, but was born on or since the 13th day of October, 1897, and is unmarried or a widower without children, shall, on or before the first day of June, 1918, report in writing by registered post to the registrar or deputy registrar under our said Military Service Act, 1917, for the registry district within which he resides, his name in full, the date of his birth, and place of residence, giving his usual post office address; wherein our loving subjects affected by our command and injunction aforesaid are especially charged not to fail, since not only do their loyalty and allegiance require and impose the obligation of careful and implicit obedience to these our strict commands and injunctions, but moreover, lest any of our loving subjects should be ignorant of the consequences which will ensue if they fail to report within the time limited as aforesaid, we do hereby forewarn, and admonish them that any one by this our proclamation required to report who shall without reasonable excuse fail to report as aforesaid shall thereby commit an offence for which he shall be liable, on summary conviction, to imprisonment for any term not exceeding five years with hard labour, and he shall, nevertheless, if we so require, be compelled to serve immediately in our said Expeditionary Force.

Of all which Our loving subjects and all others whom these presents may concern, are hereby required to take notice, rendering strict obedience to and compliance with all these our commands, directions and requirements, and governing themselves accordingly.

In Testimony Whereof, We have caused these Our Letters to be made Patent, and the Great Seal of Canada to be hereunto affixed. Witness: Our Right Trusty and Right Entirely Beloved Cousin and Counsellor, Victor Christian William, Duke of Devonshire, Marquess of Hartington, Earl of Devonshire, Earl of Burlington, Baron Cavendish of Hardwicke, Baron Cavendish of Keighley, Knight of Our Most Noble Order of the Garter; One of Our Most Honourable Privy Council; Knight Grand Cross of Our Most Distinguished Order of Saint Michael and Saint George; Knight Grand Cross of Our Royal Victorian Order; Governor General and Commander-in-Chief of Our Dominion of Canada.

At Our Government House, in Our City of OTTAWA, this FOURTH day of MAY, in the year of Our Lord one thousand nine hundred and eighteen, and in the eighth year of Our Reign.

By command,

Under-Secretary of State,

Note: The men required to report by this proclamation should address their reports as follows:—

ONTARIO—To the Deputy Registrar under the Military Service Act, 1917, London, if they reside in the County of Essex, Kent, Lambton, Elgin, Middlesex, Oxford, Waterloo, Wellington, Perth, Huron, or Bruce.

To the Registrar under the Military Service Act, 1917, Toronto, if they reside in the County of Lincoln, Welland, Haldimand, Norfolk, Brant, Wentworth, Halton, Peel, York, Ontario, Grey, Dufferin, Simcoe, or in the Districts of Muskoka, Parry Sound, Algoma, and Nipissing north of the Mattawa and French Rivers including the Townships of Ferris and Bonfield.

To the Deputy Registrar under the Military Service Act, 1917, Kingston, if they reside in the County of Durham, Northumberland, Victoria, Peterborough, Hastings, Prince Edward, Lennox, Addington, Frontenac, Haliburton, Carleton, Dundas, Glengarry, Renfrew, Russell, Stormont, Grenville, Lanark, Leeds, Prescott, or the District of Nipissing south of Mattawa River exclusive of the Townships of Ferris and Bonfield.

To the Registrar under the Military Service Act, 1917, Winnipeg, if they reside in the Districts of Kenora, Rainy River, or Thunder Bay.

QUEBEC—To the Registrar under the Military Service Act, 1917, Montreal, if they reside in the County of Jacques Cartier, Hochelaga, Laval, Vaudreuil, Soulanges, Napierville, Beauharnois, Chateaugay, Huntingdon, Laprairie, Argenteuil, Terrebonne, Two Mountains, Montcalm, L'Assomption, Joliette, Berthier, Maskinongé, St. Maurice, Three Rivers, St. Johns, Iberville, Missisquoi, Brome, Shefford, Rouville, Chambly, Vercheres, St. Hyacinthe, Bagot, Drummond, Richelieu, Yamaska, Nicolet, Arthabaska, Sherbrooke, and Stanstead.

To the Deputy Registrar under the Military Service Act, 1917, Quebec, if they reside in the County of Wolfe, Richmond, Compton, Beauce, Bellechasse, Bonaventure, Dorchester, Gaspé, Kamouraska, Lévis, L'Islet, Champlain, Charlevoix, Chicoutimi, Montmorency, Quebec, Portneuf, Saguenay, Lotbinière, Montmagny, Matane, Megantic, Rimouski, and Temiscouata.

To the Deputy Registrar under the Military Service Act, 1917, Hull, if they reside in the County of Wright, Labelle, and Pontiac.

NOVA SCOTIA—To the Registrar under the Military Service Act, 1917, Halifax, if they reside in the Province of Nova Scotia.

NEW BRUNSWICK—To the Registrar under the Military Service Act, 1917, St. John, if they reside in the Province of New Brunswick.

PRINCE EDWARD ISLAND—To the Registrar under the Military Service Act, 1917, Charlottetown, if they reside in the Province of Prince Edward Island.

BRITISH COLUMBIA—To the Registrar under the Military Service Act, 1917, Vancouver, if they reside in the Province of British Columbia.

SASKATCHEWAN—To the Registrar under the Military Service Act, 1917, Regina, if they reside in the Province of Saskatchewan.

ALBERTA—To the Registrar under the Military Service Act, 1917, Calgary, if they reside in the Province of Alberta.

MANITOBA—To the Registrar under the Military Service Act, 1917, Winnipeg, if they reside in the Province of Manitoba.

YUKON—To the Registrar under the Military Service Act, 1917, Dawson, if they reside in the Yukon Territory.

Shows, Meetings and Organized Agriculture

COMING EVENTS.

Lacombe Bull Sale, May 29.
 Dove's sale of Aberdeen-Angus at Waverly, Iowa, May 29.
 Escher & Ryan's Aberdeen-Angus sale at Botna, Iowa, June 4 and 5.
 Adams & Sloatman's Aberdeen-Angus sale, Chamberlain, South Dakota, June 7.
 Calgary Summer Fair, June 8 to July 6.
 E. H. Taylor, Jr., Frankford, Ky., Herefords, June 7th.
 Edmonton Summer Fair, July 8-13.
 Moose Jaw Exhibition, July 10-12.
 Saskatoon Summer Fair, July 15-20.
 Lethbridge Fair and Stampede, July 22-26.
 Brandon Summer Fair, July 22-27.
 Regina Summer Fair, July 29 to August 3.
 North Battleford Exhibition, August 5-7.

LACOMBE BULL SALE.

The tenth annual auction sale of bulls at Lacombe will be held at the Fair Grounds May 29th. The bulls will be judged in the forenoon and sold afternoon and evening. There are 208 entries. The breeds will be sold in the following order: 22 Aberdeen-Angus, 57 Herefords, 2 Red Polled and 127 Shorthorns. This is by far the largest entry for this event in the ten years

stock kept on grazing leases, while those on farms are exempt. Also the adoption of a resolution asking the government at Ottawa to frame such regulations as will lead to a larger use of unoccupied and remote districts in the north country for stock growing purposes. Also that the publication of the Western Stock Growers' Bulletin be continued. That steps be taken looking toward the amalgamation of the various stock growers' associations in ranching districts where none exist at present. The meeting closed with stirring addresses by A. E. Cross, of Calgary, and others, who recounted the various services of the association in the past, the acquaintances made at its annual meetings, and the opportunities continually presenting themselves for usefulness in the future.

The resolution concerning the remote outlying land was moved by W. F. Stevens, Provincial Livestock Commissioner, and was as follows:

"Whereas, in view of the constant reduction in the numbers of meat-bearing animals in the world, and in view of the gradual curtailment of grazing areas in the Western States and in Southern Alberta; and, whereas, there are large areas in Northern Alberta admirably suited for stock growing, yet too remote from transportation facilities to be suitable for farming purposes,



The 1916 Chicago International Grand Champion Steer Herd over all Breeds—Bred, fed and shown by Messrs. Escher and Ryan, Botna, Iowa

since the sale was started and will be a good opportunity to get herd bulls of the very best quality, as well as good serviceable bulls for the range. With such a large entry, bulls will no doubt be sold to suit the purse of everyone.

The catalogue for this sale is arranged according to a new plan outlined at the annual meeting of the Alberta Cattle Breeders' Association. While each man's entries are numbered consecutively for stabling convenience, the catalogue arrangement is by classes according to age. The prize winners in each class will be sold first, then the balance of that class before the next class is sold. The advantages of the new plan are that an intending purchaser has a chance to bid on all the other bulls of a certain age if he is not able to secure one of the prize winners. Also if he wants a two-year-old bull, for instance, he has the advantage of having all the two-year-olds brought forward in succession, and then can get through his business more expeditiously. Those desiring catalogues of entries should write to E. L. Richardson, Secretary of the Alberta Live Stock Associations, Calgary.

WESTERN STOCK GROWERS' ANNUAL MEETING

The Western Stock Growers' Association recently held its annual convention at Medicine Hat. Walter Huckvale was re-elected as president, A. P. Burns, secretary. The principal new business taken up was the formulating of plans to resist the action of the assessors in the consolidated school districts in enumerating or taxation off

"Therefore, be it resolved by this convention of the Western Stock Growers' Association, that the Department of the Interior and of Agriculture at Ottawa unite in framing such regulations as will result in the utilizing of these outlying districts in the growing of livestock until such time as transportation facilities shall be brought within such distances of them as shall make such lands operatable for farming purposes."

This resolution is to be forwarded to the Minister of the Interior and the Minister of Agriculture.

New Officers Elected.

The following officers were elected for the ensuing year: Hon. Presidents, Hon. T. A. Crerar and Hon. Duncan Marshall; President, Walter Huckvale, Medicine Hat; 1st Vice-President, Dr. J. G. Rutherford, Calgary; 2nd Vice-President, Walter Clive; Secretary-Treasurer, A. P. Burns, Medicine Hat; Executive, W. Huckvale, A. P. Burns, and J. Mitchell, Medicine Hat; G. Lane, Calgary; G. McIlroy, Melba; G. Mackie, Irvine; E. L. Richardson, A. E. Cross, Calgary; Duncan Clark, Cluny; D. Cargill, Pakowki; T. Newman, Pincher Creek; D. E. Riley and F. V. Bennis, High River; G. Galloway, Rosebeg; F. Walker, Bose Springs; A. S. Macdonald, Cochrane, and H. H. Foster, Seven Persons.

On the initiative of George Lane, of Calgary, it was decided to raise money for general expenses by the imposition of a tax of one cent a head for all stock owned by members.

Association Auction Sale

208 BULLS

22 Aberdeen Angus, 57 Herefords, 2 Red Polled, 127 Shorthorns

At LACOMBE

WEDNESDAY, MAY 29th, 1918

SPECIAL SHIPPING ARRANGEMENTS FOR PURCHASERS.

Send for Catalogue.

E. L. RICHARDSON

Alberta Live Stock Associations

Secretary

CALGARY, ALTA.

SOUTHERN ALBERTA AMALGAMATED FAIR.

Of special interest to Alberta breeders will come the announcement of the dates of the Southern Alberta Amalgamated Fair and Stampede which will be held in Lethbridge, July 22nd to 27th.

This fair being a consolidation of four of the big Southern Alberta Fairs, namely, Lethbridge, Raymond, Magrath and Cardston, promises to be the biggest event ever held in Southern Alberta. The Raymond, Magrath and Cardston Agricultural Societies have abandoned their fairs for 1918, and

FREE POWER

for Pumping Water

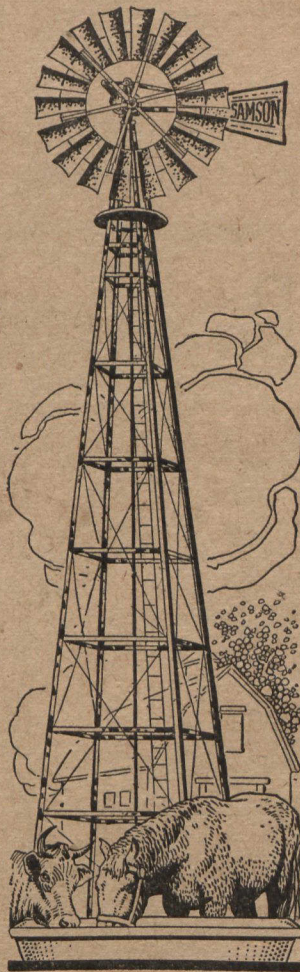
Save Labor, Time and Patience Give your stock fresh well or spring water! Don't water them in stagnant ponds or pools.

SAMSON WINDMILLS

"STRONGER THAN THE STRONGEST"

Double Geared Automatic Oilers
 Perfect Wind Wheel
 All Boxings Detachable

Governor Regulates Speed.
 Angle Steel tower is girted every five feet and held with two sets of wire braces. Built or Service and Gives Longer Service. Repair Parts Carried in Stock. Mail the Coupon for Full Description.



We Can Make Prompt Shipment of

CLEVELAND TRACTORS
 GASSADY TRACTOR
 GANG PLOWS
 STOVER GASOLINE ENGINES
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 "ALTOLECTRIC" LIGHTING PLANTS
 RODERICK LEAN DISC HARROWS
 MICHELIN TIRES

Foundry Products Ltd.
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Mail This Coupon for Full Particulars

FOUNDRY PRODUCTS, LIMITED, CALGARY.

Gentlemen:—Please send me your catalogue fully describing item marked below with an X.

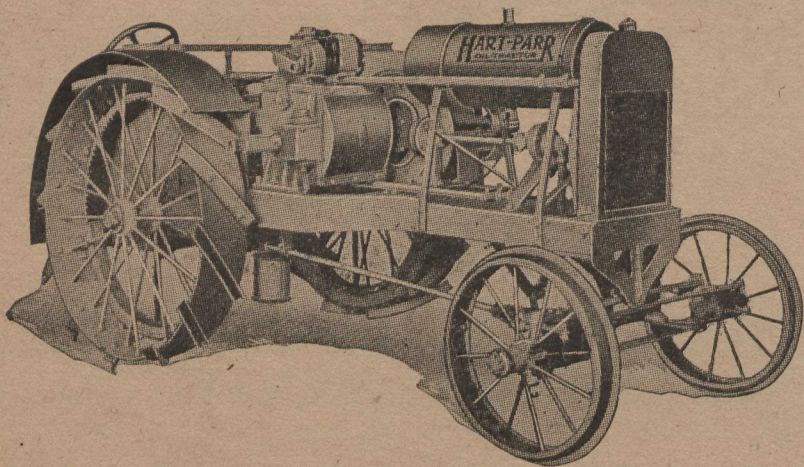
- Altolectric Lighting Plants
- Stover Gasoline Engines
- Cleveland Tractors
- Cassady Plows
- Samson Windmills
- Roderick Lean Harrows
- Stover Pump Jacks

Name

Address

The New

HART-PARR Tractor



The New HART-PARR Tractor
Will do as Much or More Work
on Kerosene as Can be Done
on Gasoline

It's a three-plow tractor. It is a one-man outfit that will work 24 hours a day, giving complete satisfaction all the time. It has ample reserve power to do more work than other tractors of its rated horse-power.

The New Hart-Parr gets more power from Kerosene because of its scientific construction--Ask us to tell you about its Dry Kerosene Shunt!

Its twin-cylinder, water-cooled engine is mounted on a solid cast steel frame, making a sturdy tractor that will stand the strain of years of hard work. Write for Full Particulars.

Hart-Parr of Canada, Limited.

WINNIPEG CALGARY REGINA SASKATOON

are bending their entire energies to bringing the Amalgamated Fair to a successful issue.

The prize list has been issued, and provides liberal classifications for all classes of livestock and poultry, as well as field crops, dairy products, arts and crafts, etc.

A special department has been created for girls and boys from nine to seventeen years of age, and classes have been provided for foals, calves, ponies, pigs, poultry, as well as for needle work, school work, gardening, etc. Altogether about \$800 has been appropriated in prizes for this department. In all classes for livestock exhibited by girls and boys, the entries must have been cared for by the exhibitor from May 15th to the date of shipment to the exhibition, and exhibitor must personally exhibit their entries in the show-ring.

The prize list will be mailed on application to W. McC. Moore, Mgr., Lethbridge, Alta.

PERCHERON ASSOCIATION MEET.

The Canadian Percheron Horse Breeders' Association held a meeting on May 4th, at the office of Secretary Willson, Calgary, to consider the matter of Percheron awards at the various summer exhibitions. For the Calgary, Edmonton, Saskatoon, Regina, Brandon and Lethbridge exhibitions, it was decided that the Association would offer the following special prizes:

Special for champion mare, \$12, \$8, \$5. Special for Canadian-bred champion mare, \$12, \$8, \$5. Special for champion stallion, \$12, \$8, \$5. Special for Canadian-bred champion stallion, \$12, \$8, \$5. Brood mare, with foal at side, \$12, \$8, \$5.

For the Weyburn, Yorkton, Moosejaw, Swift Current, Medicine Hat, Red

Deer, Camrose, North Battleford, Prince Albert and High River exhibitions the following special prizes are offered.

Special for best grade Percheron mare, with foal at side, \$12, \$8, \$5, (foal to be get of a registered Percheron sire). Special, best two-horse team, mares or geldings, 3,000 lbs. or over, sired by registered Percheron sire, \$12, \$8, \$5.

The specials are to be given only to those of the above exhibitions who comply with certain rules. Each Association is advised that its fair must have so classified its own prize lists, apart from outside subscriptions or donations so that the same classes and awards are offered to the Percheron as to the Clyde, but if they have awarded to the Clydesdale breed more classifications or, in total, more money in prizes than is awarded to the Percheron breed, then this offer is withdrawn.

The recognition of the fair by the Canadian Association also entitles the fair to the prizes offered by the Percheron Society of America which refers only to registered stock.

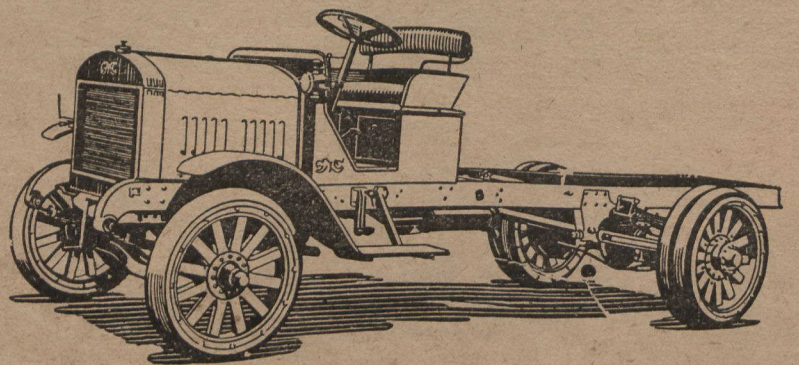
The Calgary and Edmonton Exhibition Associations have been written to for bids on the Percheron Futurity. The Percheron Association recommended to judge at the fairs at which their awards were offered, any of the following: Dr. C. W. McCampbell, Secy., State Livestock Registry Board, Manhattan, Kan.; Prof. J. L. Edmonds, Asst. Professor of Horse Husbandry, University of Illinois; Archie Robison, prominent breeder, Pekin, Ill.; John DeLancey, Secy. Breeders' Service Co., Chicago, Ill.; Prof. Curtiss, Dean Iowa Agricultural College, Ames, Iowa, or James Boyd, of the Pabst Brewery, St. Louis, Mo.

* * *

In nearly all cases clover should be included in whatever system of rotation is adopted.

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Let a G-M-C Truck Carry The Load



Every day in every part of North America G-M-C Trucks are proving their superior ability for farm work. Overstrength in all parts, and with abundant reserve power, G-M-C Trucks in every-day work are never pushed to the limit of their capabilities. Their strength, dependability and low upkeep make them the ideal truck for farm work.

There is a G-M-C Truck for every farm need. Capacities 1500 lbs. to 7 tons. Catalog and other information on request.

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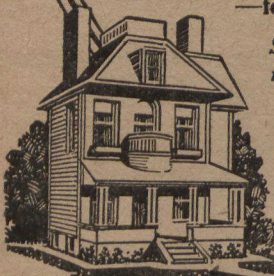
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is the ideal property-preservative; properly applied it will Protect your house and make it good to look at—for many seasons.

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 VANCOUVER, B. C.



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 If we build your house you will be entirely satisfied in every way.
 Ask for our lumber price list and our free plan service.

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If you want quickest returns and most money for your Furs, Hides, Wool, etc., ship them to

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 It is never too late to mend -- BUT it soon will be too late to plant
THAT WINDBREAK
 WRITE TO
CLUNY NURSERIES
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SHORTHORN BULLS

of the best Scotch breeding for sale. Also some young cows in calf to "Oak Bluff Hero" and the Champion "WILLOW RIDGE MARQUIS." Intending purchasers will be met at the train. Farm close to town. Write to

MRS. J. A. LYTTLE
 BRAEMAR RANCH, AIRDRIE, ALTA.

FAIRVIEW HEREFORDS FOR SALE
3 BULLS, HERD-HEADER MATERIAL

One by Beau Gaston. Two by Beau Dover. Also choice yearling Bull and Heifers. Young Stock For Sale at all Times. Come Any Time, or Write


GEO. J. ANSTEY, MASSENA, IA.

White Wyandotte Hatching Eggs

\$2.50 for 15—Regal Strain. My Pens are made up from winners at the Saskatoon Poultry Show, 1917; headed by "Gay John", 3rd Prize Cockerel, Madison Square, 1917.
 From 9 entries at Saskatoon received 7 awards.

J. V. BRADY
 611 31st Street SASKATOON, SASK.

VOLPEEK
WILL STOP THE LEAK



Don't throw away your Pots and Pans. "Vol-Peek" will mend Graniteware, Tin, Aluminum, etc., in two minutes without tools. Always keep it in the house. At dealers or from us, postpaid, 15 cents. Vol-Peek Mfg. Co., Box 2024, Montreal, Can.

COL. TAYLOR'S HEREFORD SALE.

On another page of this issue will be found the announcement of Col. E. H. Taylor Jr.'s big Hereford sale, on June 7th, at Frankfort, Kentucky. To those Canadian breeders who are looking for the best in Hereford blood, we say emphatically that distance should be no consideration where these famous animals are concerned, and we hope that a good many "Review" readers will find time to attend this outstanding event in the Hereford world.

Col. Taylor has built up one of the finest establishments in the world at his Hereford Farms. His herd of females particularly is recognized nationally and internationally as the greatest on any continent. Here is an aggregation of extreme tops, selected without regard to cost, from every herd of renown in the country, including selections made by expert judges in England, until taken from beginning to end, it is a herd of Herefords composed solely and entirely of the cream of the cream. Champions and grand champions are found at every turn on Col. Taylor's magnificent estate; matrons whose names are of such individual brilliance that one can scarcely realize that here they stand side by side in one single herd.

In bringing together so many queens of the Hereford world for his female herd; in his selection of the massive Woodford as herd bull, Col. Taylor founded his herd with a view to perfection in type and quality which has commanded the admiration and wonder of Hereford breeders on both sides of the Atlantic. In the acquisition of Woodford The Wonderful, Col. Taylor made one of his master strokes, a stroke that has not only justified the investment but has proven to the satisfaction of his friends and competitors that in the possession of this wonderful Perfection Beau Donald-bred bull; he not only holds one of the treasures of the breed of all time, but a fortune constantly increasing.

To the constructive breeder there is a lesson that is so conspicuously illustrated in the 96 daughters of Beau Donald, "the father of Kentucky Herefords," that he who runs may read. With these are found daughters of nearly all the greatest sires of modern times selected with a vision to future profit and pleasure. Read Col. Taylor's announcement, and write for a catalogue.

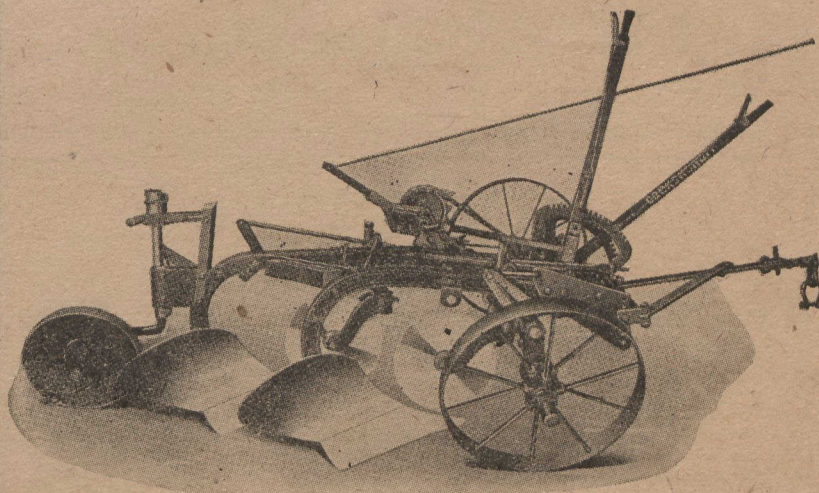
A LANDSEEKER'S OPPORTUNITY

Demand for farm lands is in excess of the supply, and those who are looking for something choice will be acting in their own interests if they plan now to attend the land sale at Lethbridge on June 4th, under the direction of the Standard Trusts Company, administrators of the various estates to be disposed of on that date. These lands are in a particularly desirable part of the Province, are all close to good markets, churches and schools, and may be acquired at moderate figures and on easy terms. Clear, unencumbered titles will be given with each parcel, and taxes are paid to the end of 1917. A complete list of the land, with the description of each parcel is contained in another section of this issue, and those who are interested in securing high-class farm land should look the offering over and inspect the properties listed, so that they will be prepared to bid judiciously on the day of the sale. The sale will be by auction, and will start at 1 p. m. at the office of the company in Lethbridge, June 4.

Don't let the talk of an imminent deluge of grass cattle scare you. Grassers are two weeks off at best, and, in the meantime, good prime grain-fed cattle will be at a premium. Finish your steers, don't sacrifice them.

The Provincial Department of Agriculture has issued a bulletin on gopher production. Among other things it states that the most effective way of getting rid of gophers is by poisoning and trapping. It has also been stated on good authority that an average gopher will succumb to hanging, electrocution, stabbing in vital spots, decapitation and other well-known forms of torture. One single case of suicide, however, has yet to be reported.

Cockshutt Light Draft Two-Furrow Tractor Plow



Before buying a plow for the Fordson or other light tractor engine, write us or see our agent.

There are more light draft 2-furrow Cockshutt tractor plows behind the Fordson than any other make of plow. 65 per cent. of the purchasers of Fordson tractors from the Ontario Government have bought Cockshutt 2-furrow light tractor plows, having decided after careful tests that the Cockshutt is best suited to the Fordson and does excellent work.

In the last few months over 6000 Cockshutt plows have been shipped to England to work with light tractors. The Cockshutt is not a remodelled horse plow. It has heavier beams, heavier bottoms and heavier construction throughout, proportionate to the extra strain a traction plow is subjected to.

The side pressure and suction of the plow is carried on three wheels instead of being a dead drag on the ground which partly accounts for the lighter draft.

The Cockshutt light tractor plow is independent of the engine, being connected to it by a flexible hitch which allows the engine to go over dead furrows and uneven ground without altering the depth of plowing or in any way affecting the work of the bottoms.

Do not experiment with the plow part of your equipment. Cockshutt tractor plows have a world wide reputation and their work is always dependable.

We are making a special price on these plows. Write us to-day.

Cockshutt Plow Co. Limited

WINNIPEG REGINA CALGARY SASKATOON

PLACE YOUR
HAIL INSURANCE

with
THE CONNECTICUT FIRE INSURANCE COMPANY

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 See Local Agent or write direct

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 Cash Grain Handled in all Markets
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 GRAIN COMMISSION MERCHANTS
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 We are agents for Grain Growers in the looking after and selling of carlots of Wheat, Oats, Barley, Rye and Flax, on commission only. The members of our firm give personal expert service in checking the grading of cars, and have been frequently successful in getting grades raised. Write to us for market advices and shipping instructions.

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 We can offer oats in carload lots, delivered at any station in the West at minimum prices.
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JAMES RICHARDSON & SONS, Limited
 WINNIPEG - CALGARY - SASKATOON

TO THE FARMERS OF WESTERN CANADA:--
 If you have followed our advice re the oat market you will notice that our prediction of \$1.00 per bushel has materialized, and if you have benefitted by our advice reciprocate by shipping us the balance of your wheat, oats, flax and barley.
 If your grain is in the elevators order it shipped to us, sending your tickets and car number.
 NOTE:—The Grain Act distinctly says that Elevator Companies must ship the grain to whom you may order it. (See Grain Act, Section 160).

Winnipeg, March 25th **McBEAN BROS.** Grain Exchange

ABERDEEN-ANGUS BULLS

 Fifteen bulls, eighteen months to two years old, for sale. The greatest and most useful bunch of bulls we have ever offered.
 Every bull a great big cracker, ready for immediate service on the range or farm.
 They are quiet and in good rugged condition. Some great show prospects among them.
 These older bulls are priced at \$300.00 to \$400.00. Every bull guaranteed right.
 Also some 12 months-old bulls for man with smaller herd. Priced at \$250.00 each.
 Young cows with calves at foot, or due right away. A great lot of real money-makers. \$300.00 to \$400.00 each.
COME OR WRITE AT ONCE.
JAS. D. MCGREGOR
 BRANDON, MAN. PROPRIETOR

Markets
WHEAT SUMMARY.
 The following is a cabled summary of the statistical notes issued to-day by the International Institute of Agriculture. It includes all information up to April 30, 1918:
 The total production of wheat in Denmark, Spain, France, Great Britain and Ireland, Italy, Luxemburg, Norway, the Netherlands, Sweden, Switzerland, Canada, United States, India, Japan, Algeria, Egypt, Tunis, Argentine, Uruguay, Union of South Africa, Australia and New Zealand in 1917 was 2,242,447,000 bushels, compared with 2,173,162,000 in 1916, and 2,479,519,000 the average of the three years, 1914-16. The probable consumption in the same countries during the grain year, August 1, 1917, to July 31, 1918, is estimated at 2,159,682,000 bushels.

WINTER WHEAT KILLED.
 The Census and Statistics office has issued a report on the area and condition of fall wheat, the condition of hay and clover meadows, and the progress of spring seeding, as compared from the reports of the crop correspondents at the end of April. Winter-killing of fall wheat in Ontario is reported as especially severe. It is estimated to amount to 56 per cent., which reduces the acreage under this crop in Ontario from 630,200 acres as sown last fall, to 277,200 acres, the area to be harvested. This is the largest proportion of fall wheat winter-killed in Ontario, and the lowest acre age left for harvesting since the records were begun in 1909. In Alberta, the percentage winter-killed is estimated at 10 per cent., thus reducing to 55,560 acres the area of 61,400 acres sown last fall.
AFFECTS WESTERN SHIPMENTS.
 According to a ruling in a judgment by the Railway Commission, just out, the movement of wheat from prairie points to the Pacific coast is subject to the increase allowed in the railway rates judgment of December last granting an approximate increase cost of 15 per cent. freight and passenger rates to railroads. The ruling was asked for by the Grain Growers' British Columbia Agency, Ltd. It will be recalled that on a special application on behalf of those interested in the grain business in the West, the board ordered that the rates authorized by the main judgment be charged on wheat, in carloads, to Port Arthur and Fort William only, would not be made effective until June 1.
 The board finds that this judgment applied only to the movement of wheat to the head of the lakes, and that westward shipments are subject to the increase allowed in the main judgment.

URGED TO SHIP WHEAT.
 All the farmers of the West are being asked through their different organizations to ship whatever wheat they have on hand at the present. Secretary H. Higginbotham, of the United Farmers, has received a communication from R. McKenzie, secretary of the Manitoba Grain Growers, asking that they circularize all the members of the U.F.A. informing them that the Board of Grain Supervisors has requested to take such action.
 Notices are now being sent out to all the members of the U.F.A., and it is likely that by June 1 there will be practically no grain on the farms in the province.

MUST UNLOAD AT TERMINALS
 In a series of orders of the board of grain supervisors for Canada, issued May 8, numbers 44 to 47, inclusive, railways of Western Canada are ordered to unload all cars of wheat shipped from country points on their lines on and after May 10, 1918, west of the Great Lakes, into terminal elevators at Fort William and (or) Port Arthur, unless a permit is granted by the board for the unloading specific shipments of wheat at other points.
 The Canadian Pacific Railway, the Canadian Northern, the Grand Trunk Pacific, and the Edmonton, Dunvegan and British Columbia railways are affected by the order of the board of grain supervisors to this effect.

CHICAGO GRAIN.
 Chicago, May 17.—Selling on the part of leading commission houses induced fresh weakness today in the corn market. Opening prices, which varied from unchanged to 2c. higher, with May \$1.27 3/4 to \$1.27 1/2, and July, \$1.41 1/2 to \$1.42 1/2, were followed by a decided break, which carried July well below yesterday's finish.
 After opening 1/4c. to 1/2c. lower, oats rallied a little, but then sagged again.
WINNIPEG GRAIN.
 Winnipeg, May 17.—There was a good demand for cash oats. Offerings were very light.
 In barley and flax trade was slow and prices unchanged.
 Oats closed 2c. higher for May and 1 1/4c. higher for July.
 Barley closed unchanged for May.
 Flax closed 3/8c. higher for May and unchanged for July.

LIVESTOCK MARKETS.
 It would almost require a specially constructed adding machine to keep tabs on the cattle and hog markets of America in these days of rapid price changes. And all of the revisions have been upward. Cattle have enjoyed a season of particularly bullish trade in the last fortnight, and as predicted in these columns two weeks ago, have continued to show exceptional strength. The runs

have been good, though not large enough to cramp transportation facilities, and everything was cleaned up in brisk fashion. Top steers have in keen demand throughout the period covered by this report, and full car loads have sold readily at \$15, with extra prime individuals going to \$15.25 and \$15.35. The country is being pretty well combed for grain-fed stuff, and any who have this class of cattle on hand would do well to get them in without delay as grass stuff will make its appearance shortly after the first of June, or possibly before.
 Prices will likely be maintained for at least two weeks, and may even gain considerably before grass cattle arrive, but there is bound to be a slight re-adjustment of values when the grassers do appear, and grain stuff will be depreciated when that time comes around. There has been a fair demand for stocker material especially in the steer department. Best stock steers are selling readily at \$10 to \$10.50. Cows are moving slower than usual, and at slightly lower values.
 The hog run has been good and prices steady throughout the week, though they were selling weak at \$20.35 toward the close. Prospects are for a continued strong trade in porkers. Quotations listed at Calgary are as follows:

AT CHICAGO
 Chicago, May 17.—Cattle—Receipts, 9,000; firm; stockers and feeders, \$9.10 to \$13.00; cows and heifers, \$7.15 to \$14.40; calves, \$8.00 to \$14.00.
 Hogs—Receipts, 13,000; strong; light, \$17.25 to \$17.80; mixed, \$17.10 to \$17.80; heavy, \$16.25 to \$17.60; rough, \$16.25 to \$16.65; pigs, \$14.50 to \$17.55; bulk of sales, \$17.30 to \$17.70.
 Sheep—Receipts, 9,000; steady; lambs, \$14.75 to \$20.25.
AT WINNIPEG.
 Winnipeg, May 17.—Cattle market today steady on all lines of butcher stuff. Stockers and light feeder trade slow and dull.
 Hog prices steady.
 Butcher steers, \$10.50 to \$15.50; heifers, \$8.00 to \$14.00; cows, \$5.00 to \$13.00; bulls, \$6.00 to \$11.00; oxen, \$7.00 to \$12.00; stockers and feeders, \$8.50 to \$10.90; veal calves, \$7.00 to \$16.00.
 Hogs, select, \$20.00; heavies, \$16.00 to \$17.00; sows, \$16.00 to \$17.00; stags \$8.00 to \$10.00; lights, \$16.50 to \$19.00.
EDMONTON QUOTATIONS.
Cattle—(Fed and Watered).
 Steers, extra choice, export \$12.50 to 14.00
 Steers, fat, choice butcher 11.50 to 12.50
 Steers, common 9.50 to 10.50
 Heifers, common to choice 11.00 to 12.50
 Bulls 7.00 to 9.00
 Cows, choice butcher 10.00 to 11.50
 Cows, common butcher 8.00 to 8.50
 Cows, canners 5.00 to 6.00
Stockers—(Fed and Watered).
 Stockers, yearling steers 9.00 to 10.50
 Stockers, 2-year-old steers 9.50 to 10.50
 Stockers, heifers 9.50 to 10.50
 Stocker cows 7.00 to 8.50
Cows—(Per head).
 Springers and milkers \$75 to 125
Sheep—(Fed and Watered).
 Sheep, good wethers 13.50 to 15.00
 Sheep, fat lambs 14.50 to 15.50
Hogs.
 Hogs, select off cars 19.75
 Hogs, select, off wagons 19.25 to 19.40
 Hogs, select, fed and watered 19.25 to 19.40
 * * *

Indications point to an increased use of fine wools in army goods, owing to the fact that there are not enough cross-breds to meet the needs of army outfitters. Gavin Jack will be right in line with his flock of Rambouillets.
 * * *

\$20 cattle are freely predicted on the Chicago market. That means \$17 cattle at Calgary, provided they are good enough. Finish and weight is what counts. The scrub steer is rapidly becoming a nonentity so far as buyers are concerned, and scrub bulls beget scrub steers.

WADE & JACK THE LEADING STOCK COMMISSION AGENTS AND ORDER BUYERS
 Consign your Stock to us. We get Top Market Prices. Write or Phone us for Market Quotations before Shipping elsewhere.
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 M 6047
 M 3438 } **ALBERTA STOCKYARDS**
CALGARY

The Dairy

BOVINE TUBERCULOSIS

By A. J. DAMMAN, V.S., Vancouver.

(Continued from last issue)

How the Disease Spreads.

When an animal first becomes infected there is usually no danger to other cattle, but sooner or later tuberculous cattle begin to give off the germs of the disease. The germs escape through the mouth, the nose, the bowels, the milk and discharges from the genital organs. When the disease is located in the lungs and discharges into the air tubes, pieces of the diseased tissue and millions of the germs are liberated and coughed up. Most of these are swallowed and passed out in the manure. This is the chief way in which the germs are discharged from diseased cattle. When the germs are given off in any of these ways, the disease is known as Open Tuberculosis. Cattle in advanced stages of the disease usually have open tuberculosis. The high percentage of tuberculosis in cattle and hogs on certain farms has been found to be due to the failure of the owners to remove promptly animals that develop visible indications of the disease.

Germs discharged from the mouth and nose are coughed up from the lungs

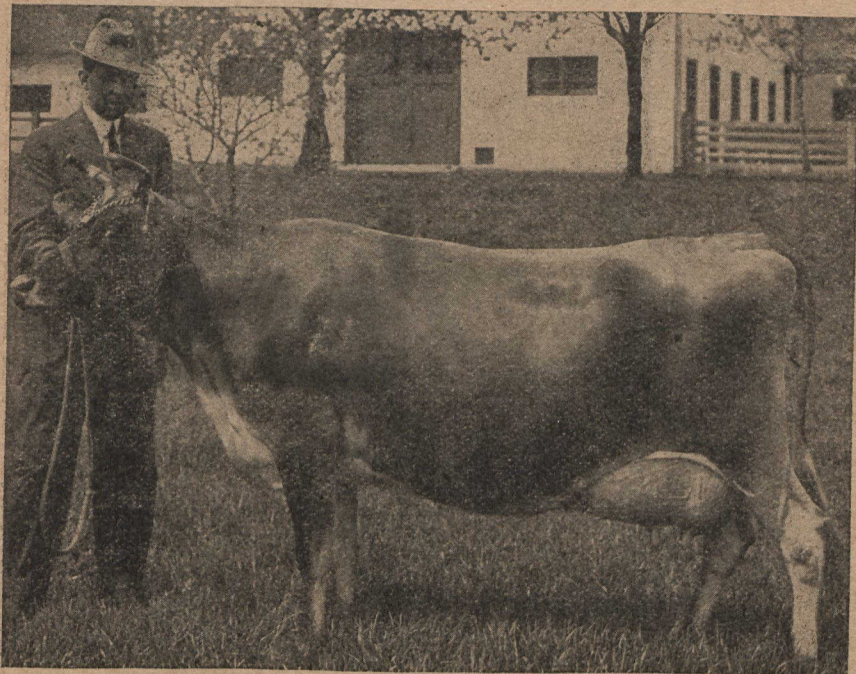
open cases and which are closed. In badly infected herds a careful physical examination by a veterinarian will eliminate a certain proportion.

Rate of Development.—Individual animals exhibit the widest variation in the duration of the disease. In the majority of cases the disease pursues a leisurely course, consuming years before causing death.

Most infected cattle and hogs are fattened and sold for human consumption, but some develop a rapidly fatal type. Losses are so evenly distributed in point of time that they do not excite the owners. In some herds which are known to have a few reacting animals, the disease does not seem to spread. Perhaps this is due to the fact that few, if any, of these happen to be open cases. On the other hand, in certain instances under observation the disease has been introduced into clean herds, and, in a few months, through the development of open cases, a large proportion of the animals have been re-actors. The feeding of infected milk to calves, particularly unheated mixed skim milk returned from the creamery, usually results in speedy infections.

How a Herd is Infected.

Tuberculosis may be introduced into a healthy herd in many ways. (1) By



A Good Type of Jersey from across the Line

and are sprayed over the food in front of the cow or are carried in the air for a time until they fall to the ground. Cows in adjoining stalls may take in these germs in the air they breathe, or in the food they eat, and so contract the disease.

Germs discharged from the bowels are mixed with the manure and may infect cattle, hogs and fowls that are allowed to pick over manure heaps. The practice of having other animals in the same yard often results in the infection of them. Manure containing tubercular germs may easily infect the milk by dropping into it while it is being milked, straining the milk afterwards only removes the large particles. The smaller ones, including the germs remain in the milk. When the udder is tuberculous, the milk contains the germs in vast numbers. Although such milk may look and taste perfectly good, it may transmit the disease to the young animals. Hogs, calves and chickens are readily infected by it. It is also dangerous to children. When all the tuberculous areas in the body are so situated that no germs are being given off or discharged in the excretions, as above described, the condition is known as "Closed Tuberculosis." Such animals do not transmit the infection until they become so diseased that the tuberculous areas open into a passage leading to the exterior of the body. Many infected cattle never develop "Open Tuberculosis," but there is no way of determining accurately in the living animals which are the

introducing of a bull which has not been previously tested, or some new cow which has been tested and shipped in a car which has carried infected cattle and not been properly disinfected. (2) By feeding calves from milk which has come from a creamery where pasteurizing has not been properly carried out. (3) By showing cattle at fairs and exhibitions where proper care is not taken to keep out diseased stock or to disinfect the stables. (4) By allowing the cattle to graze with diseased ones, or to come into contact with them over fences.

How the Presence of Tuberculosis Infection May be Demonstrated.

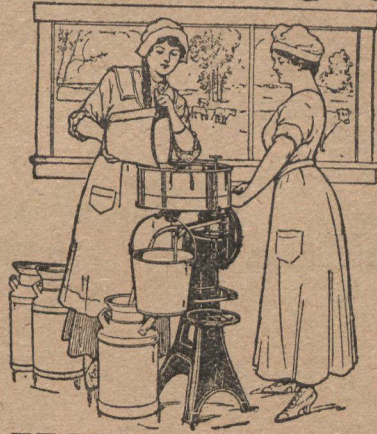
The tuberculin reaction is the best way where an animal may be pronounced nil from tuberculosis. Then you must take a good many things into consideration.

(1) That you have a good product of tuberculin; that the animal has not been plugged and a competent veterinarian to make the test.

(2) The animal may not react to the test from tuberculin and still be infected, but if you have an experienced man making the test he will detect any such conditions.

I may state for the benefit of those who may not know what tuberculin is and its reaction.

Tuberculin is a filtered, sterilized and preserved glycerine bouillon upon which tubercle bacilli have grown. It



Cream Saving Machines

IF YOU are still setting your milk and skimming by hand, you are losing anywhere from one-fourth to one-third of your cream. If you are using a separator, and it is not one of the best, you are still losing an amount of cream that would surprise you if you knew it. Every farm loss or leak that can be stopped this year should be stopped. Buy a Primrose cream separator and stop the cream loss.

Don't imagine that cream left in the skim milk will fatten pigs and calves faster. It has been proved scores of times that stock thrives as fast on warm separator skim milk, when a little meal or flax replaces the fat. Cream in the skim milk is dead-loss cream.

Primrose separators get that cream. We can prove to you that they get it all, except about one drop in each gallon.

Besides that, they are well-known as simple, easy-running, easily-cleaned machines that last and do the same good work year after year. Buy a Primrose—it will pay back its cost in cream you may now be losing. See the local dealers who handle these separators, or, write the nearest branch house for catalogues.

International Harvester Company of Canada, Limited

BRANCH HOUSES

WEST—Brandon, Man., Calgary, Alta., Edmonton, Alta., Estevan, Sask., Lethbridge, Alta., N. Battleford, Sask., Regina, Sask., Saskatoon, Sask., Winnipeg, Man., Yorkton, Sask.
EAST—Hamilton, Ont., London, Ont., Montreal, Que., Ottawa, Ont., Quebec, Que., St. John, N. B.

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C.V.O., LL.D., D.C.L., President
H. V. F. JONES, Ass't Gen'l. Manager



SIR JOHN AIRD General Manager
V. C. BROWN,
Sup't of Central Western Branches

CAPITAL PAID UP, \$15,000,000 RESERVE FUND, - \$13,500,000

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Farmers find the service of this Bank efficient and satisfactory in the discounting and collection of sales notes.

Blank sales notes supplied free of charge. 140W

The Farmer-Banker Alliance

You go to your lawyer for legal advice; to the doctor for medical advice; why not to The Merchants Bank for financial advice?

If you want a loan to buy cattle, hogs or equipment—if you want information as to how to invest money—come to those who make a business of financial matters, and are in a position to give you sound and impartial advice.



THE MERCHANTS BANK OF CANADA

Head Office: Montreal. Established 1864.
With its 52 Branches in Alberta, 8 Branches in British Columbia, 22 Branches in Saskatchewan, 19 Branches in Manitoba, 102 Branches in Ontario, 30 Branches in Quebec, 1 Branch in New Brunswick and 2 Branches in Nova Scotia serves Rural Canada most effectively.

Write or call at Nearest Branch.

ESTABLISHED 1875

IMPERIAL BANK OF CANADA

CAPITAL PAID UP, \$7,000,000. RESERVE FUND, \$7,000,000

SERVE THE SOLDIERS

Armies are fighting on bacon to-day. If you require a loan to raise more hogs, it would be well to consult our local manager.

126 Branches - 48 Branches in Western Canada.

FOUR FAIRS IN ONE

Southern Alberta Amalgamated FAIR and STAMPEDE

A CONSOLIDATION OF FOUR BIG SOUTHERN ALBERTA FAIRS
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Prize List Now Ready.

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SPECIAL BOYS AND GIRLS DEPARTMENT

Write for Prize List to

W. McC. MOORE, Manager - - - LETHBRIDGE, ALTA.

contains no germs and is harmless to cattle, even in increased dosage. In tuberculous cattle it produces a temporary effect or reaction. The living tissues of tuberculous persons and animals are sensitive to tuberculin. This sensitiveness is most marked in the tissues that are actually invaded by the germs, but it also exists to some extent in the other tissues of the body which contain blood vessels. The living tissues of individuals not infected with tuberculosis show no sensitiveness to tuberculin. When tuberculin is injected into vascular layers of the skin of a tuberculous cow a swelling will usually follow. When dropped on the eyeball an exudate of pus may result. When injected into the skin or tissues in sufficient amount a feverish attack comes on about eight to twenty hours after the tuberculin is administered, lasts a few hours and then subsides. (This is what is known as the raise and fall in temperature.) These symptoms are called reactions, and animals which show them are called reactors. The value of the test lies in the fact that diseased animals react, while healthy ones do not. There are several ways of testing with tuberculin. The methods which are most practicable are the interdermiae—sub-cutaneous and ophthalmic. Each of these methods has certain advantages. The conditions under which the testing is to be performed should be the guides in choosing the method. The successive or combined use of all three tests on the same animal gives an accurate diagnosis.

Then we have the three following tests to choose from. The interdermal Method; the ophthalmic method; the subcutaneous method, any of the above methods may be used with accuracy owing to conditions one may find.

No form of the tuberculin manufactured distinguishes between severe cases, slight cases, nor between those that are spreading infection and those that are not infecting other animals. The test is so searching that extremely slight infection will cause the animal to react. In cattle, reacting to the test the infection may occasionally be so recent and the change so slight that the ordinary methods of post-mortem examination fail to demonstrate the presence of tuberculosis, since the lesions may be microscopic in size. If a reaction does occur, tuberculosis is certainly present, although it may be very slight, but if no reaction occurs, care must be taken for there is still factors to consider.

The animal may not be called tubercular, but in such cases physical symptoms will usually indicate ill health. The reaction does not occur during incubation of the disease. In infected herds a second test should be made within six months as I have stated before the possibility of the animal being "plugged."

This is when the ophthalmic test will clinch the diagnosis should that be the case. You can use this test once a week if you wish without any bad results to the animal. In the application of any methods for the eradication or prevention of tuberculosis, certain important characteristics of the disease should be borne in mind: Bovine tuberculosis is so firmly rooted and so widely spread among cattle that no important dairy community, the Island of Jersey excepted, is free from it. So far as is known, no dairy section when once infected has been able to eradicate the disease completely. The possibility of eradicating bovine tuberculosis from individual herds has been demonstrated beyond all question, and the obstacles which have prevented the successful accomplishment of this in communities have been due to the unwillingness of the cattle owners to make the necessary financial sacrifices.

Tuberculosis does not develop spontaneously. The cause of the disease is the bacillus of tuberculosis, which exists only in the bodies of tuberculous animals and in their excretions, or in substances contaminated by them. In-and-in breeding cannot produce it. Dark, filthy, badly ventilated stables, poor food and crowded conditions may contribute to its rapid spread among cattle, but the disease does not originate in an animal, no matter how bad its environment. It must be ex-

Don't Sell Your Cows

To sell now, because of the shortage of hired men, is like "killing the goose that laid the golden eggs"—for never in the history of farming have the prices of milk and cream been higher, nor the necessity of their production so vital to the Empire's needs.



have solved the problem of saving time and labor in milking—and freed the hired man for work in the field.

Mr. J. H. Grisdale, B. Agr., director of Dominion Experimental Farms says: The real drudgery of the dairy farm is eliminated by the use of the milking machine. ONE man with a milking machine will do the work of three hand milkers in the same length of time. They take the place of the extra hired men so hard to obtain at this time and are recognized as a good investment.

Our booklets give very interesting information and will be sent you without cost. Ask us for them. 82

Address Dept. R
The Empire Cream Separator Co. of Canada, Limited
Montreal Toronto



PAYS OFF MORTGAGES BUILDS FINE HOMES

Big money in selling cream this year. Neither frost nor hail, nor excessive rain, nor even untimely draught will seriously injure the season's cream crop.

Send us a few cans and be convinced, or write us for information.

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STRATHMORE FARM Holsteins

Type and Milk Production Combined

Our Holstein herd of one hundred and thirty head comprises some of the best producers in Western Canada.

We offer a few choice young bulls at attractive prices.

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Strathmore - - Alberta

posed to the disease germs to contract the disease.

Tuberculosis is most readily communicable. This point in connection with its specific nature, cannot be too strongly emphasized. The disease results from the association of tuberculous cattle with healthy ones, and, under such conditions, will spread in spite of every sanitary precaution. It is a mistake to assume that the disease cannot thrive and multiply amongst dairy cattle kept under ideal conditions. The invigorating influence of fresh air and plenty of sunshine, well watered pastures, well ventilated, ideally constructed, clean barns, and abundant and well balanced rations will not stop, although they are likely to retard the spread of the disease. It is among some of the best kept herds that the disease has been found to be alarmingly prevalent. Contact, direct or indirect, is the chief way in which the disease is disseminated. Calves most frequently contact the disease from the milk; calves, hogs and poultry fed on unpasteurized milk from tuberculous cows soon become infected.

The responsibility of the spread of bovine tuberculosis rests with the owners of infected herds.

THE MILKING MACHINE.

The Empire Milking Machine, purchased by the Manitoba Agricultural College seven months ago, is working very satisfactorily. Although the farmer was prejudiced against milking by machinery, he is now well satisfied, and admits that the production of milk is fully as good as it was by hand milking. There has been in the minds of a great many dairy farmers, a great deal of prejudice against the use of a mechanical milker, but the present is no time to let prejudice stand in the way of increased production. The Empire machine is a one or two-cow milker. The pulsator is placed on the can cover, and is very simple. The teat cups are of metal and rubber lined. The machine can be put together and started inside of ten minutes, and will milk a cow in six or seven minutes on an average. If the machine is properly handled in the barn and properly washed, in the dairy, it will produce on an average, as clean, or cleaner milk, than that produced by hand milking.

Keeping the machine clean is very important. Wash out once a month the pressure and vacuum line with a hot solution. Then the pipes must be thoroughly drained at the tank. The pulsators should be taken apart once a month, and thoroughly cleaned. Teat cups and rubbers should be cleaned once a week at least, and given a thorough scrubbing with hot water and washing powder. We find Wyandotte Cleanser to be very good for this work. The teat cups must be kept in a solution to keep down bacteria. We find five ounces of chloride of lime to five gallons of water is a very good solution. This solution is changed once every two weeks. Warm water should be used for rinsing before milking to remove the chloride of lime.

Not only does a machine decrease the cost of milking, but it gives uniformity in milking. All cows are milked in the same manner every day, and every dairy farmer knows that this is important. A machine that is properly adjusted and handled will not injure the cow's teats or udder, any more than the average farm hand. We find the old cows, used to hand milking, object most, but the heifers take to the machine great, and require hardly any stripping. Stripping by hand after using the machine, however, is advocated by all users.—T. JENNINGS, Dairy Herdsman, Manitoba Agricultural College.

TURN COLD INTO GOLD.

Suggestions by Department of Dairy Husbandry, Manitoba Agricultural College.

Save loss from sour milk being returned—high bacteria counts—poor butter or low-quality cheese.

Cool milk and cream below 50 degrees F.

Make special efforts in spring, summer and fall, but cool throughout the year.

Milk and cream should be cooled to 50 degrees F., or lower. To do this ice is nearly always necessary. If

you can not possibly get ice, use the coldest water available. Don't use water that has been warmed by running over the ground or by standing in tanks. Use water direct from the well or spring, unless a colder source is available. If ice is not obtainable, arrange for running water in the milk storage tank. If this is impossible, arrange the equipment so that all water pumped for farm stock passes first through the cooling tank.

A surface cooler saves time and ice.

It cuts the ice bill in two and permits the cooling of morning's milk at the farm.

Save Food—Stop Waste.

A necessity—A Cooling Tank—in the Milk House.

It is used for final cooling and storage. Best made with a two-inch layer of cork between a double shell of four-inch concrete. One made of two-inch plank is next best. Tanks of plain concrete or metal require more ice for cooling. Provide a tight cover.

Size of Tank.

Three gallons of water for each gallon of milk when ice is used, otherwise, double the capacity. The cans should set in the tank on a crack so that the water can circulate under them. Arrange a drain so that the tank can be emptied and cleaned frequently. Water should enter tank near the bottom.

Directions for Cooling—Read Carefully.

1. Have the tank water at 40 degrees F. or lower before milking. In addition, at least 2 pounds of ice are needed for every gallon of milk to be stored if the milk is cooled over the surface cooler to 58 degrees F. or below.

2. Start water running through the surface cooler. For every gallon of milk or cream cooled, 10 to 15 gallons of water should pass through the cooler.

3. Pour milk over the cooler as soon as drawn from the cow. Cool cream as soon as separated.

4. Milk should flow slowly over the cooler and be cooled to within three degrees of the temperature of the water.

5. When a can is filled from the surface cooler set it into the tank immediately. Always have ice in the tank when cream or milk is being stored unless the water is below 45 degrees F. The water should always reach the neck of the cans.

6. Keep cans in storage tank until ready to ship. During hauling protect them with blanket or felt jackets. Don't Guess Temperatures. Use a Thermometer.

Clean and Sterilize.

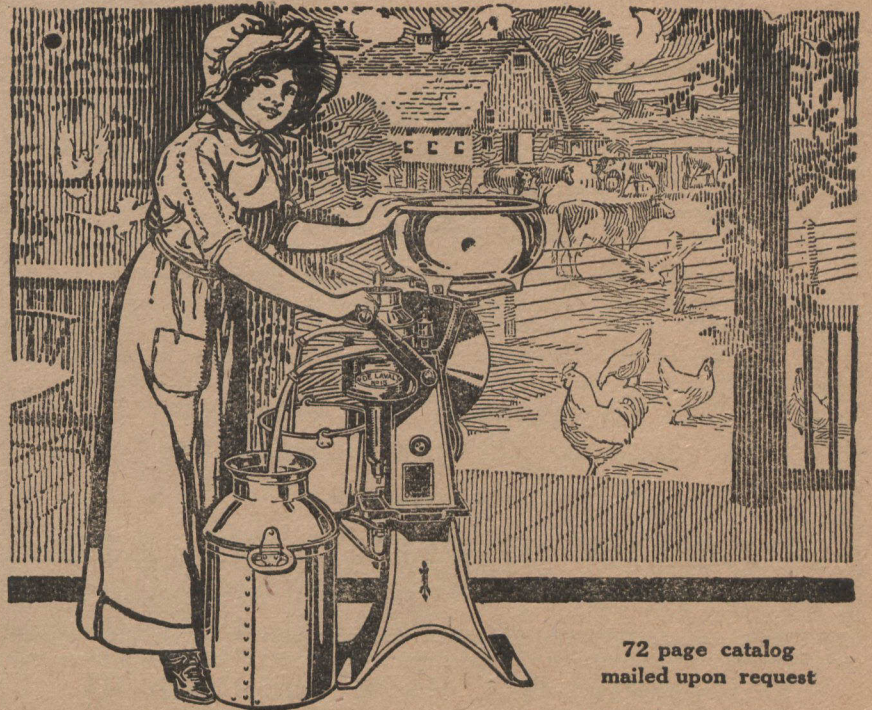
Clean and sterilize the cooler, cans, pails, and other milk utensils. Cool milk and prevent losses.

Ten gallons of spoiled milk cost more than a half ton of ice.

RUSSIAN SUNFLOWER SILAGE PROVES EQUAL TO CORN SILAGE.

Some of our readers will remember that we dealt with the question of sunflowers for silage in our issue of September 5th, 1917. At that time, we told of Prof. Linfield's experiments at the Montana Experiment Station. Word just received states that after three seasons of investigational work on Russian sunflower silage, the Montana Experiment Station, located in a high mountain valley at Bozeman, has demonstrated that one average acre of sunflower silage yielded 25 tons of silage, which proved to be a very good roughage for dairy cattle.

A silo was opened in March, 1916, and two lots of seven cows each were fed alternately grain and clover hay against grain, clover hay, and sunflower silage. The grain and clover lot showed an average gain in body weight of 11 pounds, and produced 1,382 pounds of butterfat in 33.37 pounds of milk on an average daily feed of 13 pounds of grain and 21 pounds of clover hay. The grain, clover, and sunflower silage lot showed an average gain in body weight of only 6 pounds, and produced 1,459 pounds of butterfat in 34.35 pounds of milk on an average daily feed of 13 pounds of grain, 12 pounds of



72 page catalog mailed upon request

Eight Good Reasons Why You Should Buy a

DE LAVAL CREAM SEPARATOR

GREATER CAPACITY: New capacities have been increased 10%, without increase of speed or effort required in operation.

SKIMS CLOSER: The improved bowl design, together with the patented milk distributor, gives greater skimming efficiency.

EASIER TO WASH: Simpler bowl construction and discs caulked only on the upper side make the bowl easier to wash.

EASIER TO TURN: The low speed of the De Laval bowl, the short crank, its unusually large capacity for the size and weight of the bowl, and its automatic oiling throughout, make it the easiest to turn and least tiring to the operator.

THE MAJORITY CHOICE: More De Laval's are sold every year than all other makes of separators combined. More than 2,325,000 are in daily use—thousands of them for 15 or 20 years.

TIME TESTED: The De Laval was the first cream separator. It has stood the test of time and maintained its original success and leadership for 40 years the world over.

EQUIPPED WITH SPEED INDICATOR: Every New De Laval is equipped with a Bell Speed-Indicator, the "Warning Signal" which insures proper speed, full capacity, thorough separation and uniform cream at all times.

SERVICE WHEN YOU NEED IT: The world-wide De Laval organization, with agents and representatives ready to serve users in almost every locality where cows are milked, insures the buyer of a De Laval quick and efficient service whenever he needs it.

Order your De Laval now and let it begin saving cream for you right 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 Silos. Alpha Gas Engines, Alpha Churns and Butter-Workers. Catalogues of any of our lines mailed upon request.

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50,000 BRANCHES AND LOCAL AGENCIES THE WORLD OVER

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I have at present 40 one-year-old and two-year-old Bulls for Sale. These are strictly line bred. Anxiety bulls—heavy boned and suitable for range purposes. Write for particulars or better still, come and see them.

V. W. SMITH

GREENWOOD HEREFORD FARM, CAMROSE, ALTA.
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BREEDERS OF BERKSHIRES
EXCLUSIVELY

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THE MODERN ELECTRIC PLANT FOR FARM HOME LIGHTING. . . .

Lights your home, garage, barns, buildings, driveways. Runs your vacuum cleaner, electric iron, fans, cream separator, sewing machine, laundry appliances.

We furnish the engine or belt the plant to your present power.

WE DO THE WORK OF INSTALLATION.
AUTOMOBILE BATTERIES OF EVERY SIZE

ALBERTA BATTERY CO., LTD.
408 Third Street East. CALGARY, ALBERTA

CLIFFORD STILL PAYS THE FREIGHT

Ten imported herd headers for sale, sired by "Beau Gaston," grandson of old "Beau Brummell." Also have 20 head of two-year-olds and 20 head of long yearlings.

Write for particulars to

L. O. CLIFFORD, OSHAWA, ONTARIO.

clover hay, and 34 pounds of sunflower silage.

With a slight difference of production in favor of the sunflower silage lot, 3 3/4 pounds of this silage replaced a pound of clover hay. This is not quite the same ratio as corn silage to alfalfa.

The crop was planted in rows 28 inches apart at the rate of 20 pounds per acre and gave an average yield of 25 tons of silage per acre. Frequent cultivations were given during the early stages of its growth and the silage cut when 5 percent of the flowers were in bloom.

Russian sunflower silage may solve some of the feeding problems of our high altitude districts. Further information may be obtained from C. N. Arnett, Experiment Station, Bozeman, Montana.

AN EXCELLENT JERSEY SALE.

A high average is made for Jersey cattle at a sale held at Edmond Butlers, Mount Kisco, New York, on May 2nd, when seventy head of Jerseys of all ages were sold for an average of \$1,043 each. A number of the best cattle came to Canada.

La Prairies Bessie, a daughter of Viola's Bright Prince, the senior herd bull in the Brampton Jersey herd, was purchased by D. O. Bull for Arthur T.

Little, of London, for \$2,200.00. Mr. Bull also purchased two other cows, one at \$875 and the other for \$750.

Mr. Reed, of Tennessee, offered \$1,000.00 for La Prairie's Bessie's next bull calf at birth.

Mr. John Pringle, of London, Ont., secured Eventide Lassie, a winner on Jersey Island and sired by Rower for \$1,750.00.

Mr. McGinn and Mr. Ford, of Quebec Province, secured some good animals.

J. Ross Proctor, of New York, paid \$10,000.00, the highest price of the day, for an imported five-year-old cow.

INCREASE IN COW-TESTING.

The following table shows the progress which cow testing in Canada has made since the work was undertaken by the Dairy Commissioner's Department at Ottawa.

Year.	No. of Members.	No. of Cows.	Total Monthly Records.
1906	266	3,005	17,125
1907	789	7,324	41,257
1908	751	7,243	43,518
1909	893	10,028	53,883
1910	1,143	11,853	72,423
1911	1,255	12,242	70,196
1912	1,418	16,076	86,543
1913	1,686	15,946	88,530
1914	2,109	17,777	126,527
1915	2,743	23,009	183,560
1916	3,383	29,409	212,854
1917	3,421	29,240	205,156

DESCRIBES COTTAGE CHEESE MANUFACTURE.

Cottage cheese is a valuable food and should be used in larger quantities than it is at the present time. It is comparatively cheap and may be substituted to a large extent for meats. Large quantities of skim milk now being used on farms for other purposes could be profitably turned into cottage cheese.

For the manufacture of cottage cheese, fresh, sweet, skim milk should be used. Warm it to a temperature of 70 degrees Fahrenheit, and let stand until it forms a curd. This will require from 12 to 18 hours. The curd should be smooth and soft, but firm. It should not stand until it begins to shrink and whey off, for then it will become too sour and tough when made into cheese.

After a good curd has formed, break it up gently and warm to 90 degrees Fahrenheit. This should be done very slowly and evenly. Allow the curd to stand at 90 degrees Fahrenheit for 10 to 15 minutes, then pour out into strainer cloths. A heavy quality of cheese cloth serves best as a strainer. Flour or salt sacking is too heavy. The strainer is made by taking a square piece of heavy cheese cloth and tying opposite corners together. This forms a bag or sack.

The cheese should be hung up in a cold place and allowed to drain for several hours. When sufficiently drained, the curd should have the consistency of thick mush. Care should be exercised to avoid over-draining as a dry cheese will result.

After draining, the cheese should have salt added at the rate of 1 ounce per 10 pounds of cheese. Cream is sometimes added to give the cheese a richer flavor, but this practice is expensive.

Cheese cartons or containers make attractive packages in which to sell the cheese. It may, however, be sold in crocks, but should not be put up in tin containers.

Three or four precautions are necessary in making cottage cheese:

- (1) Don't let the curd get too old or sour before the cheese is made up.
- (2) Don't heat the curd above 90 degrees Fahrenheit as a tough cheese results.
- (3) Don't heat the curd too long as a tough cheese results.
- (4) Don't hang the curd in a warm place to drain, because it will become sour.

MAKE CHEESE ON THE FARM.

Farm cheesemaking offers opportunity for saving large quantities of food which otherwise would go to waste. A surplus of milk is produced on practically every farm. This sur-

SHERWIN-WILLIAMS PAINTS & VARNISHES

Get the Varnish that is made to do what you want it to do.



MAR-NOT

For Floors

Made for floors—to be walked on and danced on, to have water spilled on it, and furniture dragged over it. MAR-NOT is tough, durable, absolutely waterproof. Dries in 8 hours; will rub and take a high wax finish; pale in color; particularly desirable for fine hardwood floors.

The Sherwin-Williams agent in your neighborhood has the right varnish for your purpose. Ask him.

Color schemes and suggestions for any part of your building furnished by expert decorator, free upon application and without any obligation.

Send for book—"The A. B. C. of Home Painting"—written by a practical painter, and telling how to paint, varnish stain or enamel every surface in and around the house. Mailed free anywhere.

THE SHERWIN-WILLIAMS CO., OF CANADA, LIMITED,
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PAINT, VARNISH AND COLOR MAKERS. LINSEED OIL CRUSHERS.

SCAR-NOT

For Furniture and Woodwork

has been the means of converting thousands of women to the idea of protection in the home. They use SCAR-NOT to make their furniture, etc., fresh and pleasing,—even boiling water will not affect it.

REXPAR

For Outside Work

Made to protect outside doors, boat decks, spars, store fronts, etc., against every kind of Canadian weather. It is absolutely waterproof and will not turn white, no matter how long exposed.



plus is usually fed to hogs. In view of the meat shortage, milk makes an expensive feed for hogs, when it could be made into cheese which is a meat substitute.

The value of cheese as a food has not been fully appreciated. One pound of cheese, according to the United States Department of Agriculture is equal in food value to two pounds of beef. Thus, some idea of the value of whole milk can be gained, since 50 pounds of milk will make about 5 pounds of cheese. In other words, 50 pounds of milk made into cheese is equal in food value to 10 pounds of beef. A pound of cheese contains about twice as much protein, or muscle building material, as a pound of beef of average composition, and it is more than twice as great in fuel or energy value. Cheese likewise has greater food value than pork, since pork and beef are not widely different in their nourishing qualities, except that pork has a higher fuel value.

It would be possible for farmers to find an outlet for their surplus milk by selling to local consumers. In this way the visible supply of food could be increased from a source which has been neglected before. In other words, cheese made on the farm would be an actual gain to the nation's food supply.

internal devices of the bowl have not been put in properly. The side of the bowl or the cover has been dented on one side. It may be that the cover of the bowl has not been screwed up sufficiently tight or a little piece of dirt has lodged on one side so as to make the bowl heavier on one side than on the other. The bowl spindle may be sprung and the bearings gummed up. No one can say just what may be the trouble without examining the machine in detail, but sure it is, if the separator does not run smoothly, there is something wrong. Besides not skimming the milk clean a separator that does not run smoothly will wear out much sooner than it otherwise would.

If the separator is not doing good work it may be because it is not being turned in accordance with the directions of the manufacturer. If the bowl does not revolve at the speed it should a portion of the butterfat is certain to be left in the skimmed milk. If the machine is being operated by hand it is well to check up occasionally to see whether the handle is being turned the proper number of times per minute.

If all the above mentioned conditions are as they should be and still the machine is not doing good work it will be necessary to look elsewhere



Typical Barred Plymouth Rocks

CARE OF THE SEPARATOR

By W. H. UNDERWOOD.

All users of cream separators who have not tested their skimmed milk for butterfat recently should make this test at once, for it is probable that they are not getting as much butterfat from their milk as they can and should obtain. Cream separators, like all other kinds of machinery, sometimes get out of adjustment. When the separator is in good working order not more than .02 of one per cent. of fat ought to be found in the skimmed milk, but there is no question but that on a great many farms as much as .05 of one per cent. of fat is left in the skimmed milk and this means a heavy waste.

If a separator is not skimming as close as it ought to it is well to see whether it is standing level or not. If it is not standing level it must be leveled up. A separator cannot be expected to do good work unless it stands perfectly level. The bowl must be in balance. If it is not in balance clean skimming cannot be obtained. If a level is not at hand one suitable for the purpose can be had by filling a glass vial nearly full with water.

But the main part of the separator may be standing well and still the bowl wobbles. This may be because the

for the trouble. Sometimes the cream outlet becomes clogged or partially closed. If this is the case it can readily be seen that less cream will flow through the outlet per minute than if it were larger. The result will be a thicker cream and the chances are that the skimming will be much less perfect than would otherwise be the case. Everyone who uses a separator knows that the percentage of butterfat in the cream can be regulated by turning the cream screw either one way or the other. By enlarging the opening the cream becomes thinner and by reducing it the cream becomes thicker, that is, the cream will contain a larger percentage of butterfat.

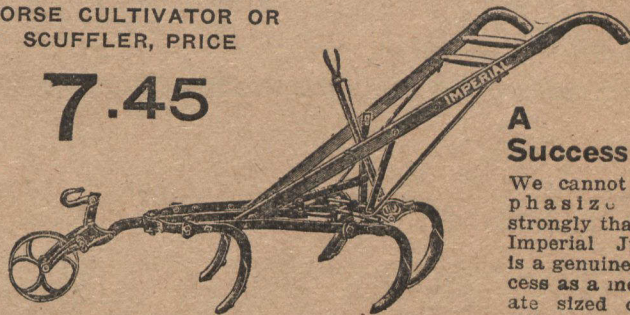
Some separators will not skim effectively when the cream contains as much as 40 percent. of butterfat. or more, and the only way one can tell whether his machine is one of that kind or not is by testing the skimmed milk. A Babcock testing outfit should be on every dairy farm, but in the absence of this the proper thing to do is to take a sample of the skimmed milk to a neighbor who has a tester or to the creamery and have it tested there. If one is not a regular patron of the creamery he may have to pay for the testing, but the cost will be nominal and should not be considered, for it pays well to know exactly whether or not all the butterfat is being gotten out of the milk.

IMPERIAL CULTIVATORS

FOR INCREASED PRODUCTION

IMPERIAL JUNIOR ONE-HORSE CULTIVATOR OR SCUFFLER, PRICE

7.45



A Success

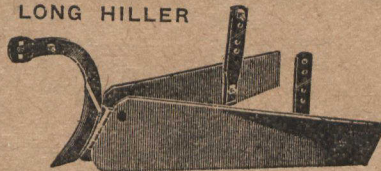
We cannot emphasize too strongly that the Imperial Junior is a genuine success as a moderate sized cultivator.

741D727—Five-blade Cultivator. Weight 60 lbs. Price 7.45
741D728—Five-blade Cultivator. With extra blades as shown in small cut below. Price 8.95

741D690—Five-blade Cultivator and long hiller. Price 10.20
741D729—Five-blade Cultivator. Complete with long hiller and extra blades. Price 11.70

Takes second-class freight rate Order from Winnipeg.

LONG HILLER

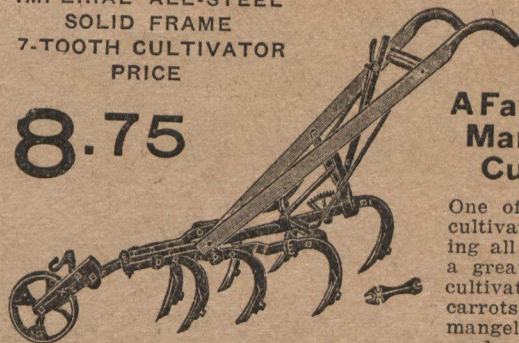


EXTRA SIDE HOES AND CENTRE BLADE.



IMPERIAL ALL-STEEL SOLID FRAME 7-TOOTH CULTIVATOR PRICE

8.75



A Favorite with Many of Our Customers

One of the very best cultivators for removing all the weeds, and a great favorite for cultivating corn, beans, carrots, beets, turnips, mangels in the fruit garden, etc.,

741D730—7-Tooth Cultivator. Weight 70 lbs. Price 8.75
741D731—With extra side hoes and centre blade shown below. Price 10.25

741D731A—7-Tooth Cultivator, with long hiller. Price 11.50
741D732—Complete with extra side hoes and long hiller. Price 13.00

For both the narrow and the wide row. Every tooth is adjustable.

TAKES SECOND CLASS FREIGHT RATE

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See Page 486 of our Spring and Summer general catalogue for detailed description of Cultivators.

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ADMINISTRATORS' SALE OF SOUTHERN ALBERTA LANDS

There will be offered for sale at PUBLIC AUCTION, subject to a reserve bid, the lands described below. The Sale will be conducted at the offices of THE STANDARD TRUSTS COMPANY, ALBERTA BLOCK, LETHBRIDGE, by Peter La Valley, Auctioneer, on

TUESDAY, THE 4th DAY OF JUNE, 1918

at the hour of 1 o'clock in the afternoon, on the following terms:— 20 per cent. cash, balance in six equal consecutive annual instalments. Interest at seven per cent. Clear unencumbered titles will be given. Taxes all paid to end of 1917 from which date purchasers will assume future taxes.

Sec.	Township	Range	Sec.	Township	Range
W. half 6	4	11-W. 4th	N.W. qr. 25	10	16-W. 4th
All 29	1	12 " "	W. half 12	10	18 " "
All 11	2	12 " "	N.E. qr. 12	10	18 " "
All 11	1	13 " "	S. half 20	10	18 " "
All 11	2	13 " "	All 5	4	20 " "
All 11	4	13 " "	All 6	4	20 " "
All 17	4	13 " "	All 7	4	20 " "
S.W. qr. 10	11	13 " "	S. half 17	4	20 " "
N.W. qr. 31	3	14 " "	S. half 18	4	20 " "
E. half 5	4	14 " "	N. half 19	4	20 " "
S.W. qr. 32	3	15 " "	S. half 20	4	20 " "
N.E. qr. 27	10	15 " "	All 1	4	21 " "

The lands are all convenient to market, church and school; are of a most desirable character, and the opportunity is afforded farmers or the investing public to acquire them at moderate prices and on easy terms.

For further particulars, apply to the Lethbridge or Winnipeg Offices of

The Standard Trusts Company
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Farm Poultry

OFFICIAL ORGAN OF THE ALBERTA POULTRY ASSOCIATIONS.

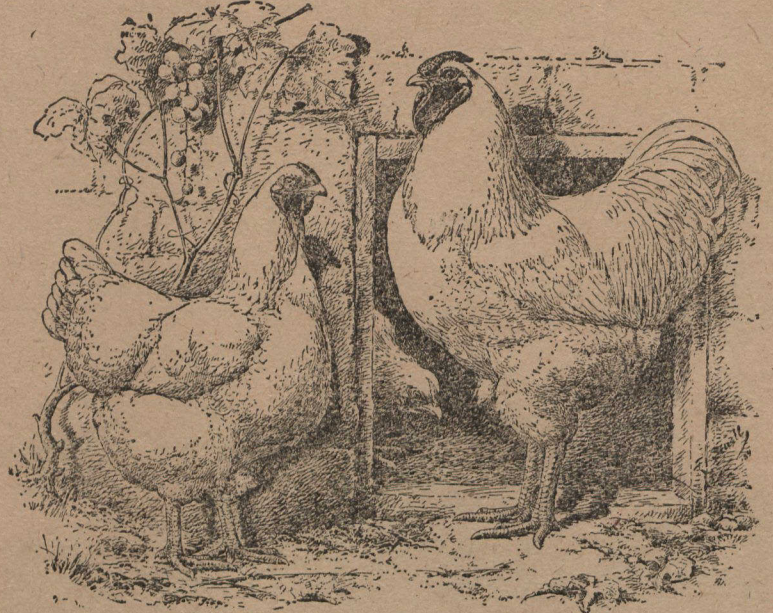
"SWAT THE COCKEREL"—CAPONS ARE PROFITABLE.

While you are swatting the old "rooster," swat the young one and make him a capon. June is the best time for caponizing the surplus cockerels. If young birds are beginning to develop combs and wattles, they are ready for the operation. The heavy breeds should be caponized at about two to two and one-half pounds, the

A REAL FREAK.

Mrs. E. G. Bray, Norwood, Winnipeg, who ran a chicken incubator this spring found recently in one of the shells a freak chicken with three tails and four legs.

The chick was all feathered out and had, apparently, lived in its shell for 19 days before coming to the conclusion that it was too big a freak to chip the shell and come out.



White Wyandottes

light breeds one and one-half to two pounds. Rocks, Wyandottes, and Reds make the choicest capons.

Many people have hesitated going into this phase of poultry production because of the common opinion that the operation was a difficult one. This is not the case. With very little experience an operator should not have over 5 per cent. loss. Since these nearly all result from a severed artery at the time of the operation, such birds can be killed at once, and used for food. One can become familiar with the details of the operation from the directions which accompany each set of instruments, or from Farmer's Bulletin 452, U. S. Department of Agriculture, Washington, D. C.

Practice shows that a 10-lb. capon can be grown on the same amount of feed and in the same time as an 8-lb.

Besides having a tail at the usual site for such an appendage, there was one at each side in the places where wings ought to be.

The four legs were all perfectly formed, even to the toes.

The chick had but one head. Perhaps if it had had another it might have lived.

It is understood that the chicken was shown to the staff of the poultry department of the Manitoba Agricultural College.

CARE OF CHICKS

The hen with a brood of chickens should be housed in a coop so arranged that the little chicks can run in and out. The weaklings can always find shelter and heat under the hen, and may, after a few days, develop into strong, healthy chicks. If the coop has a floor, clean

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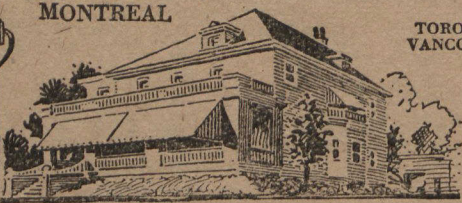
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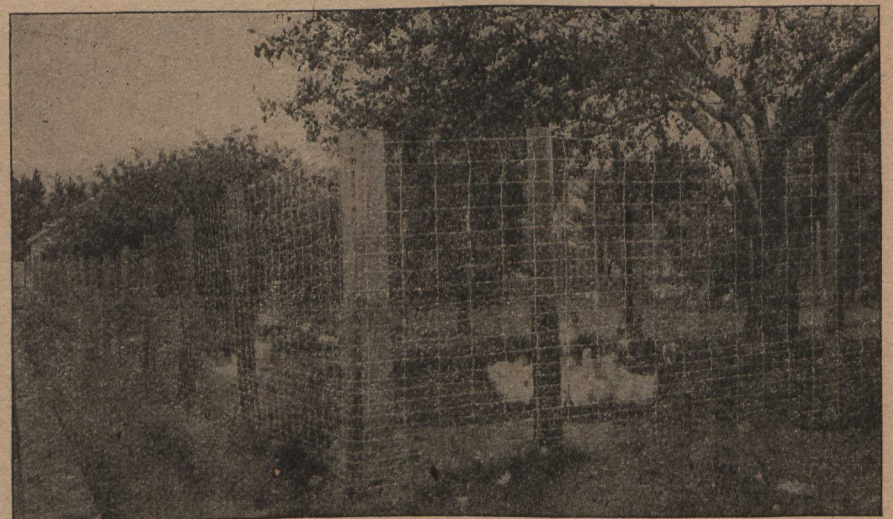
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cockerel. On the most undeveloped markets capons bring from three to six cents per pound more than cockerels, and when well established seldom sell for less than 18 to 25 cents per pound.

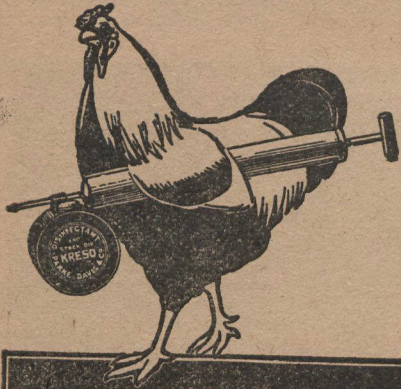
It is not only the greater weight and high selling price that makes capon raising attractive, but their sweet meat of finer flavor wins a place for them on every table.—C. S. ANDERSON, Colorado Agricultural College, Fort Collins, Colo.

it often, if it has no floor, move the coop often. If the hen is given full range, do not let her out till the grass is dry. One hen will successfully brood 15 to 20 chicks. A large hen can care for 25 chicks in warm weather.

SUMMER CARE OF FOWLS

Do not make the mistake that many make, that of neglecting the young chickens as soon as they get large enough to run around and find their

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S. C. Rhode Island Reds } \$2.00 and \$3.00
Buff Orpingtons } per setting
White Plymouth Rocks } 15 Eggs
White Wyandottes }

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own food. Often when the birds get large enough to broil or fry they are considered able to take care of themselves. They are then left to shift for themselves.

This is a very critical time in the growth and development of pullets intended for winter layers. It would be a serious mistake to neglect them at this time. They should be kept free from insects, protected from diseases and fed suitable rations at regular intervals. They will need a balanced ration and regular feed with plenty of pure water and adequate shade.

The same suggestions apply to hens that are not laying in the summer seasons. That they are not laying and hence not paying is no reason why they should not have attention. In fact, we believe it is all the better reason why they should have care and attention so they will begin to lay in the fall and winter.

The merchant who sees his opportunity advertises his business in dull seasons and prepares for better business when conditions are better. The same applies to poultry-raising.

Take care of your fowls this summer if you wish them to take care of you next winter.

WHITE DIARRHOEA.

It is claimed that not less than 50 per cent. of chickens hatched die of white diarrhoea, and the loss from this disease is greater than the combined loss from all other diseases.

It is not difficult to distinguish between the white diarrhoea and non-infectious diarrhoea. The latter attacks older chicks and is not nearly so fatal. Incubator chicks are the most susceptible, and the disease usually appears within the first three days after they are hatched. At least 80 per cent of chickens affected die.

The treatment must be preventive. The cause must be removed and sanitation is practically the whole thing. The incubators and brooders should be thoroughly scrubbed with soap and water in which a disinfectant has been added. They should then be further disinfected by fumigation with formaldehyde gas. For 36 hours after hatching, the chicks should receive no feed. An intestinal antiseptic may help to prevent infection. Dr. Kaupp has recommended for this purpose sulphocarbonate thirty grains, bichloride of mercury six grains, and citric acid three grains, dissolved in one gallon of water. This mixture should constitute their drinking water.

Experience has fully demonstrated that success in the poultry business is impossible without the exercise of eternal vigilance in sanitation.—GEO. H. GLOVER, Colorado Agricultural College, Fort Collins, Colorado.

SHUT UP THE ROOSTER.

Fertile eggs spoil faster than infertile ones. When the breeding season is over, either shut up, kill or sell the rooster.

SOME MORE CHICKEN LORE.

When your youngster gets the mumps you can send for the doctor and have him help you out of the difficulty. But when the chickens get the sore throat, or the lymphangitis—well, they are pretty nearly down and out.

The highway to chicken success is along the line of doing the right thing at the right time; not in trying to fix up a job already botched.

This is the main reason for a new bulletin of the Manitoba Department of Agriculture, entitled "Hatching, Brooding, Rearing and Feeding Chicks." This 16-page bulletin is written by Prof. Herner, of Manitoba Agricultural College, and its scope may be pretty well judged by its title.

Professor Herner commences before the egg is laid, and shows how a little care in selecting the right hens would improve the strain of poultry being bred. Some hens are wrong; some right. Then some eggs are wrong, and some right, too. In the human family a freak may turn out to be a genius—or a fool! The common run of folk are more dependable. So it is with eggs, Prof. Herner shows photos of freak eggs—too long, too short, too much creased in the shell, too lop-sided, too

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A real fence, not netting. Strongly made and closely spaced, a complete barrier against animals of any kind. Keeps the small chicks confined. They can't get through. Does all and more than is required of a poultry fence.

The heavy, hard steel top and bottom wires with intermediate laterals will hold a carelessly backed wagon or unruly animal and immediately spring back into shape.

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No. 1 Pens of the following Breeds:

R. C. Rhode Island Reds, 10 pullets, 1 cockerel, 1917 hatched, \$30.00; W. Wyandottes, 10 pullets, 1 cockerel, 1917 hatched, \$30.00; S. C. White Leghorns, 7 hens, 1 cock, 1916 hatched, \$15.00; Buff Orpingtons, 6 pullets, 1 cockerel, 1917 hatched, \$15.00; 3 large White Pekin Ducks, 1 drake, 1917 hatched, \$10.00.

NOTE:—All the above male birds are entirely unrelated from any of the females.

Correspondence invited.

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In former years the Niagara, St. Catharines and Toronto Ry. Co. used a ton of ordinary white lead to cover the Steamer *Dalhousie City*. This year they used Brandram's B. B. with the result that only 1,500 lbs. was required. In the other qualities of this white lead are equally outstanding. In brilliance and in durability, it is unrivalled. It fills the pores, and makes a tough elastic film that will not crack or peel either in warm weather or in cold. Though slightly higher in price it is more economical.

Do not just ask for Brandram's B. B.—insist on it.

Equally worth insisting on are our brands of Paints, Varnishes, Shingle Stains and Wood Fillers. A uniform high quality runs throughout the entire line.

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St. Catharines, Ont., October 27, 1917.

In regard to your B. B. Lead, I cannot say anything better except that it is the best lead we have ever used. It has more covering capacity, doesn't settle in the containers and is the most economical lead we have used.

Yours truly,
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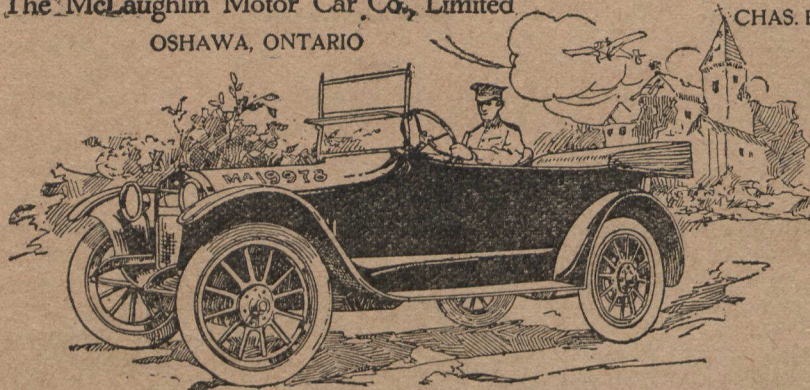
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Gentlemen:

I arrived in France, April, 1917, with one of your cars (Model D45 Touring). Up to now it has covered over 18,000 miles over all conditions of roads, some so bad one would never think of taking a car in private use.

It is only fair to you and your car that I should tell you that up to now it has given no trouble nor has it had any replacements except one plug and the carbon removed. The oil we are getting not always the best.

This statement is correct and will bear any investigation. Have had such pleasure with the car, compared with others, suggested it to me that I should write you this note, which may be of some use.

Yours sincerely,

CHAS. P. BAILEY,
a/c. Corporal.

This letter and photograph is a copy made from the original sent from somewhere behind the lines.

big, or too small. He says, don't use them; they seldom hatch. Old Dame Nature always did try to head off most freaks by sterility—the mule will not breed—and she discourages monstrosities in the feathered world as well.

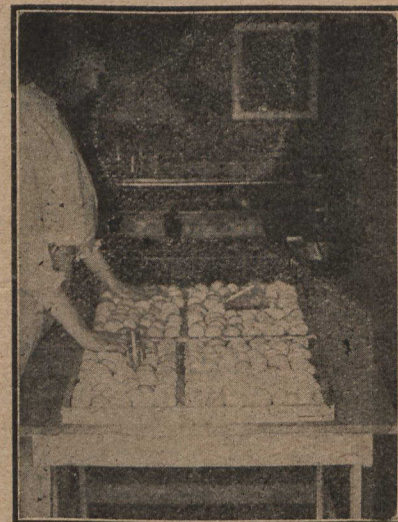
Hens or incubators—which? That subject is discussed. And if it is to be incubators, which it usually is if more than 100 chicks are wanted, the reader



Testing Eggs

is shown by drawings the principle of different types—hot air, hot water, etc.—and instructed as to operating his machine.

The questions of brooding and feeding are fully gone into. Among poultry, as among humans, some parents are so foolish that the children would be better off in the "children's home." That's what a brooder is. Professor Herner says:—"In comparing the brooder or hover with the hen, we find there is less trouble with disease, fewer deaths, no chicks trampled to death, and no lice to contend with when the brooder is used. Hens, if they are nervous and irritable, often trample chicks to death. If allowed to run,



Cooling the Eggs by Touch rather than time

they also often drag their brood through the wet grass, till they chill and die from exposure."

Copies of the bulletin may be had free on application to the Publications Branch, Manitoba Department of Agriculture, Winnipeg.

* * *

Hen houses badly infected with red mites may be cleaned by spraying them thoroughly with crude petroleum. The roosts of all hen houses should be painted with petroleum at least once a month.

* * *

REACHING BIG PROPORTIONS.

The J. J. Murray Co., seed house of Edmonton, have recently sold another car of timothy seed to the Steele-Briggs seed firm of Toronto. This brings their total shipments of last year's Alberta crop of timothy seed up to 80 cars.

* * *

More and more are farmers waking up to the idea of having a price for farm products instead of the old way of saying "What will you give?"

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DEPT. L WINNIPEG, MAN.

Horticulture

HOW TO CONTROL SOME OF THE GARDEN PESTS.

By L. H. COBB.

There are several species of cabbage worms, but they are all worms, all eat cabbage, and all need about the same dose of poison to kill them. Most of the adult moths of these worms are white, but some are gray. The worms vary in color more than do the moths, and, so far as I know, they are about equally bothersome, however they dress themselves up.

It is claimed by entomologists that the cabbage worms are not getting worse, and in many localities they are getting less troublesome, due to the ravages made on them by their natural enemies. The imported cabbage worm, the worst of the lot, breeds very rapidly and throughout the whole

worms during the short period of their march in one season we can realize the power of these little friends.

In addition to the parasitic flies there are several ground beetles that prey on cabbage worms, and most of the insect-eating birds will search diligently for them. I have had little chicks do good work in the cabbage patch until they formed the habit of picking the cabbages as well. An aunt of mine turned her young turkeys into the garden every year to eat cabbage worms, and she claimed they were the best protection she could get to her cabbage crop.

Spraying with arsenate of lead is the best method of combating them, where the natural enemies do not avail. Quarter of a pound of the arsenate of lead to 6 gallons of water will give a very effective solution. If



Bee-keeping—Looking over the young.

season, from three to five generations coming forth each summer, according to the length of the season. Several Chalsis and similar parasitic flies are enemies of these worms. These little flies are scarce an eighth of an inch in length, and wasp shaped, and they increase with marvelous rapidity. The little flies lay the eggs on the worms, or puncture their skin and lay the eggs beneath, and the tiny larva eat their host, finally killing it. As these flies must depend on having a supply of worms to work on, the regularity of the supply of cabbage worms have given them ideal conditions, and it is reasonable to expect that they will become so numerous that they will totally hold in check these pests in time. It is said that in the East, where the worms were first introduced, they have already done so, and the cabbage worm is no longer very damaging. When we understand that the syrphus and tachina flies, also parasitic, have been known to totally destroy vast hordes of army

you will make a soapsuds by dissolving quarter of a bar of the yellow laundry soap in the water it will make the solution take hold better, and be more effective. Many fear to eat cabbages, cauliflower, etc., where arsenical poisons have been used, but this is foolish, as it would take a couple of dozen heads eaten at once to kill a man. They should not be sprayed shortly before they are intended to be eaten. In such cases, hellebore can be dusted upon the plant, or use a tablespoonful in a quart of water for spraying.

If the cabbage plants are kept growing rapidly during their early life, and the poison used as needed to keep them free from worms until the heads are half grown the plants will have such strength that they will make good heads in spite of all the worms can do to them. It is the constant destruction of the leaves from the start that ruins the cabbage. Leaves are necessary to any plant to enable it to grow, for the leaves that are

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Side Seams have double row of rivets.
Bottom is turned up inside—the strongest method known.



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You can get any kind of tank in any size from us including HOUSE TANKS—CISTERNS knocked down, (these are made for setting up with very little work) HOG TROUGHS—GASOLENE TANKS—WAGON TANKS.

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Whether the Plastering is to be used on wood or metal lath, or Gypsofibre Wall Board, remember that the only Perfect Wall is a Well Plastered Wall, and Gypsum Wall Plasters are the Only kind of Plasters used by Builders who know best.

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which are made principally of calcined Gypsum (pure Plaster of Paris) have a Tensile Strength that is Two Hundred Times Stronger than Lime, and the cost is no higher when all the Saving Features are considered.

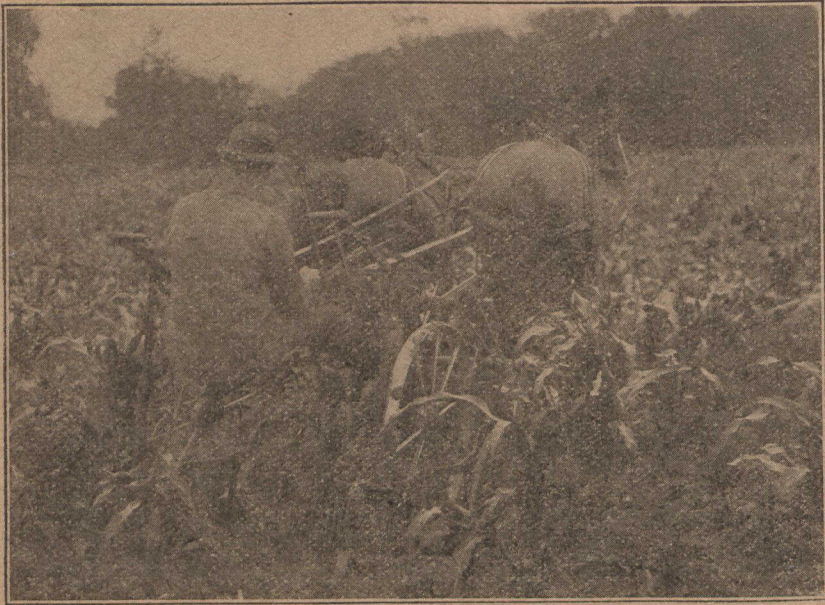
Wood Fibre and Hardwall Plasters are absolutely Fire Proof—also Vermin, Rat and Germ Proof; and being Non-conductors of Heat and Cold make Buildings Warmer in winter and Cooler in summer. Wood Fibre, Hardwall and Finishing Plasters are sold everywhere in Western Canada.

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Save Time and Money—
Raise More and Better Crops.

It's easy to see the saving in time and money. Maybe it is not so easy to see how the crop will be improved.

Here is the Answer:

If using a One-Row Cultivator it's almost certain that you will not be able to cultivate as often as desirable. The extra cultivation made possible by this Two-Row Cultivator is sure to show at Harvest Time in increased crops.

The Massey-Harris No. 8 Two-Row Cultivator

Cultivates two rows of corn at one operation, and does it thoroughly, thus saving the time and expense of the extra man and team if using One-Row Cultivator. Where there is a large acreage of corn to look after, this Implement will be found most useful.

A convenient Lever provides for adjusting the Gangs for cultivating rows of from 28 to 44 in. apart. The Wheels may be adjusted from 32 to 52 inches apart.

Raising and Pressure Levers are convenient and easy to operate, and a separate Lever is used for levelling the Cultivator with any sized horses. The Seat is also adjustable forward or back as driver desires.

This Cultivator is regularly furnished with 14 Reversible Steel Points, 2 Shovel Points, 2 Sweeps, 2 Pairs of Shields or Fenders and 2 Hillers. Discs can also be supplied.

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We also Write FIRE and LIVE STOCK INSURANCE
PROMPT ADJUSTMENTS AND PAYMENTS OF LOSSES

EMPIRE FINANCIERS LTD., REGINA, Agents.

present elaborate the sap for the production of new leaves. When these leaves are cut full of holes, and a major part of them consumed they cannot perform their functions, and the plants suffer severely. Keeping the plants free half their life is gaining more than half the battle.

Cut Worm.

The cut worms, which cause so much damage to garden crops, do their work during the night and spend the day in hiding just under the ground. The worms are from 1 to 2 inches long, having mottled backs and are lighter colored below. They may be controlled by digging about the injured plants, finding the worms and killing them, or better still, by sprinkling a poisoned bran mash close to the plants in the evening. Poison mash may be made as follows:

Wheat bran, 10 pounds; molasses, or sugar, 1 cup; Paris green, $\frac{1}{4}$ pound; water to make a thick mash.

White Grub.

This is a yellowish white grub about one-half inch in length, which causes much damage to onions and other garden crops. It is often confused with the cut worm, but cannot, however, be destroyed with the poison mash. The only remedy is to plough late in the fall exposing the grub to the birds and to the action of the winter frosts.

Plant Lice.

These are the small green insects with or without wings frequently found on house plants and occasionally on garden crops. They destroy the plant by sucking its sap. The remedy is to spray the plants with kerosene emulsion or soap solution. These kill the insects by stopping up the openings in their skin through which they breathe.

Formula for kerosene emulsion:

Common washing soap, $\frac{1}{4}$ pound (shaved fine); water, $\frac{1}{2}$ gallon; coal oil, 1 gallon.

Dissolve soap in hot water, then add the coal oil. Stir until it thickens. To spray, use one part of this mixture to nine of water.

Wire Worm.

These are slender, brown, shiny worms, often found working on the roots of crops growing on newly broken land. They are extremely hard to control. Late backsetting, or fall plowing, which will expose the worms to the winter frosts is the best remedy. Owing to the fact that the worms do not attack a flax crop, it can be successfully grown in wire worm infested area.

For more comprehensive and detailed information, in regard to insects injurious to fruits and vegetables, refer to bulletin entitled "Common Garden Insects and Their Control," prepared by the Dominion Entomologist, copies of which can be obtained free on application to the Publications Branch, Department of Agriculture, Ottawa.

SAVE THE SEEDS FOR THE NEXT YEAR.

"Seeds are scarce this year," we are told when selecting our packages for spring planting. Ah! another thought. In olden times the garden yielded seeds for next year's planting. No sooner said than acted upon, and a seed campaign is on in Saskatchewan. Home gardens will not be the only places where strivings will be made to raise seeds. It is reported that specialists in this culture will undertake seed growing on a large scale in some of our southern areas. The seeds recommended for production here are vegetables such as beets, turnips, carrots, etc.; grains, legumes, grasses and sweet peas.

Sweet peas! One of the favorite flowers of the West! These fragrant beauties will be the only flowers attended to in many instances this season, as women are undertaking, more extensively than ever before, the care of the garden, thus doing their bit by allowing men folk longer time in the field. Farm homes that have a well-established flower garden of the old-fashioned type containing those old-time blossoms, roses, pansies, southern wood, lavender, lilacs and so forth, are the homes which can fill the need.

GARDEN CULTIVATION.

Keeping down weeds is quite an important part of gardening, but it is by no means the only part. Every gardener recognizes that if weeds are allowed to get a start they soon rob plants of plant food and moisture and even crowd out the plants. But cultivation is far more important to store and conserve moisture than to fill weeds.

For reasons understood by most gardeners it is advisable to cultivate after every rain. Just as soon as the soil gets dry enough to work well it should be stirred. This is advisable for at least three reasons, namely: (1) to loosen the surface soil and make a mulch to stop the rapid evaporation of soil moisture, (2) to kill weeds that are germinating or have just reached the surface and prevent them from getting a start, (3) to bring plant food within the reach of the tiny root hairs and thus hasten the growth of plants.

But it takes considerable care as well as the right kind of implements to cultivate in an approved manner. One must know what one wants to do before good cultivation can be expected. Digging up soil may fall far short of good cultivation. Especially is this true when we are to save the limited supply of moisture by making the mulch as effective as possible.

The garden rake is a very fine implement to make a good soil mulch on garden soil. Even if you must dig up with a grub-hoe or ordinary weed-hoe it is a good plan to go over the soil again, using the garden rake to smooth and level the surface to prevent rapid evaporation. The rake will leave the soil in better tilth and conserve the moisture better than other implements that leave a rough and more or less cloddy surface.

HOW NEW BIRD PROTECTION WILL WORK OUT

By DR. C. GORDON HEWITT, DOMINION ZOOLOGIST, OTTAWA.

The International Convention for the protection of migrating birds in Canada and the United States, ratified in December last, constitutes the most important and far-reaching measure ever taken in the history of bird protection. It affords the best means of ensuring not only a cessation of the decrease in the numbers of our migrating birds such as the insectivorous birds, the wild-fowl, waders and sea birds, but, in many cases, it assures an increase, in their numbers, which have been ruthlessly depleted. It affects over 1,000 species of our chief insect-eating and game birds. It guarantees to the farmer the continued existence of the insect-eating birds, the most powerful and active allies he has in the fight against the destroyers of his crops; and it guarantees to the sportsmen a never-failing supply of ducks, geese, and other game birds.

In fulfillment of its obligations under the Convention, the Canadian Government introduced the Migratory Birds Convention Bill to carry out the provisions of the Convention, and this measure has recently passed both Houses of Parliament. As soon as assent is given to the bill, regulations will be promulgated fixing close seasons.

In the case of insectivorous birds, it will be unlawful to kill them or to take their eggs at any time of the year. The close seasons on ducks and geese will not exceed three and one-half months, and the dates of opening and closing will be fixed in accordance with local conditions and after consultation with the proper authorities in the different provinces. On a number of birds, such as the cranes, swans, curlew and most of the shore-birds, with the exception of woodcock, snipe, certain plover and yellow-legs which are becoming greatly reduced in numbers, a close season of ten years will be provided. The wood duck and eider duck will also be given special protection. Where they are injurious to agriculture or other interests, provision will be made for the killing of protected birds under special permit. Regulations will also be made to prohibit the shipment of migratory birds or their eggs during the close seasons and generally to govern the traffic in them and their eggs.

While the numbers of the migratory birds in Canada and the United States have been most seriously depleted by various causes confidence is felt that, with international co-operation, and particularly, the prohibition of spring shooting, a gradual increase in the abundance of our wild bird life will take place.—Canadian Forestry Journal.

EMULSION FOR APHIDS

Aphids make their appearance every year. They cause considerable damage some seasons, especially when the weather is cool.

These aphids are often called plant lice. They do not bite off and chew their food, as some of the crop pests do, but suck juices from the tender growing plants. For this reason it is not possible to poison these pests with the ordinary poison solution, as there would be no way of getting the solution into the stomach. The way to kill plant lice is to spray with a contact solution such as kerosene emulsion, tobacco extracts, etc.

Kerosene emulsion is made up in stock solution according to the following formula:

Kerosene, 2 gallons; fish-oil or laundry soap, 1½ pound; water, 1 gallon.

The name "fish-oil soap" is now used in place of "whale-oil soap," since most of the soap on the market is made of fish oil.

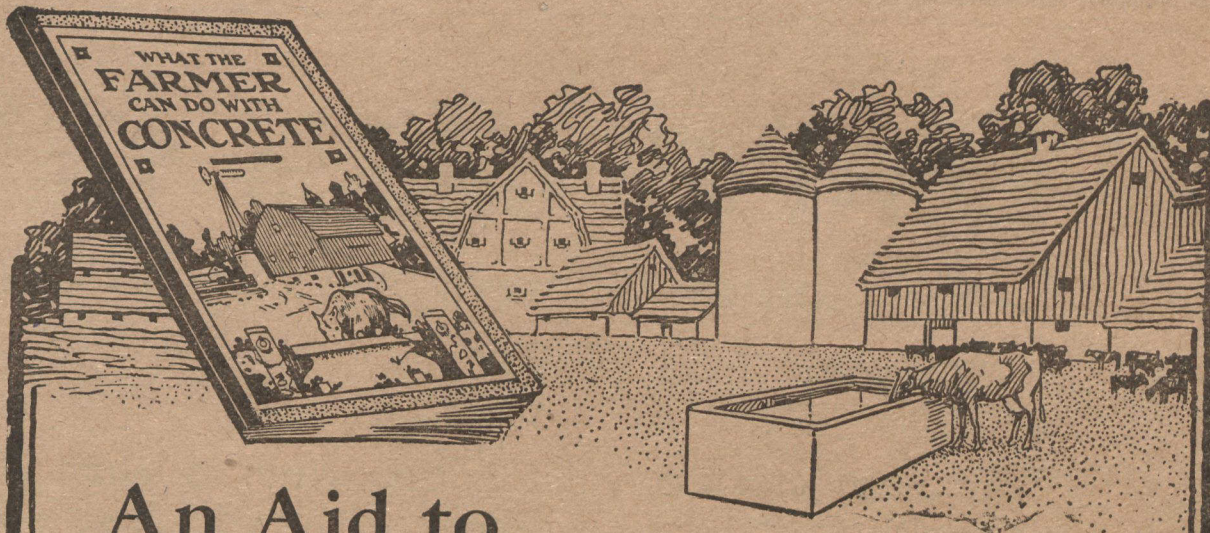
First the soap should be dissolved in a gallon of boiling water, and after the vessel is removed from the fire the coal oil should be added. Then the mixture should be agitated thoroughly for four or five minutes by pumping the liquid back into itself until it becomes a creamy mass and the oil does not separate. The quantities of the ingredients may be increased when a larger quantity of spray is needed. This stock solution is used against aphids at the rate of one gallon to seven or eight of water.

POINTS ON THE CULTIVATION OF CAULIFLOWERS.

Cauliflower, although one of the most delicious vegetables, is one of the hardest to grow in many parts of Canada. It damps off easily in the hot-bed, is often badly affected by root maggot and frequently does not head well. In raising plants, transplant them from the seed row, pot or flat to a distance of about two inches apart each way as soon as possible after the seed germinates. This permits a freer circulation of air between the plants, and makes the danger of damping off much less. Root maggots are bad nearly every year in many places in Canada, and often prevent practically all the plants from heading. Eggs are laid on the ground near the plant which soon hatch into maggots which eat the roots and thus cut off the supply of sap. To prevent injury from these, a tar felt disc should be placed around each plant close to the ground at the time of planting. It will be too late otherwise. Full particulars in regard to the use of the disc can be obtained from the Department of Agriculture, Ottawa. If the first planting of cauliflower is a failure, a second planting should be made, as cauliflowers are much easier to grow in late than in earlier summer as the maggots are not so troublesome at that time, and there is usually an abundant supply of moisture. If the soil in which cauliflowers are growing is dry, they will not head well as they need lots of moisture, and must be kept growing without a check from start to finish.

TRANSPLANTING INTO THE GARDEN

A cloudy day or toward evening is the best time for transplanting young plants into the garden. It is also well to pinch off some of the leaves. If all are left on they may throw off more moisture than the roots that have been reduced in number and length can supply. The plants will also stand transplanting better if the soil they grow in has been allowed to get rather dry for the last week or two.



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THE successful farmer of to-day is the one who builds permanent improvements. The time for makeshifts is past. The farmer recognizes that he is under a great handicap in his efforts to make money, if he has continually to sink profits in temporary repairs.

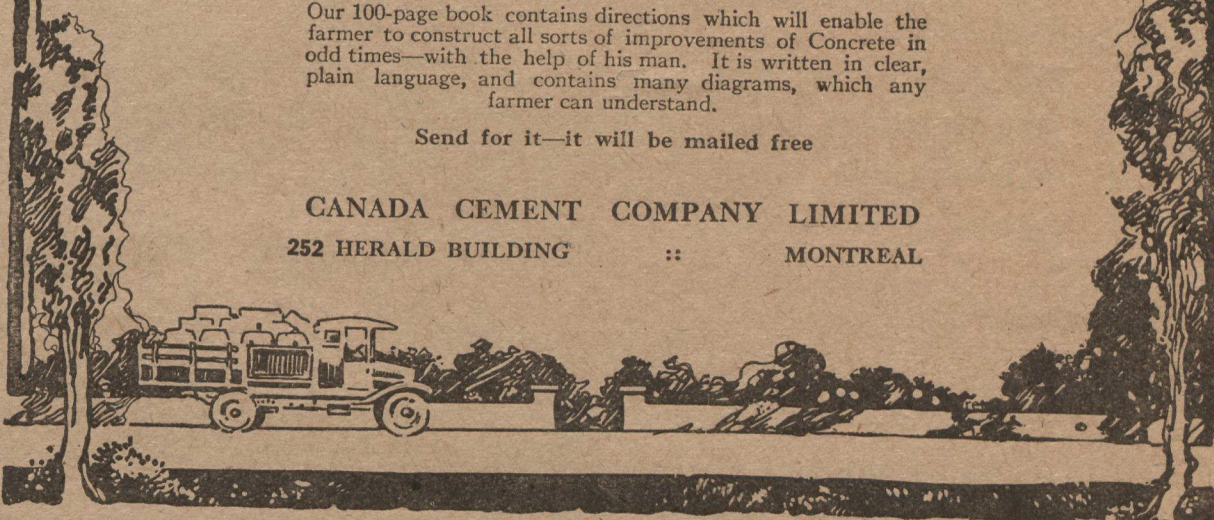
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Lord Rhondda Cables:

"We Cannot Achieve Victory Without Food."

"Canada Food Board,
"Ottawa

"In these stern days it is inspiring to learn that Canada is tackling the food problem with redoubled energy. The terrific pressure on our military front makes it all the more imperative that those behind the lines should strain every nerve to defeat the enemy's avowed object of destroying the British Empire.

"Germany hoped first to starve the Old Country by the submarine campaign and then to smash her land forces. She has failed to starve us and she will fail to smash us, but we cannot achieve victory without food. There never was a time when it was more needed.

"The Canadian farmer and the Canadian farmhand now have the opportunity to make an effective reply to the enemy's present onslaughts by bending their undivided energies to the increased production of those food supplies for which we depend to such vital extent upon your great Dominion."

(Signed) "RHONDDA"

London, April 10th

The Prime Minister of Canada, in a call to Greater Food Production, says: "The crisis is grave and urgent beyond possibility of exaggeration."

Our Allies are depending upon Canada to produce this year more cereals—especially Spring Wheat—and more meat—especially Pork.

The world shortage will inevitably continue for years after the war—with this continent the nearest source of supply for the 200,000,000 persons in Europe who will be clamoring for food.

Measures have been taken and plans have been formulated which, on the authority of the Director of Agricultural Labor, will provide help needed for harvest.

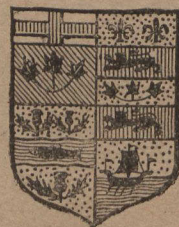
City and town people who cannot go on the farms are helping to feed themselves by growing their own vegetables, so that the farmers may grow more food for export.

The food crisis calls for the utmost effort by all the people of Canada, because, as Lord Rhondda says, **Food is essential to Victory.**



CANADA FOOD BOARD
OTTAWA

In co-operation with the Provincial
Departments of Agriculture



CANADA

In The Country Home

THEIR MOTHERLAND.

All you who left your native land
For evils which you could not stand,
Because of rulers' pride and spite
Which stored up workmen's sweat for
fight,
And took from all they made and ate
The greater part for warring hate;
Be true to this adopted clime
Where you've enjoyed such better time.

For here is where you could attain
Such peace and freedom which in vain
You sought in that much-governed land,
Which armed to bind you soul and hand;
And here with all your thrift and might
You've gained in ease and wealth and
right;
So stand by this, your motherland,
Which keeps and feeds you from its
hand.

Think not by schemes or plots to win
Against these shores which took you in,
For thus a traitor's mark you'd brand
On all of the sons of Teuton's land;
And ne'er again you could regain
The trust and honor you retain;
So, stepson, thou from fatherland,
Be true to this, your motherland.

Not so much for rhythmic merit as for the sentiment involved, these lines have been winning attention. They were written by Father Prout, rector of St. John's Church in New York, who was an Austrian by birth, and addressed to "Ye Teutons of America."

IS HELP FOR FARM WOMEN REALLY NEEDED?

A short time ago a letter was addressed to the U.F.W. locals from the central office in Calgary, enquiring as to the need of farm kitchen help. The response was by no means as general as was anticipated, and it is felt at this point it would be just as well to hear a little more from the rural woman's side. Whether much can be done to give very real assistance in the matter cannot, of course, be stated off-hand, but Miss Mary W. Spiller, Provincial Secretary, U.F.W.A., Lougheed Bldg., Calgary, would be glad if any farm woman in the province of Alberta needing help would write to her, stating her requirements. References should be given from two responsible parties in the district. Often people seem to think the question of references on both sides is superfluous, but you have simply to consider your mother, daughter or sister going out to absolute strangers, and you will at once appreciate the sound common sense behind the request. Incidentally when writing in, do not ask for help by return train. This is more or less of a "try out," and the idea is to find what the actual need is, and then get into active co-operation with the provincial bureau and organizations particularly interested in this matter.

THE NEW FOOD REGULATIONS.

From all over Canada the Food Board has received reports that it will have the fullest co-operation of the trade in the carrying out of its food stipulations and restrictions. More than this, however, is needed to meet the exigencies of the situation, and Henry B. Thompson, Chairman of the Canada Food Board, has recently issued a statement, urging that as a patriotic duty, the regulations relative to public eating places, and those now governing the manufacture of biscuits, cakes, etc., should be observed voluntarily in every household in Canada.

The list of confectionery products which it is now illegal to manufacture for sale is as follows: (a) French or puff pastry; (b) doughnuts or crullers; (c) biscuits or cake known as Scotch shortbread or cake; (d) fancy almond macaroons, or like products containing more than 50 per cent. of cane sugar; (e) marshmallow, which contains more than 20 pounds of cane sugar to a 60-pound batch of marshmallow; (f) cakes or biscuits having on the exterior products made wholly, or in part, of

cane sugar, or filled with products of cane sugar, or with shortening, except jams, jellies and pure or compounded fruit.

People returning from Europe, and even visitors from across the line frequently tell us that we are remarkably well off in this country, and cannot even yet say from the standpoint of the food question that we have really felt the pinch of war. In spite of this, however, and in spite of the fact that although prices have certainly advanced very considerably, staple articles of diet are still procurable, we still run across people from time to time who feel badly aggrieved whenever they are asked by the Government to alter their regular mode of living one iota, by doing without or limiting the use of something they have had freely all their lives. To state one specific instance, we are told there is a great scarcity of sugar, and that our supply is vastly less at present than it was this time last year.

Women's Club columns. Dangers to be avoided, however, are selfish indifference and ignorance as to the true need. We want to remember that the information carefully prepared and given the public by the Food Board is not the result of a strange desire on the part of that body to pry into a very unhappy state of affairs, but is meant for our edification and assimilation, and, incidentally, the members of that Board have a very new and hard problem to deal with, and need to the utmost our co-operation and support.

WORK AMONG THE FOREIGN-SETTLERS.

From her actual experience as teacher in a non-English settlement, Mrs. Maude Whitmore has written the following short story, which gives a very vivid account of a new Canadian home, and the possibilities of what may

clothes Miss Moore has promised me a dollar every week if I do her laundry on Saturdays, and I can buy my own clothes."

"Well, child, I hate to say, 'No,' when you have so fully set your heart on it. Though you have a good schooling now, far more than I ever got, I do think your father encourages you too much for books and learning."

"Poor father, I am sure he felt the lack of it very much when he came to Canada. He told Miss Moore that he had never had but four months' schooling in his life, and that he is willing to do all he can to give his children a chance. He doesn't want us to be drudges, and Miss Moore said, 'One does not need to be a drudge in this great new country.' If we have our health, and are willing to work, we can make ourselves what we will. The opportunities are ours to make good, and, mother, I do so want mine."

"Well, well, child, you shall have it." Nadine Stransky was at this time a girl of sixteen summers, rather tall and slender, with well defined, regular features, and large, earnest, grey eyes, but surely her crowning beauty was the heavy braid of golden brown hair which circled her well shaped head. Her generally serious and thoughtful expression gave one the impression of an eighteen-year-old girl.

Nine years previous to this, Conrad Stransky had emigrated from Eastern Russia to one of our far Western Canadian towns, accompanied by his aged mother, his wife and five children. Peter, the oldest, then a boy of nine, poor little crippled Felix, Nadine, Conrad junior, and little Stephanie.

In the course of a short time, Conrad Stransky had located a homestead a few miles from the town, and, in spite of many privations and hardships which the first few years had brought, they were a singularly happy family. As time advanced, many of these hardships had been overcome, each year saw a marked improvement in the homestead, for both husband and wife, as well as their family, were willing workers, and toiled late and early to improve their home. The knowledge that it was theirs to improve was a source of great happiness to these people who had come from a far off land, where with all their toiling they had been so often without even the bare necessities.

After a few years, the first rude cabin had been converted into a stable, and a more pretentious house had taken its place with its two large rooms downstairs and three comfortable rooms above, and they felt rich, indeed, in this new land of their adoption.

In the earlier years, Mrs. Stransky had been able to manage the household expenses with her excellent garden, her chickens, and the wild berries so plentiful in the neighborhood. A ready market was found in the neighboring town some six miles distant. Mr. Stransky labored late and early to clear the land with the aid of a yoke of oxen. At first the crops had been mostly potatoes, though a small amount of grain was put in. Every one was busy, and even little Felix had proved to be of great assistance cleaning, sorting, and tying the vegetables and flowers in their neat little bunches. The latter work he particularly revelled in. Finally, he was the proud possessor of a garden all his own. To see the little fellow steadily growing stronger was another source of great joy to the parents.

Conrad Stransky, who had been a carpenter in his own land, was able to add, from time to time many little extra pieces of furniture and conveniences to the home, and the one expensive piece of furniture which they had allowed themselves to buy was a fine sewing machine; for Mrs. Stransky was a clever woman with her needle, and in the winter evenings had been able to do some extra work for neighbors, thus adding little amounts to the common purse. Grandmother Stransky shared in the work by keeping her



Old and New—One picture represents the first home of an Ukrainian homesteader, the other, the later modern but Old Country style cottage.

Merely "telling" not being sufficient, the Food Board goes one step further, and a certain amount of sugar is allotted to each person at the public eating houses, if their tastes demand the use of sugar with their tea or coffee. What happens in a good many cases? Like spoiled children, the people denied their unlimited allowance of sweetening at a meal taken down town, make up for the loss by a double dose in the privacy of their own homes, and their tea and coffee become treacle-like as a result. Greedy children would receive their due, but grown-ups are exempt. Possibly similar cases could be cited as working against some other line of necessary conservation.

The various rules and regulations drawn up by the Food Board, and laid before the public, form a harder matter to deal with in rural districts than in cities and towns where a variety of food is obtainable, the difficulties of keeping are not to be compared, and incidentally a good many workers are living in-door lives to a great extent. Like every other problem it must be approached with a liberal supply of common sense, and some excellent advice has been given from time to time to country home-makers by Mrs. Jean Stevenson, in her articles appearing in the Coun-

try Women's Club columns. Dangers to be avoided, however, are selfish indifference and ignorance as to the true need. We want to remember that the information carefully prepared and given the public by the Food Board is not the result of a strange desire on the part of that body to pry into a very unhappy state of affairs, but is meant for our edification and assimilation, and, incidentally, the members of that Board have a very new and hard problem to deal with, and need to the utmost our co-operation and support.

Mrs. Whitmore is devoting herself whole-heartedly to the cause of teaching in the West, and, as a result, of a recent trip through Eastern Canada, secured the services of over two hundred volunteers to take charge of some of the many vacancies in Alberta schools.

THE STRANSKYS MAKE GOOD

By MARGARET WHITMORE.

Miss Moore said, "Learning is better than gold, that I am not too old to go to school, and that she will help me all she can to get my certificate. Please mother, may I not go on with my schooling? It will not be for much longer."

"But I do need you at home Nadine, you know, since Peter is away, there is no one but myself to help your father with the harvest." Then who is to keep house? We can't always depend on grandma since her last illness. And, your school clothes, where are they to come from?"

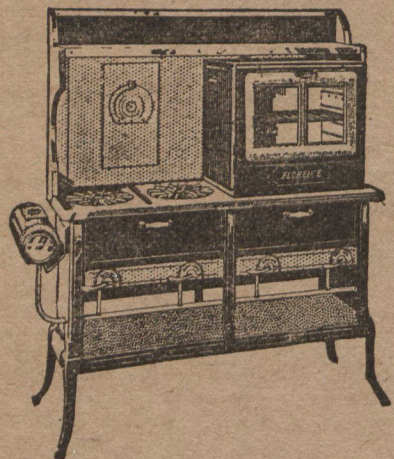
"But, mother, surely if I rise very early in the mornings, and work hard and late in the evenings, you can spare me during school hours; as for my



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07

kitting needles constantly busy. All together, they were a happy and industrious family.

About half a mile north of the Stransky home stood a fine rural school house, quite a modern structure, and close beside it was the teacher's cabin. These buildings were on the side of a slope, and, at the foot of it, lay a beautiful little lake with wooded hills beyond; a very picturesque and desirable spot. The district had been fortunate in securing a teacher in the person of Miss Eleanor Moore, a honor graduate of Toronto University. Miss Moore had come out on the advice of her physician to a climate more suited to her rather delicate constitution, and Sunny Alberta had already done wonders for her in more ways than one.

The families of her district were mainly from Russian Poland, and in her short but interesting experience among them, Miss Moore had concluded that many of our Canadian boys and girls might learn much that is worth while from these little Russian immigrants, who, too often, are made to feel they are strangers and inferiors among Canadian children. Generally, they are very reticent and afraid to speak lest they blunder in their English; and sometimes their quaint clothes bring forth unkind remarks, but they have certainly learned the lesson of implicit obedience to parents, and one might as soon expect the impossible, as impertinence to their elders. As a rule, they are plodders in school as well as out of it.

The Stranskys had encouraged their children to speak English in their home, even though it was difficult at first, and they soon found by persisting that they improved wonderfully in their ordinary conversation, and certainly they had shown themselves to be very apt in adopting not only the language but many of the customs of their new country, although it was a source of grief to Grandmother Stransky that she got no further than a few brief phrases. These few she seemed very proud to use whenever chance permitted, and the kind old face would fairly beam as she bade one, "Goot day. It is a fine day to-day already!"

The Stransky home had become one of deep interest to Miss Moore, for she saw splendid possibilities in Nadine and Felix. Conrad and Stephanie had by this time grown to be sturdy youngsters of twelve and thirteen. They were great pals, always together. The former had already declared his intention of becoming a farmer. He gloried in being among the animals in the barnyard, particularly the horses, and his father was not ill-pleased with his decision; while Stephanie, who was a real little housewife and a great help to her mother, had decided she would be Conrad's housekeeper.

With Nadine, the thirst for a good education almost amounted to a passion, as one might infer from a previous conversation between the mother and daughter, and in this she had received every encouragement from her teacher. The ruling passion of her life was her brother Felix. From the time they had been little tots together (though he was her senior by sixteen months), her greatest desire had been to make him happy, shield him and save him in every possible way, and she never thought of sparing herself, always sharing with her Felix any little gift or luxury received, no matter from what source.

When her father had first told her about that far great land of promise called Canada, where they would all go some day, (for there were great farms of richest soil awaiting those who would go to claim them, a fine healthy climate, abundance of wild fruit and game—indeed, a land of plenty!), best of all to Nadine was the thought of free schools to all children, and she had conjured up in her precocious young mind visions of this wonderful new country to which they were all going, where brother might possibly be made well and go to school, and in time become a great man. To Nadine, Felix was nothing short of a genius. Even then he would take a pencil and draw in an almost life-like way any animal he saw. Then, too, he had shown a great talent in music; and, many a time, the little fellow would steal away by himself with his father's

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violin and play mournful little snatches, as though it were his only way of expressing what he was unable to put into words. It was not often he could stay away for long without Nadine knowing, for a great sympathy had always seemed to exist between the two; and Nadine felt in her heart that if Felix only had a chance to get strong he would make good. She was untiring in her efforts to teach her brother what she had learned at school, and as he became stronger he was able to go with her, when, as a result of her tuition, he was just a grade behind her.

In the winter, wrapped in his warm fur coat, cap, and mitts, which his mother had made from the muskrat skins that Conrad had trapped, he never felt the cold, and was as zealous in his studies as his sister.

If the Stransky home were one of great interest to Miss Moore, the teacher's cabin was of even greater interest to Felix, (indeed, it was a source of pride to the people of the whole district). Miss Moore possessed the happy faculty of making her room, no matter where she was placed, homelike and artistic, and shortly after her arrival at Birchmere School, the ugly board walls and ceiling of the cabin had been hidden from view with green building paper, and this was brightened by many artistic pictures. An oak patterned linoleum covered the floors, while the living room boasted a few small rugs, and a beautiful large coyote skin (a gift from the Stranskys).

In one corner of this room stood a fine Heintzman piano, a luxury Miss Moore felt she could not dispense with. Three fine shelves of books included a mis-

cellaneous collection of well-known authors.

The piano was the great attraction for Felix, and his delight was unbounded when Miss Moore invited him to bring his violin over one evening when he and Nadine were coming to take tea with her. After this it became a regular habit, and, with Miss Moore's help, he had shown great talent in the rendering of his music, playing the obligatos to many of her fine accompaniments. These were indeed precious hours to the lame boy who had often dreamed of being able to play like a celebrated musician, whom his father had once taken him to hear when a very little lad, and whom he had never forgotten.

In her hygiene and physical culture classes, Miss Moore had talked much of the benefit of living in the open air, and the effects of special diet and wholesome food. Nadine always seemed to take a very deep interest in these talks, and whenever possible applied them in a practical way to her brother. In one of her talks with Nadine she spoke of the wonderful strides medical science had taken in the past few years, particularly in the surgical branch, and although the girl had said nothing, she pondered much over these talks, and each one but served to strengthen her belief that there was a cure for the lame hip, yet she could not put it into words least it would come to Felix and his hopes be raised only to be rudely shattered in the end in bitter disappointment. At the same time she resolved that her first salary earned should be devoted to that one purpose.

(Continued next issue)





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Alberta Women's Institutes

MOTTO: FOR HOME AND COUNTRY

Superintendent: MISS MARY MacISAAC

MEETINGS OF CONSTITUENCY CONVENORS.

Alberta Women's Institute Constituency Convenors are to meet in May. At the convention of the Women's Institutes, which was held in Edmonton on March 6th, 7th and 8th, Constituency Convenors were appointed in order to make more perfect the work of this splendid organization.

The Convenors of the south and central districts will be called to meet in Calgary the latter part of May.

The north and Peace River districts will meet in Edmonton also the last of May. Superintendent Miss Mary MacIsaac will notify the convenors in time for the meeting, which will last but one day, and a full attendance is desired in order that the work may be set forth for the good of all.

The railroad fares will be paid upon receipts presented from the ticket agents.—Isabel Noble, Provincial President.

Daysland presented a "mock trial" early in April, which was a great success, both financially and entertainingly. It was an original production, but "smacked" of the real thing.

Queenstown and Daysland both have sick committees, whose business it is to call on the sick and send flowers to the very sick. If you "just have a toothache," you get no flowers. A ten-cent tea and rummage sale is to be held by Queenstown in May. This Institute recently inaugurated a new way to "get up" an interesting program. A division is made into two committees, each side to work for the best and most interesting program. Points are given and it is hoped that many new features will be brought out.

Golden Centre's last attendance was quite small, on account of the spring's "rushing" season, but there is no lack of interest in the work.

Sounding Creek is to place two sacks in each elevator for the collection of wheat this fall, and, as the farmers drive up, they will kindly throw in a shovelful or more. When full, these will be sold for Y.M.C.A. overseas and

Red Cross. A Better Baby Contest is to be put on at the fair, which is held in August. \$315.00 is owing on the Rest Room, but it is hoped to clear this in a few months.

Curlew had a discussion recently on "How can we raise money?" Let us know how, Curlew, for all are interested in that subject.

Stony Plain gave a concert and dance, clearing \$130.00 for the Convalescent Home. A Field Day and picnic will be held in May, and we hope to learn all about it later.

Strome is to hold a dance soon to secure funds for Red Cross supplies and yarn for their Knitting Circle.

Didsbury is planning for hospital work. Be sure to tell us more concerning it, Madam Secretary, for that is a burning question.

Lougheed is to have a refreshment booth on Sports Day, May 24, the proceeds for Red Cross funds. The last attendance was 57,—a little down, but this institute is still a leader.

Clemens is also worrying over the "how to raise money" question. Sometimes money does not appear to wish to be raised, but we know, if it is about, women can raise it.

Sedgewick members are each to bring a neighbor or friend at their next meeting. This is a splendid idea, and we must hear how many came. Hospital work is the big question here also.

Okotoks is certainly making us all proud of her. Next meeting is to be on Domestic Science, and a sale of home cooking will take place.

Tofield held a reception in April, inviting all friends and U.F.A. members. It is reported as an unlimited success. The members are planning for a tax system to raise \$1,000.00 for Red Cross. They are to buy an auto knitter, and we believe are the first institute to do this. Are there others?

Airdrie—with your perfectly splendid "Girls' Club," we want you to be the first to organize a girls' "Victory Garden and Canning Club." This is a sure way to help win the war, and your girls, I know, will take up the

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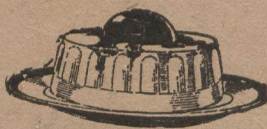
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work with great spirit. Let us hear that the Victory Gardens are yours.

Hanna during the summer months is to have meetings twice a month. Hanna is doing splendid work in all lines.

Entwistle sent \$52.00 to one prisoner in Germany, and also sent out 19 boxes to their boys overseas.

Argyle—At a very pleasant social meeting recently, the members listened to a splendid address on the history and development of their own institute. Mrs. Wm. J. Fleming is well known to many of our Institute members, and they will be pleased to know that she was then presented with a handsome gold wrist watch, in recognition for her splendid work.

Auction sales among the institutes are very popular. **Leduc** recently had one and cleared nearly \$2,000. Daysland is to have one in June, and **Bideford** is to conduct another next fall. All money is given to the Red Cross.

Wiste held a really Irish dance on March 18th. Bad roads for wheeling or sleighing kept some away, but a good time was enjoyed by all there, and enough money raised to pay for the dance and all expenses of the two delegates to the Convention. Little green flags were distributed as favors, and Irish songs and recitations were the order of the evening.

Reid Hill is a No. 1 institute—always busy. At a sale in March, \$607 were raised, of which \$300 were sent to buy invalid chairs for Red Cross Hospitals, and the other \$300 handed over to the general Red Cross fund in Calgary.

Gleichen was to hold a "clean up" day on April 20th. Some of the others could well afford to follow Gleichen's example with good results.

Ureka raised \$50.00 at a recent Box Social. \$20.00 went to Red Cross and \$20.00 to the Agricultural Relief Fund, to help the poor farmers of the devastated region of Europe.

Clive had an interesting meeting in April, when two splendid papers were read, one "Poultry Raising," and the other "How to get eggs in the winter." We certainly will have to teach our hens to do their "bit" a little better in the winter, or **Biddy's** head will be missing some fine morning.

Ryerson gave a dance in April and served "just war refreshments." They write that all are busy to the limit this year, planting grain and vegetables.

Minburn was honored with an address by Mr. Grisdale, of Vermilion College, his subject being "Shrubs and Small Fruits best suited to the Climate of Alberta." After the address the ladies served a supper, clearing \$21.00, which will be applied on the Cemetery Fund.

Fairacres is buying an organ for the school. At a recent meeting one member exhibited a loaf of bread made of oatmeal and another made from potatoes. 20 per cent. of wheat flour was saved in the making, and the bread was found very palatable by the members.

Eagle Hill is holding a concert and box social early in May to dispose of a silk quilt.

Halkirk members have decided to cut down lunch to bread and butter and tea. This is as it should be, and others will follow, we know. This institute intends to have a flower show in August.

Bulwark recently enjoyed an address on "Trees" by a gentleman, and the secretary writes: "This is the first time we have had a gentleman address us, and it proved quite a success." Meetings usually prove interesting if the unusual takes place, and we have discovered that men enjoy the honor of attending a W. I. meeting. Do you find it so? An entertainment was to be held in April for the benefit of Red Cross funds.

Tide Lake—A dance was given in March, raising \$50.00, which were sent to the Red Cross Society. The members are filled with new hope, and are going to work hard this summer, knitting and sewing more than ever. The Tide Lake ladies are made up of the best sort of clay, and we know they will "carry on."

Gem has undertaken to provide a cemetery for the Gem colony. A gar-

Rheumatism

A Home Cure Given by One Who Had It

In the spring of 1893 I was attacked by Muscular and Inflammatory Rheumatism. I suffered as only those who have it know, for over three years. I tried remedy after remedy, and doctor after doctor, but such relief as I received was only temporary. Finally, I found a remedy that cured me completely, and it has never returned. I have given it to a number who were terribly afflicted and even bedridden with Rheumatism, and it effected a cure in every case.

I want every sufferer from any form of rheumatic trouble to try this marvelous healing power. Don't send a cent; simply mail your name and address and I will send it free to try. After you have used it and it has proven itself to be that long-looked-for means of curing your Rheumatism, you may send the price of it, one dollar, but, understand, I do not want your money unless you are perfectly satisfied to send it. Isn't that fair? Why suffer any longer when positive relief is thus offered you free. Don't delay. Write to-day. Mark H. Jackson, No. 334D Curney Bldg., Syracuse, N.Y.

The Amusements Tax Act



To take effect on from and after May 1st, 1918.

Every person attending an exhibition, performance or entertainment at a place of amusement to which an entrance or admission fee is charged shall on each admission thereto pay an amusement tax at the following rates:

- (1) When the price of admission is from 10c to 20c inclusive, a tax of 1c.
- (2) When the price of admission is more than 20c and not more than 75c, a tax of 2 1/2c.
- (3) When the price of admission is more than 75c and not more than \$1.00, a tax of 5c.
- (4) When the price of admission is more than \$1.00 but not more than \$2.00, a tax of 10c.
- (5) When the price of admission is more than \$2.00, a tax of 25c.
- (6) A tax of 25c shall be paid by every person attending any boxing bouts or contests.
- (7) Where admission is given by pass or complimentary tickets a tax shall be payable at the highest rate charged for the performance to which admission is granted.

PENALTIES

Every person who, without having previously paid the tax provided by this Act, enters a place of amusement in the province for the purpose of attending an exhibition, performance, entertainment or game shall be liable, on summary conviction, to a penalty of not more than \$50.00 for each offence, and in default of the payment of the fine and costs, to imprisonment for not more than six months.

Every owner of a place of amusement and every employee of an owner of a place of amusement who permits or authorizes or is a party or privy to the admission of any person to a place of amusement for the purpose of attending an exhibition, performance, entertainment or game therein without payment of the tax provided for by this Act, shall be liable, on summary conviction, to a penalty of not less than \$25.00, nor more than \$200.00 for each offence, and, in default of payment of the fine and costs, to imprisonment for not more than six months.

E. TROWBRIDGE, Deputy Provincial Secretary. Edmonton, April 15th, 1918.

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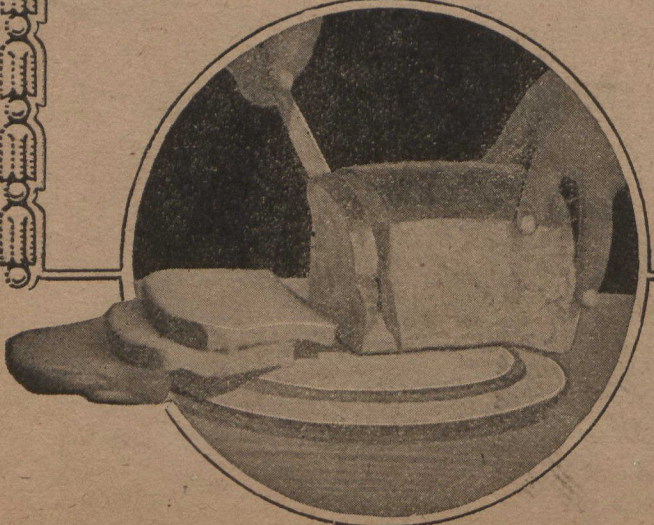
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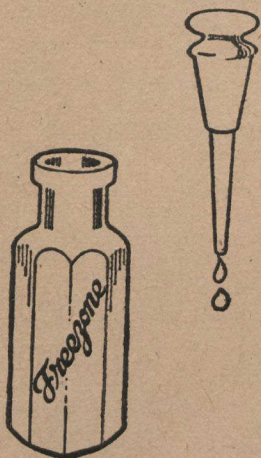
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den and canning contest is to be held this summer, and an exhibit will be made in the fall. Good for Gem!

Consort sent a case of eggs to the Ogden Military Home. This fall each farmer is being asked to donate a little grain, which will be sold for the benefit of the Red Cross. Some changes have been made in the regular plan for the fall fair. All fancy work will be eliminated and Red Cross work displayed instead. War bread will take the place of white, and canned vegetables will be made a new exhibit. Good, we are pleased to note this.

Hughenden held a social meeting recently, serving a conundrum lunch, for which .25c a head was charged. \$31.00 was raised, to be used for the Rest Room.

Fort Saskatchewan held a "morning dress" contest in April. Nearly all the members appeared in morning dresses of a very neat and serviceable character, and some were "fetching."

Conjuring Creek is to hold a calico dance and box social soon, for the purpose of raising money for the Returned Soldiers' Home.

Wide Awake recently purchased a new gate for the cemetery. They are to have an "Egg Week" this month. What is an "Egg Week?" Tell us in detail for other branches might like to have one.

Sullivan Lake recently made \$17.00 by a whist drive, and are now purchasing more supplies to make up for Red Cross.

Broadview held a very successful meeting in their school house with the U. F. A.

Nobleford is doing good work after a hard struggle. They are sending money to the boys who are prisoners of war. A play is being given in April for Red Cross. The delegates to the Convention write that they will "Carry On" to the end. That is what all must do.

Our Institutes are all doing good work this year, and we must remember we want 2,000 at the next convention, and a 16,000 membership. Work—that means you, you know!—Isabel Noble, Provincial President.

NOTICE:—The secretaries of the different Institutes are asked to cut out the reports, and read them over at their meetings. It will help you all to hear what the others are doing, and you can reap some really splendid ideas from so doing.—I N.

A GIRLS' CLUB—AIRDRIE INSTITUTE.

The following letter received from the Secretary of the Airdrie Women's Institute will be of very great interest to all.

"About a month ago we formed a club for the young girls, to enable them to do Red Cross work, or any work of a kindred nature, as a unit. For some time we thought that there was work waiting for these girls, if they could only be induced to co-operate with the Institute. So far, it has been a decided success. The girls formed a club, consisting at present of fifteen members, whose ages range from nine to fourteen years, with the exception of their secretary, who is older. They elect their own officers from among themselves, and conduct their meetings after the manner in which the regular Institute meetings are carried out. The yearly fee is 10c., and club colors have been adopted of purple and gold. These things tend to keep the girls interested.

Meetings are held every Saturday afternoon from two till five, when they sew for Red Cross, hemming handkerchiefs, bandages, etc. Some of the older ones knit socks, and face-cloths, and although their society is so very new, three have already completed a pair of socks, which, as they are new at the work, is very good indeed.

In addition to this work, they collect magazines, which are shipped to the Ogden Convalescent Home, and the Military Y.M.C.A. They also collect old used stamps, which are to be sent to the hospitals, as several of the bed-ridden soldiers amuse themselves making ornamental plaques. They are considering the gathering of all the old

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"junk" in the district and realizing a sum in that way for the Red Cross, and will doubtless find many ways of helping out, as they go on.

At our fair or sports we intend giving prizes for the best cooking done by the girls, and expect to get up a good competition."



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'TEEN AGE GIRLS

WORK FOR GIRLS

Many of our girl readers attended one or other of the conferences held recently in Alberta, and possibly had the pleasure of meeting Miss Isabel Noble, President of the Women's Institutes, and Miss Olive Ziegler, Girls' Work Secretary of the Y. W. C. A. Miss Noble is keenly interested in the cause of the Victory Garden and Canning Clubs, and will be only too willing to give advice and information to those communicating with her at Daysland, Alta. Incidentally, don't forget that Miss Noble advised the growing of plenty of peas, beans, spinnach and cauliflower, because these vegetables are easy to can.

Read all Miss Ziegler has to say about the work that is being done among girls, and if you would like one of the "Girls in Training" booklets, write in to the Home Department, Farm and Ranch Review, Calgary, sending in 5c. (five cents) for booklet, and 2c. (two cents) to cover postage.

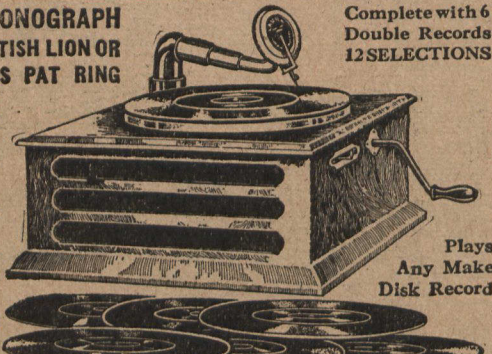
In 1912, a group of men, the heads of the Sunday school work of the Anglican, Baptist, Methodist and Presbyterian churches and the National Boys' Work secretaries of the Y.M.C.A., realized the necessity of conserving all the power and possibilities of Canadian boys; and that if they wanted to help boys, they would have to "specialize" on their needs and problems. And they felt that, as a truly religious view of life is the only one which gives life values and meaning, they would have to interpret religion in terms which boys could understand. As a result of the work and study of this group of men, a programme of religious education for boys was brought out called the Canadian Standard Efficiency Tests. At the centre of the whole programme lies the life of Christ. The verse describing his boyhood's development is the keynote—"Jesus increased in wisdom and stature and in favor with God and Man."—the ideal of the four-fold development, physical, intellectual, religious and social, for service. The method of working towards the ideal is by bringing the boy face to face with the opportunities that are his for development along those four lines, showing him where he is weak, and where he must pull up; also by giving him a programme, to carry out in the mid-week meeting of his group which will help in filling in some of the gaps in his equipment. The aim is to help the

A MESSAGE FROM MISS ISABEL NOBLE.

"I am having letters by the dozen from our girls interested in the 'Victory Garden' movement, but I want letters by the hundreds. Do you not remember I said I would answer every letter, and

FREE BIG PHONOGRAPH AND BRITISH LION OR PRINCESS PAT RING

Don't give \$25.00 for a phonograph. You can get this beautiful machine complete with 12 of the newest selections absolutely free of cost. It is a magnificent machine. Its tone is powerful and as clear as a bell and it plays any make disc record—Victor, Columbia or Edison. It has a handsome mahogany case, tapered tone arm, nickel trimmings, powerful motor, and in fact many of the big features found in the highest grade machines. Every loyal Canadian will also want the magnificent British Lion or Princess Pat gem ring. They are fashion's latest creations in fine jewellery. The Lion ring is a handsome massive carved Lion head with jewelled eyes and mouth—the emblem of Britain's greatness. The Princess Pat is an exquisite design set with five sparkling brilliants and having all the appearance of a \$50.00 diamond ring.



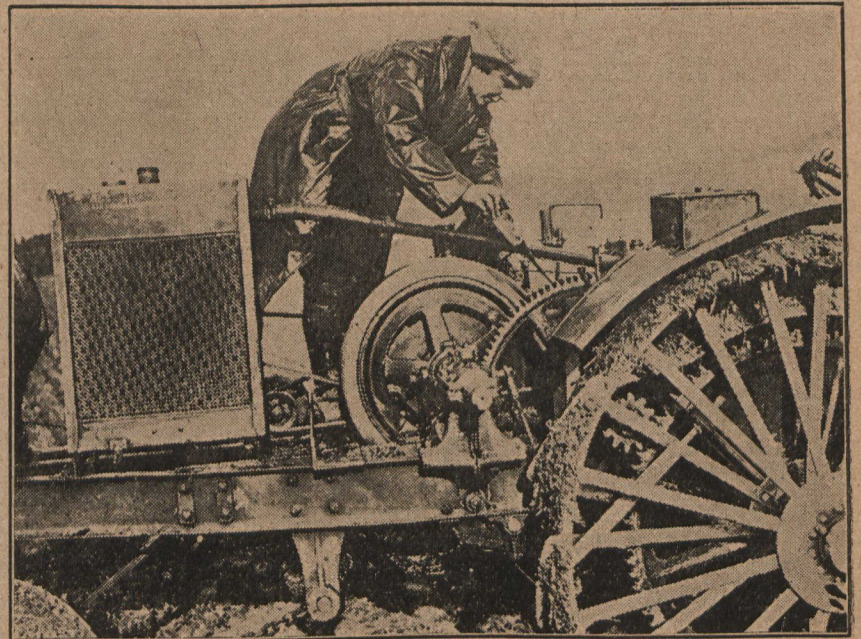
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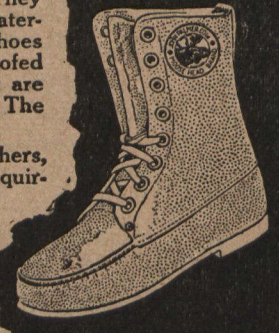
Berries sweeten the breath, purify the mouth, and leave a lasting fragrance. You'll sell them like hot cakes. Then return our money, only \$2.50, and we'll promptly send you choice of the beautiful rings, all postage paid, and the grand phonograph and records complete you can also receive for just showing your fine prize to your friends and getting only six of them to sell our goods and earn our fine premiums as you did. SEND NO MONEY. Just send your name and address to-day. A post card will do. Address 6B

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Department P. 30 Toronto, Ontario



WOMEN TRACTOR DRIVERS TAKE MEN'S PLACES ON ENGLISH FARMS. The war-time dearth of men has forced Great Britain to look to women for the raising of food supplies. An agricultural college at Wye, Kent, has undertaken to train women for the many technical tasks in farming. Part of the course takes up the operation of tractor. This British official photo shows one of the tractor-drivers oiling her machine.—Copyright, Underwood & Underwood, N.Y.

Palmer's Summer Packs

GIVE real foot comfort to tired, aching feet. They are made from oil-tanned Skowhegan waterproof leather. These summer packs or plow shoes are light, strong, durable—made with water-proofed leather sole and heel and solid leather insoles are laced, have large eyelets and bellows tongues. The ideal shoe for working on the land.

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Send your name and address to-day, and we will send you all postage paid, just 32 handsome bottles of Princess Royale perfume to introduce among your friends at only 10c. each. Six delicious odors: Rose, Carnation, Wood Violet, Heliotrope, Lily of the Valley, and Lilac. They sell like hot cakes. You have only to hand them out and take in the money. It's easy.

Return our \$3.20 when the perfume is sold and we will promptly send you this beautiful Princess Mary Toilet Set

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all I wish is that you will organize a Club in your district. It isn't much to do is it, to raise a Victory Garden, when so many of our brightest lives are given for Victory's sake.

If Illinois girls could number 40,000, we here can number 5,000, and I know you will organize your Clubs, but I want to hear about them.

So 'write soon,' as we used to say in our letters." ISABEL NOBLE.

"CANADIAN GIRLS IN TRAINING"—A PROGRAMME FOR CANADIAN GIRLS

By OLIVE I. ZIEGLER, NATIONAL GIRLS' WORK SECRETARY, Y.W.C.A.

We hear much about conservation these days. We are realizing, as never before in our brief history, that our natural resources, whether of mine, forest, or river, must be accounted for and used to the limit of their possibilities. Also, this is the age of specialization. If any work is to be adequately done, there must be people specializing on the particular difficulties and problems it involves. But these two principles of specialization and conservation apply not only to the natural resources of a country, but also to its human resources, to the ideals, quality and character of its men and women, its boys and girls.

boy to see all phases of his life, his school life, home and church life from the spiritual, and unselfish, rather than material and selfish point of view.

About three years later, a similar group of people, including Y.W.C.A. secretaries, in the place of the Y.M.C.A., got together to consider what could be done for Canadian girls. Surely in many places, particularly in small towns and rural districts, much of their energy, enthusiasm and latent possibilities were being wasted. How much they missed in not having clubs which stood for high ideals, where they could work out many things together that individual girls could not possibly do alone! Many groups of girls were discovered who had little real culture, and an utter lack of reverence for those things which are highest and best, and alone worth while. In most cases, the fault was not theirs, but was due to a lack of opportunity and understanding on the part of those who were leading them, whether mother, Sunday school teacher, or high school teacher.

To meet this need, the National Advisory Committee for Co-operation in Girls' Work was formed along exactly the same lines as the boys' committee. The first thing this committee tried to do was to define the idea towards which Canadian girls should aim. They felt that in general it could only be the four-fold ideal, the same as

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 THE FAMOUS MASTER MECHANIC OVERALLS

the boys; that girls should be strong physically, strong intellectually, with well-trained minds, stored with the best knowledge, strong religiously, conscious of their relation to God, their Maker, and strong socially in the highest sense, having the Christ ideal of service in their relationship to other people. To make this ideal tangible, a standard for girls was worked out. Under the four headings, all the things a girl should know and do to be strong in that particular way were put down. By considering the standard carefully, a girl can see where she stands in her physical life, etc., and can strengthen where she sees she is weak.

But girls must learn not only how to be strong individually, but if they are going to contribute anything worth while to the community, they must learn to work and play with other people. For this reason, it is felt that every girl should belong to some organization of girls. This organization, when possible, should be linked up with the church, so that it may have all the benefit and help of that connection. For this reason, it has been laid down that every Sunday school class should meet with the teacher for one hour, and a half, once a week, or once in two weeks. At these meetings the girls should carry out a programme which would be religious in the broadest sense, helping them on every one of the four sides, and linking up the religious teaching of Sunday with the activities and interests of every day.

The committee worked out a programme which they thought would solve the problem; and the standard, and programme, with lists of books for ladies and for girls, they included in a pamphlet which they called "Canadian Girls in Training." The programme may, of course, be used by any group of girls, whether Girl Guides, Camp Fire Girls or Club, wherever several girls want to come together for mutual development and to help others; but it has proved to be the best policy for the group to be linked up with the church.

(To be continued.)

SPECIAL LINE OF WORK

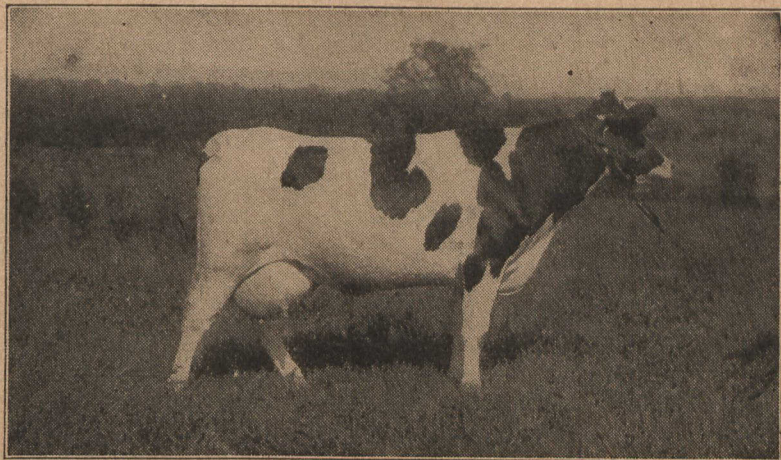
One line of work that seems desirable appears to have been taken up in Canada by only one body of workers. The Levana Society composed of the women of Queen's University have done wonderfully in providing vermin-proof underclothing, acting on the suggestion of Miss Gordon, who is particularly interested in work done by English university women. The formula furnished by Miss Gordon was given to the British Medical Journal in May, 1917, by Captain Gunn, M.D., D.Sc., R.A.M.C.T. of Oxford.

Undervests are made of ordinary cheese cloth and dipped in a solution of 1½ ounces naphthalene and 1½ ounces of sulphur to one gallon of benzoline or gasoline. They are wrung out of this solution and hung up to dry when the gasoline evaporates, leaving the other ingredients in minute particles. These should not be shaken off. Fold the vests and wrap in grease-proof paper. These vests are worn next the skin and are not irritating but afford an almost complete protection against vermin. Miss Gordon says: "Mrs. Gerrans of Oxford has made, dipped and sent to the front many thousands of these undervests and has received many grateful letters testifying to their remarkable and unique efficiency. No field comforts could be more welcome."

The dipping must be done out of doors and on no account must be undertaken where there is an open fire or even a lighted match or cigar or cigarette. In cold weather the rapid evaporation of the gasoline will permanently injure the skin and at all times some method should be devised for handling the cloth without coming into too direct contact with the gasoline. The making of these comforts in quantities offers profitable work for societies, and even the dipping of garments previously made should furnish an appreciable source of income to bodies engaged in raising war funds.

* * *

Do not speculate as to what you would do in someone else's place, but do your very best in your own.



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FORWARD

MRS. WALTER PARLBY, President, U. F. W. A.

MEMBERSHIP DRIVE.

In the springtime, as everybody knows, the farm is one of the busiest spots in the world, but this year I think the Central Office of the Alberta Farmers' organizations can at least claim a second place in this respect. Everybody is hard at work preparing for the big membership drive and organization campaign which is to take place next month. Every effort is being made on our part to ensure success, and we appeal to the members of both organizations to do likewise.

So far as the U. F. W. A. is concerned, this is the finest opportunity which has ever come our way. Hitherto, we have not been able to undertake organization work to any great extent, owing to lack of finances, and now that such a wonderful opportunity is offered us, we must not be slow to take advantage of it. The U. F. A. expects, as a result of this campaign, to very largely increase their membership, and we must try to do the same.

As we have pointed out on several occasions already, the U. F. W. is essentially a farm women's organization. We believe it is the duty of all farm women to give it their moral and financial support by becoming members. The U. F. W. is the women's section of the U. F. A. and increased membership of either section means greater power and influence for the farmers' organization as a whole. At several points where U. F. A. locals exist, there are no corresponding U. F. W. locals, and we hope that at such points women will lose no time in organizing, and that the men will lend them every assistance in doing so. Write to the Central Office for literature, and information as to how to get started. Remember that no organization can take the place of the farmers' own, when it comes to fighting for the rights of the farmers as a class, and, as our President states in her "Reasons Why Women Should Join the U. F. W.," the farmers' battles are the battles of the farmer's wife.

Prize Offered for Securing Members

How many of our locals are competing for the prize which is being offered for securing the greatest number of new members during 1918. If you have any suggestions to offer as to how the Central Office might help, let us know and we will do what we can. A prize is also being offered to the local which is instrumental in organizing the greatest number of new locals during the year. The prizes will be presented at our next annual convention, and surely it will be a proud moment for the winning ones.

Y.M.C.A. Huts.

I received a letter from the general Secretary of the Y. M. C. A. Military Branch, Western Division, recently, expressing appreciation of our efforts in regard to raising money enough to supply them with a hut. He states that these huts are badly needed, and if we can raise sufficient money to build a hut, we can have our own name inscribed on same—"Donated by the United Farm Women of Alberta," or something similar. This hut will be placed right in the trenches, and be a constant reminder to the "Boys at the front" that the farm women in Alberta are not forgetting them, and are working faithfully and well at home to see that they have every possible comfort supplied to them. The Secretary unfortunately omitted to state how much it would cost to build a hut, but I hope to have this information at an early date.

The ever-progressive Carstairs local has already raised over \$378 for this fund. We do not of course expect that all our locals will do as well, but if each one does its very best, there will not be much difficulty in supplying, not only the hut, but the furniture for same. We all know the work that the Y. M. C. A. is doing, and what better means

can we find of expressing our sympathy and good will for those who are enduring the hardships of the trenches for our sakes than by sending them a Y.M.C.A. Hut.

EGG CIRCLES.

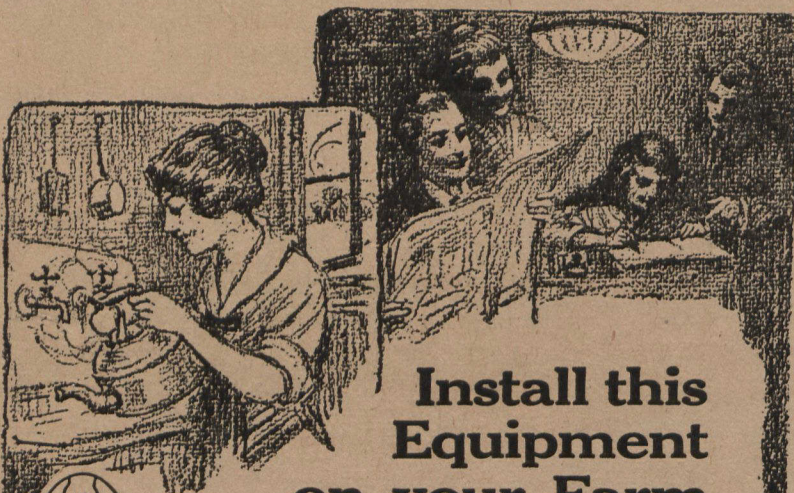
As a result of the circular sent out on behalf of the Home Economics Committee, several egg circles have been organized. The secretary of one of these remarks that one of the things which they admire about these circles is that there is so little "red tape" in connection with the organization of same. As she says you "appoint a shipper, and the job is done." The Egg Marketing Service is certainly proving itself a wonderful benefit to the farmers of Alberta, both financially and educationally. Remember the Service is not only trying to get for the farmers the very highest market price, according to grade, for their eggs, but when they find that a certain farmer's eggs are grading low, their experts are able to advise him as to the possible cause of same and how to remedy it. In this way they are raising the standard of Alberta eggs as a whole, and that they are succeeding in this is shown by the ever-increasing percentage of high-grade eggs, and the marked decrease in the percentage of low-grade ones, which are being received at the candling Station. During the last week in April this year, the price paid for extras was 36c. and 35c. for No. Ones, averaging slightly over 35c. per dozen. The special cases are supplied free of charge by the Service, and express charges are paid both on the empty ones sent out and on the full ones returning, so that you do not need to deduct these charges from the price of your eggs. Why should farmers go on accepting low prices, very often in trade, for their eggs, when the remedy is at hand? All you have to do is to organize to appoint a good live committee, who will get in touch with the Egg Marketing Service at Calgary or Edmonton, when full instructions will be sent them as to how to complete the organization and arrange for the shipping. In many cases it will be possible to arrange with the local storekeeper to handle the shipments on a commission basis, which will save considerable trouble, and also eliminate local competition. The results obtained in this way are usually very satisfactory to all parties concerned.

All farmers who can possibly do so should endeavor to raise more poultry this year, and produce more eggs. Farm produce of all kinds is urgently needed, but, of course, farmers cannot be expected to produce unless they receive proper remuneration for their work involved. For this reason we are anxious that every local should at least give the Egg Circle plan a trial. We feel assured that if they do, they will never return to the old plan of individual marketing, especially where individual farmers have only small quantities of eggs to market. Of course, any farmers who have quantities to ship which would make it worth while doing so, they can secure the cases from the Service and make individual shipments direct. That is, of course, as applies more especially to points where no egg circle exists.

Write to the Egg Marketing Service, Calgary, for full particulars, and all possible information and assistance will be given you. Please advise your Central Office also when you organize a circle, so that we may be thoroughly informed as to work which is being carried on, and if there is any way in which we can help you do not hesitate to call upon us.—MARY SPILLER, Prov. Sec'y U. F. W. A.

* * *

"It ain't no use to grumble and complain;
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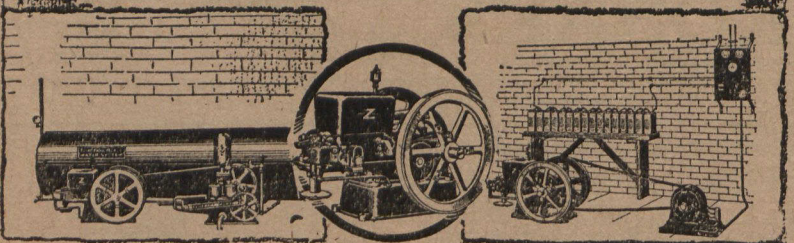
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MAVERICKS

BY WILLIAM MacLEOD RAINE

Author of "Wyoming," "Bucky O'Gonnor," etc.

SYNOPSIS:—Cattle rustling prevails in neighborhood, and incoming homesteaders or "nesters", including Larrabee Keller, are openly suspected by old-timers, such as Buck Weaver, owner of Twin Star Ranch, his late foreman, Brill Healy, etc. Phyllis and Phil Sanderson, when out riding, are joined suddenly by Healy, and the three sight an apparent rustler in distance.

The lad nodded. "I brought my six-gun for rattlesnakes."

"Are you going to—to—" cried Phyllis, the color gone from her face.

"We're going to capture him alive if we can, Phyl. You're to wait here till we come back. You may hear shooting. Don't let that worry you. We've got the drop on him, or will have. Nobody is going to get hurt if he acts sensible," Healy reassured.

"Don't you move from here. You stay right where you are," her brother ordered sharply.

"Yes," she said, and was aware that her throat was suddenly parched.

"You'll be careful, won't you, Phil?"

"Sure," he called back, as he put his horse at a canter to follow his friend up the draw.

The sound of the hoofs died away, and she was alone. That they were going to circle in and out among the tangle of hills until they were opposite the miscreant, she knew, but in spite of Brill's promise she had a heart of water. With trembling fingers she raised the glasses again, and focused them on that point which was to be the centre of the drama.

The man was moving about now, quite unconscious of the danger that menaced him. What she looked at was the great crime of Cattleland. All her life she had been taught to hold it in horror. But now something human in her was deeper than her detestation of the cowardly and awful thing this man had just done. She wanted to cry out to him a warning, and did in a faint, ineffective voice that carried not a tenth of the distance between them.

She had promised to remain where she was, but her tense interest in what was doing drew her forward in spite of herself. She rode along the ridge that bordered the park, at first slowly and then quicker as the impulse grew in her to be in at the finish.

The climax came. She saw him look round quickly, and in an instant his pony was at the gallop and he was lying low on its neck. A shot rang out, and another, but without checking his flight. He turned in the saddle and waved a derisive hand at the shooters, then plunged into a wash and disappeared.

What inspired her she could never tell. Perhaps it was her indignation at the thing he had done, perhaps her anger at that mocking wave of the hand with which he had vanished. She wheeled her horse, and put it at a canter down the nearest draw so as to try to intercept him at right angles. Her heart beat fast with excitement, but she was conscious of no fear.

Before she had covered half the distance, she knew she was going to be too late to cut off his retreat. Faintly, she heard the rhythm of hoofs striking the rocky bottom of the draw. Abruptly they ceased. Wondering what that could mean, she found her answer presently. For the pounding of the galloping broncho had renewed itself, and closer. The man was riding up the gulch toward her. He had turned into its mesquite-laced entrance for a hiding place. Phyllis drew rein, and waited quietly to confront him, but with a pulse that hammered the moments for her.

A white-stockinged roan, plowing a way through heavy sand, labored into view round the bend, its rider slewed in the saddle with his whole attention upon the possible pursuit. Not until he was almost upon her did the man turn. With a startled exclamation at sight of the motionless figure, he pulled up sharply. It was the nester, Keller.

"You," she cried.

"Happy to meet you, Miss Sanderson," he told her jauntily.

His revolver slid into its holster, and his hat came off in a low bow. White, even teeth gleamed in a sardonic smile.

"So you are a — rustler," she told him scornfully.

"I hate to contradict a lady," he came back, with a kind of bitter irony.

She saw something else, a deepening stain that soaked slowly down his shirt sleeve.

"You are wounded."

"Am I?"

"Aren't you?"

"Come to think of it, I believe I am," he laughed shortly.

"Badly?"

"I haven't got the doctor's report yet." There was a gleam of whimsical gayety in his eyes as he added: "I was going to find him when I had the good luck to meet up with you."

He was a hunted miscreant, wounded, riding for his life as a hurt wolf dodges to shake off the pursuit, but strangely enough her gallant heart thrilled to the indomitable pluck of him. Never had she seen a man who looked more the vagabond enthroned. His crisp bronze curls and his superb shoulders were bathed in the sunpour. Not once, since his eyes had fallen on her, had he looked back to see if his hunters had picked up the lost trail. He was as much at ease as if his whole thought at meeting her were the pleasure of the encounter.

"Can you ride?" she demanded.

"I can stick on a hawss if it's plumb gentle. Leastways I've been trying to for twenty years," he drawled.

Her impatient gesture waved his flippancy aside. "I mean, are you too much hurt to ride? I'm not going to leave you here like a wounded coyote. Can you follow me if I lead the way?"

"Yes, ma'am."

She turned. He followed her obediently, but with a ghost of a smile still flickering on his face.

"Am I your prisoner, Miss Sanderson?" he presently wanted to know.

"I'm not thinking of prisoners just now," she answered shortly, with an anxious backward glance.

Presently she pulled up and wheeled her horse, so that when he halted they sat facing each other.

"Let me see your arm," she ordered.

Obediently he held out to her the one that happened to be nearest. It was the unwounded one. An angry spark gleamed in her eye.

"This is no time to be fresh. Give me the other."

"Yes, ma'am," he answered, with deceptive meekness.

Without comment, she turned back the sleeve which came to the wrist gauntlet, and discovered a furrow ridged by a rifle bullet. It was a clean flesh wound, neither deep nor long enough to cause him trouble except for the immediate loss of blood. To her inexperienced it looked pretty bad.

"A plumb scratch," he explained.

She took the kerchief from her neck, and tied it about the hurt, then pulled down the sleeve and buttoned it over the brown forearm. All this she did quite impersonally, her face free of the least sympathy.

"Thank you, ma'am. You're a right friendly enemy."

"It isn't a matter of friendship at all. One couldn't leave a wounded jack rabbit in pain," she retorted coldly, taking up the trail again.

There was room for two abreast, and he chose to ride beside her. "So you tied me up because it was your Christian duty," he soliloquized aloud. "Just the same as if I had been a mangy coyote that was suffering."

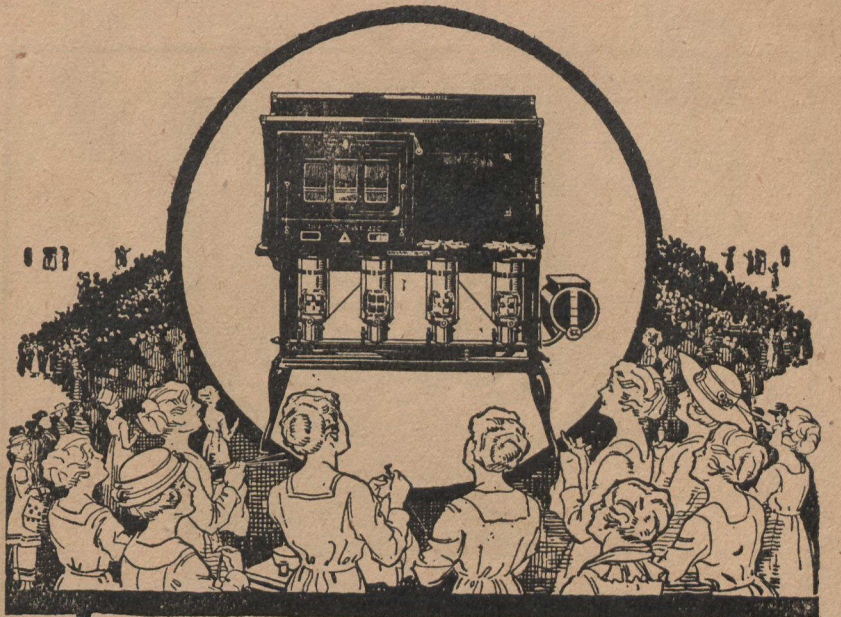
"Exactly."

He let his cool eyes rest on her with a hint of amusement. "And what were you thinking of doing with me now, ma'am?"

"I'm going to take you up to Jim Yeager's mine. He is doing his assessment work now, and he'll look out for you for a day or two."

"Look out for me in a locked room?" he wanted to know casually.

"I didn't say so. It isn't my business to arrest criminals," she said icily.



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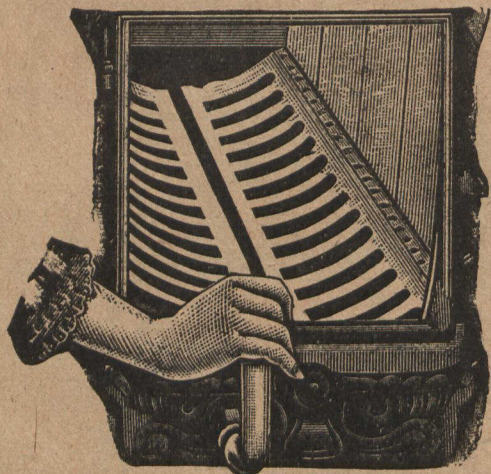
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His eyes gleamed mischief. "Is it your business to help them to escape?" "I'm not helping you to escape. I'll not risk your dying in the hills alone. That is all."

"Jim Yeager is your friend?"

"Yes."

"And you guarantee he'll keep his mouth padlocked and not betray me?" "He'll do as he pleases about that," she said indifferently.

"Then I don't reckon I'll trouble his hospitality. Good-by, Miss Sanderson. I've enjoyed meeting you very much."

He checked his pony and bowed.

"Where are you going?" the girl exclaimed.

"Up Bear Creek."

"It's twenty miles. You can't do it."

"Sure I can. Thanks for your kindness, Miss Sanderson. I'll return the handkerchief some day," and with a touch he swung round his pony.

"You're not going. I won't have it, and you wounded!"

He turned in the saddle, smiling at her with jauntily insouciance.

"I'll answer for Jim. He won't betray you," she promised, subduing her pride.

"Thanks. I'll take your word for it, but I won't trouble your friend. I've had all the Christian charity that's good for me this morning," he drawled.

At that she flamed out passionately: "Do you want me to tell you that I like you, knowing what you are? Do you want me to pretend that I feel friendly when I hate you?"

"Do you want me to be under obligations to folks that hate me?" he came back with his easy smile.

"You have lost a lot of blood. Your arm is still bleeding. You know I can't let you go alone."

"You're certainly aching for a chance to be a Good Samaritan, Miss Sanderson."

With this he left her. But he had not gone a hundred yards before he heard her pony cantering after his. One glance told him she was furious, both at him and at herself.

"Did you come after your handkerchief, ma'am? I'm not through with it yet," he said innocently.

"I'm going with you. I'm not going to leave you till we meet some one that will take charge of you," she choked.

"It isn't necessary. I'm much obliged, ma'am, but you're overestimating the effect of this pill your friend injected into me."

"Still, I'm going. I won't have your death on my hands," she told him defiantly.

"Sho! I ain't aimin' to pass over the divide on account of a scratch like this. There's no danger but what I can look out for myself."

She waited in silence for him to start, looking straight ahead of her.

He tried in vain to argue her out of it. She had nothing to say, and he saw she was obstinately determined to carry her point.

Finally, with a little chuckle at her stubbornness, he gave in and turned round.

"All right. Yeager's it is. We're acting like a pair of kids, seems to me." This last with a propitiatory little smile toward her which she disdained to answer.

Yeager saw them from afar, and recognized the girl.

"Hello, Phyllis!" he shouted down. "With you in a minute."

The girl slipped to the ground, and climbed the steep trail to meet him. Her crisp "Wait here," flung over her shoulder with the slightest turn of the head, kept Keller in the saddle.

Halfway up she and the man met. The one waiting below could not hear what they said, but he could tell she was explaining the situation to Yeager. The latter nodded from time to time, protested, was vehemently overruled, and seemed to leave the matter with her. Together they retraced their way. Young Yeager, in flannel shirt and half-leg miner's boots, was a splendid specimen of bronzed Arizona. His level gaze judged the man on horseback, approved him, and met him eye to eye.

"Better light, Mr. Keller. If you come in we'll have a look at your arm. An accident like that is a mighty awkward thing to happen to a man on

the trail. It's right fortunate Miss Sanderson found you so soon after it happened."

The nester knew a surge of triumph in his blood, but it did not show in the impassive face which he turned upon his host.

"It was right fortunate for me," he said, swinging from the saddle. Incidentally he was wondering what story had been narrated to Yeager, but he took a chance without hesitation. "A fellow oughtn't to be so careless when he's got a gun in his hand."

"You're right, seh. In this country of heavy underbrush a man's gun is liable to go off and hit somebody any time if he ain't careful. You're in big luck you didn't shoot yourself up a heap worse."

Yeager led the way to his cabin, and offered Phyllis the single chair he brought, and the nester a seat on the bed. Sitting beside him, he examined the wound and washed it.

"Comes to being an invalid I'm a false alarm," Keller said apologetically. "I didn't want to come, but Miss Sanderson would bring me."

"She was dead right, too. Time you had ridden twenty miles through the hot sun with that wound you would have been in a raging fever."

"One way and another I'm quite in her debt."

"That's so," agreed Yeager, intent on his work.

She refused to meet the nester's smile. "Fiddlesticks! You talk mighty foolish, Jim. I wouldn't go away and leave a wounded dog if I could help it."

"Suppose the dog were a sheep-killer?" Keller asked with his engaging, impudent smile.

A dust cloud rose from her skirt under a stroke of the restless quilt. "I'd do my best for it and let it settle with the law afterward."

"Even if it were a wolf caught in a trap?"

"I should put it out of its pain. No matter how much I detested it, I wouldn't leave it there to suffer."

"I'm quite sure you wouldn't," the wounded man agreed.

Yeager looked from one to the other not quite catching the drift of the underlying meaning. Another thing puzzled him, too. But, like most men of the unfenced Southwest, Yeager had a large capacity for silence. Now he attended strictly to his business, without mentioning what he had noticed.

The wound dressed, Phyllis rose to leave. "You'll be down for your mail to-morrow, Jim," she suggested, as she sauntered toward the door.

"Sure. I'll let you know how our patient is getting along."

"Oh, he's yours. I don't want any of the credit," she returned carelessly.

Then, the words scarce off her lips, she gave a little cry of alarm, and stepped quickly back into the room. What she had seen had sapped the color from her face. Yeager started forward but she waved him back.

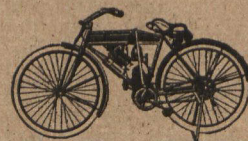
"It's Phil and Brill Healy. You've got to hide us, Jim," she told him tensely.

The nester began to grin. He always did when he faced a difficulty apparently insurmountable. Also his fingers slid toward the butt of his revolver.

(To be continued)

* * *

The only thing to do is to take the cards that are dealt to you and play the game.



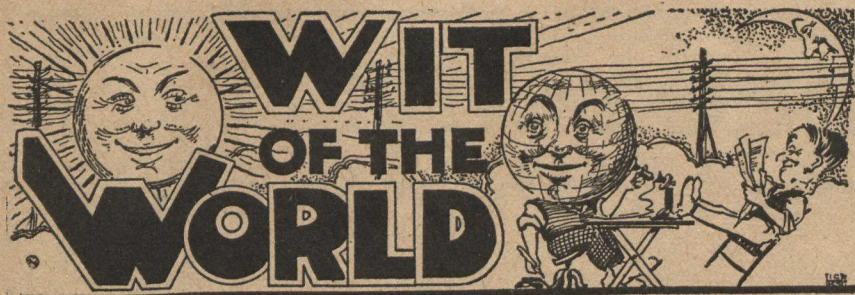
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CASH PRIZES.

We offer two cash prizes each issue, the first \$1.00 and the second, 50 cents, for the two brightest anecdotes forwarded to us, and these will appear at the top of the column with the names of the winners. Send in as often as you care to.

CHANGING THINGS—FIRST PRIZE

A bailiff sent to seize a quantity of furniture on an order of foreclosure was instructed to make a complete inventory. He did as directed. When it came to the dining-room, the tally of the furniture ran thus:

- "One dining-room table, oak,"
- "One set chairs (six), oak,"
- "One sideboard, oak,"
- "Two bottles whiskey, full,"

Then the word "full" was struck out and replaced with "empty," and the inventory went on in a hand that straggled and lurched diagonally across the page until it closed with:

"One revolving door mat."—C. M. KIDD, Meadow Bank, Sask.

A SLIGHT MISTAKE—SECOND PRIZE

A farmer tells of a city lad who once worked for him.

The lad was called one winter morning before dawn and told to harness the mule to the wagon.

The lad was too lazy to light a lantern, and in the dark he didn't notice that one of the cows was in the stable with the mule. The farmer, impatient at the long delay, shouted from the house:

"Billy! Billy! What are you doing?"

"I can't get the collar over the mule's head," yelled back the boy. "His ears are frozen."—MRS. ISABEL HARRISON, Bowden, Alta.

CONSIDERATION.

Farmer Hawbuck, who never had been any too considerate about bringing the livestock in before dark, kept arriving at the corral later and later each evening. Finally his wife's patience began to break.

"Hiram," she exclaimed, "it takes you twice as long to drive in the pigs as it used to."

"I know it," replied Farmer Hawbuck. "You wouldn't expect me to speak harsh to a lot of critters worth \$50 apiece, would you?"

A PERSON OF DISCERNMENT

A Quaker had got himself into trouble with the authorities, and a constable called to escort him to the lock-up.

"Is your husband in?" he inquired of the good wife who came to the door. "My husband will see thee," she replied, "Come in."

The officer entered, was bidden to make himself at home, and was hospitably entertained for half an hour, but no husband appeared. At last he grew impatient.

"Look here," said he, "I thought you said your husband would see me."

"He has seen thee," was the calm reply, "but he did not like thy look, and so he's gone another way."

THE OLD-FASHIONED WAY

The young hopeful of four years had been a source of continual vexation and trouble all through the meal, and at its finish a woman friend turned to the child's mother and said:

"If your boy belonged to me I shouldn't stand so much of his nonsense at meal-times. I should give him a thrashing."

"But," said the mother, "you can't spank the poor little fellow on a full stomach."

"No," said her friend, "but you can turn him over."

AND THE BOY GOT IT

A hungry traveller put his head out of a car window as his train pulled up at a small station, and said to a boy:

"Here, boy, take this dime and get me a sandwich, will you? And, by the way, here's another dime. Get a sandwich for yourself, too."

The boy darted away and returned, munching a sandwich, just as the train was starting off. He ran to the traveller, handed him a dime, and said:

"Here's your dime back, boss. They only had one sandwich left."

SHE WOULD BE PLEASED

"What would your mother say, little boy," demanded the passer-by virtuously, "if she could hear you swear like that?"

"She'd be tickled to death if she could hear it," answered the bad little boy. "She's stone deaf."

DESCRIPTION

"Oh, I just love cake, and it's awfully nice!" cried little Dorothy, regarding her dessert.

"You should not say you 'love cake'," reproved her mother; "say you 'like it'; and don't say 'awfully'; say 'very.' Don't say 'nice,' but 'good.' Now, my dear, repeat it."

"I like cake; it is very good," repeated Dorothy; "but it sounds exactly as if I were talking about bread."

DIARY OF A GARDENER

Monday: Spaded up garden, levelled seed beds.

Tuesday: Levelled up seed beds, planted Radishes.

Wednesday: Made new beds, planted Radishes.

Thursday: Killed Jones' hen, blacked his eye.

Friday: Jones' dog bit me, broke hoe on him.

Saturday: Made new seed beds, planted Radishes.

Sunday: Rain, snow, sleet.

A POSER

Inquiring Son—Pa, may I just ask one more question?

Patient pa—Yes, my son—just one more.

Son—Well, then, pa, how is it that while night falls day breaks?

WHICH WAS THE TRUTHFUL END?

"Why don't you go in?" asked one tramp of the other, as they stood before the gate. "Dat dog's all right. Don't you see him waggin' his tail?"

"Sure I do," said the second tramp, "but he's a-growlin', too, and I don't know which end to believe."

LET HER DOWN EASY.

"Did you make those biscuits, my dear?" asked the young husband.

"Yes, darling."

"Well, I'd rather you would not make any more, sweetheart."

"Why not, my love?"

"Because, angel mine, you are too light for such heavy work."

AS THE TEACHER SAW IT

"I'm very much afraid that Jimmie isn't trying enough," wrote an anxious mother to the teacher of her young hopeful.

"You are quite wrong," wrote back the tired teacher. "for I assure you that Jimmie is the most trying boy in the class."

LOCUSTS AND HONEY

Minister: "And Joshua did eat rejoicing of locusts and honey."

Johnny (wonderingly): Gee, mother, what did his mother give him after that—castor oil or a spanking?

COWAN'S MAPLE BUDS

A dainty Solid Chocolate

Name Reg.—Design Pat.

The choicest and most expensive cocoa beans, rich, creamy milk and selected sugar blended skilfully.

No other chocolate of its kind in the world—none so charming.

A-45



Little Miss MAIDEN CANADA



Dainty and Strong for Little "Tots"

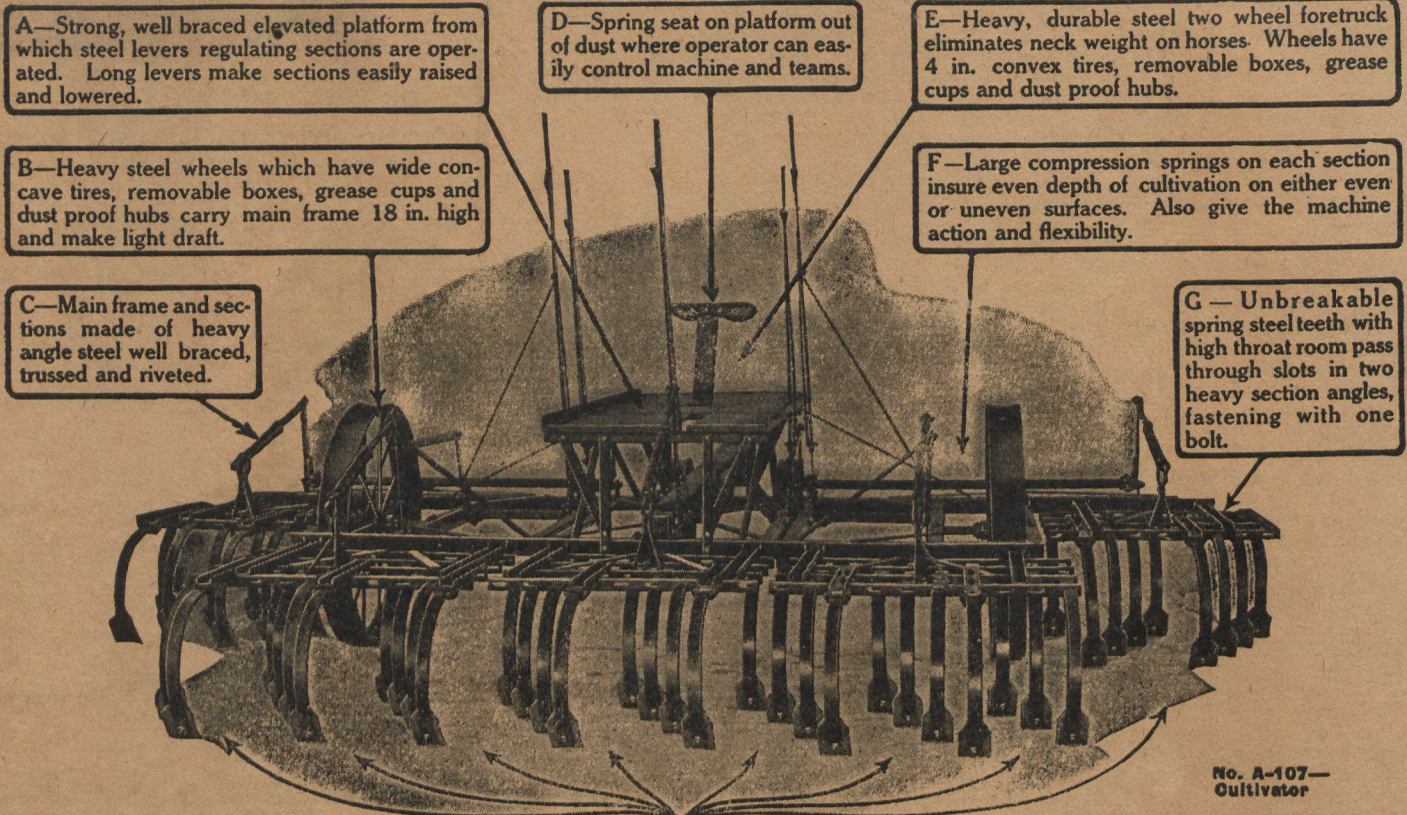
Watson's Spring Needle Underwear is the correct thing for particular "little women" with sensitive skins and rapidly growing bodies. The garments are soft, warm, snug-fitting and always comfortable.

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BE U. G. G. PROTECTED From Sow-thistle and Other Weeds

Stirring and turning up every inch of your summer-fallowed land—completely uprooting the weeds, leaving the soil in a wavy condition so as to minimize blowing of the soil during strong winds—and putting the clod-mulch on the surface of the ground to conserve the moisture—this is what a U.G.G. Forkner Cultivator does in assisting you in the production of bigger and better crops.



A—Strong, well braced elevated platform from which steel levers regulating sections are operated. Long levers make sections easily raised and lowered.

D—Spring seat on platform out of dust where operator can easily control machine and teams.

E—Heavy, durable steel two wheel foretruck eliminates neck weight on horses. Wheels have 4 in. convex tires, removable boxes, grease cups and dust proof hubs.

B—Heavy steel wheels which have wide concave tires, removable boxes, grease cups and dust proof hubs carry main frame 18 in. high and make light draft.

F—Large compression springs on each section insure even depth of cultivation on either even or uneven surfaces. Also give the machine action and flexibility.

C—Main frame and sections made of heavy angle steel well braced, trussed and riveted.

G—Unbreakable spring steel teeth with high throat room pass through slots in two heavy section angles, fastening with one bolt.

Each shovel laps the one next to it. Every inch of soil is cut and stirred. All weeds are cut off. Clearance of 14 inches between every four teeth for weeds and trash to pass freely through after they are cut. No clogging—No binding. Springs are reinforced and held firmly in two section angles. No shifting or twisting possible. Different types of shovels and sweeps for all kinds of soils, weeds and purposes are easily attached to spring with one bolt.

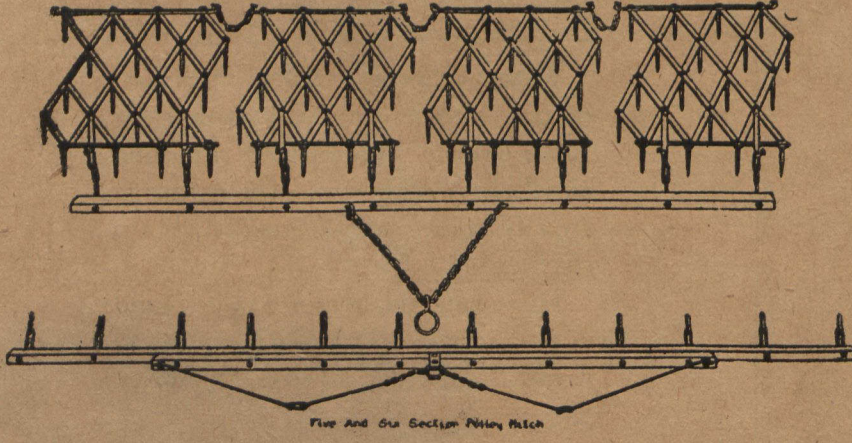
A-103 No. 30 Forkner Cultivator, with 20 No. 6 teeth, with 4-inch reversible steels, tongue truck, no pole, trees or yoke. Weight 700 lbs.
CALGARY, \$135.40; SASKATOON, \$133.90; REGINA, \$133.35; WINNIPEG, \$130.40.

A-107 No. 47 Forkner Cultivator, with 47 No. 6 teeth, with 4-inch reversible steels, tongue truck, no pole, trees or yoke. Weight 1500 lbs.
CALGARY, \$261.55; SASKATOON, \$258.35; REGINA, \$257.15; WINNIPEG, \$250.90.

A-105 No. 34 Forkner Cultivator, with 34 No. 6 teeth, with 4-inch reversible steels, tongue truck, no pole, trees or yoke. Weight 1250 lbs.
CALGARY, \$215.65; SASKATOON, \$213.00; REGINA, \$212.00; WINNIPEG, \$206.75.

U. G. G. Diamond Harrow

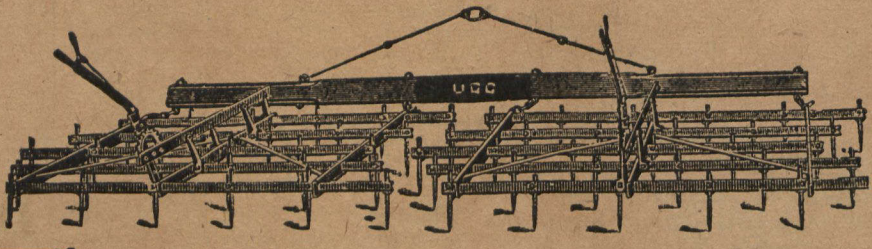
This drag is built to give excellent service where more weight than the "Boss" is necessary. The Channel steel frame in this Harrow gives you great strength. High-grade crucible steel is used in the diamond spiked teeth, which are set 20 teeth to the section, weighing 50 lbs. There is no danger of these teeth coming out—in fact the sections are made so thoroughly and yet so simple, that there is nothing to get out of order. We can supply draw bars for 3, 4, 5 or 6 sections. The illustration shows a 4 section Harrow complete. We can also ship you immediately from any of our warehouses, 3 section, 5 section, and 6 section harrows.



A-66 Diamond Harrow, 4 sections, with evener, 13½ feet. Weight 233 lbs.
CALGARY, \$23.50; SASKATOON, \$23.15; REGINA, \$23.00; WINNIPEG, \$22.00.

Heavy sections for Diamond Harrows, where still larger drag is needed. Weight 80 lbs., teeth ½-inch, and channels and flats are 1½ inches per section.
F.O.B. CALGARY, \$7.80; SASKATOON, \$7.65; REGINA, \$7.60; WINNIPEG, \$7.25.

U. G. G. Channel Steel Five-Bar Zig-Zag Lever Harrow



Channel-bar gives all strength of excessively heavy harrows while of less weight. Steel tooth holder fastens tooth firmly to the edge of flanges. By loosening clamping bolt, the tooth easily comes out, and it may be raised or lowered without removal. The tightening bolt holds tooth firmly in place. Dagger teeth are supplied with an ear at top so as to prevent dropping through holder when same is loosened. Lever mechanism is simple, yet positive in action. Illustration shows 2 section harrow with individual sections. We have also in our warehouses for immediate shipment, 3 and 4 section harrows complete.

A-58 Zig-Zag Harrow, 2 sections, 60 teeth, with evener, 10 feet. Weight 203 lbs.
CALGARY, \$24.50; SASKATOON, \$24.10; REGINA, \$24.00; WINNIPEG, \$23.10.

Write the U.G.G. Branch nearest you for full particulars.

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