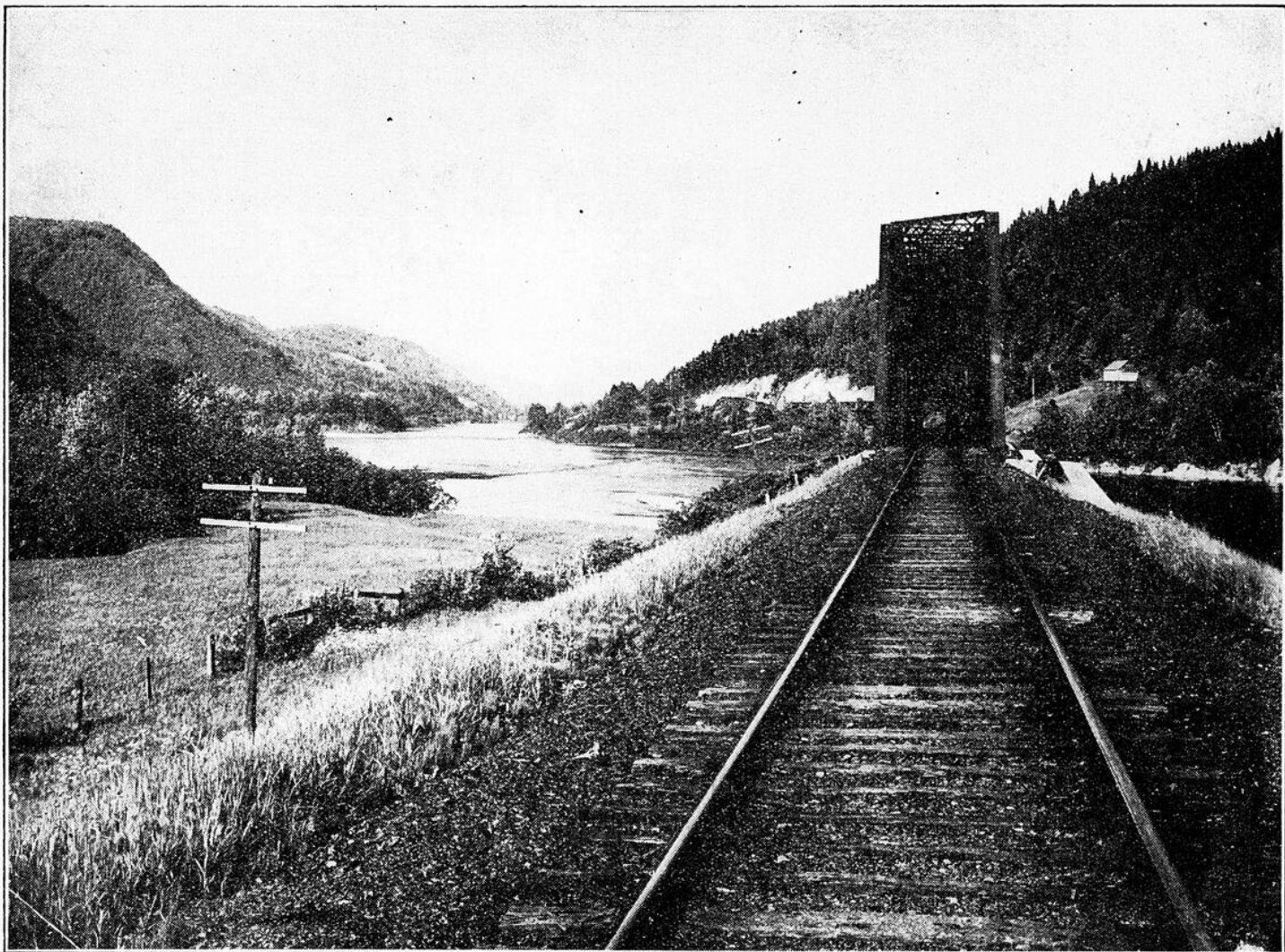


The JOURNAL of AGRICULTURE AND HORTICULTURE

Volume 25

August 1st 1921

Number 2

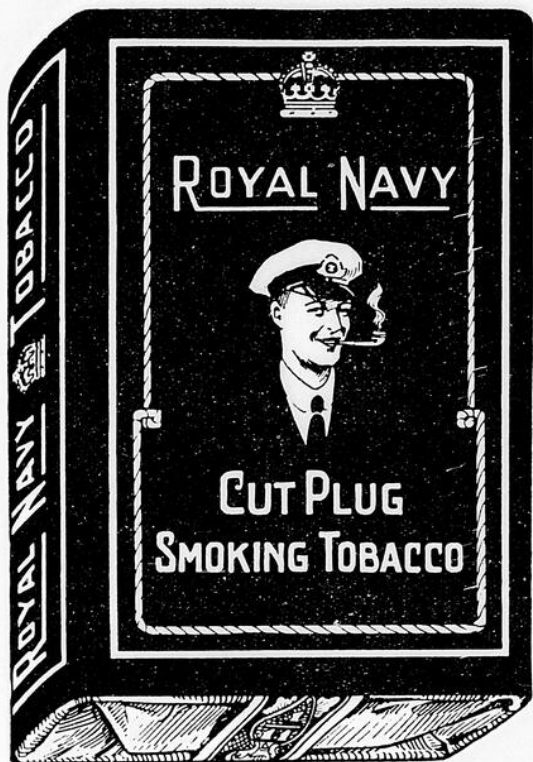


The Road Not Leads to Holidays

IN THIS ISSUE

In this issue will be found as much of our material for the August number of the JOURNAL as was set up in type before the printers were called out in connection with the strike now affecting all job-printing establishments in Montreal. We have had to omit from our contents this month much material that should have appeared, but we hope to be able to make it up to our readers in the good things that will come "after the strike."

PUBLISHED BY THE DEPARTMENT OF AGRICULTURE OF
THE PROVINCE OF QUEBEC.



1/4 lb. packet 15 cents
 also in
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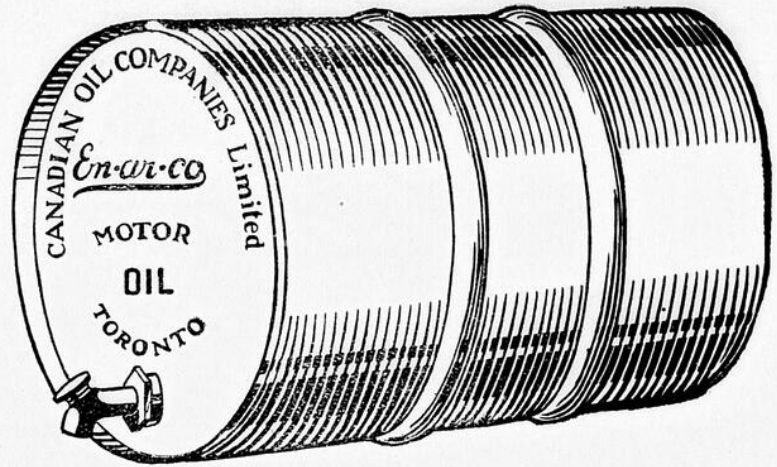
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(J.A.S)

Wherever you see the "Boy and Slate" sign, that's the best place to buy gasoline and lubricants.



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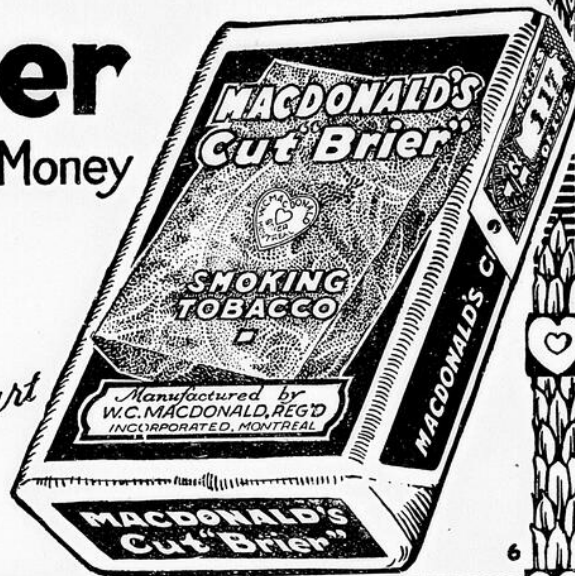
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Classes will be opened Wednesday morning, September 14th 1921, at 10 o'clock.

For further information, apply to the undersigned or Dr Albert Dauth, V.S., Secretary.

Dr. F.-T. DAUBIGNY, V.S.,

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AT Knowlton Village, Que., 100 acres of land, first quality, on Brome Lake. No stone. One house and large barn. Low price and easy terms. GUNN LANGLOIS & CO. Ltd., Montreal. Tel. Main 8600.

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FINE Chester White pigs farrowed in May, coming from a 3 years old sow. Apply to THEODORE LANDRY, St. Anselme.

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FINE cockerels coming from subjects, winners of prizes at the County Fair; those cockerels were hatched in April and May. Barred Plymouth Rocks and Red Rhode Island, \$2.00 each. Apply to VALMOND AUDET, Maria Capes, Bonaventure Cty., P. Q.

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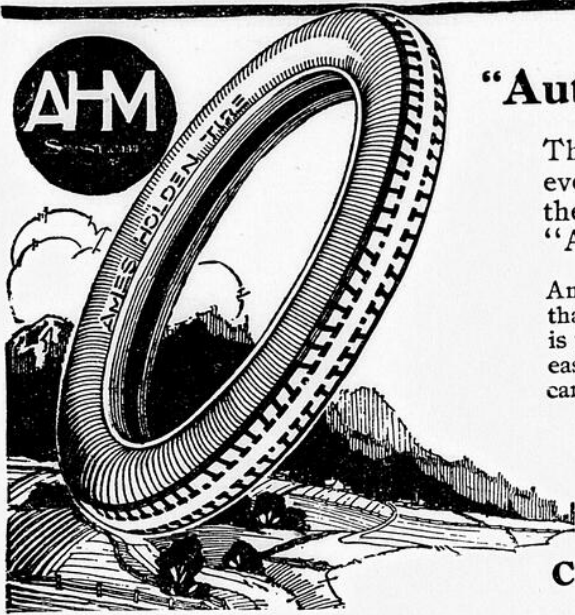
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WANT to hear from owner having farm for sale; give particulars and lowest price. JOHN J. BLACK, Agriculture Street, Chippewa Falls, Wisconsin.

OUR RUSSIAN WOLFHOUNDS are ideal companions, good hunters, bench show winners. Prize winning strains. Send for booklet, prices. ARKANSAS VALLEY KENNELS, Dept. C., Cimarron, Kans.

DEALERS—Start for yourselves in one complete line in your own hands. Every proprietor needs few of our 900 varieties of hard and strong trees "Red Label". Money not necessary. Free and complete outfit and information. Apply to DOMINION NURSERY CO., Montreal.

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The mileage given by the best tire you ever used would just about approximate the average given by Ames Holden "Auto-Shoes" year after year.

Ames Holden "Auto-Shoes" are miles better than ordinary tires. The name "Auto-Shoes" is to help you to remember that—to make it easy for you to get the cheapest mileage you can buy.

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"Grey Sox" Tubes

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Or Can Readily Procure Them For You

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The new low price at which you can own Delco-Light is so reasonable that your good business judgment will prompt you to act immediately.

Delco-Light is one of the very best investments you can make. It gives you electric lights in your home and buildings, and electric power to do many of the hard jobs that must now be done by hand.

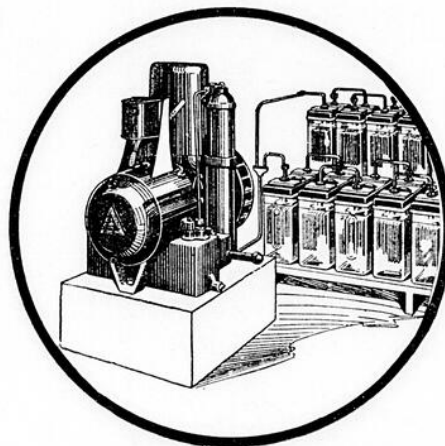
With Delco-Light you have safe electric lights in every room of your house, in the barn and about the premises. The electric power operates your milking machine, cream separator, churn, washing machine and pump. It makes it possible for you to have fresh running water, under pressure, for all uses.

There are 25 styles and sizes of Delco-Light. All models have the famous valve-in-head, four-cycle, air-cooled engine with only one place to oil. They run on kerosene.

Buy your Delco-Light now. It will pay for itself in a very short while by the work it actually saves. Get in touch with the Dealer near you. He will gladly tell you the size plant best suited to your needs. Or write to your nearest Distributor for descriptive literature.

Easy payments if desired.
Write for complete details.

The Charlebois Co. Ltd.
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25
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a size for
every need

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DELCO-LIGHT



Save the Separator Save Cream-

YOUR cream separator is not unlike your watch. Its delicate mechanism must work accurately. To give satisfactory service, proper lubrication is necessary. The continuous use of Imperial Cream Separator Oil saves your separator and saves cream.

IMPERIAL CREAM SEPARATOR OIL

A pure super-refined mineral oil, specially formulated for cream separator lubrication. Its use insures the perfect balance and the steady, even running essential to close skimming.

It does not gum or congeal. It protects against rust and corrosion and lubricates perfectly at good-skimming speed.

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POWER - HEAT - LIGHT - LUBRICATION
Branches in all Cities.

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Equal in brilliancy to electricity.
Light with matches.
Storm, Wind and Bug proof.
Cannot blow out.
Perfectly safe, simple to operate. Cannot explode or spill even when tipped over or rolled around. Always reliable.
Write for catalogue and prices to

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614 Drummond
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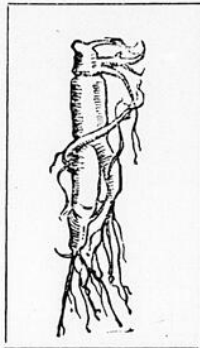
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Does not blister or remove the hair and horse can be worked. Pleasant to use. \$2.50 a bottle, delivered. Describe your case for special instructions and Book 5 R free.
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We want your Co-operation Mr. Farmer, to make Canada the biggest producer of Ginseng in the world. We want you to put in a crop of Ginseng this Fall. It is an easy crop to grow. It requires but little attention. It pays immense profits — as high as \$40,000 per acre. The seeds of the Conklin Ginseng Nursery Plantation are sure producers. We have yet to hear of a customer of ours who has had a crop failure from our seeds. We will pay the highest spot cash prices for your crop. The 500 Million Chinese who use Ginseng daily are the chief users of Ginseng — but the world generally is coming to its use for medicinal purposes. The supply is always short. We will send you detailed directions for planting and cultivation of Ginseng.



Ginseng Root—3 years old
Buy your Seeds from us—
we buy your Roots at highest market prices.

No other crop you can grow approaches Ginseng in profits. Every farmer in Canada should have his acre or two of Ginseng. Write us to-day. Let us send you our booklet "A" It tells what others have done and what you can surely do. If you had 10,000 pounds of first-class Ginseng root to sell to-day, we would pay you \$80,000 for it. We believe it will be higher next year, for the price is advancing every month. This is a wonderfully profitable chance. Write us to-day for full details.

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100 Seeds	\$ 3.50
500 "	12.00
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50,000 "	500.00
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EXACTLY

There is only one way to kill all the Flies

This is it—Darken the room as much as possible, close the windows, raise one of the blinds where the sun shines in, about eight inches, place as many Wilson's Fly Pads as possible on plates (properly wetted with water but not flooded) on the window ledge where the light is strong, leave the room closed for two or three hours, then sweep up the flies and burn them. See illustration below.

Put the plates away out of the reach of children until required in another room.

The right way to use Wilson's Fly Pads

Stoves - Stoves - Stoves

Cast Iron "RIVAL" weight 700 lbs.

Summer is the right season to renew the big kitchen stove. Dont delay to fall or winter, because at that time of the year, shipping is not sure and prices always higher.

Get direct from us, from our factory, prices will be lower. Write for our catalog and prices, you will be interested.

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As before, good agents wanted for stoves and boilers selling.

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The Dependable Kerosene Engine

The absolute reliability of the "Type K" Kerosene Engine on the farm has been demonstrated to an ever increasing host of customers.

Simple and powerful in operation, it will do more on a gallon of inexpensive coal oil, than other engines can do on a gallon of gasoline. The

Low Cost of Operation

of the "Type K" is just one of its big features. It possesses Magneto Ignition, not batteries necessary. Fuel Tank is located in the base and fully protected. Accurate throttle governor with speed changing device. All unnecessary weight is eliminated.

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Kaustine WATERLESS TOILET

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The JOURNAL of AGRICULTURE AND HORTICULTURE

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Limited
73 St. James St.,
Montréal.
Circulation - 83,110
FRENCH 73,831
ENGLISH 9,279

Volume 25

AUGUST 1st 1921

Number 2

EDITORIAL

STOCK FOR SHOWING

IN a month or so we shall be in the midst of the Fall Fair season and the man who is going to make a good showing with his stock at the fairs this fall should already be making preparations for bringing them out in good shape. Almost every fair teaches to the observant the lesson of the need of fitting show animals. We owe it to ourselves and to the visiting public at the fair to bring our stock out in the very best possible condition, for the fair is, of all places, one of the best for teaching the most up-to-date methods in the handling of live stock.

In this issue of the Journal we are carrying an article by Mr. L. H. Hamilton on the fitting of sheep for show; and while, as a rule, horses and cattle are brought out in better fit than are some of the farm animals of lesser importance, there is always a tremendous difference to be noted in this respect between different herds of the same breed shown at any exhibition. Too many of us have a contempt for fitting, considering that work done on animals is a partial attempt to catch the eye of the judge and to impress him favourably through purely artificial means, rather than through the qualities of the animals. The real value of fitting is, however, much greater than that of merely catching the eye through the "flash" or "bloom" a show animal may have. It gives to the young men attending the show a conception of the beauty there is in good live stock and makes an exhibit of horses or cattle really worth while from the spectators' standpoint.

For the benefit of new exhibitors, we should like to remind them that the time for preparing animals for the show ring is in the six weeks preceding the date of the exhibition. Several things must be accomplished during this time. The animals must be taught to lead perfectly; they must be accustomed to the feed that will be available when they arrive at the exhibition grounds; they must be put in good condition and hide and hair given that finish that goes by the term "bloom." Animals brought direct from good grass pasturage and fed dry feed at the exhibition cannot be expected to look at their best in the show ring. So a few weeks of feeding on some of the drier feeds in a cool, darkened stable will accustom them to this. And the continued vigorous use of the curry comb and brush during the period of preparation, accompanied by a couple of good washings with soft water and soap, will put them in much finer shape for showing than they would be if brought direct from the field.

These are just a few little things that are given here merely as reminders. The subject of fitting cattle for show is a large one in itself and with complete directions would take up much space. When, however, a stage has been made, it is not difficult to keep on the right track if common sense principles are used.

There is no advertising medium of such value as is the fall fair, if one brings out one's animals in good condition.

FAITH—AND WORKS

THE exceptionally dry weather of June and the first part of July and its effect upon growing crops, and particularly upon the hay crop, have added to the burden of worries which the farmer is carrying this season. Faced as he is with continued high prices in most of the commodities that he requires and with exceptionally low prices being offered for the products of his labor, he is the further worried by lessened production through the adverse weather conditions and by a possible shortage of feed. The seriousness of the situation was well portrayed by the Hon. J. E. Caron, Minister of Agriculture, a couple of weeks ago, when he stated that the Quebec hay crop is only 50% of that of last year, while prospects are for a small grain crop as well and very little straw.

"But what is most alarming," stated Mr. Caron, "is that the farmers are becoming discouraged. Foreseeing the scarcity of hay and straw, many of them are selling their cows at ridiculously low prices. It is a disaster which will greatly affect our dairying industry; butter and cheese will be dearer; in brief, everything will feel the effects of this depression. There are farmers who are at present offering to sell milk cows for \$10, because they cannot feed them.

This is the situation. What we now require is a remedy. The rains which have been so general through the rural districts during the past couple of weeks have greatly revived the pastures and with suitable weather

conditions prevailing for the rest of the season the situation would be greatly relieved. What is required more than anything else at the present time is faith—faith in the future which must steadily bring about a greater uniformity in the prices of farm products and of manufactured commodities, and faith more particularly in the inherent strength of the live stock industry of our province.

But faith without works is dead. While conditions may ultimately right themselves, we cannot afford to sit back and wait for something to turn up. We must help better the situation. The Hon. Mr. Caron has taken the first step in helping to relieve the feed situation by commencing negotiations for reduced freight rates upon grains and feeders, so that feed may be brought to the less fortunate sections from those sections of the country that are well supplied. This is a commendable step. But there are many things which can be done by the

individual farmer to help better the live stock situation upon his own farm. If feed be scarce, this is the time for getting rid of cull stock. It is very difficult for a poor producer to show a profit in times of scarce feed and low prices for farm products. And the man who would reduce his losses to the minimum in this time of stress should see that his herd harbors no star boarders that not only give nothing in the line of profitable returns, but merely consume the feed that the profitable animals may need so badly.

Live stock is and will continue to be the basis of profitable farming in Quebec and it is the man who, in time of stress, plans for the more prosperous seasons that will ultimately win out. What is needed at the present moment is faith in our proposition, coupled with works in securing the greatest efficiency and the greatest profit, even under the adverse circumstances that are met with from time to time.

The Problems of Economics

II.

By Dr. H. D. Brunt, Macdonald College

MEN, then, have different ways of making a living. Some of these ways are economic, that is, increase the total amount of wealth. Some are uneconomic; they decrease or fail to increase wealth. By wealth we mean not money but commodities and services, although this wealth is measured or valued in money. The bare fact that prices vary shows that money is not wealth: a pound of sugar at 22 cents is neither more nor less than at 9 cents; the pound of sugar is the real wealth.

Moreover, no man is sufficient unto himself. He produces but few of the things he needs, while he produces much more of a few things than he can possibly use. Hence we must exchange the product of our work. This means markets, money, credit, banks, foreign exchange, transportation.

In order to produce this wealth, at least two factors are needed: land, which contains the raw materials; labor, which produces and operates upon this raw material. We purpose in this article to discuss the land.

From the standpoint of Economics, land must be looked upon in two aspects: as a source of raw material, the products of forest and farm, quarry and mines; secondly, as land, as extent of space. To the city man, land means something to build upon, and its value depends upon situation. A lot of land on Broadway or the Strand is worth many times the value of a similar lot in an obscure part of the city.

Perhaps, then, this is as good a place as any to discuss the so-called *unearned increment*. A man owns a neglected lot on an obscure street. Business moves in that direction, warehouses are built, there is keen competition for land space. By simply "sitting tight," our man finds his piece of land increased many times in value. He himself had done nothing to improve it, to increase its value; that was done by the general movement of prosperity, by social and economic growth of the community. The increase or increment in value was unearned. When land is purposely so held for increase in land values, it is called speculation in land values. Such speculation, of course, may and does take place in land as source of raw materials, farm land, oil land, etc. Every farmer knows the terrible evils resulting from the earlier speculation in farm lands of the West. The present Duke of Westminster draws an enormous yearly revenue from "Ground Rents," because his family held the swampy ground upon which a large part of London is built.

Many cities have attempted to reduce this Unearned Increment to a minimum by progressive taxation. As long as a piece of land is unimproved, not used either for productive or building purposes, the taxes are progressively increased periodically, until the owner finds the tax eating up his expected profit. There is but one course for him: either to sell or use.

The Single Tax defenders use this argument: The community is a unit, an organism. No man's ability is enough; a grocer must have customers; an actor must have an audience. Progress, then, is social; even the inventor is helpless without those who use his invention. Society as a unit has a claim upon the individual, the unearned increment is created by the community and belongs to the community. Let all land be classified according to its position, its uses. Let a unit of land, a square foot if you like, be valued according to its position or use or both. The land shall be taxed according to this valuation. As land is ultimately the source of all wealth, there need be no other form of taxation.

Think this over carefully. Let us return to land as the source of raw material. This involves two important questions:

A. International rivalry to control the sources of raw material, the real and fundamental source and cause of war. What is the danger spot in Central Europe to-day? Is it not Silesia? Why? Because of its rich, enormously rich mineral deposits. It is not so much the amount of reparation that troubles Germany—but, shall she retain Silesia, the source of her industrial life. Hence, too, Poland's desire for the same land. The oil of Mesopotamia, the rubber of Africa, the fertilizers of Alsace, the minerals of Silesia: watch your newspapers, and see how the diplomats rave and the people imagine a vain thing. What is the vain thing? That it makes the slightest difference, to you and me and the millions of other common people, who controls them.

The world needs oil and coal and fertilizer. Carefully distributed, equitably exchanged, we common folk

WE GRAVE INDULGENCE

The printers' strike, which is at present affecting all job-printing establishments in Montreal, is solely responsible for the dwarfed issue of the JOURNAL in your hand. We are sorry to have to cut down on the size of the paper, but "needs must when what's-his-name drives." We have plenty of good material—much of which should be published this month—but we have no one to set it up in type. So handicapped as we are we send out this diminutive number with the hope that a settlement with the striking printers may be reached before the next issue of the JOURNAL goes to press. And because the causes leading to the cutting down of the number of pages this month, and to the delay in getting even this much to our readers, are so obviously beyond our control, we feel assured of the kindly sympathy and indulgence of our readers.

should get our share, a reasonable share in return for a reasonable share in the world's work. Yes, but if another country gets raw material, she will build up a great manufacturing business. Granted. Did you ever swap things when a boy? Did you not swap? Listen—it is economically impossible to build up a great industry except by helping to build up the industries of those with whom you trade. Ultimately, goods and services must be exchanged for goods and services. If there be corn in Egypt, the Egyptians need not be spoiled. We have cotton shirts for them. In a similar way, the Americans are anxious as to the disposition of Mesopotamian and Persian oil fields; and much recrimination has it caused, sometimes seeming to imperil the friendly relations of the two nations.

The cause is two-fold: though it makes no difference to you and me, nor ultimately to our or any country's best interests, it does make a difference to rival groups of financiers and promoters in the different countries. We get our oil, refined. That satisfies us. We give in exchange our money, which represents our work. Our work meant some form of industry which corresponds roughly to the amount of industry of someone else in obtaining and refining the oil. We cannot create and exchange without helping some one else to create and exchange. But it makes much difference to Lord Cowdray and John D. Rockefeller who controls the oil fields of Mexico. This is not intended as a tirade against such groups of financiers. It is merely an analysis intended to show the real source of international rivalries.

There is a second reason, however. All these raw materials are most necessary in war. Hence the interest and anxiety of the various governments in Spheres of Influence, especially among Backward Peoples, where the earth yields her treasures. One needs but to mention this to show the necessity of world peace, however obtained: whether through the League of Nations or Disarmament Conferences.

There are, it seems to me, two fundamental principles: 1. A Mandate or Sphere of Influence must be administered primarily in the interests of the natives of that country. 2. Its natural resources should be developed so that the raw materials so gained should be distributed:

- (a) To provide the means for Government;
- (b) To provide in exchange a fair standard of life for the natives;
- (c) As far as possible, to give the various parts of the world their fair share of such products, whether rubber, oil, minerals or food stuffs.

B. We have left no space to discuss in this article the second main point: Who shall control the sources of raw material in any country? That brings up to the question of nationalization of the land.

Timely Hints on Gardening

OUTDOOR work during this month is very heavy as so many plants require attention. Strict attention should be paid to staking and tying herbaceous and any other tall-growing plants. Lawns will also need constant attention, for the grass will grow apace. Flower beds should have all the dead flowers and foliage removed. There is more pleasure to be derived from a small place well kept than from a large one in a neglected state. Hoe and rake borders and walks to keep weeds in abeyance.

POTTING SOIL

Loam, by which term is generally understood the top layer of soil taken from an old pasture, turf included, should be the prime ingredient in all prepared compost for potting. The turfs should be taken up about 12 in. by 18 in. by 2 in., deep and stacked in a heap, grassy side downwards, until the roots are dead and partially decayed,—a slow process which will be accelerated if layers of good, rotten manure are alternated with every third layer of sods. The heap should be exposed to the weather.

All the refuse of the garden—and a great deal of that of the house also—can be turned into a fertilizer of high value. There are two ways of dealing with it: one by burning and the other by building up a heap of all the refuse and leaving it until it has rotted into a nice compost. Then it can be spread over the surface of the soil before digging or ploughing.

FREESIAS

Freesias bulbs should be potted as soon as they can be procured from the dealers, or any bulbs left over from last season should be taken out of their pots and repotted into fresh soil, seven or eight bulbs in a five inch pot being sufficient. Place the pots in a sheltered position, for, better still, in a frame, giving enough water to keep the soil moist.

CALLA LILIES

Calla Lilies which have been resting during the summer months should be taken out of their pots towards the end of this month. The bulbs should be thoroughly examined and if any signs of mealy bugs are present, place them under a tap and wash, making sure that the bulbs are clean before repotting: then place in pots in proportion to the size of the bulbs, four or five inch pots usually are large enough. With a good supply of water at first they will not need much moisture until the roots have formed. At least one-fourth of good, rotten manure should be mixed with the soil. Directly the pots are full of roots and the growth is well advanced, they should be repotted into their flowering pots, which are usually seven or eight inch.

Notice—to Quebec Sheep Breeders

THE federal Department of Agriculture, in conjunction with the provincial Department of Agriculture offers to make a classification of pure bred lambs in the province of Quebec for sheep breeders. The principal aims of this classification, which has already been tried and has given good results in other provinces, are the following:

(a) To improve the sheep industry in the province, by making better known the breeders of good pure-bred subjects, according to their merits, and by assisting them to sell their lambs.

(b) To facilitate the acquisition of good subjects of pure breed by breeders of cross sheep. Very often the breeder of cross sheep does not know all the qualities of a good pure-bred sheep, nor yet the particular characteristics of the breed that he desires to introduce into his stock.

(c) To assist raisers of pure bred sheep to select their lambs.

(d) To facilitate the purchase of sheep by correspondence and thus to avoid useless costs.

Breeders of pure blood sheep who have pure bred lambs, and who desire to have them classified, must inform the Secretary of the Council of Agriculture of the fact before the 15th of August by transmitting to him the annexed form carefully filled in.

When we are placed in possession of the required information, the experts chosen and named by the federal department of Agriculture and accepted by the provincial Department will visit the subjects mentioned in the application, and will classify them as follows:

Every lamb representative of the type of his breed, and of good size will be tattooed with three stars on the left ear and will be recommended for heading a pure bred flock.

A lamb of good quality, but less representative of the type of his breed will be tattooed with two stars and recommended for placing at the head of a flock of cross or common sheep.

Lambs of inferior quality will be tattooed with one star and will be recommended for breeding purposes.

The Quebec department of Agriculture will grant to every breeder a premium of three dollars and of two dollars for each of his sheep marked with three and with two stars respectively.

A list of the breeders who have their lambs so classified will be distributed by the Department of Agriculture at Quebec to all the agronomists and to all others who apply for it. A list will also be affixed to the two cattle markets in Montreal.

On this list will be shown the name and address of the breeders and the number of their lambs tattooed with three and with two stars.

J.-Antonio Grenier,
Deputy-Minister of Agriculture



APPLICATION FOR CLASSIFICATION OF REGISTERED, PURE BRED RAMS

\$.....\$

I,....., living in the parish of.....county of..... hereby make application for the classification of my rams of.....breed, numbering.....

In making the present application, I hereby undertake to conform to the regulation established by the federal Department of Agriculture, with the cooperation of the provincial Department of Agriculture, for the classification of rams.

I live in the.....range of.....my postal address is.....The railway station nearest to my residence is.....and the distance between the two localities is.....miles.

(Signature of the applicant)

Date:.....192 .

N. B.—Do not fail to fill in all the blank of this form in order to avoid any delay or misunderstanding.

PELARGONIUMS

Pelargoniums, or what are commonly called Royal George, that have been resting for the past few months should be given attention during this month. The old plants may be cut back to within two or three eyes on each stem, the old soil shaken from the roots and repotted into small pots. Place them in a frame or a good sunny window, and water sparingly. Directly the plants have made a little growth and the pots are filled with roots, repot into a larger size and so on until the flowering pot is reached. It is necessary to give the plants all the light possible. Increase the supply of water as the plants begin to grow.

The wood that is cut back off the old plants can be used for making cuttings. Select good, strong shoots and cut into three inch lengths. Place into three inch pots, using a sandy soil. Keep the soil moist but not too wet. The cuttings should be placed in a shady window. After the roots have formed, give the same treatment as the old plants, i. e. lots of light, good ventilation and plenty of water, and repot as required until their flowering pots are reached, using a good, rich soil. Six or seven inch pots are sufficiently large to carry them through the winter.

E. H. J.

Preparing for the Next Lamb Crop

SUCCESSFUL sheep husbandry requires careful preparation for the next lamb crop. It matters little what time of the year it is, whether the ewes are just bred, the lambs just weaned or the lamb crop just due, preparation for the next crop should be kept in mind. No time is more important than during the previous lambing season. At that time notes and records should be kept of all important items regarding the behaviour of the ewes, the number of lambs each raises and whether they are good mothers or not, whether their udders are healthy and well balanced, or any other valuable notes of this kind. Any ewe that does not successfully raise her offspring should be culled rather than re-bred.

Great care should be exercised in the selection of the ram to be used. He should be a typical, uniform, good-sized, pure-bred animal, full of vigour, active, and in good bloom. It is wonderful the influence a ram may have upon the offspring of a flock of ordinary ewes.

The selection of the ewes is also a very important feature in connection with the lamb crop. This selection may be done when the previous lambs are weaned and again at breeding time. The shepherd has in mind at this time uniformity in type. The more uniform in appearance the ewes are, the more uniformity will be shown in the offspring and hence the better the prices to be obtained when marketing time arrives. Nothing attracts the buyers like uniformity not only in good conditions, but in size, age, appearance and type. The ewes' teeth should be examined and if any defects are found the ewes should be culled. As a rule ewes are not profitable for breeding after they pass five years of age. Not only should severe culling be done to the mature ewes but careful selection should be practised in choosing future breeding ewes from the lamb crop, always being careful to retain those as near the ideal type as possible. Too much emphasis cannot be laid upon the culling process.

After the culling and selection work has been completed the ewes are prepared for breeding. They must be well fed and put in good condition but not overfat. As the breeding time approaches they should be flushed on some good, green, succulent pasture. As many as possible should be bred at the same time so that the lambs arrive in a group and the lambing period will not then be spread over a long period, which is objectionable.

As the lambing period draws near the shepherd appreciates the fact that his busy time is approaching. He looks to the increased comfort of his flock. If the lambs are to be born in the barns the buildings are thoroughly cleaned and disinfected; hurdles, lamb-creeps, feeding racks, disinfectants, record books, docking and castrating tools are all put in readiness for the coming harvest, which will represent his profits on the business.

W. H. HICKS,

Superintendent, Experimental Farm,

Agassiz, B. C.

Trimming up the Show Flock

How Sheep should be Prepared before they are put up for Exhibition

THE trimming, fitting and showing of sheep may seem, to the casual observer or onlooker, a matter of trifling import; even the average stockman who has maintained a small flock of sheep all his life has little conception of the pains which have been exercised and time which has been expended in preparing a small flock of ewes and lambs for the show ring. The excellence which has been attained in the art of trimming and fitting at our big shows is certainly most commendable and worthy of the highest praise, but the apparent neglect, lack of interest and indifference which prevails at some of our smaller shows and amongst the smaller breeders is greatly to be regretted and deplored, for not only does it injure the reputation of the exhibitors and the particular breed in which they should delight, but it also is an injustice to the industry itself, causing many would be breeders to stay out of the business instead of entering whole-heartedly into the game.

Only a small number of men naturally possess the necessary liking for sheep, the personal qualifications and the unbounded persistence and self-sacrifice necessary to make a success of their work. For some working on their knees moulding out a perfect form becomes an arduous duty instead of a happy pastime, and the feeding and watching of the flock a monotonous routine. These men never really make a success of the show business. They lack the enthusiasm and pep which really is the fount of education and the sole source of pleasure of the real show man. Their aim seems not in the direction of pleasure and wealth combined, but rather in that of material benefit alone. It is the man with the alert eye and keen brain who sees and compares the efforts of others with those of his own, who really enjoys the artificialities of the show ring and the few words of praise which slip from the casual observer. These men are the benefactors of a show. They are in the game for all that is in it and should be encouraged. However, such wanted characteristics as have been just mentioned can be cultivated and developed if one will but apply one's self and use his energy and brain in harmonious co-operation, for often it is the amateur enthusiast, who is observant and energetic, who carries off the honors.

Much time and money has been spent by our various Departments of Agriculture in promoting the sheep interests in the Province of Quebec and with apparent good results, but not until we have enlisted the enthusiastic support of every purebred sheep breeder in an advertising campaign, a campaign which not only boosts himself but the industry in general and breed in particular, can we expect to receive the full benefit of such efforts. Such campaigns find their birth in the show ring; thus every man should have sufficient interest to bring his worthy prospects to the show and in good show shape.

THE PROPER TIME TO COMMENCE

To commence properly for showing, one should make the selection of his stock the previous fall, and in spite of all alluring prices keep the foundation stock with which he hopes to carry off the ribbons. During the fall and winter very little extra care is required so long as the sheep are kept in a good, healthy and vigorous condition. During the first two weeks in March the sheep should be properly shorn. The exact time cannot be made too definite because of climatic conditions at the time and the situation or locality of the interested party. However, any time during the last two weeks of February and during the month of March should prove satisfactory. A practice which is still followed to some extent is that of stubble shearing or the clipping of the wool down to about one inch in length, the object being to have the sheep carry a heavy fleece at the time of showing. While this has been quite successful in some instances in the past it has neither proven profitable from a health or economic standpoint on the average. Only last week did the writer visit quite an extensive sheep farm, and on being shown through the stables became amazed at seeing quite a large number of ewes and rams running in a pen still unshorn. Needless to say, with the temperature running around 90° in the shade, those sheep were suffering quite intensely. This is one of the bad effects of such a practice; another is that wool left on the sheep's back for such a length of time loses its proper lustre and vitality and becomes more or less dead. Such a practice is not generally followed by the most efficient shepherds and should be more distinctly discriminated against by judges.

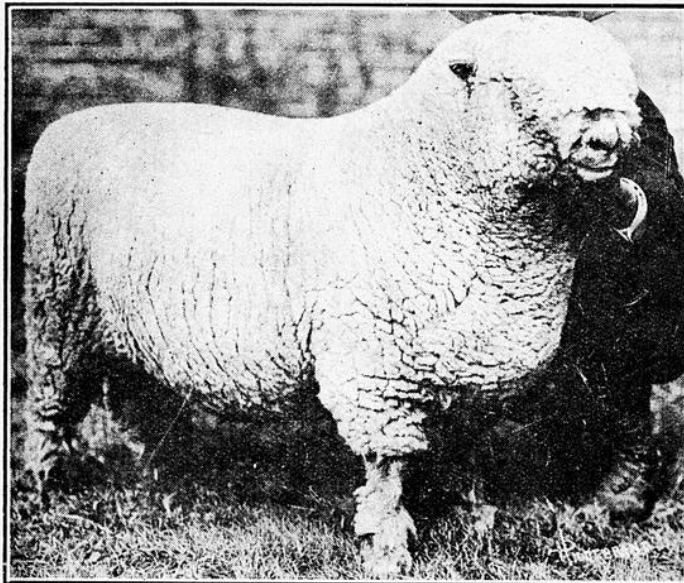
In close shearing during the early spring season care is required that the stock does not become chilled and stiffened. After shearing they should be placed in warmer quarters and blanketed. This, along with a good heating meal ration such as a little peas or a mixture of oats, bran and oilcake, should help keep the circulation up to normal and the body sufficiently warm. It will also be noticed by the good stock man that the appetite is more sharp and more food is required at this time, and while this condition exists proper exercise should be provided. This is very important in keeping the digestive organs in good shape and in keeping the muscles pliable and free.

During the spring the flock should be carried along in good condition and changes from dry feed to pasture made very gradually. Winter rye is perhaps one of the best and earliest pastures and the flock may be turned out for a short time each day until they have become accustomed to feeding upon it. Early rape is also very good and sheep will do well on being turned from the rye to rape.

PUT FINISH ON DURING THE SUMMER

To have sheep finished at the proper time requires a great amount of skill and ability. Very often people start too early to feed and their sheep become too fat, the flesh becomes flabby and the animal goes off in conformation by weakening in the pasterns and sagging in the back; often also what is known as slipping occurs. These conditions should be carefully guarded against and one should always bear in mind that the animal carrying the most flesh does not always carry off premier honors. The ideal condition is to have the finish on just before the big show. That is, to have the flesh firm and fresh to the touch and the animal as correct as possible in conformation. To do this feeding must be done carefully, the ration increased gradually as the hot weather spoils the appetite. In feeding one should give just enough; the troughs should be kept clean and sweet. Fresh clean water should be available at all times, also a plentiful supply of salt kept within easy reach. During the hot days some shelter should be provided. A cool well ventilated barn or shed which is darkened to keep away flies is almost ideal. In the evening the flock should be turned to pasture again.

During the latter part of July and August, when old pastures become dried up to some extent, a fresh lot of rape, clover or alfalfa should be provided. This keeps



the flock doing well when ordinarily they would go back. A little grain should also be fed throughout the summer season and increased gradually as the time for showing approaches. The amount of increase and amount to feed at any time depends upon several factors such as the breed, age of sheep being fed, time to finish off, etc., so that nothing definite can be stated here. Such a factor depends entirely upon a man's judgment. One other factor, however, might be mentioned, and that is variety in feeding. No animal responds more quickly or shows better results from a variety of feeds than sheep, and the good feeder will always try to tempt the appetite of his flock by adding something new to the ration as often as possible. The main thing to remember in feeding is that good digestion ever waits on appetite, and unless we can keep the appetite sharp and keen our gain may become our loss.

In the feeding of the lambs there are several essentials for success, viz., milk, sunshine, exercise and variety of succulent feeds. This supplemented with a meal ration as the lamb matures is bound to give good results upon the right type of lamb. Many feeders use peas to a large extent in fattening lambs, and while good results have been attained in some instances it is generally conceded that too many peas for lambs are detrimental.

Having the proper condition, the next factor is the trimming of the fleece. In producing a good fleece in a fine well trimmed condition it is necessary that it be kept as free from dirt as possible and at no time after trimming has commenced should the sheep be left out in any heavy rains, as this makes the fleece much more difficult to trim by not only matting it together, but also by giving it a more or less dry harsh effect. Two or three trimmings should be sufficient to block out the animal properly and leave the fleece in fair order, the first being done about a month before the show. To trim one requires a pail of soft water to dampen and work up the wool, a cattle curry to bring out the ends of the wool and break up the clots, and a wool card to

put the finishing smoothness upon the fleece. This is a feature which one cannot afford to overlook and which tests a man's skill and judgment to the utmost, for it is by proper trimming that we try not only to cover up the weaknesses of our stock but also to show to the very best advantage the strong points of our individuals. During the actual work great patience must be exercised with animals which become restless, uneasy and excited.

In trimming it is probably best to commence at the shoulder and work back, always keeping a straight top line. Then trim the rear end making it correspond to the back; then the left side and right side, and finally the head and neck are done. The main idea to keep in mind in trimming is to give the animal as compact and blocky an appearance as possible and to make the fleece appear as dense as possible to the eye and to the touch.

In the long woolled breeds separate the wool into strips and cut off the rough edges. Put blankets on after trimming and also keep blanketed in transit. In blanketing be sure to make the blanket to fit the sheep and not vice versa.

One other feature which should not be overlooked is the trimming of the feet. This should be attended to early and attention paid all along so that a sheep stands properly on its pasterns and square on its legs.

Finally, in showing remember that you are still in the game until the ribbons are actually placed and very often the proper attention in the show ring wins one not only much favor in the ring but may also be the cause of a much higher place in the honors.

Heavy Hogs Not Wanted

The Hog Situation Discussed in a Letter from a Buyer.

Hon. J. E. Caron,
Minister of Agriculture,
Quebec, P. Q.

DEAR Mr. Caron, Once Again the farmers in Quebec are paying a heavy penalty for marketing their hogs at too heavy a weight. Last week and again this week, there were very many hogs on this market weighing from 250 up to 350 and even 400 lbs. With the unsatisfactory market conditions in England as at present it is absolutely impossible to market these hogs except at a very heavy discount in price.

We are open to buy this morning selected hogs weighing from 175 to 250 at 13½¢ weighed off at this market, which would net the farmer about 12¢. We are not able to buy hogs weighing from 250 lbs up at over 8¢ a pound, which would mean the farmer would receive 6½¢. Circumstances today are extreme although they are typical of the English market. Today bacon out of selected hogs of selected weights is bringing 155 shillings on the English market. Heavy bacon out of heavy hogs is bringing 90 shillings and it is on this differential we have to base our prices. The farmer, therefore, today who markets a hog weighing 300 lbs will receive about \$19.50. Had he marketed this hog a few weeks ago when it weighed 200 lbs he would have received \$24.00. The reason of his taking a lower price is not on account of a slump in the market but from the fact that he has produced a product for sale for which there is little or no market. This is most unfortunate, especially at a time like this when farm products are so much lower in price.

I feel absolutely certain that there is no hope that the raiser of hogs in this province will meet with success unless he produces a hog of the weight and type suitable so that the packer can export it to England. As matters now stand, the farmer is taking \$5.00 per head less for his hog than he would have obtained two months ago and is out of pocket all the feed that he has fed to it. If this were the first time this had happened, I would not be so surprised, but it has occurred time after time and year after year.

It occurred to me that perhaps a statement to the press issued by you at this time might have some good effect. It will not, of course, provide the remedy as the hogs are too heavy now and will have to be sold for the best price they can bring, but it may be possible for you to drive home a lesson to the farmers which they might take more to heart at this time when they are experiencing this cruel loss.

I firmly believe that the growing of hogs could be made a great revenue producer to the farmers of this province if they would grow them the type and quality which would enable the packer to export

them, but, if they insist on raising them and marketing them at the heavy weights they do, they are only going to meet with grief and disaster. As I stated early in this letter, we are open to buy thousands of suitable hogs for our export trade on a basis of 12c to farmers but we cannot buy these heavy hogs on a higher basis than 6½c, and even

at this low price our trade in England would only take a very few.

Yours truly,
(signed) R. N. WATT, *Vice-President.*
The William Davies Company Limited.
Montreal, July 27, 1921.

The Shrinkage of Stored Hay

An Explanation of the Variation Found in Weights of Hay

By Dr. G. P. McRostie, *Macdonald College, Que.*

THE question of the shrinkage of stored hay is one that has caused considerable speculation and no small amount of dissatisfaction all along the line from the producer to the ultimate consumer.

The farmer who weighs his hay before stacking or putting it into the mow wants to know how many tons of hay he is going to have to sell after meeting his feeding requirements, or on the other hand how much hay he must buy now to make up any estimated shortage for winter feeding. The dealers want to know how much loss in weight they must allow for from the time they buy the baled hay until it has passed out of their hands, while the consumer wants to know the reason why he is asked to pay for an eighty-six pound bale of hay that weighs only eighty-one pounds when he buys it. A better understanding of the exact points involved would help to smooth out some of the troubles and misunderstandings all along the line.

It is necessary that we keep in mind that shrinkage, and by that term we mean loss in weight, in hay consists almost entirely in a reduction in the amount of water normally present in the green plant when cut.

The greatest shrinkage of course takes place between the time the forage is cut and the time it is considered ready to put into storage. The average water content of most of our grasses is reported to be from 60 to 70%, while that of our clovers and alfalfas ranges somewhat higher. The amount of water remaining in the hay when it is deemed safe for storage ranges from as high as 25% in the semi-arid regions of the middle west to an average of 12 to 15% in eastern sections. The extreme dryness of the atmosphere of the semi-arid portions of the country makes it possible to store hay containing the larger amount of moisture, where the same amount of initial moisture under the more humid eastern conditions would result in moldy hay.

There is a wide variation in the amount of water contained in grasses and clovers at the time of cutting, during the process of curing and when considered ready for storage. The maturity of the crop is one of the chief causes of variation in this respect. Green hay contains considerably more water than the same hay when nearer maturity. Hay cut at the beginning of the haying season will therefore have a much larger water content than hay cut at the end of the season. Experiments indicate as much as 32% of variation in water content between the first and last cuttings of timothy, the harvest period of which extended over a period of three weeks. This means that hay cut at the first of the haying season will very likely be put into the barn or stack with a considerably higher water content than the hay that is cut at the end of the same season. There will consequently be a much greater shrinkage during storage in the first cuttings than in the later ones.

The humidity of the atmosphere and general weather conditions also play an important part in determining the amount of moisture that will be present in hay when it is stored. The same conditions will also have a definite bearing on the amount and rapidity of shrinkage after the hay is stored. Damp weather, or dry weather with high humidity, such as is frequently experienced in the vicinity of large bodies of water, during the time the hay is being harvested, and followed by dry days with low humidity, will mean a very marked and quite rapid shrinkage of hay after storage. On the other hand, dry harvest days with little moisture in the atmosphere will be accompanied by a much smaller percent of shrinkage of the stored hay. This will be more marked if the weather following storage happens to be damp.

WHAT CONSTITUTES "CURED" HAY.

The initial shrinkage in hay practically ceases when the water content reaches a certain point which varies with climate. For Quebec conditions the average percentage of water in cured hay should range from 11 to 13%. By cured hay is meant hay that has passed through the sweating stage in either stack, mow or bale, which stage is usually completed in from four to six weeks after storage. Until hay has passed through this sweating stage it should not be regarded as a marketable product.

After the sweating period has been passed through and the moisture content has reached the averages stated previously, the loss by shrinkage is very little. It is true that a fluctuation will occur in the moisture content with the changing weather conditions but the gains and losses will offset each other. For the farmer who feeds most of his hay on his own farm the question of shrinkage should be the least of his troubles. In well cured hay practically no food material is lost during this process. All that takes place is a loss of water the equivalent of which can readily be obtained at the minimum of expense by a judicious use of the pump handle. On the other hand, the farmer who wants to estimate how much hay he is likely to have for sale or how much he must buy to take care of an expected shortage, a safe allowance for average shrinkage during storage would be from 15 to 20%. Twenty percent is the allowance made by the western hay growers, but on account of our higher humidity in the province of Quebec our percent of shrinkage would likely be somewhat less.

The bulk of the hay in the province that is placed on the market is put there in the form of bales usually varying from about 65 to 100 lbs. in weight. It is the shrinkage in the hay thus baled that is the greatest bone of contention.

SHRINKAGE IN BALED HAY.

That there is a considerable variation from the original weight of some bales is common knowledge. Just why some bales vary so much more than others in this respect it is our purpose to try to make clear. If all baled hay were put up from material that had passed through the period of heat, in other words from cured hay, there would be much less cause for fault finding on the score of short weight of the baled hay. This is not the case, however, as considerable hay is baled from the cock or windrow without being previously cured. It is needless to say that hay thus baled will lose very appreciably through shrinkage. Where dealers make a practice of handling such hay it is highly desirable that they get rid of the hay as quickly as possible and that it is not held by any one person longer than absolutely necessary in order that the loss through shrinkage be distributed all along the line and not all borne by one person.

Where hay is baled from the mow or stack even after curing has taken place, there will be an appreciable variation in the moisture content of bales put up from the outside and those put up from the inside of the mow or stack. This is due to the fact that the outside of the mow or stack dries out more quickly than the inside and is also effected by varying weather conditions. The interior of a stack or mow is very little affected by climatic changes and once the moisture content has reached around the minimum shows very little variation in that respect.

Baled hay, being in comparatively small bundles, is affected appreciably by changing climatic conditions. The amount of variation in weight will depend considerably on how the bales are piled and where they are stored. If they are piled so that there is considerable free air space between the bales they will vary much more than if they are

tightly packed. Similarly, bales stored in an open shed will vary more than those stored in a closed room.

The chief cause of loss and dissatisfaction is due to the baling and marketing of hay before it is properly cured. If hay is marketed in the proper condition shrinkage does not affect the profits of the producer, dealer, commission man or consumer to any very serious extent. There may be a small loss in weight caused by continued dry weather which lowers the normal water content of marketable hay, but this is just as liable to be offset by an increase in weight during a prolonged period of damp weather, under which conditions the water content of the hay is increased slightly over the normal. There is actually no increase or decrease in any food constituent only a loss or gain of water.

For the dealer or commission man who handles large quantities of produce this variation in weight with changing climatic conditions would be well worth taking into account. For the producer who sells by weight, it might seem good policy to sell after a damp period rather than after a protracted dry period, and for the consumer who also buys by weight it might be worth while to buy after a dry period. However, where hay is baled in proper condition and the weight recorded on the bale there should be little cause for complaint if the weight of the bale does fluctuate within a few pounds of the stamped weight. Keep in mind that the shrinkage or gain is only water, not food material, and the world will look a little brighter.

If regulations were enforced whereby only hay that has passed through the sweating stage and had been properly and thoroughly cured were allowed to be put on the market, much loss, dissatisfaction and petty annoyance would be removed from the hay trade.

Marketing the Surplus Stock

DISTRIBUTE the sale of market birds over as many of the twelve months as possible. Sell when the price is good and the birds ready. As far as possible, get out of the habit of marketing everything in the fall of the year. Watch the markets and have your birds ready when you can get the prices.

HENS. The best prices are received for hens in the spring of the year. A good plan is to cull out all the hens you do not intend to keep over for breeding purposes another year and sell as soon as the egg yield drops. This will occur after the breeding season is over and usually along about the 1st of July for the poorer ones, the better layers a little bit later.

Whether these birds should be killed before selling will depend upon the demand. In some large cities, a better price is paid for the live bird than for the dressed. The killing therefore, will depend upon the prices paid.

WHICH HENS TO MARKET. When trap-nesting is followed the matter is simple, for the non-producers can be picked out at any time. Where trap-nests are not used the selection is made much more convenient if leg bands are used to distinguish the hens from the pullets, and the early-laying pullets from the later ones. With these marks the hens and the low-producing pullets can be disposed of. *The aim should be to keep over the summer months only the birds that are paying well for their keep, and that are to be kept for breeding purposes the next spring.*

In the case of Leghorns or other light breeds, it may pay to keep all pullets over the summer, but this must be determined by the number of eggs they are laying, as soon after their egg production comes below their cost of keep even Leghorns should be disposed of.

BROILERS. Broilers are chickens weighing not over four to five pounds to the pair. In recent years the demand and the prices have risen for broilers and now for those who are close to a good broiler market it pays to sell their cockerels as broilers rather than hold them until fall and sell them as roasters. It is a good plan, therefore, to get rid of as many cockerels as you intend to sell, during the broiler stage, if the price available at that time makes it worth while, and usually it does. The selling of broilers at this time of the year cuts down on the feed bill and leaves more room for the pullets to mature.

DUCKS. The only time to sell market ducks is when they are about ten weeks of age and can be marketed under the trade name of "green ducks". Usually where there is a demand for this class of ducks they will bring a bigger price per bird at this stage than at any later stage, and the cost of production is materially less.

ROASTERS. In spite of the number that can sell broilers, the bulk of the cockerels will be sold as roasters weighing from 4½ to 6 pounds in the fall. In disposing of roasters it pays to crate feed. The last pound of flesh is the cheapest part of the whole carcass and enhances the value of the entire bird. Do not dispose of any class of poultry stock without special feeding, and for the larger cockerels, especially, the crate feeding system is best.

TURKEYS AND GEESE. Geese are becoming more popular each year and deserve more attention on the average farm than they have received. The

grass feeding habit of the goose is an added reason for goose flesh being one of the cheapest poultry meats produced.

Turkeys continue to be our highest priced poultry flesh and no doubt will maintain this position for some time, for the ravages of black-head each year seem to make it harder to produce turkeys. In marketing turkeys almost more than any other class of poultry meat, it is essential that they be well-fed. Turkeys cannot be too fat and in disposing of them keep in mind that turkeys are used for festival occasions. Have them ready, therefore, in plenty of time for Thanksgiving and Christmas, and do not leave the marketing of them too near the time at which they are required for eating.

F. C. ELFORD,
Dominion Poultry Husbandman.

Report of Quebec Women's Institutes

DURING the past month Women's Institutes of this Province have held their eighth annual convention, at Macdonald College. At that Convention delegates were present from nearly all of the fifty-five Institutes. Reports were most encouraging, and tell of splendid work being done along many lines.

Howich Institute during June had addresses on "Temperance," "Our Canadian Youths," and "Rights of Childhood." They also had a descriptive talk on "Bermuda" by a resident of that Island. This institute is working for consolidation of schools, as well as taking charge of the local school fair.

Wyman Institute reports a demonstration by Miss Buzzell in April on "Supper Dishes."

At the Shawville Institute Mr. R. W. Hodgins gave an address on "Community Work." One new member joined.

At Eardley the report of the Convention was read and three new members joined.

The Dundee Institute had a paper on "Stains" and how to remove them, and one on "Sunday Dinners." "Our Dominion Governments" was the subject of an address given at the Elmside Institute.

Wakefield Institute has discontinued meetings until September. The June meeting took the form of a picnic at which the Convention report was read.

St. Francis Institute reports four new members enrolled at their June meeting. They have paid five dollars to the Traveller's Aid, and fifty dollars to the Wales Old Folks' Home.

Cookshire Institute is co-operating with the Agricultural Demonstrator in carrying out a strawberry contest, and is helping with the School Fair.

Committees from the Bury Women's Institute and the local churches are working together towards the improvement of the cemeteries.

Brookbury Institute is "full of good works." The members served dinner to those attending a "bee" which was held for work in the cemetery. Plans are being made to assist in the schools in practical ways. This Institute has undertaken the erection of Community Hall. Four new members were enrolled at their June meeting.

Massawippi Institute was instrumental in securing the services of a minister and holding Sunday services and Sunday School in the Massawippi Church, which has been closed for five years. They are also looking after the improvement of the cemetery. Mrs. McCurdy of Lennoxville gave a talk on "Work of the Women's Institutes," at their June meeting. Six new members joined.

"Home Nursing" was the subject of an address given at the Hatley Institute and two new members joined. This Institute has undertaken the purchase of a piano for use in the town hall.

"Resolved that Reading is more beneficial than Travel," was the subject of a debate at Tomifobia Institute. This Institute is working hard to equip the town hall with necessary furnishings. Five new members joined.

At Ayer's Cliff routine business and the reading of the report of the Annual Convention took up the time at the June meeting. One new member was enrolled.

Orford Institute is still "Carrying On" and working towards community improvement.

Belvidere Institute has greatly added to the attractiveness of their school house and surroundings. Five dollars was donated to the School Fair, and a couch given to the tuberculosis hospital.

In addition to routine business at the Ascot Institute, an address was given on "Home Nursing," and the report from the Convention at Macdonald College was read.

The June meeting of the Lennoxville Institute was the second of a series on Child Welfare. A paper was read on the "Feeding of Young Children," and copies of the "Canadian Mother's Book," by Dr. Helen McMurphy were distributed. Twenty-five dollars was voted to assist in School Fair Work. Two new members joined.

MRS. W. S. ARMITAGE,
Convener, Publicity Committee,
Quebec Women's Institutes.

Carrying the Garden Over

VEGETABLES, MEAT AND FISH MAY BE CANNED BY THE COLD PACK METHOD

By Miss E. M. Roach, Macdonald College

WE are in the midst of our Canning Season. There is no more interesting or profitable work than that of canning fruits, vegetables, meats and fish. What work shows to a better advantage, or what work do we feel prouder to show to our friends than that of our canned products; our rows and rows of jars filled for future use? And what tastes better in the long cold winter months than these products which we exhibit with such pride in the fall? And lastly, what foods do our bodies require? What elements do we need to keep our bodies in good repair?—just what will be found in these well-filled jars.

COLD PACK METHOD

The Cold Pack Method is to be preferred to all other methods, as it decreases the work of canning, and is just as effective as is the Intermittent Method. It is the method used in canning factories where the food is canned under pressure, but it may be used in the home, where a wash-boiler is used, for all fruits and vegetables.

1. Use a boiler with a false bottom, and fill with enough water to cover the jars at least one inch.
2. Prepare the fruit or vegetables to be canned.
3. Scald or blanch the foods the required length of time, according to the table. In blanching be sure to keep the water boiling.
4. Plunge the food into cold water, and leave it in cold water until cool.
5. For vegetables, remove the skins and cut in convenient size. Pack tightly in the jar. Add 1 teaspoonful of salt to each jar, and fill full with boiling water.
6. Place jars in water or steamer. Cover the boiler tightly, and boil the required length of time (see timetable).
7. Remove jars. Screw tightly and invert over night.

TERMS EXPLAINED:

1. Scalding—is pouring water over the food in order,—
 - (a) To loosen the skin;
 - (b) To eliminate objectionable acids and acrid flavour;
 - (c) To start the flow of colouring material.
2. Blanching—is boiling the food in water, or steam-

ing. Use a cheese-cloth bag, or a wire frying basket, or strainer, to lower the food into the water.

The blanching process is used:

- (a) To loosen the skin;
- (b) To eliminate acids and acrid flavours;
- (c) To reduce bulk;
- (d) To make the Intermittent or fractional method unnecessary.

3. Cold Dip—is to chill quickly by dipping in cold water the fruits or vegetables.

Purposes of cold dip are—

- (a) To harden the pulp under the skin and thus permit the removal of the skin;
- (b) To coagulate the colouring matter and to make it harder to dissolve during the sterilization period;
- (c) To make it easier to handle the products in packing.

Baked beans may be canned during the winter months when the bottles are being emptied. Prepare the beans as for serving. Pack in clean hot jars, and fill with boiling water. Sterilize in the hot water bath or steamer ninety minutes. This saves time, fuel and work in the summer.

Canning Pie Filling: Cut pumpkin or squash into convenient sections, core and remove skins. Cook 30 minutes to reduce to pulp. Add one cup sugar and one teaspoonful salt to each quart of pulp. Pack in jars. Adjust rubbers and covers. Sterilize 90 minutes in hot water bath; or 45 minutes at 5 pounds steam pressure.

Canning Vegetables for Salad: In canning different kinds of vegetables there is often a sample of each left over, which is not sufficient to fill one jar. These leftovers may be utilized. Place them in layers in the jar, for instance, a layer of peas, layer of cubed carrots, layer of beans, layer of corn, etc. Add salt, one-half teaspoonful to one pint jar. Pour hot water over them. Fit covers, partially seal and cook according to the cold pack method. Sterilize 3 hours in hot water bath; or 2 hours at 5 pounds steam pressure; or 1½ hours at 15 pounds steam pressure.

Tomato Soup: ½ bushel ripe tomatoes, 1 dozen onions, 8 bunches celery, 1 bunch of parsley, 1 dozen cloves, 8 bay leaves. Boil all together and pour through colander, then sieve, then add one cup granulated sugar, half cup salt, half a teaspoonful cayenne. Fill jars and sterilize twenty minutes in a hot water bath or steam cooker.

Note:—All products should be strictly fresh for successful work.

CANNING CHART

Products to be Canned	Preparations	Boiling Water	Steam Cooker or in Boiling Water	Processing with 5 lbs. steam pressure outfit
Vegetable Greens, Asparagus, Cauliflower, Spinach, Brussels Sprouts, Beet Tops, Swiss Chard, Kale, French Endive, Dandelion.	Blanch in steam from 15 to 20 minutes. Dip into cold water. Cut in convenient sizes. Pack tightly Season to taste.	Fill jars with boiling water. Add 1 teaspoon salt to 1 pint jar.	Steam cooker or hot water bath. 120 minutes, except cauliflower, 60 minutes.	Forty-five minutes.
Tomatoes.	Scald long enough to loosen skins, 1 to 2 minutes. Dip quickly into cold water, core and skin. Pack whole.	Add m teaspoon salt to 1 pint jar. Fill jars with water or strained tomato juice.	Steam cooker or hot water bath, 22 minutes.	Twelve minutes.
Corn.	Blanch on cob from 3 to 5 minutes. Dip quickly in cold water. Cut from cob with sharp knife. Pack loosely.	Fill jar with boiling water. Add m teaspoon salt to 1 pint jar.	Steam cooker or hot water bath, 3 hours.	Ninety minutes.
Pfrowjl Peas, String Beans, Lentils.	Cull, strong beans, shell peas, grade. Blanch from 2 to 5 minutes in boiling water. Pack whole.	Fill jar with boiling water. Add m teaspoon salt to 1 pint jar.	Steam cooker or hot water bath, 3 hours.	Ninety minutes.
Btt jl Beets, Carrots.	Cleanse thoroughly. Scald till skin is loose. Dip quickly in cold water. Remove skins. Pack whole or ni cubes.	Fill jar with boiling water. Add m teaspoon salt to 1 pint jar.	Steam Cooker or hot water bath, 90 minutes.	Forty-five minutes.
Mfe l Chicken, Beef, etc.	Scald in boiling water 5 to 10 minutes. Pack in jars.	Fill jars with pot liquid reduced to one-half.	Steam cooker or hot water bath, 3 hours.	Two hours.
Fish.	Clean thoroughly. Remove head and tail. Cut in pieces for packing.	Fill jars with boiling water. Add m teaspoon salt to 1 pint jar.	Steam cooker or hot water bath, 3 hours.	Two hours.

The Permanence of Dairy Farming

J. H. Alexander in "Hoard's Dairyman"

AS a secure and permanent occupation, none of the common forms of farming compare with dairying. Still, many dairymen have regarded the future of the industry with doubt. Falling prices during the past few months have led them to wonder and worry regarding their heavy investments in live stock, land, buildings, and machinery. Let them consider the following seven reasons why dairying is the most permanent form of farming. We could give more, and will gladly do so if called upon, but seven always was a lucky number with us. Besides, we rest assured that seven reasons will more than remove the last vestige of doubt from the mind of any farm reader.

First—Milk and milk products are absolutely essential to life, health, and normal growth. This point is becoming better known year by year to our reading and reasoning public; as a consequence the consumption of milk and milk products is steadily increasing. So is the use of substitutes, you may say, and you would be right. War prices and highly commendable patriotism popularized the use of substitutes. But none of the so-called substitutes, no matter how extensively advertised, dare meet pure milk products in open battle. Why? Because milk products contain vitamins, and vitamins are absolutely essential to normal health and growth. They are not found in appreciable quantity in other animal oils and in vegetable oils, and it is these oils that form the base of all substitutes on the market.

Second—During the past five years our population has increased seven per cent; milk consumption has increased ten per cent in the same period. What do these indisputable facts promise for the future? The population of the country is increasing rapidly and history will show that it has been on the steady increase for the past century. Immigration and the natural increase through births assure further growth. Education in child welfare and general health insists on milk for the growing child. Therefore we may expect to see milk consumption increase far more rapidly and markedly in the next generation than in the decade just ended. What could be a more promising guarantee for the future than an ever increasing and extending market.

Third—Dairy products are a source of regular and reliable profit. The market for dairy products has never been controlled by a few; it never will be. Through co-operative creameries and cheese factories farmers can supply a staple, finished product, ready to be disposed of direct to the ultimate consumer if necessary. This in a sense makes possible the elimination of the middleman, and has been used by farmers where it was found that the "split" in profits was going against them. Once a month, twice a month, or even every week or day in some cases, the dairyman receives payment for the work his cows have done for him—and cows don't work on an eight-hour day basis either. Thus the dairy farmer is enabled to pay cash for things he buys and is free to "stand from under" when hard times threaten. The fact that rural Wisconsin is better situated financially right now than any of the Corn Belt states proves the truth of this point.

Fourth—Dairying and diversified farming are one and the same. Diversified farming produces a variety of crops for market; a failure of any one or two does not mean bankruptcy for the farmer. The dairyman does

not have "all his eggs in one basket". Contrast this condition with the Corn Belt where wealth is measured in terms of corn, hogs, and steers. This year has seen the "bottom drop out" of the market for the three things he produces—commodities he has always considered as legal tender. As a consequence there is no money in circulation, farmers are not able to meet their obligations, farm sales made a year ago at high prices are failing through, and banks are unable to assist farmers by making loans. In Wisconsin, primarily a dairy state, conditions are much better in spite of decreased prices. Banks are still able to take care of the needs of farmers, and farmers seem to be able to "scare up the cash" with which to meet their debts. Why? Because diversified farming with the timely aid of dairy dollars can meet and is successfully meeting the emergency.

Fifth—The dairy herd conserves and even increases soil fertility, assuring good yields of farm crops in future years. At the same time the herd provides a sure, prompt, and profitable outlet for grains and roughage grown on the farm. Land that supports good dairy herds becomes richer year by year, whereas land devoted to raising grains and hay for market soon becomes sadly depleted unless carefully managed and unless commercial fertilizer is purchased.

Every ton of corn sold off the farm, worth in normal times about \$20.00, takes with it \$6.50 worth of plant food; every ton of wheat worth \$35.00 takes \$17.00; every ton of butterfat worth about \$1,000.00 takes away only 49 cents worth of plant food! Meanwhile the herd is returning many times this amount in fertility. It pays to market crops in the milk can. Keep these facts in mind when you haul away your next load of oats or hay.

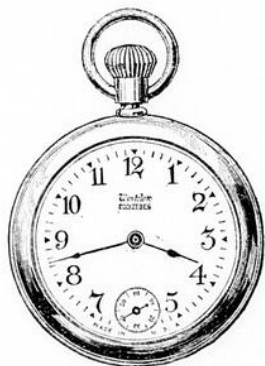
Sixth—Our biggest and most successful dairymen, with years of practical experience to back up their statements, say, "The dairy crop is the only one which has never known a complete failure". They base this statement on a few simple facts. In the first place dairying is more quickly adjustable to new conditions and prices than any other kind of farming. We can easily see why. Field crops are marketed once a year, and the price is forced down—temporarily—because of the overload of any single crop on the market. The marketing period is not distributed. To purposely hold for higher prices means to wait for the money tied up in the crop. Not so with the dairyman. He markets his "crop" every day, or every few days at most, and is paid once or twice a month or oftener. His returns no doubt do vary in times such as the present when all

lines of industry are being readjusted, but a few months of low prices do not condemn the industry. The reasoning farmer notes a drop of 15 to 25 per cent in milk prices, then compares this to the drop of corn from \$1.50 per bushel to around 60 cents, and pork from 23 cents to 9 cents. He figures his average earnings for the last two years and is satisfied. He knows that no business is entirely free from ups and downs; he also knows that none are more highly favored than dairying in this respect.

Seventh—The dairy cow is a home builder. Farming, no matter how profitable, never reaches the position of dignity which is its heritage until the farm home becomes so attractive that it is the greatest pride of the entire family, something to be handed down from generation to generation. The growing boy or girl does not look forward with pleasure to the time when they will inherit a mortgage-ridden, impoverished ruin. They do thrill at the thought of a farm both fertile and fair, stocked with the blood left as the breeders' handiwork of father and grandfather. The dairy herd always has stood and always will stand as a symbol of permanence for the good farm, the real farm home, the farm from which the boys are not easily attracted to the job in the city nor the girls lured

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The truth of these rather strong statements may be severely attacked. They may raise a lusty howl of dissent and disapproval from the fruit farmer and from the grain grower; the corn and hog raiser of the corn belt may cuss us and threaten bodily harm. But we are in possession of facts and proofs sufficiently strong and numerous to refute any arguments they may advance.

Top Prices for Market Milk

The Philadelphia Producers' Peaceful Plan

MILK producers' associations the country over turn to the "City of Brotherly Love" for a lesson in the peaceable handling of market milk difficulties. The record of the Inter-state Milk Producers' Association with headquarters at Philadelphia is notable proof that milk can be marketed successfully without "war" and with very little of "rumors" of war.

Wherever milk producers meet to discuss their selling problems, the Keystone metropolis is held up as an example to be emulated. "In Philadelphia", it is commonly said, "producers and distributors work together without friction. The price to the farmer is high, the dealer's margin is small, and the cost to the consumer, low". A closer acquaintance with conditions than most of these commentators have, reveals the fact that, though selling difficulties are not unknown in the Inter-state Milk Producers' Association, its officers have been strikingly far-sighted in their policies and broad minded in their relations with the distributors and consumers.

The Inter-state Milk Producers' Association was organized in 1916 as a successor to the Milk Shippers' Union which has existed for seventeen years. At the meetings of this old organization the members and officers talked, settled upon a price, and went home—having no facilities for forcing the market in line with the price agreed upon; or for improving production or suiting it to the market. Since 1916 the Inter-state Association has grown to a membership of 12,500; 9,000 in Pennsylvania, 1,400 in Maryland, 1,400 in New Jersey, and 700 in Delaware. It has 217 local organizations and sells to 780 dealers. Besides the milk supply of Philadelphia, it sells principally to Harrisburg, Reading, Allentown, West Chester, Wilmington, Altoona, and Camden and Trenton. The association is financed by a one-cent deduction for each 100 lbs. of milk, which is made by the dealers to whom the farmer sells.

The first real strength of the producers' organization came with the appointment and subsequent investigations of the Tri-state Milk Commission, of which Dr. Clyde L. King was chairman. The first findings of this commission gave the producers' case so favorable publicity that the dealers discredited in the price controversy asked for an investigation. Later Dr. King was appointed milk expert for the Food Administration of Pennsylvania. At first the dealers refused to confer with the farmers but later joined with them in asking for Dr. King's appointment as arbitrator in milk price discussions, a position which he now fills in Philadelphia, Pittsburg, and Baltimore.

Especially fortunate for the producers from the beginning of the association was the election of F. P. Willits as president and the appointment of R. W. Balderston as secretary, which positions they have held continuously to the present time. Thoroughly conversant with the factors controlling milk prices, they have

represented the farmer in the best possible manner. Perhaps the strength of this producer organization is well indicated by its ability to maintain an 8-cent f. o. b. Philadelphia price this season when milk in carload lots from outside points has been offered at prices materially lower.

STABILIZING PRICES

A study of milk prices for the ten-year period ending in 1916 shows that producers in the Philadelphia district received a slightly lower price than those in the New York, Chicago, and Pittsburg districts in January and December and a higher price in May, June, and July, inasmuch as more milk is sold during the summer months the Philadelphia market for the year averaged with or above that in other cities. The Inter-state Milk Producers' Association, with the representatives of other milk interests, have agreed that a stabilization of prices throughout the year is beneficial to the industry. In order that stabilizing prices, by holding down values in times of shortage and keeping them up somewhat in times of surplus, might not tend to encourage summer dairying at the expense of

winter dairies, a surplus plan has been put in use.

THE SURPLUS PLAN

In October, 1919, an agreement was entered into which divided the product into fluid milk and manufacturing milk and defined what should be called surplus. The quantity of milk delivered by a producer in October, November, and December, 1919, was taken as the basic quantity to be sold throughout the year except in May, June, and July, when it was agreed he could deliver 110% of that quantity at market milk prices, and in August, 105%. All milk over that quantity, which average 12 to 15% of the total production, was to be sold on the basis of its butter fat at 120% of the price of New York 92-score butter. For example, if a producer marketed an average of 2000 lbs. of milk daily throughout the three months, October, November, and December, 1919, and his milk totalled 3000 lbs. in the following June, he could sell 110% of 2000 lbs. or 2200 lbs. at fluid prices and the remaining 800 lbs. at manufacturing prices. If butter averaged 50 cents for the month he would receive 120 per cent of \$.50 or \$.60 per

pound for surplus fat or \$2.40 per hundred pounds of 4 per cent milk for the 800 lbs.

Under this agreement the price announced monthly as "subject to change whenever warranted by market conditions" is continued until changed in a conference which may be called by distributors, manufacturers, or producers. As an illustration, the price list published for February, 1921, and which is in operation through May specifies that 3.5 per cent market milk f. o. b. Philadelphia is worth \$3.48 per 100 lbs. or 7.6 cents per quart. The price on surplus is 5.6 cents per quart. Knowing the quantity of milk he can sell as fluid, the producer easily calculates his return from the milk he sells. A charge of 23 cents per 100 lbs. is allowed for running the country receiving station. This, in addition to the freight charges, is deducted from the f. o. b. Philadelphia price.

A comparison of Philadelphia milk prices with those in Chicago and New York is illuminating. The 1919 average for 3.5 per cent milk in Philadelphia was \$3.88 per hundred and in Chicago and New York, \$3.60 and \$3.71 respectively. In 1920, New York

Chart of Recommendations for AUTOMOBILES

How to Read the Chart
THE Correct Grades of Gargoyle Mobiloils for engine lubrication are specified in the Chart below.

A means Gargoyle Mobiloil "A"
B means Gargoyle Mobiloil "B"
E means Gargoyle Mobiloil "E"
Arc means Gargoyle Mobiloil Arctic

These recommendations cover all models unless otherwise specified.

Different grades of Gargoyle Mobiloils are recommended for summer and winter use.

This Chart is compiled by the Vacuum Oil Company's Board of Automotive Engineers and constitutes a scientific guide to Correct Automobile Lubrication.

If your car is not listed in this partial chart, consult the Chart of Recommendations at your dealer's, or send for booklet, "Correct Lubrication," which lists the Correct Grades for all cars.

MAKE OF AUTOMOBILES AND MOTOR TRUCKS	1910	1911	1912	1913	1914	1915	1916
Alfa	A	A	A	A	A	A	A
Alfa (12 cylinder)	A	A	A	A	A	A	A
Alfa (16 cylinder)	A	A	A	A	A	A	A
Alfa (20 cylinder)	A	A	A	A	A	A	A
Alfa (24 cylinder)	A	A	A	A	A	A	A
Alfa (30 cylinder)	A	A	A	A	A	A	A
Alfa (36 cylinder)	A	A	A	A	A	A	A
Alfa (42 cylinder)	A	A	A	A	A	A	A
Alfa (48 cylinder)	A	A	A	A	A	A	A
Alfa (54 cylinder)	A	A	A	A	A	A	A
Alfa (60 cylinder)	A	A	A	A	A	A	A
Alfa (66 cylinder)	A	A	A	A	A	A	A
Alfa (72 cylinder)	A	A	A	A	A	A	A
Alfa (78 cylinder)	A	A	A	A	A	A	A
Alfa (84 cylinder)	A	A	A	A	A	A	A
Alfa (90 cylinder)	A	A	A	A	A	A	A
Alfa (96 cylinder)	A	A	A	A	A	A	A
Alfa (102 cylinder)	A	A	A	A	A	A	A
Alfa (108 cylinder)	A	A	A	A	A	A	A
Alfa (114 cylinder)	A	A	A	A	A	A	A
Alfa (120 cylinder)	A	A	A	A	A	A	A
Alfa (126 cylinder)	A	A	A	A	A	A	A
Alfa (132 cylinder)	A	A	A	A	A	A	A
Alfa (138 cylinder)	A	A	A	A	A	A	A
Alfa (144 cylinder)	A	A	A	A	A	A	A
Alfa (150 cylinder)	A	A	A	A	A	A	A
Alfa (156 cylinder)	A	A	A	A	A	A	A
Alfa (162 cylinder)	A	A	A	A	A	A	A
Alfa (168 cylinder)	A	A	A	A	A	A	A
Alfa (174 cylinder)	A	A	A	A	A	A	A
Alfa (180 cylinder)	A	A	A	A	A	A	A
Alfa (186 cylinder)	A	A	A	A	A	A	A
Alfa (192 cylinder)	A	A	A	A	A	A	A
Alfa (198 cylinder)	A	A	A	A	A	A	A
Alfa (204 cylinder)	A	A	A	A	A	A	A
Alfa (210 cylinder)	A	A	A	A	A	A	A
Alfa (216 cylinder)	A	A	A	A	A	A	A
Alfa (222 cylinder)	A	A	A	A	A	A	A
Alfa (228 cylinder)	A	A	A	A	A	A	A
Alfa (234 cylinder)	A	A	A	A	A	A	A
Alfa (240 cylinder)	A	A	A	A	A	A	A
Alfa (246 cylinder)	A	A	A	A	A	A	A
Alfa (252 cylinder)	A	A	A	A	A	A	A
Alfa (258 cylinder)	A	A	A	A	A	A	A
Alfa (264 cylinder)	A	A	A	A	A	A	A
Alfa (270 cylinder)	A	A	A	A	A	A	A
Alfa (276 cylinder)	A	A	A	A	A	A	A
Alfa (282 cylinder)	A	A	A	A	A	A	A
Alfa (288 cylinder)	A	A	A	A	A	A	A
Alfa (294 cylinder)	A	A	A	A	A	A	A
Alfa (300 cylinder)	A	A	A	A	A	A	A
Alfa (306 cylinder)	A	A	A	A	A	A	A
Alfa (312 cylinder)	A	A	A	A	A	A	A
Alfa (318 cylinder)	A	A	A	A	A	A	A
Alfa (324 cylinder)	A	A	A	A	A	A	A
Alfa (330 cylinder)	A	A	A	A	A	A	A
Alfa (336 cylinder)	A	A	A	A	A	A	A
Alfa (342 cylinder)	A	A	A	A	A	A	A
Alfa (348 cylinder)	A	A	A	A	A	A	A
Alfa (354 cylinder)	A	A	A	A	A	A	A
Alfa (360 cylinder)	A	A	A	A	A	A	A
Alfa (366 cylinder)	A	A	A	A	A	A	A
Alfa (372 cylinder)	A	A	A	A	A	A	A
Alfa (378 cylinder)	A	A	A	A	A	A	A
Alfa (384 cylinder)	A	A	A	A	A	A	A
Alfa (390 cylinder)	A	A	A	A	A	A	A
Alfa (396 cylinder)	A	A	A	A	A	A	A
Alfa (402 cylinder)	A	A	A	A	A	A	A
Alfa (408 cylinder)	A	A	A	A	A	A	A
Alfa (414 cylinder)	A	A	A	A	A	A	A
Alfa (420 cylinder)	A	A	A	A	A	A	A
Alfa (426 cylinder)	A	A	A	A	A	A	A
Alfa (432 cylinder)	A	A	A	A	A	A	A
Alfa (438 cylinder)	A	A	A	A	A	A	A
Alfa (444 cylinder)	A	A	A	A	A	A	A
Alfa (450 cylinder)	A	A	A	A	A	A	A
Alfa (456 cylinder)	A	A	A	A	A	A	A
Alfa (462 cylinder)	A	A	A	A	A	A	A
Alfa (468 cylinder)	A	A	A	A	A	A	A
Alfa (474 cylinder)	A	A	A	A	A	A	A
Alfa (480 cylinder)	A	A	A	A	A	A	A
Alfa (486 cylinder)	A	A	A	A	A	A	A
Alfa (492 cylinder)	A	A	A	A	A	A	A
Alfa (498 cylinder)	A	A	A	A	A	A	A
Alfa (504 cylinder)	A	A	A	A	A	A	A
Alfa (510 cylinder)	A	A	A	A	A	A	A
Alfa (516 cylinder)	A	A	A	A	A	A	A
Alfa (522 cylinder)	A	A	A	A	A	A	A
Alfa (528 cylinder)	A	A	A	A	A	A	A
Alfa (534 cylinder)	A	A	A	A	A	A	A
Alfa (540 cylinder)	A	A	A	A	A	A	A
Alfa (546 cylinder)	A	A	A	A	A	A	A
Alfa (552 cylinder)	A	A	A	A	A	A	A
Alfa (558 cylinder)	A	A	A	A	A	A	A
Alfa (564 cylinder)	A	A	A	A	A	A	A
Alfa (570 cylinder)	A	A	A	A	A	A	A
Alfa (576 cylinder)	A	A	A	A	A	A	A
Alfa (582 cylinder)	A	A	A	A	A	A	A
Alfa (588 cylinder)	A	A	A	A	A	A	A
Alfa (594 cylinder)	A	A	A	A	A	A	A
Alfa (600 cylinder)	A	A	A	A	A	A	A
Alfa (606 cylinder)	A	A	A	A	A	A	A
Alfa (612 cylinder)	A	A	A	A	A	A	A
Alfa (618 cylinder)	A	A	A	A	A	A	A
Alfa (624 cylinder)	A	A	A	A	A	A	A
Alfa (630 cylinder)	A	A	A	A	A	A	A
Alfa (636 cylinder)	A	A	A	A	A	A	A
Alfa (642 cylinder)	A	A	A	A	A	A	A
Alfa (648 cylinder)	A	A	A	A	A	A	A
Alfa (654 cylinder)	A	A	A	A	A	A	A
Alfa (660 cylinder)	A	A	A	A	A	A	A
Alfa (666 cylinder)	A	A	A	A	A	A	A
Alfa (672 cylinder)	A	A	A	A	A	A	A
Alfa (678 cylinder)	A	A	A	A	A	A	A
Alfa (684 cylinder)	A	A	A	A	A	A	A
Alfa (690 cylinder)	A	A	A	A	A	A	A
Alfa (696 cylinder)	A	A	A	A	A	A	A
Alfa (702 cylinder)	A	A	A	A	A	A	A
Alfa (708 cylinder)	A	A	A	A	A	A	A
Alfa (714 cylinder)	A	A	A	A	A	A	A
Alfa (720 cylinder)	A	A	A	A	A	A	A
Alfa (726 cylinder)	A	A	A	A	A	A	A
Alfa (732 cylinder)	A	A	A	A	A	A	A
Alfa (738 cylinder)	A	A	A	A	A	A	A
Alfa (744 cylinder)	A	A	A	A	A	A	A
Alfa (750 cylinder)	A	A	A	A	A	A	A
Alfa (756 cylinder)	A	A	A	A	A	A	A
Alfa (762 cylinder)	A	A	A	A	A	A	A
Alfa (768 cylinder)	A	A	A	A	A	A	A
Alfa (774 cylinder)	A	A	A	A	A	A	A
Alfa (780 cylinder)	A	A	A	A	A	A	A
Alfa (786 cylinder)	A	A	A	A	A	A	A
Alfa (792 cylinder)	A	A	A	A	A	A	A
Alfa (798 cylinder)	A	A	A	A	A	A	A
Alfa (804 cylinder)	A	A	A	A	A	A	A
Alfa (810 cylinder)	A	A	A	A	A	A	A
Alfa (816 cylinder)	A	A	A	A	A	A	A
Alfa (822 cylinder)	A	A	A	A	A	A	A
Alfa (828 cylinder)	A	A	A	A	A	A	A
Alfa (834 cylinder)	A	A	A	A	A	A	A
Alfa (840 cylinder)	A	A	A	A	A	A	A
Alfa (846 cylinder)	A	A	A	A	A	A	A
Alfa (852 cylinder)	A	A	A	A	A	A	A
Alfa (858 cylinder)	A	A	A	A	A	A	A
Alfa (864 cylinder)	A	A	A	A	A	A	A
Alfa (870 cylinder)	A	A	A	A	A	A	A
Alfa (876 cylinder)	A	A	A	A	A	A	A
Alfa (882 cylinder)	A	A	A	A	A	A	A
Alfa (888 cylinder)	A	A	A	A	A	A	A
Alfa (894 cylinder)	A	A	A	A	A	A	A
Alfa (900 cylinder)	A	A	A	A	A	A	A
Alfa (906 cylinder)	A	A	A	A	A	A	A
Alfa (912 cylinder)	A	A	A	A	A	A	A
Alfa (918 cylinder)	A	A	A	A	A	A	A
Alfa (924 cylinder)	A	A	A	A	A		

led in the price secured for the producer, the year's average being \$4.27 while \$4.04 was paid in Philadelphia and \$3.85 in Chicago.

LOW MARGIN FOR DISTRIBUTION

Philadelphia dealers enjoy a reputation for economical distribution which rivals that of the producers for "peaceable and successful selling of milk". They paid more for milk in 1919 than either Chicago or New York dealers and yet undersold them, charging an average of 13.59 cents per bottled quart when Chicago dealers taxed the consumer 14.16 cents and the New York distributors collected 16.17 cents. In 1920 the Philadelphia retail price was lower than in the other two cities, being 14.25 cents against 14.8 cents in Chicago and 16.5 cents in New York. Considering that the Philadelphia price to the producer is high, the narrowness of the margin for distribution is striking. During the present season when the producer's price has been

about 8 cents, the retail cost has been 13, leaving a margin of about 5.

There are a number of reasons advanced in explanation of the fact that the milk man of the Quaker metropolis carries milk so cheaply from the producer to the back porches of the city. In the first place the city has been largely apportioned so that the different retailing companies cover their routes with a minimum of overlapping. Also, they carry large loads, each wagon taking 400 to 450 quarts at a trip as compared with 300 or even 200 in some cities. The narrow margin has given the bulk of the city's milk business to five large dealers, which leads to greater efficiency of distribution than would be possible with a large number, each handling a small quantity. Since the Inter-state Association came into operation the number of dealers in Philadelphia has been reduced from 700 to less than 300 and President Willits stated at the American Farm Bureau Federation dairy conference in Chicago, May 3, that the number

will likely be still further reduced.

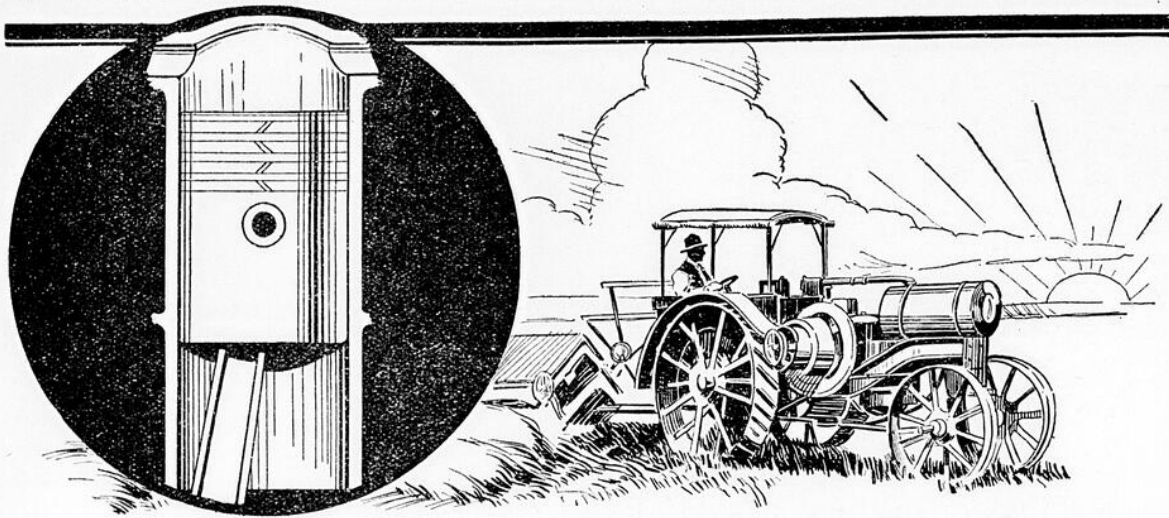
ADVERTISING MILK

Conspicuous in the activities of the Inter-state Milk Producers' Association is its interest in work other than that directly involved in selling milk. It has an important part in dairy council advertising of dairy products, sharing offices with the Inter-state Dairy Council and contributing liberally to its support. Beginning with December, 1920, the producers authorized a deduction of one cent from the price quoted for 100 lbs. of milk, for advertising purposes. A \$100,000 educational campaign is now underway, financed half and half by producers and distributors. Already results have been secured in increased consumption which the association hopes will cut down the percentage of manufactured milk to even less than the present 12 to 15 per cent.

The Inter-state Association also serves its members by pointing out methods of bettering the market qual-

ities of their product. As an example, as early as March a campaign was begun this year to encourage the cooling of milk.

Thus, the Inter-state Milk Producers' Association—which has never called a strike—serves its members: It sells milk by satisfying the public and the distributors in conference; it equalizes prices throughout the year so far as possible; it defines market milk and manufacturing milk, and makes separate prices for the two; and it engages in any other work besides selling which will improve market milk conditions. Through its activities it is a strong factor in making Philadelphia a city where "producers and distributors work together without friction, where the price to the farmer is high, the dealers' margin small, and the cost to the consumer low".



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Check up on the Imperial Chart of Recommendations at your dealer's. Make sure that you are using the correct grade of Imperial Polarine recommended. The regular use of the correct grade means less expense and less trouble, and more and better work from your tractor.

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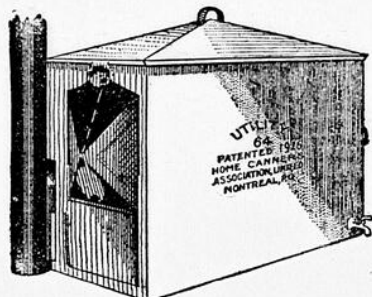
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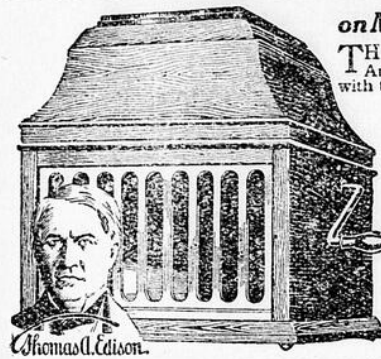
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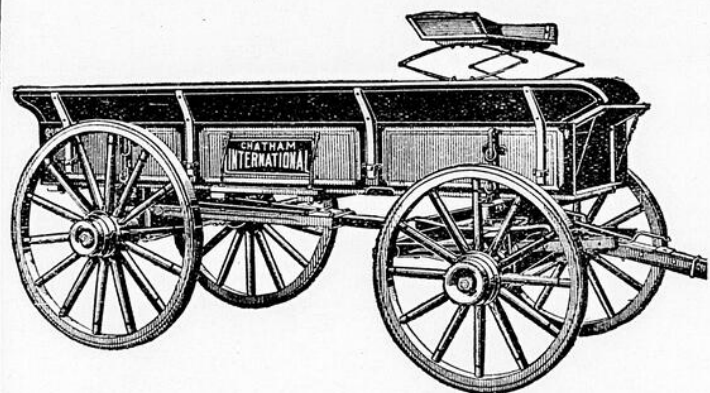
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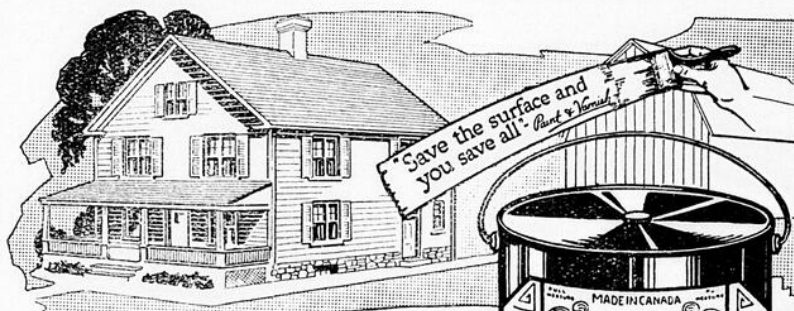
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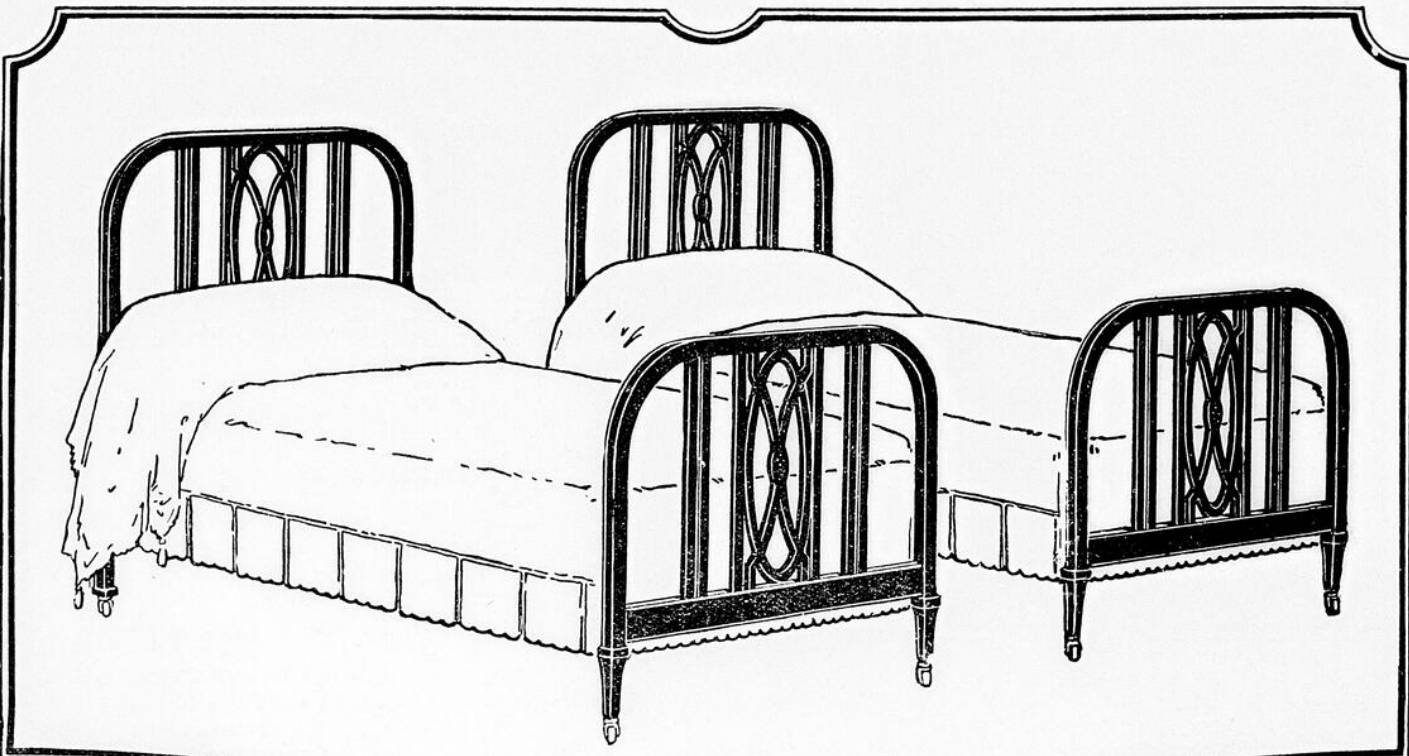
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