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# THE FARMER'S ADVOCATE

AND HOME MAGAZINE

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

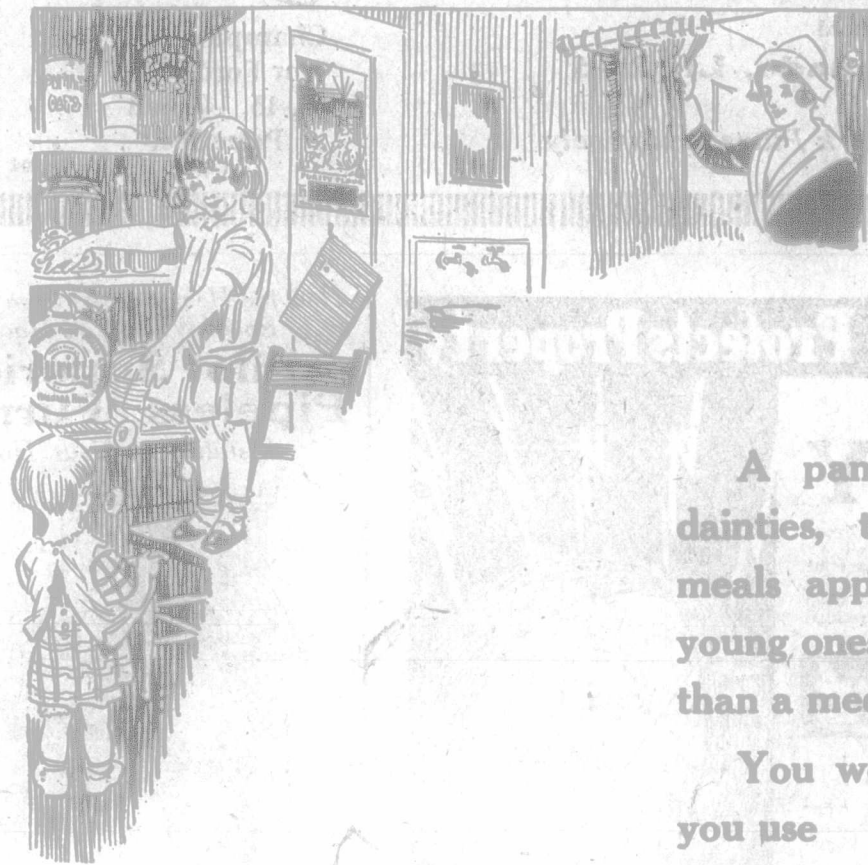
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LV.

LONDON, ONTARIO, JULY 22, 1920.

No. 1452



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For motor owners who have

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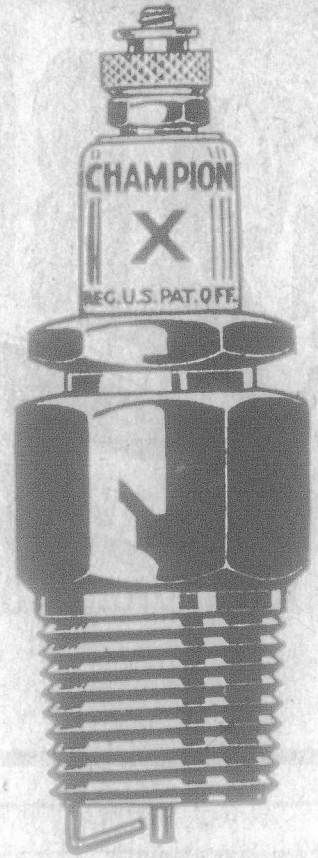
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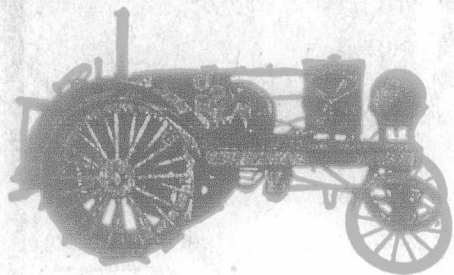
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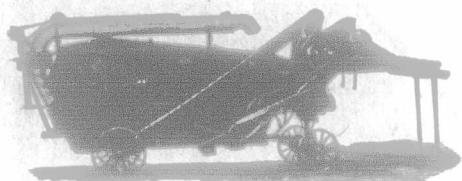
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The Simplest, most Accessible, most Powerful 3-plow Tractor on the market. Suitable for hauling 3 plows, Threshing, Silo Filling and General Farm Work.



Individual Farmers' Threshers, suitable size to be driven by small Tractors and Gasoline Engines. Do your own Threshing. Keep your farm clean and save expense.

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Make yourself, your family, your cattle, your crops, and your buildings safe against Lightning, by having them protected by Shinn-Flat Lightning Rods.

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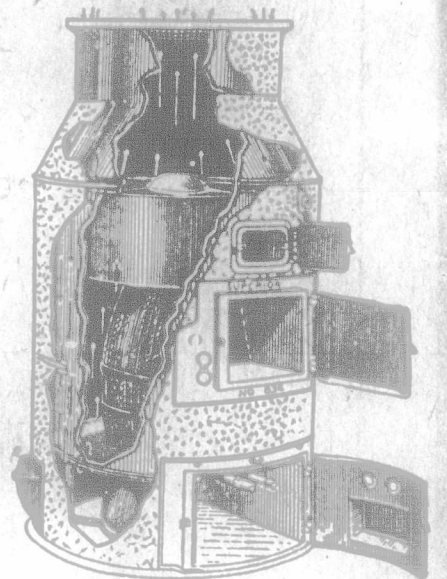
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In much the same manner the warm air is distributed from the room in which the register is placed, to every part of the building, the difference being that warm air, according to natural laws, rises to the highest level, and as the volume is increased it lowers in the building, while with water the level raises as the volume is increased.

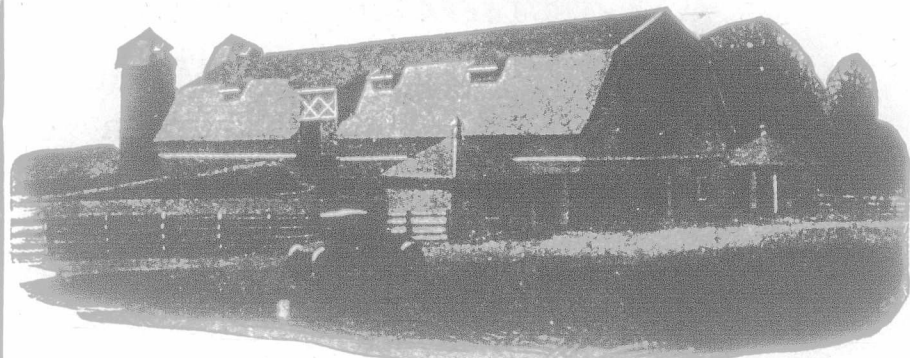
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or stuttering overcome positively. Our natural methods permanently restore natural speech. Graduate pupils everywhere. Free advice and literature.

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KITCHENER, - CANADA

## The De Laval Milker



Used on Bredablik Farm, Wilmington, Delaware

The De Laval Milker is in constant use on Bredablik Farm, milking sixty high-grade Guernsey cows daily.

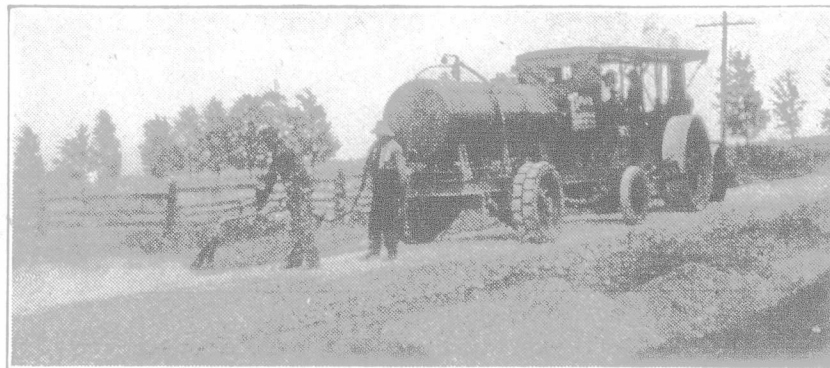
The Bredablik Farm manager reported recently:

"The De Laval Milker has proved very satisfactory. It saves from two to four men and about an hour and a half at every milking. It is very simple to operate and to keep clean. In fact, so much so that a green man can do the work as efficiently as an old hand. It pleases the cows, as can be seen by our high records. Ten of our cows average over 10,000 pounds of milk a year. We have never missed a milking since we have had the De Laval Milker."

The De Laval Milker is a distinctly different type of machine. The Master Control of pulsation speed insures that every cow in the barn is milked in just the same way every day.

Write to nearest De Laval office for Milker Catalog mentioning number of cows milked

**THE DE LAVAL COMPANY, Ltd.**  
Montreal Peterboro Winnipeg Edmonton Vancouver



Applying "Tarvia-X" on Kennedy Road, Scarboro Township, Ont. Toronto & York Roads Commission.

## A Tarvia Road is an all-weather road

RIGHT after the annual Spring thaw, when dirt, gravel and ordinary macadam roads are at their worst, and going into town means a hard, wearisome day's work, then's when you would appreciate a good Tarvia road!

Think of it: no matter how heavily the winter snow has drifted, no matter how many days it rains, and thaws, no matter how much the frost cuts up the ordinary road, Tarvia stays just the same—firm smooth, solid, and easy riding.

And, best of all, a Tarvia road is the most economical road for any farming or small-town community because it costs very little for up-keep.

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shipped in barrels, tank-wagons or tank-cars, depending upon the size and location of the job. No matter what your road problem may be—whether you require a road binder for new construction, a dust PREVENTIVE, a road preserver or a patching material—there is a grade of Tarvia made for the purpose.

Summer is the time to apply Tarvia. You and your neighbors can have all-weather roads for next winter and spring if you get together now and start on a Tarvia road program right away.

Our engineers will be very glad to furnish information and suggestions on request.

A note to our nearest office outlining your problems will not involve any obligation on your part.

# Tarvia

Preserves Roads—Prevents Dust

The **Sanitt** Company Limited  
St. John, N. B. Halifax, N. S. Sydney, N. S. Montreal Toronto Winnipeg Vancouver

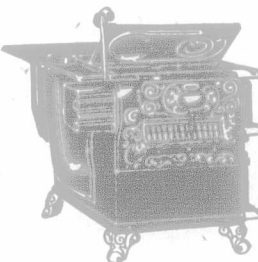


### Built to Last

THE life of any Range is no longer than its weakest part, but special attention has been given to the construction of the vital parts of the Corona.

See the above cut and note:—

1. FIRST the large CAST IRON FLUE at the back of the Range. This insures perfect draft and no danger of the flue clogging. Also, it will not rust-out at the bottom like ranges equipped with sheet steel flues.
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3. We also show the "front draft" used on all our ranges built with right hand reservoirs. The damper drops open readily, as shown in illustration, and this makes it so that the ashes and clinkers can be removed from the grates from the front with an ordinary poker without stooping.
4. The patented front check damper is seen to advantage. It can be adjusted readily as desired and remains exactly as it is placed.
5. This cut shows how the front top section can be raised to any desired height, even though there is no closet on the range.



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Life Insurance will answer the question—as you want it answered.

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Ask for information—sent by mail for your leisurely consideration. There will be no obligation whatsoever.



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Make sure that, after you are gone, she will receive as long as she lives, a monthly cheque to provide for her every need

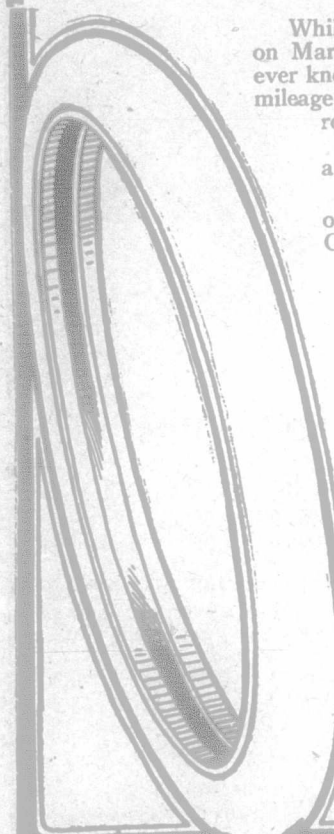
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We will ship genuine tires on approval to any address east of Fort William.

All you need do is send in your order by mail or wire. The tires will reach you express paid C.O.D. If you are satisfied—buy them, if not—ship them back at our expense.

You will never get tires elsewhere at these prices. Look at them.

Size	Plain Tread	Non-Skid Tread
30x3 1/2	.....	\$16.50
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33x4 1/2	.....	30.00
34x4 1/2	.....	33.00
35x4 1/2	28.00	.....

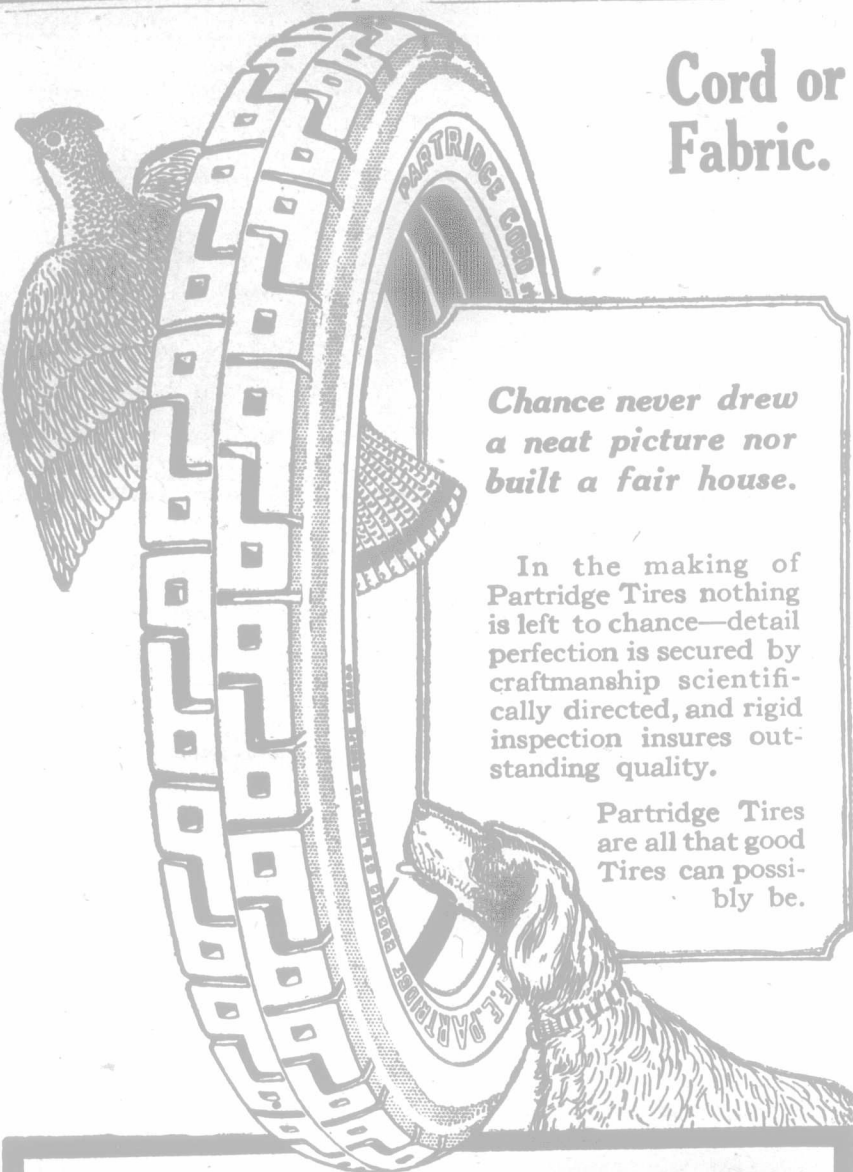
Other sizes in proportionately low prices. When ordering state size and style—whether "Clincher" or "Straight Wall," plain or non-skid.

**Tubes Extraordinary!**

30x3 1/2—fully guaranteed—\$2.25

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*Chance never drew a neat picture nor built a fair house.*

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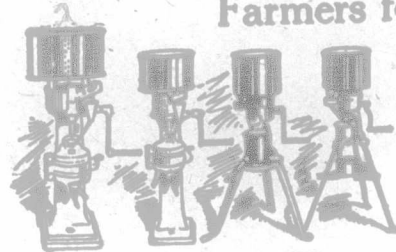
# PARTRIDGE TIRES

*Game as Their Name*

118A

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FOUR MODELS—15 SIZES

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Everybody Knows It.**

The Cream Separator with the Suspended Bowl

Think of it! A bowl hanging naturally on a ball-bearing spindle—a *real* self-balancing bowl.

Large stocks of the "Original Melotte" just received from England. Order now from nearest local agent.

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**Practical for every power job on the farm**

The White-Allwork Tractor is a wonder of simplicity, sturdiness and power. Well worth a place in "The First Quality Line." Use it for any field job, turning a three-plow furrow (four on some land), seeding or harrowing. Weighs only 4800 lbs. Will work on wet land without undue packing. Turns in a 12-foot radius. 28 H.P. at the belt and 14 H.P. on the drawbar—and plenty of extra power over these ratings, as hundreds of farmers have proved.

It will run a 16-inch ensilage cutter, or a 28-inch separator, grind feed, crush stone, saw wood, bale hay or straw—anything requiring power.

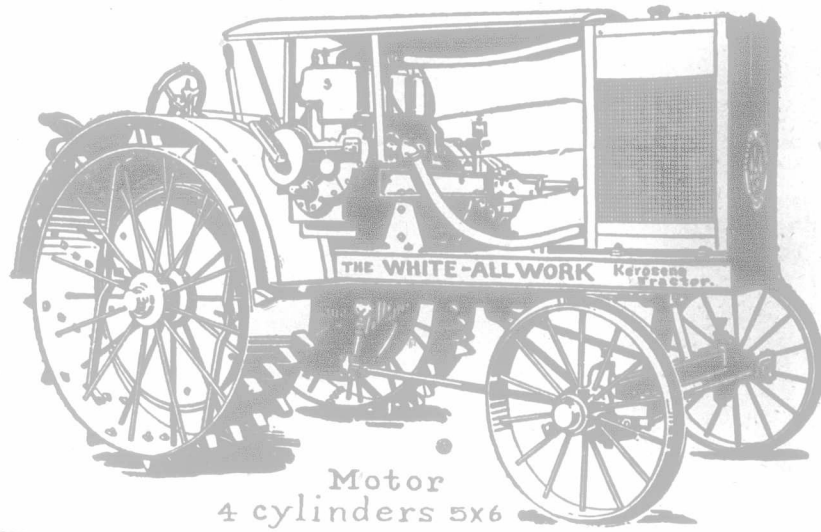
**Decide for yourself whether it will pay**

Let us tell you what the White-Allwork costs per acre for field work—What it will do on the blower. You can save money with a White-Allwork.

Ask for full information.

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"THE FIRST QUALITY LINE"



Motor 4 cylinders 5x6

**Spare Time Work—Easy and Pleasant**

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# The Farmer's Advocate and Home Magazine

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1866

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LV.

LONDON, ONTARIO, JULY 22, 1920

1452

## EDITORIAL.

The frequent use of the cultivator helps insure a good corn crop.

Learn to think for yourself and not be merely an echo of other people's sentiments and ideas.

That pile of manure in the yard will be used to advantage if spread on the meadow to boost next year's hay crop.

In a hurry to arrive at one's destination, excessive speed oftentimes causes undue delay. Safety first is good advice.

While wet weather is not conducive to good hay-making, it is fine for roots, corn, pasture and the rapidly heading oats.

A new Party, a new Premier and a rebuilt Cabinet at Ottawa without a general election, and it is an election that people have been asking for most of all!

Grain intended for seed purposes should be ripe when cut, but that for feed may be cut on the green side, especially if the straw is used for feeding stock.

Bugs are enemies of the potato plant, and arsenate of lead or Paris green are death to bugs. You cannot feed potato bugs and have a good yield of potatoes.

The sound of the binder will soon be heard in the fields. Is the machine in repair, or must a trip be made to town for parts after it has been taken to the field?

After planting high-priced seed the potato patch should receive special attention. After hilling the potatoes, keep the cultivator going to conserve moisture.

There are plenty of young men and women anxious to get on to the movie stage, but very few willing to get on to the farm and help replenish the world's granary.

Fall Fair time is again approaching, and it is not too early to make preparations. Give the boy some encouragement to show, and help him to get the entries ready.

A little extra attention the end of this month and the beginning of next will aid in keeping up the milk flow at the most critical time of the season. In six weeks' time the second growth clover will furnish appetizing feed.

It has been one of the worst haying seasons in years, but one can derive some consolation from the old maxim: "It's a bad wind that does not blow somebody good." The loss may be made up in the increased growth in other crops.

The number of accidents on public highways is appalling. In the majority of cases they are due to gross carelessness on someone's part. If every driver would realize that others have rights on the road and would drive sanely, there would be fewer lives lost. When people take advantage of privileges, restrictions must be enforced.

The recent Hydro-radial controversy has provided the occasion for the rural people of Ontario to again ask: When are the farmers going to get Hydro, and when are some of the back sections going to be opened up by radials? They will be putting this question to Premier Drury more emphatically as time goes by, and it is that question that he is probably preparing himself to answer.

### Scrub Bull Legislation.

Everyone interested in the live stock industry are in agreement on one point, and it is that the scrub bull should be banished. However, when we set about to fill out the extradition papers a slight difference of opinion arises. At the recent conference of Agricultural Representatives, convened at Guelph, a resolution was carried asking for the elimination of the scrub bull by legislative enactment. This means coercion, which is distasteful to many, and it is a question whether by compulsion the most satisfactory success can be attained. At the best, we can expect to see the scrub sire eliminated only after a long, tedious struggle, and when Ontario can boast of that crowning achievement the Province is still only part way on its upward course. It required thirteen long, troublesome years to blot out the grade stallion in Ontario, even with the aid of legislation, and in view of the great numbers involved, one can hardly expect the scrub bull to accept a more abrupt dismissal. The complete elimination of the scrub bull alone will not bring the quality of our cattle stocks up to the high standard required. Those breeding cattle destined for the block must become obsessed with the spirit of improvement and advocates of first-class quality. Improvement is not bred by compulsion, and we can never expect to build a stable live stock industry by force and coercion.

The best results will be brought about by appealing to the conscience and honor of producers. The time is coming when the agricultural fraternity will look with contempt on the man who uses a scrub bull, just as society now looks upon the ordinary "drunk" on the street. Let us hasten the day when all and sundry will be ashamed to use a scrub sire and, with concealed pride in their herds, strive to surpass their neighbors in the excellence of their breeding stock.

Stock raisers need to be shown the difference between good and poorly-bred stuff, and this should be carried to the logical conclusion and the difference in market values revealed to them. They must be told how the surplus of thin, scrubby, poorly-bred cattle impairs Canada's opportunity of competing in the world's markets, and this does injury to every farmer, whether he rears good or bad stock. We have implicit confidence in the Canadian farmer, and sincerely believe that more far-reaching and beneficial results will accrue from an energetic policy of education and persuasion than from legislation and compulsion.

### Breeding in Grain.

The finite mind, be it ever so technical, cannot analyze in full detail the modest little kernel of wheat. Analysts can determine the actual chemical contents of the grain and the amount of such definite and known substances as proteins, starches, fats and ash; but in the germ of every kernel of grain we sow there are wrapped up inherent possibilities that influence to a very appreciable extent the quality and quantity of the harvest. These hidden and invisible characteristics cannot be discerned but they exist in the smallest of seeds and gain expression in the crop, just as the characteristics of a direct line of ancestry reveal themselves in the progeny of pure-bred horses, cattle, sheep and swine.

In days gone by farmers listened with contempt to the exhortations of cerealists, who advised selection and improvement of grain with the same care as exercised in the choice and selection of live stock mated on the farm. It has always been conceded that the best calf crop could only be produced from approved sires and dams, but granting that, farmers have too often sown their grain in the spring-time altogether unmindful of the quality of the seed and the possibilities inherent in it. On the experimental grounds at Macdonald College are standing plots of winter wheat seeded with a strain selected from the Kharkov variety. Inter-

persed among these healthy stands of a selected strain are plots seeded with the original Kharkov and other varieties, but the wheat-plants have succumbed to the cruelties inflicted by a severe winter. The selected Kharkov baffled the elements, while the less hardy varieties fell a victim to them. The difference in all these wheats existed, no doubt, in the tiny germ from which the plant took life.

Hardiness is not the only virtue that is present or absent in the seed we sow. There is or is not the ability to yield well; the power or not the power to resist drought and disease; the tendency or not the tendency to throw up a stout, rigid straw and carry the grain through to a clean harvest. All the virtues we seek in a farm crop are housed, in varying proportions, in the seed sown. Nature is capricious, that is true, and may disconcert the careless or indifferent farmer, but the man who can appreciate the fact that there is "breeding" in grain just as there is "breeding" in live stock, will pay attention to the seed he sows, and reap in proportion to the respect he pays to nature's laws.

### The Wool Market.

Anyone who has wool to sell knows well enough that there is no satisfactory market for it. On the other hand, when we purchase goods alleged to contain wool the price is staggering, and the report is that prices on woollen goods are due for a raise this fall, and, if nothing unforeseen occurs, they will soar still higher next spring. After taking everything into consideration, there seems to be no more powerful factor governing the whole wool market than the determination of manufacturers, at home and abroad, to get wool at a low initial cost and then tax consumers every cent the traffic will bear. The sheep industry is threatened in this country by the existing situation, and producers would like to have those entrusted with the enforcement of law and the administration of justice dig the Ethiopian out of the wool-pile.

It has been said that if the textile people got wool for nothing the price of goods would not come down, because wool constitutes such an insignificant item in the total cost of the finished product. Through what door do the enormous costs enter? It was shown during the Budget debate in the House of Commons that Canadian textile firms do not maintain a high wage standard. If the price of raw material and labor costs are not the factors governing the value of the finished product, what is? There is, we are told, a huge foreign demand that is now creating and maintaining a remunerative market for worsted goods. This being so, one would expect to see it reflected in the price of raw materials, as it is in the case of wheat, beef, lumber or minerals. The impression is abroad, and it seems to have foundation in facts, that producers and consumers alike are caught in the grip of a few so powerful that even the Government recoils when they approach.

In an article published in the Live Stock Department of this issue, J. D. Brien points out that the sheep industry is in peril, and he asks for a commission to investigate. It is an easy matter to investigate the producer's end of the business, and it has been done time and time again, but if a provincial commission attempted to get at the root of the trouble they would run up against a formidable stone wall. Honorable Mr. Raney explained in detail, during the last session of the Legislature, that the power to investigate unfair prices, etc., was relegated to the Board of Commerce, but the people of Canada have now lost what confidence they imposed in that institution, for sovereign voters were inclined to pay some attention to the glaring charges of James Murdock, even if the Government did not. In the letter accompanying his resignation from the Board of Commerce, Mr. Murdock writes:

"That later records show that the textile manu-

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urator  
"Melotte"  
Canadian

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Easiest  
Longest  
Knows It.  
Bowl  
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6-inch ensilage  
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## The Farmer's Advocate AND HOME MAGAZINE.

THE LEADING AGRICULTURAL JOURNAL IN THE  
DOMINION.

Published weekly by  
THE WILLIAM WELD COMPANY (Limited),

JOHN WELD, Manager.  
Agents for "The Farmer's Advocate and Home Journal,"  
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1. THE FARMER'S ADVOCATE AND HOME MAGAZINE is published every Thursday. It is impartial and independent of all cliques and parties, handsomely illustrated with original engravings, and furnishes the most practical, reliable and profitable information for farmers, dairymen, gardeners, stockmen and home-makers of any publication in Canada.
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facturers had ample reason to struggle desperately to prevent the true facts from being known to the Board, and that if this Board could have secured the assistance desired, a statement of the facts and figures disclosed, followed by an order as the result of the analysis of the statements of affairs sent to this Board, would have startled and incensed the Canadian public beyond anything that has developed in recent months. This information is still due the Canadian people, when your Cabinet renders the ordinary and reasonable assistance necessary to present it."

"The Farmer's Advocate" concurs in the request for a committee to investigate, but would urge that such commission have full powers and the right of way.

### Thrift and Spending.

Few things more complimentary can be said of a people than that they are thrifty. But thrift has its varieties as well as honesty, and such are the extremes of method by which thrift is attained that one might be either a miser or a liberal spender and still qualify. Generally speaking, there are two kinds of thrift common on the farms. One may be thrifty and succeed by dint of very hard work and only the minimum cash expenditures. One may also become thrifty by less slavish toil but more liberal expenditure for labor-saving implements or other productive investments for the farm. The spendthrift farmer never can succeed, but the man who spends wisely for improvements that will make him money can have a much easier time at a very arduous occupation than the man who relies solely on steady labor for his success. Head work is of as much advantage to the farmer as manual labor, and will often prolong his life as well as increase his contentment. There is such a thing as the joy of farming, but too often our noses are too close to the grindstone and we pass it by. There are many ways of making more money with even less work from farming. No doubt for some, more or better live stock would help. Others might use better seed, larger implements, or a silo. The man who spends some time trying to make his work lighter is not necessarily lazy. He may achieve more by spending than his neighbor can by hard work and close saving.

### Crossing the Prairies.

BY SANDY FRASER.

Four or five days spent on a railway train is an unco' tiresome experience in a guid mony ways, but it must be a lot better for those that ride in the ordinary coach than for the chap that has his ain private car hitched to the end o' the train and has to travel alone. There's generally something doing when ye're wi' a crowd. If naething else there's usually a couple or three babies along, which helps to keep things stirred up a bit. And, noo an' again, ye'll be seein' or hearin' somethin' to mak' ye laugh.

On my trip West, that I hae been tellin' ye aboot lately, I always had my eyes an' ears open for anything that might be gaein' on, tae relieve the monotony o' lookin' at sae muckle country as I was seein' oot o' the window.

There was an Englishman, juist oot frae the Auld Country, apparently, on the same car wi' us. He was findin' things strange, a'richt. When the conductor punched his ticket he put a slip o' paper in the band o' the Englishman's hat, as they hae the habit o' daein' to keep track o' their passengers. After a while the Englishman wanted to gang back tae the smoking-car for a cigar or twa, and says he to the conductor, "Say guard, will it be safe for me to leave my hat on the rack heah with that blooming ticket in it?"

We had anither auld farmer on board too, beside mysel'. In the morning, after we had managed tae get dressed an' oot o' oor berths, that nigger chap that makes the beds came along an' started tae brush us doon, for all the world like he was curryin' a bunch o' horses in a stable. When he came tae the auld farmer he gave him a couple or three whisks and then held oot his hand for the tip he was expectin'. But oor farmer friend wasna sae slack. He took the nigger's hand an' shook it, an' says he, "Good-bye, my boy. I'm sorry ye hae to leave us. See that ye tak' care o' yersel'."

Most o' the time the hours seem tae be passing slow enough, however. And aboot once a day ye have to set yer watch back an hour, to agree wi' the time-table. Ye see, in travellin' West ye're chasin' the sun and ye are catchin' up tae him at that rate. The worst o' it was, wi' us, we were always settin' the watches back at meal-time, and I was hungry enough sometimes, I can tell ye, before I got my dinner.

Three times a day, gin ye want anything tae eat, ye have to mak' yer way back to what we got in the habit o' callin' the "hold-up car," for want o' a better name. (I ken now how the annual report o' the finances o' the C. P. R. comes tae be so satisfactory tae the Directors.) But they put up a guid meal, I'll say that for them. There's mair to eat than juist boquets an' table-napkins, like in some places I've been. And there's no charge for an extra glass o' water.

Gin a chap happens to be o' a sociable disposition he can generally get acquainted wi' a number o' his fellow-passengers an' put in some o' the time tradin' experiences an' opinions wi' them. I fell in wi' half-a-dozen or so o' vera decent people on my way West, and made oot to get mair or less information frae all o' them.

One chap I met had been farming up north in Saskatchewan, somewhere, and he told me that parts o' that country had to be cleared o' trees before it could be plowed. But they cut the trees down by machinery, up there, and instead o' pullin' oot the stumps they juist turn the whole thing upside doon wi' a big breaker plow and a thirty-five horse-power tractor. They use this same tractor for drawing the machine that cuts the trees. This machine had a blade on it shaped something like a scythe, and they draw it against the trunks o' the poplars and ither soft trees they hae in that country and it cuts them off, slick as a whistle. It brings doon onything up tae the size o' a man's arm. All it needs is one man tae run it and three or four to keep a road clear. I wonder what oor grandfathers would hae said if some agent had offered tae sell them a machine like that to do their under-brushin' for them.

Once this bush land is cleared off I'm thinkin' it will be a better country for wheat-raisin', an' the likes o' that, than some o' the land further south. It canna be worse than some o' what I saw along the line o' the C. P. R. onyway. When ye've travelled a day or so west o' Winnipeg ye begin tae run into it. I saw thousands o' acres that were as bare as the road, all drifted over, wi' the high winds they hae been havin' this spring.

One hears some unco' hard-luck stories aboot this part o' the West. I was told o' one farmer who had lost three crops hand-running. Once it was hail, once it was frost, and I dinna ken what got the third one. But he wasna' discouraged. He went to wark in the town last winter and earned enough to buy his seed grain this spring. He put in the crop and in less than three weeks the wind-storms came, and what wasn't blown out o' the ground was buried sae deep that he'll probably never see it till the day o' judgment.

They hae a weed in the West that is called "rolling mustard," if I mind right. This weed is carried by the wind over the prairies until it comes up against a wire fence, or some ither obstruction o' the kind. I saw miles o' fences wi' these weeds piled right over them. And then where the land had been drifting it had heaped itself over these weeds until there was juist one lang mound o' sand where had been a fence. It was what ye might call a sight to mak' sore eyes.

And ye wad see farm-houses, here an' there, wi' not a tree or a blade o' grass around them, right in the middle o' a sand-plain of maybe a hundred acres or mair. They say the sand drifts right into these houses when the storm comes. It's na place for over-particular hoose-keepers, I wouldna be thinkin'.

I was tauld that there was forty townships blown oot this spring, to a mair or less degree, and that there is talk o' gettin' the Government to help wi' an irrigation scheme tae prevent the like happenin' in the future. Maybe it will be a help, but I dinna ken. I'm thinkin' it's bad farm practice that's at the bottom o' it all. They've cropped the land till there's naething left but the sand, and, when the wind comes noo, it's bound to blow. Let them get back intae the land something o' what they hae taken oot o' it, by plowing down green crops o' all kinds, and through time they'll find their farms inclined tae quiet doon a bit and not sae anxious to be strayin' off intae the next township ilka time the wind rises. Gin this plan willna wark I see naething for it but to let the land rin back to grass an' let the buffalos have it again.

But it's time I cam' tae a stop. I'll hae a word to say to ye later, maybe, aboot the last stage o' my trip, among the mountains an' valleys o' British Columbia.

### Nature's Diary.

BY A. BROOKER KLUGH, M.A.

#### The Baltimore Oriole.

Few birds hold a higher place in popular estimation than the Baltimore Oriole. The reasons for this are not far to seek, and we find them to be four in number—its brilliant plumage, musical and cheerful song, its peculiar and attractive nest, and its preference for the vicinity of human habitations.

The brilliant orange and black of the plumage of the male gave the bird its name of Baltimore Oriole, for Cecilius Calvert, second Baron of Baltimore, when he came to America was both surprised and delighted to find a bird wearing his armourial colors, and sent a specimen to Linnaeus. It has also given rise to two other names frequently applied to it—"Golden Robin" and "Fire-bird," while the character of its nest has given it a fourth common cognomen—Hangnest.

The adult male Oriole has the head, neck, shoulders and the upper part of the back jet black, the breast, lower back, and under parts brilliant cadmium orange, the wings black, with the lesser coverts orange, and margin of the greater coverts tipped with white, while the end half of the middle tail-feathers are black and the rest of the tail-feathers orange with a middle black band. The pattern of the female is similar, but her colors are burnt orange and rusty black.

It takes three years for the male Oriole to attain his full plumage, the whole tail of a young male sometimes being yellow, while sometimes only the two middle feathers are black, and frequently the black of the back of the young male is skirted with orange, and the tail tipped with the same color.

The males of this species arrive in Canada about May 10, and at once announce their presence by their loud and joyous song. They arrive a week or more in advance of the females, and during this interval they not only vie with one another in song, but fight pitched battles, chasing one another through the branches and from tree to tree with angry notes. "The coming of the females," says Ernest Ingersoll, "offers some diversion to these pugnacious cavaliers, or at least furnishes a new *causis belli*, for, while devoting themselves with great ardor to wooing and winning their coy mistresses, their jealousy is easily aroused and their fighting is often resumed. Even the lady-loves sometimes forget themselves so far as to attack their fancied rivals savagely. This is not all fancy but lamentable fact."

Much has been written in praise of the song of the Oriole. Wilson said that it possessed "a certain wild plaintiveness and naivete extremely interesting;" Higginson says, "Yonder Oriole fills with light and melody the thousand branches of a neighborhood." Dr. Brewer thought that when they first arrived the voices of the males were loud and somewhat shrill, and that their song changed into a richer, lower and more pleasing refrain when they were joined by their partners. F. Scuyler Mathews, who has made the most critical studies of the songs of North American birds which has ever been attempted, and who has recorded many hundred songs of various species in musical notation, says: "The Oriole is a musician in the fullest sense of the word. His ability to whistle a well-constructed song is unquestionable. His only fault is his fragmentary treatment of a good theme, and his chary way of singing it. He is lavish with calls and chattering, and devotes too much time to preliminaries before he begins on the song that he is well able to round out to a satisfactory finish. His voice is a full rich, round, though somewhat metallic, suggestive of a mezzo-soprano, generally reliable in pitch and percussive in effect. He has a certain vehemence, if not excited, way of singing which is all his own. No other bird can give a staccato note so well, none other except the Thrush can approach him in clearness of style; he never mixes things up, his A is A, either sharp or flat, it never gets too near B. He never slurs over a passage, on the contrary he hits his notes with hammerlike taps directly on the head."

Songs recorded by this writer exhibit syncopation, and Dr. Mathews says: "This music is remarkable for its syncopated character. The bird occasionally fails to put in an important note at its proper place, or he accents a note without reference to the time-beat. In music this is called syncopation, and in popular estimate—rag-time. I have never discovered this character in the song of any other species than the Oriole."

Ernest Ingersoll says: "The female also has a pretty song, which mingles with the brilliant tenor of the male during all the season of love-making."

(To be continued.)

## THE HORSE.

### Examination of Horses as to Soundness.

(Concluded.)

Having finished the examination while standing, we proceed to examine for stringhalt. Take the horse by the halter and back him, step him forward, turn him sharply to the right, practically using his front feet as a pivot, then turn him, in like manner, to the left. During all this watch his hind feet closely. If he lifts one or both feet suddenly and high from the ground with a rapid and apparently involuntary motion, it indicates unsoundness. In the early stages of this trouble it is not easily detected, he may show the above symptoms only occasionally with one or both feet. It is a progressive disease, and after a time becomes so well marked that it can be readily detected during ordinary movement, but in the early stages may escape detection unless carefully examined for.

Then get an assistant to lead him straight away from you for a few yards, say 50 to 100, and straight back towards you on a hard, level surface, first at a walk and then at a slow, easy trot. He must not be held tightly or with his head up, but allowed to go with a slack rein, his head being entirely free from constraint, but in order that the leader may be safe, he must not allow a sufficient length of rein to give the horse an opportunity of kicking him, or rearing upon him. Watch him closely, both going and coming towards you, and observe whether he shows any symptoms of soreness or lameness, either before or behind, at either gait. He may go short and groggy in front, and still not be exactly lame, but of course is unsound. Some horses are naturally short-gaited, but at the same time go free and show no symptoms of soreness. The examiner must be able to discriminate between a naturally short-gaited animal and one that goes sore or groggy. The examination for lameness is one of the most difficult, hence the examiner must be very careful. A horse may stand sound and show no alteration, and at the same time go lame. In some cases he will show lameness only after standing a considerable time. If we observe a man, whose horse is being examined, inclined to keep the animal in motion as much as possible, we become suspicious. If, when we are examining a horse, his actions excite suspicion, even though we cannot say that he is going lame or groggy, it is good practice to stand him in a stall and allow him to remain perfectly quiet for a few hours, and then test him again. If the owner objects to this delay, we are justified in refusing to give an opinion as to his soundness. Where there are reasonable grounds for suspicion, the examiner should not be content until he has satisfied himself whether or not his suspicions are well founded. When a horse shows lameness it is sufficient to condemn him, as he is at least temporarily unsound. Where the lameness is evidently caused by some recent injury, and will undoubtedly soon disappear, the examiner should express his opinion to that effect, and the prospective purchaser may then decide whether or not he will buy. If the horse be lame, it is not the duty of the examiner to determine the cause of lameness, especially if it be obscure. The lameness exists, and with the exception of a possible case, such as above cited, it constitutes unsoundness, and is sufficient to condemn the animal. Even in such a case as cited, it is generally wise to defer purchase for a few days to allow a recovery to take place. We may say that it may be considered unwise to purchase a lame horse under any conditions.

Having satisfied himself that the horse is going sound, the examiner will proceed to test his wind. This, also, is a point upon which he must be very careful and particular. In order to do this, the animal must be subjected to severe exercise or excitement. In order that the examiner may be able to determine whether or not he be sound he must, of course, be familiar with the respiratory sounds made by a healthy horse under such conditions. There are several diseases of the respiratory organs which are apparent only under severe exertion, as roaring, whistling, wheezing, etc., all of which are different forms or conditions of the same trouble, viz., diseases of the throat or nostrils, principally of the former, which lessen the calibre of the respiratory tract and cause an abnormal noise during inspiration or expiration. In many cases there is a wasting of the muscles of the larynx (the cartilagenous box at the commencement of the windpipe) or a thickening of the mucous membrane of the same. The abnormal sounds made are due to a large volume of air rushing through a constricted passage to reach the lungs. In order to prevent this, some unscrupulous dealers will sometimes stuff the false nostrils with batting, and, by constricting the external opening, prevent air entering in sufficient volume to cause a noise. When a noise is caused by the conditions mentioned, it is made during inspiration, expiration taking place in a normal manner. In cases where the calibre of the nostrils is lessened by growths or injuries the abnormal sounds are usually made during expiration. Another condition to be carefully looked for is broken wind or heaves. Here again, unscrupulous dealers ply their art. A horse so affected may be dosed so as to temporarily lessen the symptoms so that when at rest he will not show the decided abdominal or flank motions during expiration, that indicate heaves, but during severe exertion and for a few respirations after it the presence of the disease can be detected. In case where doubts are entertained as to this trouble and the examiner is not able to give a definite opinion, it is good practice to cause the animal to cough, by pressing the throat between the thumb and fingers until the animal is forced to cough. The nature

of the cough will help greatly in diagnosis, as every horseman is familiar with the peculiar cough of a heavy horse.

In order to test the wind, a man should mount the horse. If the examiner be still suspicious of lameness it is well to have the horse ridden at a slow trot with a slack rein both from and towards him. If lame in front he is more likely to show it with weight upon his back. Then instruct the rider to take the horse down the street or road for a considerable distance, better not less than a quarter of a mile, and ride him back at a fast gallop, and draw him up suddenly when he reaches you. If disease exists he will make some of the noises mentioned or breathe heavily and exhibit the characteristic flank motions of heaves. If he be sound he will make a few rapid and somewhat loud respirations and then respire normally.

We have endeavored to treat this important subject as thoroughly and simply as possible, but must again state that in order to be able to satisfactorily examine a horse as to soundness, the examiner must be thoroughly conversant with the appearance and actions of a sound horse.

WHIP.



First Prize Shire Foal at the Royal Counties Show.

## LIVE STOCK.

Rape sown now will furnish good calf or hog pasture by the middle of September.

Sheep will not do well on bare pastures. The flock require good grass, water and salt.

Watch for sore feet in the stock. A cracked hoof, a bruise or cut causes pain and lameness. Tramping over wet ground or through a soggy yard tends to produce sore feet.

A good fly repellent sprayed or rubbed on the cattle each morning will give them a degree of relief from the tormentors and will aid in keeping up the milk flow and increasing the gains.



An English Winning Shropshire Ram.

Many unfinished cattle have been going into the markets the last few weeks resulting in the market having a bearish tendency. There appears to be a demand for finished stuff.

If it takes four-and-a-half pounds of grain to make a pound of gain, feeding four-cents a pound grain to hogs which sell at nineteen cents per pound is no get-rich-quick proposition. In fact the owner has nothing for labor, investment, depreciation etc.

If the flock is pastured on the road the owner should not complain if there are a few casualties from cars, dogs, etc. Sheep pasturing on roads are a nuisance, and should not be permitted.

Undocked and uncastrated lambs seldom bring as much as those docked and castrated, yet thousands of the former are marketed each year and their owners bear the loss as a result of his negligence in the spring.

The Live Stock Commissioner has the following paragraph in Live Stock Notes relating to live weights and meat yields:

"Among the factors affecting the ultimate beef supply, one of outstanding importance is the average yield of beef from the dressed carcass. From an economic viewpoint yield is perhaps more important than the number of live stock or the rate of slaughter. Reports from the packing industry show that marked variations occur one year with another in the average dressed weights of cattle. Figures supplied by one of the chief packing companies, show an average dressed weight of the cattle slaughtered during the Fiscal Year 1920, approximately 97 pounds less than during 1917, 75 pounds less than during 1918, and 50 pounds less than during 1919. Figures of another prominent firm also show around 50 pounds less dressing weight in 1920 than in 1919. Stating the matter another way, the dressing percentages have steadily diminished since 1917. The significant point in connection with these figures is that the higher the average quality and live weight, the higher the dressing percentage. Good live weights beget good dressing percentages. Heavy movements of thin butcher stock and canners and cutters marked the shipments of cattle during the Fiscal Year 1920."

### Let Some Light Into the Wool Business.

EDITOR "THE FARMER'S ADVOCATE."

To those who are taking an interest in developing the sheep industry of the country, and especially of Ontario, the present situation, regarding the price of wool, particularly wool of the coarser grades, is certainly becoming alarming if not serious. Thousands of dollars have been expended and an immense amount of labor involved, in an effort to bring sheep breeding in this country up to a standard, whereby we could be in a position to supply our country with at least a reasonably steady supply of wool and mutton. We were making some headway. The sheep stocks of the country, especially of Ontario, have been steadily increasing the past few years. Sheep breeders were beginning to see some results of their long hard struggle to make the sheep population something worth while. But now, owing to the low price of wool, all this work seems likely to be for nought. Farmers and sheep breeders cannot understand the seemingly complex situation of long or coarse wool being twelve cents a pound and the prices of clothing and woollen goods of all kinds still soaring.

True, we get the information that the whole demand is for the finer grades of wool. Manufacturers claim there is no demand for tweeds, but all the demand is for worsted and fine grades of clothing. What about blankets and other articles wherein the coarse grades of wool are used? I saw an agent of a well known woollen house offer a tradesman blankets at a dollar and a half a pound, said blankets being half cotton. Upon the merchant inquiring the reason he could not purchase "all wool" blankets, he was informed that it was "impossible to get wool." Yet sheep breeders are offered only twelve cents per pound.

I am not one of those who are continually shouting "profiteer! grafter! robber!" to those who are engaged in other industries, but it seems to me that a thorough investigation into the woollen business should be made and made now by the Province of Ontario.

If, in the ordinary course of events, the trade is being conducted in a proper manner, manufacturers making a reasonable profit, all well and good. It will not do the producers any harm to know it. On the other hand, if the business is not as it should be, steps certainly should be taken to remedy matters.

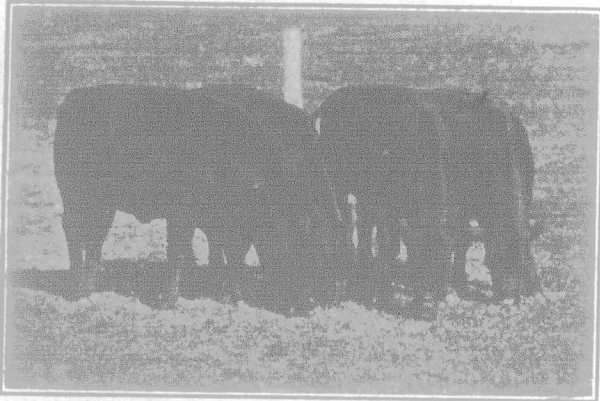
As the modern system of legislation seems to be on the commission plan, perhaps a commission (I mean a few men with brains and nerve) could be set to work to secure a little inside information regarding the entire woollen business. I quite understand that the manufacturing and trading in wool and woollen goods cannot altogether be controlled by conditions within the country of their manufacture, any more than can any other industrial and mercantile pursuits. Conditions in outside countries all have their effect on certain articles of manufacture. But in spite of the intricate ramifications of trade, it is my opinion that a proper investigation into this woollen business would clear the air and perhaps be the means of retaining a large portion of the breeding stock of the Province. Otherwise a large portion of the valuable stock of the country will be dumped on the market this summer and fall, thus reducing the sheep stocks of the Province to a minimum. The seriousness of such a course must be apparent to everyone. Manufacturers are claiming that the goods being now manufactured are from wool purchased at the high prices prevailing during the past few years. What about the future? I saw a letter sent to the trade saying prices paid for spring of 1921 are in many cases from 50 to 75 per cent. higher than were paid during the past spring. This letter concludes with the statement "possible reductions distant, manufacturers and spinners so fully booked they will resist any reduction at all." Surely now the legislators of this Province, between their picnics and time spent in telling of the tremendous attempts made to bribe and contaminate them, can find time to look into this, to my mind, very serious situation of the sheep industry.

Kent Co., Ontario J. D. BRIEN.

# Four Prescriptions for Successful Calf Rearing

How Some Splendid Calf Herds Were Reared—Quantities of Milk Given—Size and Quality of Grain Rations, and Calf Management in General.

EVERY calf has a right to be well born, but thousands and thousands of them are simply scrubs. Every calf regardless of its breeding has a right to be well fed, as long as it lives, but at least half the calves dropped annually in Canada are denied the right of developing the inherent possibilities that are born with them. Successful live stock husbandry depends almost entirely upon two dominating factors, "Breeding" and "Feeding." Breeding is the foundation or the groundwork, so to speak, while feeding provides the superstructure. It is utter nonsense attempting to build a strong, imposing super-structure on a defective foundation, and it is economically unsound to spend money and effort on an elaborate foundation and put a puny, mean structure on top of it. So it is with calf rearing.



Four Calves That Have Been Started Right.

In this enlightened age every calf should be well-bred and then it deserves to be properly reared so as to develop to their fullest extent the inherent possibilities wrapped up in the new-born animal.

It is a wise policy to rear calves cheaply, but it is false economy to stunt them in their calthood. Too many calves are simply kept alive until they can go on to grass and pick a living for themselves. During the period in which they would respond most handsomely to feed and care, they are kept on little more than a maintenance ration; their growth is retarded and their future is marred. Nature intended that calves should have the health-giving, growth-promoting sustenance provided by the dam, but man has modernized calf rearing—he has adopted the offspring, and in too many cases he has been a failure as a foster-parent. Perhaps the most striking and appalling evidence of improper methods is to be found on our leading live stock markets. The stock yards relate a tale that few would believe if they got it by word of mouth or from the printed page. Stock yards tell the whole story with unerring accuracy; they tell where the good and the bad stock come from; they tell where good cattle are bred, and they tell where cattle are well fed; they hold up some districts as the mecca of scrub bulls and the home of careless, indifferent feeders; they speak as loudly in praise of other localities where the pure-bred sire is enthroned and the farmers take pride in feeding and rearing the live stock bred along modern and improved lines. To get a true picture of the animal industry in any country, all one has to do is visit the stock yards where the final disposition is made of the stuff bred and fed. The stock yards constitute the high court of the live stock industry, and right here is where we find conclusive proof that better breeding and more liberal feeding should and must be practiced, in order to raise our animal industry to a sound and profitable basis.

So far as feeding is concerned there is no place where feed brings such good results as with the calf, and with this in mind a representative of "The Farmer's Advocate" paid particular attention to calf-rearing methods in vogue at several public institutions visited throughout Eastern Canada. In every case where data was collected a splendid calf herd was observed and for this reason the information later set down in this article should be especially valuable. It is not theory, it is actual practice which has brought and is bringing results. Particular attention was paid to the quantity of milk fed. Very frequently calves are allowed too much milk and the results are anything but satisfactory, for the victims contract scours, become pot-bellied, and generally unthrifty. A common practice, too, is to throw a calf out into the world when it is only four or five months old and expect it to thrive. Calves are calves until they are nine months or a year old and should be treated as such.

The quantities of milk and grain fed at these various

institutions should be accepted as a guide only. It is the principle of liberal and careful feeding only that we desire to have accepted. Calves of the same breed vary in size and appetite, and the difference between calves of various breeds is apparent to all. Calves require individual attention just as do adult animals. No hard and fast rule can be laid down, but the broad underlying principles of successful calf rearing can be gleaned from the methods herein described.

## CALF REARING AT MACDONALD COLLEGE.

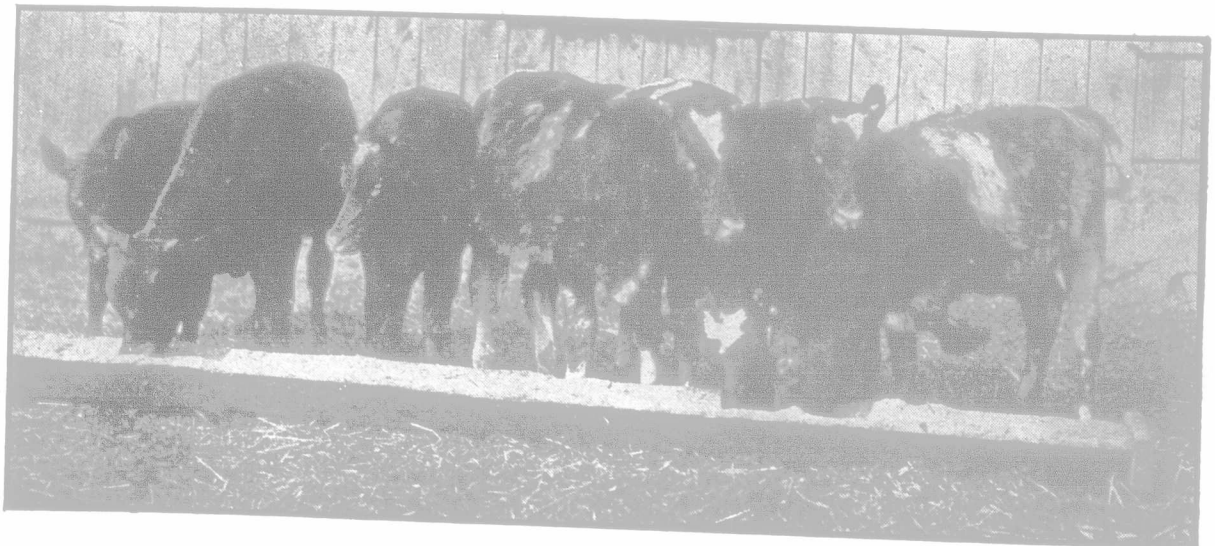
At the Macdonald College the new-born calf is left about one day with the cow, until the condition of the calf and the dam warrant their separation. The calf is then fed whole milk twice a day. Small calves, from 50 to 60 pounds in weight, receive about 3 pounds twice daily, but larger calves may receive as much as 5 pounds of whole milk at a feed. From 8 to 10 pounds per day is the regular allowance. Small calves are allowed to run from 14 to 20 days on whole milk, but strong calves have skim-milk introduced to their ration at an earlier period. It is considered better practice at Macdonald College to introduce skim-milk early, rather than feed whole milk for a long time and then change suddenly. Usually a period of three weeks is allowed for the transition period from whole to skim-milk. Very shortly after the skim-milk is introduced, oatmeal siftings are added to the diet. At the time of our visit to Macdonald College these siftings were not procurable and a brand of "oat feed" was being used. Frequently the hulls are sifted out of crushed oats, and the remainder is fed. This is frequently mixed with oil cake. Oatmeal siftings, it was said, are high in fat, containing about nine per cent. For this reason they make a good substitute for the fat in whole milk. A very small handful is added to the milk for four or five days and gradually increased as the calf develops. The quantity of milk is also increased and when a calf is six weeks of age it receives in the neighborhood of 16 pounds daily. It is an established rule at Macdonald College that twelve pounds of milk at a feed is the maximum for any size of calf. Skim-milk is fed until the calf is six months of age. The oatmeal siftings fed with the milk are also increased until the calf receives about one-half pound per day.

A meal mixture composed of 2 parts crushed oats



A Growthy Ayrshire Calf Herd.

and one part bran is also fed when the calves are still quite young. As soon as the calves can be taught to eat it, the meal is sprinkled into their mangers. When they are done drinking their milk they become engaged in eating the meal and it has been found to keep them from sucking each other. At six months of age calves will be getting about 2 pounds daily of bran and oats. Good clover hay is fed as soon as the calves will eat it, and roots and silage (roots preferably) are allowed as soon as the young things will take them. The feeding



Some Pail-fed Dual-purpose Shorthorn Calves.

of silage prior to the milk ration has been found to give bad results as it causes digestive troubles.

Late winter and early spring calves are housed all summer, unless good grass is handy. An effort is made, however, to give calves about a month on grass in the early fall. Calves with this grass experience seem to do better when turned out the following spring. It has not been found advisable to turn the calves out in the spring with the young and dry stock. They are first put on a good pasture handy to the stables, where they receive a daily meal allowance for two or three weeks. They are then turned to pasture with the dry and young stock. A. R. Ness of the Animal Husbandry Department is of the opinion that fall calves can be raised more cheaply than spring calves, for it works out that up to two years of age the fall-dropped calf spends about ten weeks more on pasture than the spring-born calf.

## REARING CALVES AT FREDERICTON, N. B.

A splendid bunch of calves were observed at the Dominion Experimental Farm, Fredericton, N. B. A number of these were pure-bred Shorthorns, while many of them were of dairy breeding, resulting from the grading-up experiment that has been carried on there during the past few years. Inquiries as to the calf-rearing practice brought forth the following information. The calves are pail-raised and never allowed to suck. They are started on from 10 to 14 pounds of whole milk per day, using the mother's milk for the first three days. At the end of the fourth week the milk ration is changed to 8 pounds of whole milk and 2 pounds of skim-milk per day, gradually increasing the skim-milk and decreasing the whole milk until at seven weeks the whole milk is stopped entirely. At this time the calf receives 10 pounds of skim-milk and two ounces of steam-cooked oil cake in the milk as a ration. Grain feeding begins at six weeks of age. A mixture is made up of equal parts crushed oats, bran and oil cake. It is fed dry after the milk. The calves also receive a little hay at this age. This ration is continued till the calves are about four months of age, and at this time the calves are consuming 20 pounds of skim-milk and 2 pounds of grain per day. When roots are available they are fed pulped once a day from the time the calf is eight weeks old. A little silage is also fed once daily. When roots are not available, silage is fed twice a day in quantities that will be readily cleaned up. At four months, the calves consume about 2 pounds of roots and 4 pounds of silage daily. When the calves are five to six months of age the grain ration consists of 300 pounds of wheat bran, 300 pounds of screenings, 200 pounds of crushed oats and 200 pounds of oil cake. About 3 pounds of this mixture is fed daily, and gradually increased to 4 pounds per day, along with 20 pounds of skim-milk, 3 pounds of roots, and 4 pounds of silage. This ration is adhered to till the calves are nine months of age. Fall-born calves are turned to grass in June of the following year. Calves dropped during the summer are not turned on grass till the next June. The opinion was expressed that the calves were receiving quite a heavy grain ration, and perhaps could be fed a little more economically.

## GOOD CALVES AT KENTVILLE, N. S.

In the stables of the Dominion Experimental Farm, Kentville, N. S., the writer found a row of ten well-grown heifers between one and two years old, twelve splendid heifer calves, and eight young bulls. These were of the dual-purpose Shorthorn variety, in good condition and exceedingly thrifty. The methods followed in rearing them were given somewhat as follows: The calves are allowed to remain on the cow for two or three days, depending on the condition of the udder. They are then taught to drink whole milk from the pail, receiving 4 pounds three times daily, or twelve pounds per day. A young calf is never given more than 5 pounds at a feed, and frequently small calves receive as little as 3 pounds. It has been found good practice to provide the young calf with its mother's milk for a short



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time, at least. After from three to five weeks, depending on how the calf is doing, skim-milk is introduced and the change gradually made. At noon the milk is warmed to blood heat. The calves are fed three times daily, with 5 pounds to a feed. An effort is early made to teach the calves to eat grain. Right after the milk is consumed, meal is rubbed on their mouth and nose to get them acquainted with the taste. The meal mixture at Kentville farm consists of wheat bran, finely-ground oats and oil meal, mixed in equal parts. If the feed proves too heavy, 2 parts of bran are used. The skim-milk ration is gradually increased to 21 pounds per day, when the calves are three months old; 21 pounds of milk daily is the maximum. The meal ration is also gradually increased, it being found that at four months of age calves will handily consume about 3 pounds daily. Roots are preferred for the young calves, but silage is given and all the clover hay they will clean up. If skim-milk is available it is fed up to nine months of age and the calves make good use of it. It has been found that a nine-months-old calf will take about 5 pounds of the meal mixture and 20 pounds of roots, or 15 pounds of silage, and in the neighborhood of 6 pounds of hay per day. Plenty of water is supplied, usually where they can take it at will. "Do not forget salt" said the herdsman, Mr. Porter. "It is an important part of the ration. One pound of salt is added to every 100 pounds of grain mixture. All the salt allowance is fed in this way."

CARE AND LIBERALITY PRACTICED AT THE N.S. A. C.

Calves seen in the stable at the Nova Scotia Agricultural College were largely of dairy breeding and the information acquired there applies in some details to the dairy calf but in general principles is applicable to all breeds.

In feeding the dairy calf, the first feed given should consist of the mother's milk. If the cow is a heavy milker, the calf may easily get too much if allowed to suck all it wants. Light feeding for the first week or two should be the invariable rule. The calf should be allowed to suck for a day or two, until the milk is good for use; after that it should be fed from a pail, preferably three times daily, until it is two weeks old. A small amount at each feed is the rule-- not more than a quart at a time for the first ten days. Professor Trueman was very emphatic regarding this point, and declared that many calves were injured during the first seven to ten days by their stomachs being upset with too much milk. Large calves, however, should be fed according to their requirements, he said, and big Holstein calves were often-fed as much as ten pounds of milk per day. After the first ten days, part skim-milk may be substituted for whole milk, and after the calf is three weeks old all skim-milk may be given. At this time some fine hay and grain should be given in addition to the skim-milk. A little fine, mixed hay should be put in a rack fresh every day, where the calf can reach it easily. A grain mixture made up of equal parts of bran, middlings, ground oats, and one-quarter part of oil meal was recommended. A small handful of this mixture may be given daily until the calf learns to eat it with relish. The meal should be put in a box dry, after the calf has had its milk, as it will masticate it better and be more useful to the calf if it is fed dry. Great care should be taken to keep the feed box clean and fresh. All pails used in feeding should be cleaned thoroughly every day. The amount of grain fed may be increased gradually until by the time the calf is three months old it is getting some 2 pounds or more of the mixture per day. The skim-milk may be increased to 8 quarts per day, given in two feeds. Professor Trueman emphasized the importance of feeding calves liberally during the first year. If the calf is not fed enough to make it grow well the first year, it will always be undersized. It is better practice, he said, to feed some grain the first year and none the second, than to feed none the first year and attempt to make it up by feeding heavily the second. More returns in growth will be obtained by feeding grain to the animal when it is young than at any other time.

Western Fair to Issue a Catalogue.

During past years "The Farmer's Advocate" has repeatedly criticized the management of the Western Fair, London, Ontario, for the absence of a catalogue of the live stock entries, but now that the management have decided to issue a catalogue for the coming show we desire to offer a word of commendation. There is a remarkably good showing of live stock at the "Western," but its value as an educational feature has always been discounted by the utter absence of anything that would give visitors a cue to the breeding of the animals, their owners, or to where, when and by whom bred. There is always useful information contained in exhibition catalogues other than that concerning the live stock entries, and no real live exhibition should be without a suitably compiled booklet. A catalogue, however, cannot be compiled and printed in half a day. Entries must be received in time so they may be classified and printed. Exhibitors should break away from the old, time-worn custom of deciding while at the Canadian National whether they will go to London or Ottawa. Eleventh-hour decisions have inconvenienced the management of both the latter exhibitions in the past and taxed the staffs and accommodation at both fairs to care for the tardy entries and late arrivals. And exhibitors following the circuit are not the only guilty ones. It is in the exhibitor's interests to have his entries in early so as to have his stock properly classified in the catalogue and the printing done with as few errors as possible. We record this comment in behalf of all fairs and exhibitions, because few people appreciate the tremendous efforts that must be put forth by the

manager and help just prior to opening in order to please everyone and avoid errors. A catalogue at the "Western" will materially benefit the live stock exhibitors and they ought to reciprocate by having their entries in early.

THE FARM.

Spray Calendar for Potatoes.

BY G. E. SANDERS, ANNAPOLIS ROYAL, N. S.

When the plants are six inches high spray with poisoned Bordeaux and repeat every ten days or two weeks until the tops die of old age or frost.

For the first spray use poisoned 4-4-40 Bordeaux and for the second and later sprays, poisoned 6-6-40.

To make 4-4-40 Bordeaux, dissolve 4 lbs. of bluestone in 4 gallons of water, hanging the bluestone in a coarse sack at the top of the water, 24 hours before using. Dilute the four gallons of bluestone stock solution up to twenty gallons. In another container slake



A Large Implement Shed Photographed in Nova Scotia.

"In the shade of the old apple tree  
Where the snow and the rain blow so free,  
It's no place to store  
The binder and mower,  
And implements there that you see;

For the rust and the rot you'll agree,  
Are worse than hard usage would be,  
And the paint that they wore  
Is a shade, nothing more,  
Just the shade of the old apple tree."

four pounds of stone lime or wet up four pounds of hydrated lime, dilute this up to twenty gallons. Either put the lime solution into the spray tank first or pour the two solutions in together or pour them in by alternate buckets. Strain all solutions going into a potato sprayer. If arsenate of lime, lead arsenate or Paris green are to be added, add them last. For a 6-6-40 Bordeaux, use 6 lbs. of bluestone and 6 of lime. In 40 gallons of Bordeaux use anyone of the following poisons.

- Arsenate of lime.....1 1/2 lbs. to 40 gallons.
- Arsenate of lead, dry.....2 " " "
- Paris green.....1 " " "
- Arsenite of zinc.....1 1/4 " " "



Well Graded Lane on Farm of D. Jack, Perth Co.

Arsenate of soda (arsenoid or sol-arsato) may be used at the rate of 1 lb. to 40 gallons, this poison must be combined with Bordeaux. Directions for using white arsenic may be obtained from the writer.

Use from 60 to 80 gallons per acre application. Where a man applies only 30 to 40 gallons per acre, he cannot expect to control insects and diseases with the above formulas; some growers double them and get fair results, but there is always the danger of burning and poor distribution over the plant.

Spray thoroughly and often if the weather is rainy or foggy.

Spring-Tooth Harrow Best Enemy of Quack Grass.

EDITOR "THE FARMER'S ADVOCATE":

Ever since the spring-tooth harrow came into general use as an agricultural implement, it has been noticed that in most sections of the country there has been a steady decrease in the spreading of noxious weeds, especially quack grass. The reason for this is that it cultivates the land in an entirely different way to that of the much used disc harrow. In fact, the disc does not cultivate the land at all, but simply cuts it up.

When a field infested with quack grass is worked up with the disc the roots are all chopped up in small pieces and left in the soil. All these small pieces grow again and instead of killing this tenacious weed, several plants are started where only one grew before, thus in time spreading it over the whole farm. With the spring-tooth harrow this does not happen as the roots are torn up and left on the surface of the soil to be dried out and killed by the sun and wind.

Many people claim that it tears up the sod but that is not so where it is handled properly. In the preparation for a field of corn in this neighborhood, the spring-tooth harrow was the only implement used besides the light drag-harrows and roller just before planting. This field was in fine condition when the seed was planted, being remarkably free from sods. At present it is not only the best field of corn in the vicinity, but is exceptionally free from weeds of any kind. It has been cultivated regularly but has never been hoed.

It is also noticed in this part that fields of grain where the land was prepared with this implement are very clean and have a good growth. Therefore, the sooner farmers who are still using the disc harrow alone recognize the superiority of the spring-tooth harrow the better will be the condition of the land and the crops in general, as a thorough cultivation of the land with this implement will soon rid a field of quack grass or almost any other weed.

A READER,  
Haldimand Co., Ontario

Crops in Halton County.

EDITOR "THE FARMER'S ADVOCATE":

The recent heavy rains have created a marked improvement in this district, so much so that the prophesy of failure as entertained by many has given place to a genuine spirit of optimism.

The outlook for a bumper crop of oats and barley is particularly gratifying. In many fields the straw has become so long and rank that there is a tendency for lodging, which would be regretted, as it would be accompanied by considerable loss of grain in harvesting.

Alfalfa and alsike are being cut at the time of writing, but owing to the extremely wet weather farmers are experiencing considerable difficulty in curing it. Generally speaking, the hay crop will be below the average, with a few outstanding fields of alfalfa and sweet clover.

Timothy has made remarkable growth since the coming of favorable growing weather, but as it is usually sown as a mixture with clover there will be no heavy yield.

Considerable rust is prevalent in barley and oats in some sections of the country. Fall wheat is poor; in many instances the severe winter-killing which it suffered from, coupled with adverse growing conditions during the month of May, left little prospects for a bumper crop. At the time of writing corn is looking well, sowing was later than usual and due to the fear on the part of some farmers for poor spring crops, a much larger acreage has been sown than is usual. Pasture is only fair, to say the least, and in many places very poor, due to some extent to the early date at which the stock was obliged to resort to pasture by reason of a shortage of winter feed, which was general throughout the Province. Notwithstanding this fact, locally speaking, cattle are in good demand and farmers are asking good prices for all classes of live stock.

Halton County, Ont. A. R. LINN.

THE DAIRY.

The Cream and Milk Purchase Act.

Cream shippers throughout the Province of Ontario have long been laboring under the disadvantage of selling cream entirely on the test made by the purchaser, and there have been many instances during the last two years where producers have complained of low tests. For two years or more the Ontario Milk and Cream Producers' Association has been seeking legislation from the Provincial Government, under the authority of which cream tests as well as milk tests could be checked up, and the producer protected from the unfairness of the occasional unscrupulous dealer. At the session of 1919, a Milk and Cream Testing Act was passed but this was inadequate, and at the last session of the Legislature the Cream and Milk Purchase Act, 1920, was passed and is now in effect. The Act is herewith given in full, together with the regulations made by the Minister of Agriculture and adopted by the Lieutenant-Governor in Council. It should be noted that the Act does not provide for compulsory payment by test, but it does apply to all places, factories, and receiving stations at which milk is paid for by test, or may hereafter be paid for after this manner. G. A. Putnam, Director of Dairying, points out that it would be impossible for the Department of Agriculture to undertake testing for the purpose of determining the value of the milk or cream from time to time, but a sufficient staff will be employed to check up the testing that is being done by purchasers. The object of the Depart-

ment is declared to be that of seeing that proper methods are being used in the testing of milk and cream, and that justice is being done to all concerned.

#### THE ACT.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

1. This Act may be cited as The Cream and Milk Purchase Act, 1920.

2. In this Act,—

(a) "Cream" includes whey cream;

(b) "Factory" shall mean and include a cheese factory, creamery, condensed milk factory, milk powder factory, milk or cream buying or receiving station or other premises where milk or cream is collected for sale or shipment or manufacture, or collected or tested at the point of collection;

(c) "Test" shall mean Babcock Test, and "tested" and "testing" shall have a corresponding meaning.

(d) "Producer" shall mean one who supplies or sells milk or cream to a factory.

3. All cream purchased for sale, shipment or manufacture shall be purchased on the basis of its butter fat content as determined by the Babcock test.

4. All milk paid for on a butter fat basis shall be tested by the Babcock method.

5. In determining the fat content of cream supplied to a factory, the sample of cream taken for testing shall be weighed into a test bottle officially stamped and shall weigh 9 or 18 grams.

6.—(1) The Minister may appoint inspectors to carry out the provisions of this Act, and any inspector so appointed shall at all reasonable hours have free access and admission to all factories or other premises where milk or cream is collected for sale or shipment or manufacture, or to milk and cream in transit on wagons, trains or other conveyances, at collecting stations, railroad stations, express offices, in storage or wherever found, whether in possession of producer, seller, purchaser carrying agent or storage company, and such inspector may take samples of such milk and cream sufficient in quantities to make the proper test.

(2) It shall be the duty of the inspector and he shall have authority,—

(a) To weigh, test and take such quantities as may reasonably be required as samples of any lot of milk or cream or milk products for the purpose of testing the same;

(b) To examine and test samples of milk kept for re-test at a factory;

(c) To examine the records of receipts of milk and cream of all Babcock tests made at a factory, and of the disposition thereof, and of the weight of all butter and other dairy products manufactured daily.

7. Every such inspector shall re-seal any container which has been unsealed by him for the purpose of section 6.

8. Every owner, operator, manager or employee of a factory, or any purchaser, seller or collector of milk or cream or other factory products, or any carrying agent or storage company who refuses admission to or offers any objection to, or neglects to render such assistance as may be required by an inspector, shall incur a penalty of not less than \$25 nor more than \$100.

9. Any person who violates any of the provisions of this Act or any regulation made under this Act, or who falsifies any records, or over-reads the Babcock test or who in any way makes incorrect determinations of fat shall incur a penalty of not less than \$25 nor more than \$100.

10. The Lieutenant-Governor in Council, upon the recommendation of the Minister of Agriculture, may make such regulations as may be deemed necessary for the purpose of carrying into effect the provision of this Act and may impose penalties for the violation of any such regulations.

(2) The regulations shall have the same force and effect as if enacted herein.

11. The penalties imposed by or under the authority of this Act shall be recoverable under The Ontario Summary Convictions Act.

#### REGULATIONS ADOPTED BY THE LIEUTENANT-GOVERNOR-IN COUNCIL.

(a) Every person making a Babcock test of milk or cream for the purpose of determining its value when such value is to be based on the fat content shall observe every precaution to secure a truly representative sample.

(b) Every person purchasing milk or cream on the basis of its butter fat content shall keep or cause to be kept until ten o'clock of the day following the day on which the tests are made a sufficient amount of the original unchanged sample of such milk or cream as is required for the purpose of retest.

(c) Composite samples of milk or cream or representative portions thereof shall be kept for ten days following the day on which such composite samples are tested.

(d) The Inspector shall have the right to require that one-half of the samples of the previous day's testing, but not more than fifty in number, shall be kept until three o'clock in the afternoon, and he shall also have the right to designate the samples to be so held.

(e) A record shall also be kept of the reading of all such Babcock tests of milk or cream, and Inspectors shall have the right to examine such records.

(f) All composite samples of milk or cream collected at a factory and tested for the purpose of determining the value of the milk or cream which said samples represent, when such value is to be based on the fat content, shall be kept in a cool place in a tightly stoppered glass bottle or jar, plainly labelled with the name or the number of the seller, and such composite samples

shall truly represent the several weighings or lots of milk or cream from which the samples are taken.

(g) The owner, operator, manager, or other person in charge of factory, shall keep a record of the amount of milk or cream received each day and the disposition thereof; also of the weight of all butter or other dairy products manufactured daily.

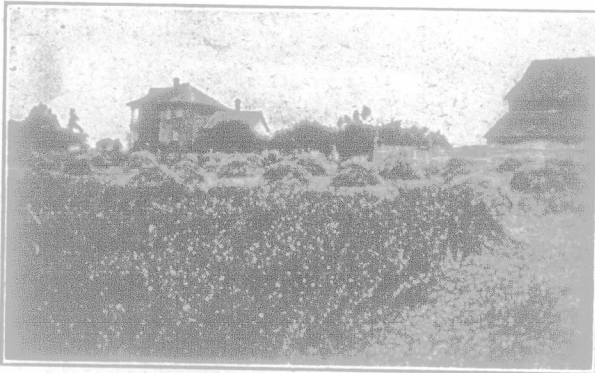
(h) The purchaser shall at the time of each settlement be required to furnish each patron with a statement as to weight and test; and when payment is based on weight and test of each can or single delivery, a detailed statement as to weights and tests of the various lots of cream being paid for shall be furnished at the time of settlement.

(i) If the seal on a can has been broken in transit, the receiver shall at once notify the seller of the same.

(j) A copy of the above Act and Regulations must be posted in a conspicuous place in each receiving station and creamery.

#### Holstein Records in June.

During the month of June the official test reports of sixty-seven Holstein-Friesian cows and heifers were received and accepted in the Record of Merit. The mature class of twenty-one is headed by Raymondale Queen Pietje, with 34.07 lbs. butter from 580.6 lbs. milk, followed by Molly Pietertje Hengerveld, with 32.34 lbs. butter from 744.7 lbs. milk, in seven days, and 134.75 lbs. butter from 3,064.3 lbs. milk, in thirty days.

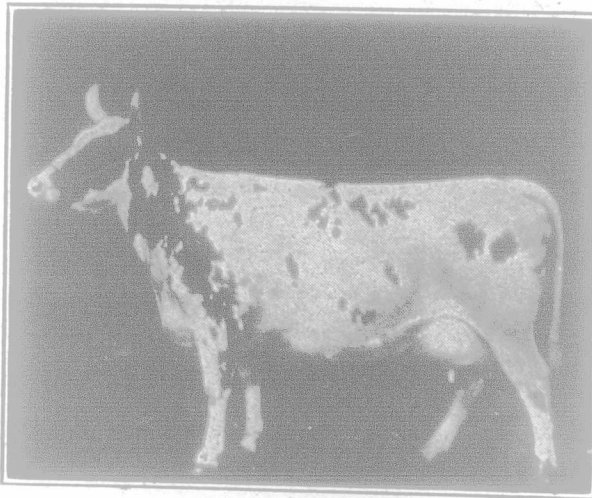


A Three-ten Crop of Alfalfa.

Grown by Samuel Langman, Simcoe County, Ontario.

In the senior four-year class, Colony Aaggie Pietertje is high with 25.32 lbs. butter from 611.3 lbs. milk, in seven days, and 202.15 lbs. butter from 4,792.7 lbs. milk in thirty days. Clover Leaf Emnia Segis is second with 25.28 lbs. butter from 555.3 lbs. milk. Pontiac Segis Alcartra Prescott, in the junior four-year class, is high with 31.30 lbs. butter from 500.1 lbs. milk, in seven days, and 122.82 lbs. butter from 2,434.3 lbs. milk, in thirty days. The senior three-year class is led by Kate Castleton Hartog, with 26.36 lbs. butter from 572.4 lbs. milk. In the junior three-year-class, Roycroft Mildred is high with 26.04 lbs. butter from 589.8 lbs. milk, in seven days, and 108.68 lbs. butter from 2,542.9 lbs. milk, in thirty days. Of the three reported in the senior two-year class, Maria Colantha De Kol is high with 16.76 lbs. butter from 275.6 lbs. milk, and in a class of fourteen junior two-year-olds, Countess Alcartra Segis leads with 27.19 lbs. butter, from 453.6 lbs. milk in seven days, and 103.99 lbs. butter from 1,860 lbs. milk in thirty days.

During the month of June the semi-official test reports of twenty-seven cows and heifers were received and accepted in the Record of Performance. The three leaders in the mature class are all above the 20,000-lb. mark,



Gardrum White Floss.

The splendid Ayrshire heifer that won the last dairy test at the Winter Fair, Amherst, for the Nova Scotia Agricultural College, with a total score of 270.97 points.

while Calamity Snow Mechthilde is high with 1,133.75 lbs. butter from 25,424 lbs. milk. She is followed by Elsie Fairchilds Queenie, with 925 lbs. butter from 20,152 lbs. milk, and third comes Nell Iosco De Kol, with 902.50 lbs. butter from 24,156 lbs. milk. Three in the four-year class are reported, and in this trio Idylwilde Alice Echo De Kol is high with 791.25 lbs. butter from 18,911 lbs. milk. The two-year-old class of ten is headed by Bessie Posch Colantha, with 723.75 lbs. butter from 18,168 lbs. milk.

#### Milking Machines in Use in Canada.

The Markets Division of the Dairy and Cold Storage Branch, Ottawa, report on the number of milking machines in use in Canada. One make of milking machine is used on 1,000 farms, while another variety is used on 400 farms, making 1,400 farms in all using two kinds of milking machines. Other makes are reported according to the number of units in use; combined they total 8,160 units. It is quite reasonable to expect that the 1,400 farms first reported would use somewhere between two and three units on the average, which would bring the total number of units now being used in Canada well up to the 11,000 mark.

#### HORTICULTURE.

##### How Fruit Growers in British Columbia are Tackling the Marketing Problem.

BY WALTER M. WRIGHT.

Just at this season of the year fruit growers are likely to be much interested in the methods that prevail in the different fruit-growing sections. Those in the East will likely feel a greater interest in how we go at the problem in Summerland, British Columbia, and hence it is that I have mapped out a sketch of our methods in the hope of assisting others in their own peculiar situations.

The main object, of course, is to get the good prices and to do that the leaders of the movement here have encouraged the attempt to get a firm grip on the dessert trade for all kinds of fruit that can be grown in our climate. With that in mind and the extra spur of the growers to the south of us across the line with their tremendous acreage and marketing systems we have gone at it, and have made a good name for ourselves. Catering to the dessert market means a greater amount of pressure on growers to persuade them to eliminate from their produce the defective specimens. It has forced the box pack in all kinds of fruit. Every thing has been done to put up a pack that will show the very best that is in the fruit. Box pack has of necessity called for the line pack. All specimens in the package are in line two ways at least, and this shows the fruit to advantage, tempts the eye of the buyer, attracts the purchaser from the street to the store, and very often will surmount the obstacle of placing such poor quality fruit as the Ben Davis or Gano; and, in cherries, the "facing" of the basket with such cherries as Royal Ann, which ordinarily are a hard cherry to get rid of, has the same effect.

Here we market through various channels. First of all of them comes the O. U. G., the co-operative sellers. They have one big difficulty, and it is that no one man is responsible, and expenses, which in a one-man business would be eliminated, are almost a foregone conclusion with them. The commission man is still here and does a considerable business, especially in other places in the Valley. The handicap of the co-operative seller is that they cannot say what the fruit will bring even after the crops have started to move; they have to have many employees that in an ordinary business could be kept only part time, and the bookkeeping end of it is a very big affair, often quite unwieldy. Yet with all this they are making wonderful headway.

Quite a number, and the number is ever increasing, sell by the co-operative union and also by mail orders. This is always on the increase. It is a very interesting side, and to some growers it is their salvation. It has grown to such an extent in here that Summerland has now a bigger express business for the year than has the city of Vancouver.

A short time ago I was talking to a shipper in here, and he said that that morning he had just received an order bringing his receipts up to \$2,000 for shipments of fruit. This money he had in the spring of the year when, for most growers, money is the scarcest article about the farm; and he is only one of many here. The system is this, varied of course by individuals: An advertisement is inserted in several of the prairie papers or in the Province where shipping is profitable, announcing the prices that will be asked for various kinds of fruit and the season when they will be shipped. The consumer is guaranteed tree ripened fruit, and careful delivery and packing. The money for the fruit to be sent to the grower with the order; and the advertisement is carefully worded so as to avoid misunderstandings. These orders are received, put on file, and filled as the various fruits ripen. There is one difficulty with the grower in this kind of marketing, he often gets an order that he cannot fill and he must buy, which necessitates a considerable amount of telephoning and travelling after the kinds of fruit he does not grow himself, or of the kinds of which he may have over-sold. However, even with this difficulty the number is ever increasing, and hence we must consider it has been a paying business for few of them drop it.

The attempt to get this market can be, and is, much advanced by the growers putting in small recipe books in the orders when filling. For instance, the Fruit Growers of British Columbia had a booklet brought out with methods for using different kinds of fruit and vegetables. The growers got these and sent one to each party ordering from them. The book helped sell more fruit, and often introduced new favorites that consumers had not been accustomed to use.

There is another thing, and it would pay fruit men to advertise it all over just now since sugar is so high. Fruit does not need sugar to preserve it! You may can

**in Canada.**

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almost every kind of fruit and not use one speck of sugar, still having it keep perfectly. The present high price of sugar is going to be a detrimental factor in this year's marketing. The British Columbia F. G. A. advertised this in a great number of the prairie papers last year, and much unsweetened canning was done, but not enough.

Canning in glass jars is a hot, tedious, expensive, tiresome business. Canning in tins can be done at home, no soldering, no working in the heat, no working over steam, cheaper than with glass, absolutely safe, and as farmers we should advertise this fact to the limit through our fruit growers' organizations. There is a little machine that costs \$15 that will seal the cap of a can without solder. It is about the size of an ordinary meat chopper and quite as simple. Place the fruit in the cans, in a cool room, pour hot syrup over them or hot water, put the top on the can and seal it with this machine. Take it to the kitchen, put it in water along with the other cans you have done, and let it boil the proper time; take the cans out of the water and they are done. In half an hour a woman can do up a dozen cans of plums and not even be warm doing it. As farmers we should advertise this fact. It will be and is paying. If the fruit is done without sugar, then when it is wanted open the can, allow the sugar to soak into the fruit either by pouring it over the bowl of preserves and let it stand, or heat it. Many varieties of fruit take less sugar this way to sweeten them.

What about the cost? Taken over a period of years tins are cheaper. When a can is used it is thrown away. When glass is used a lot are broken and they are thrown away; one glass broken will pay for quite a few tins. Many use specially expensive glass and expensive tops; these all count up, and comparing the two methods of tins of glass, alone, the tin will, in a period of three or four years (judging by the past 3 years) have cost less. When we consider the loss in the glass or tin, the saving by the tins is tremendous. Taste? No one can tell the difference. If you don't think that is the case take home some canned fruit put up by the same woman in tins and glass; place the fruit before the most particular, in several bowls and ask them to pick out the ones from tins and the ones from the glass, and they cannot do it.

I have no interest in the manufacture of tins or of these little machines. I have no interest in the safe of anything connected with them, but I have a considerable interest in the selling of fruit, and like to see the women get out of the trying heat of the canning season so that they will not be dreading preserves, but will enjoy it, and so buy our fruit to do it up, especially because they can do it and be sure it will keep. Then I'll sell them more fruit to can, and so may you.

**Fruit Crop Prospects.**

The second Fruit and Vegetable Crop Report, issued by the Dominion Fruit Commissioner, indicates good prospects for heavy fruit production this season. The report is issued under date of July 6, and of course has only canvassed the field up until that time. One pleasing feature of all the reports coming to the Commissioner is the comment on the absence of scab or fungus. It looks now as though Canada would have a clean crop this year.

Generally speaking, apples promise well in Ontario. In Lambton County all varieties set well, except Baldwin in limited areas. In the Georgian Bay District the June drop was not complete when reports were received, but the outlook was good. At Owen Sound, Snow, Man and Duchess promise to be heavy, but Baldwin, King, Golden Russett, Greening and Wagener will be only a partial crop, with Spy almost a total failure. The Collingwood District reports the promise for fall apples good, with the exception of Yellow Transparent. Winter varieties are only medium. Oshawa reports the set as good, but not heavy in uncared-for orchards. The weather was ideal around Newcastle during the bloom period. Kings, McIntosh Reds and Snows looked well, but the acreage under these varieties is not large. Spys and Baldwins were a light set, and in some sections a complete failure. It was said that Ben Davis will comprise seventy per cent. of the winter varieties. A light crop is reported from Port Hope, but fair prospects are held out in the neighborhood of Cobourg. Spys are light to good in the Colborne-Brighton District, and Baldwins are light. The majority of other winter varieties, however, gave a satisfactory show. From Trenton comes the word that if favorable conditions continue the 1920 crop, both in quality and quantity, should be the best of the past three or four years. Farther East in Ontario conditions are variable, but generally speaking fair prospects for a good crop are the rule.

When the report was issued the apple crop in Quebec was still clean. Some of the fall varieties throughout the various apple-growing districts set full, and other varieties promise from fifty to seventy-five per cent. of a crop.

The July report places the Nova Scotia crop at approximately sixty per cent. of last year, or in the neighborhood of a million barrels. All the foregoing reports are, of course, subject to change, and not until well on in August can a fairly accurate estimate of the harvest be made.

The British crop is still placed at about twenty-five per cent. of last year's, and from the United States comes the word that the general consensus of opinion is that the apple crop as a whole will be one of the best for several years.

Tender fruits give promise of a good crop in practically all of the tender fruit growing districts of Canada.

The Commissioner sounds a note of warning in this report regarding packages, and says: "There is a tendency

to defer making arrangements for supplies, and we would strongly urge that every grower place his order for barrels and boxes to take care of his crop, and not depend on the buyer to furnish these as has been the practice in many districts. The prices quoted for apple barrels in Ontario are from \$1.25 to \$1.50. In Nova Scotia the market is irregular, prices varying from 75 cents to \$1."

Growers are also cautioned regarding the standard apple barrel, and it was intimated very emphatically that the regulations this year will be enforced.

**Conditions Very Promising in the Annapolis Valley.**

By C. PERRY FOOTE, KINGS COUNTY, N. S.

Politics at date of writing is the all pervading subject. The wise ones of both "Grit" and "Tory" followings are not so certain of where their candidates are at. "This farmer scheme is one disturbing factor," say the wise ones, while "you never can tell just what a woman



**An Annapolis Valley Fruit Grower's Home.**

The property of W. B. Burgess who handles about 90 acres of orchard.

is going to do" exclaim others. The Minister of Highways or Mud-holes—the title applies to Hon. H. H. Wickwire, being according to the party using it—is fairly certain of his seat in Kings, but we all can call to mind what one of our politicians has applied to the certainty or uncertainty of elections. The farmers' meeting held at Kentville failed to agree upon a candidate for nomination. When we understand that the three other candidates are good representatives of our farmers, it would appear to be rather premature, at this stage of organization, to put any men in the field.

Annapolis County, the Western end of the Valley, has done better and has two good farmer candidates in Edgar Shaffner and V. B. Leonard. By the way, Mr. Shaffner is a near relative of Dr. Shaffner, a representative M. P. from Manitoba. July 27 is the date of the Provincial election; then we'll know, but as the Opposition has comparatively no issue to take to the people, it looks as if the Hon. George H. Murray's leadership of Nova Scotia affairs for some time to come is assured. Still, we repeat, July 27 is the date—then we'll know.

As this appears to be the beginning, possibly it is well to begin at the first. The winter was very steady, with very severe cold, and many hundreds of trees were killed outright or badly injured by the severity of the weather. Grass fields wintered splendidly and started early in April, but the exceptionally fine weather of May and the early portion of June seriously affected the hay prospects, however a few timely showers to date July 12, have very materially increased this crop. Clover wintered extra well and the quality of grass

now nearly ready for the harvest is as good if not the best we have had for some seasons. Grains of all kinds look well and are doing splendidly; the fine spring weather largely increased the acreage of this as well as other tilled crops. The acreage of potatoes is considerably larger than that of 1919. The prospects for this crop never looked better, although the Colorado beetle is doing his best to keep up the H. C. L. we hear so much about.

There was a good crop of very fine strawberries. The blueberries are just beginning to ripen and give promise of a more than average crop. Pears, plums and cherries are good in some localities but not so abundant in others, and the quality of all this season's crop to date gives promise of the best. There was a large acreage of turnips planted and they are doing well indeed.

Apples.—Now we get down the "The Valley's" crop. The abundant bloom of the spring of 1920, following the crop of 1919, came as a real surprise, but although weather conditions during the blossoming season were ideal, the set of fruit has been very disappointing to many, and today, while the foliage is very heavy and healthy in appearance, the apple crop is estimated to be considerably less than that of last year. There is another difference for which we are thankful. While the apples as a whole last year were the worst ever produced those of this year are very large for the time of year, and practically clean of fungus. Dusting has become quite common, the greater part of the farmers in many localities using this method of combatting worm, grub, "bug" and other detrimental factors; but at the same time

many are still using liquid spray, the "weak Bordeaux" appearing to be the favorite, and it would seem that in the very near future lime-sulphur as a spray might be a thing of the past. But you never can tell. A careful investigation of orchards dusted and sprayed showed practically no difference in the prevalence of fungus, either to date appearing to be very effective, but the foliage appeared to be better on the dusted trees, with considerably more fruit in favor of the dry application. This increase in fruit is considered by the users to offset the price of materials. A leading farmer recently told me that he used three and a half tons of Bordeaux dust at one application. This at from \$6 to \$11 per hundred weight runs into quite a bill. A plant for manufacturing the dust was recently erected at Centerville, Kings County, N. S., and has prepared to date over 200 tons of this pestiferous killing concoction. We believe that the apple crop will be one of the best in quality we have produced for some seasons, and when every tree is picked a great many barrels will be filled, and remember many, many young trees will bear their first crop this season, thus making our 1920 crop much larger than it now appears.

On Saturday, July 10, the Province of New Brunswick voted to retain the Provincial Prohibition Act and to prevent the sale of light wines and beer. The voting was as follows: For prohibition, 44,000; against, 20,240. For wines and beer, 23,698; against, 36,374.



**A Large Orchard with the tops pruned down to a reasonable height.**

## POULTRY.

### Co-operative Egg Circles in Canada.

During 1919 there were 85 co-operative egg circles operating in Canada, of which records have been secured by the Federal Department of Agriculture. The following table gives a summary of these records by provinces, including the years 1915, 1916, 1917 and 1918 for egg circles in Ontario. For P. E. Island and Alberta the values given are those represented by advances made to the circles, and by them to their members.

Province	Year	No. Circles	No. Members	No. Shipments	Quantity Shipped (dozens)	Gross Value to Circle	Net Value to Members	Value at Local Store Prices
Ontario.....	1915	24	749	—	244,004	\$ 55,317.15	\$ 51,688.98	—
	1916	28	920	—	340,066	92,859.70	86,987.06	—
	1917	35	1,454	—	487,841	187,381.99	179,607.28	—
	1918	44	2,274	—	667,032	294,043.34	276,599.32	—
	1919	43	2,399	1,545	720,621	345,464.19	331,310.60	\$308,100.16
P. E. Island.....	1919	37	1,642	1,002	482,104	196,309.20	189,091.45	—
Quebec.....	1919	3	118	75	42,354	19,523.69	18,749.20	—
Alberta.....	1919	2	142	93	10,063	3,985.63	3,769.62	—

## FARM BULLETIN.

### The Hydro Radial Controversy.

A somewhat animated discussion has been carried on of late in regard to hydro radials in Ontario. The Provincial Government do not seem inclined to put their O. K. on the whole hydro radial scheme, as it applies to the Province, without a thorough investigation and the acquisition of all the facts. Hydro radial development has thus been halted, and the Provincial Government have come in for severe criticism from hydro radial enthusiasts throughout Ontario. On July 8 a mass meeting of representatives of the municipalities met in Toronto and expressed their disapproval of the Government's action. Since then cutting remarks have been made by advocates of hydro radials, and letters concerning the scheme have been appearing in the press. In spite of this the Honorable Mr. Drury says the Provincial Government will not be stampeded. They have appointed a commission to investigate the whole matter before taking any action whatever. The apostles of hydro radials claim that the Government are not justified in holding up development, because the Province is not financially involved. For hydro radials, the Commission itself issues the bonds and holds as collateral security the debentures of the municipalities interested. The Provincial Government endorses the bonds of the Commission, and it is this action which Mr. Drury and his Cabinet consider a liability affecting the finances of the Province.

It is unfortunate that the Provincial Government is not at this critical time in a position to pronounce on the hydro radial scheme. However, the findings of a duly appointed commission will do no harm. If the hydro radial project is not financially sound, the Province should know it. If the commission return a verdict in favor of hydro radials, it will act as an added impetus to the whole scheme, and give the Government, as well as the people, unbounded confidence in the project. The view is held, however, that a commission is no better qualified to pronounce on hydro radials than Sir Adam Beck and his hydro engineers.

The Governments Commission which has been asked to investigate hydro radials is composed of Mr. Justice Sutherland, (chairman); Brigadier-General G. H. Mitchell, Toronto; Fred Bancroft, (labor leader), Toronto; W. A. Amos, Vice-President of the U. F. O., Palmerston; A. F. McCallum, City Engineer and Commissioner of Works, Ottawa.

This cannot, at first appraisal, be termed an exceptionally strong commission to investigate so important a matter. Outside of Brigadier-General Mitchell and Mr. McCallum, an engineer, there is no member qualified by training or experience to pass on a project such as hydro radials. The Government, we believe should have made its own investigation.

The great majority in Ontario are willing to concede that Sir Adam Beck has saved the Province millions of dollars, and he has been obliged to face and to fight opposition from every direction in order to carry his plans to fruition. However, the insinuation that Mr. Drury and his Cabinet are being influenced by opposing interests should not, we believe, be given credence. Mr. Drury is cautious, and he has plainly intimated that he has not been able to obtain all the information from the Commission that he desired. It does not seem at all likely that a party which went into power with such a strong hydro plank, as did the present U. F. O. group, should at once reverse its judgment without informing its constituents to that effect and telling them why. There is every reason to believe that the Drury Government is still pro hydro and will insist that Sir Adam Beck and the municipalities carry on their great work for the benefit of this Province. At the same time the Premier has been besieged with request from rural districts as to when they will get hydro—when they can expect it even. Sooner or later the Premier will be obliged to make a pronouncement on this great question, in which so many are vitally interested. More than that the people of Ontario want to know if hydro electric will continuously be used to provide industries with power, illuminate towns, cities, amusement parks, etc., and propel electric lines

paralleling steam roads where a reasonably good service is already maintained, or will it soon be available to lighten the burdens and brighten the life on the farms of this Province, and open up with radials the districts now unserved by any kind of railroad. The Premier is being asked these questions but he has not answered them. Good roads will be an influencing factor affecting the future transportation scheme in Ontario—this too must be considered.

So long as Hon. E. C. Drury is Premier of Ontario he must be guided by his own judgment for he is responsible, not to a number of municipalities only, but to the whole Province. It is refreshing indeed to see a Government

respected in their respective communities. A. E. McMahon is Manager of the United Fruit Companies.

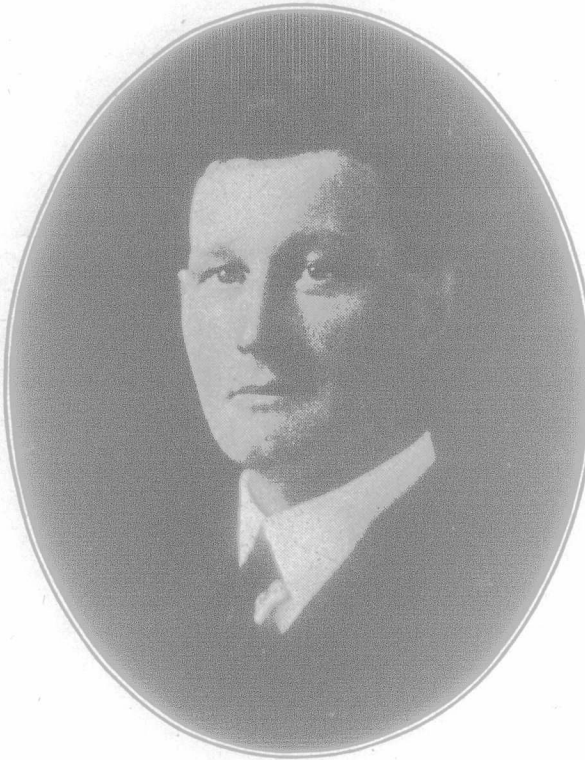
The new organization, we believe, has made a slight mistake by putting its political activities foremost and uppermost. Had some time been spent in acquainting the farmers with the complete aims and objects of the movement, and showing them the necessity for such an organization, it would have made a more stable and healthy growth. The people of Nova Scotia have a cherished political background which is linked up inseparably with the family lineage. In spite of that, however, several attempts have been made in the past to seduce them into the political wilderness, and they view with skepticism any innovation that is not in accordance with political traditions of Nova Scotia. The writer talked with many farmers, not a few of whom have been strong partisans in the past. Their utterances would lead one to believe that they will support a farmers' movement when they are satisfied that it is such, but they are not going to renounce their own parties until they are sure the newcomer is genuine and bona fide.

The U. F. of N. S. as a provincial organization have not in any way affiliated with labor; that matter has been left to the locals to decide. There is a strong labor element in Nova Scotia, but an affiliation with labor in some constituencies would tend to discountenance the organization in the purely farmer ridings. With a strong campaign for members and good organizing work the farmers' movement should grow and flourish in Nova Scotia as it has in the provinces further west.

in Ontario stand out against the demands and clamors of the city of Toronto which has had such phenomenal success in dictating policies not for Ontario only but throughout Canada. Hon. Mr. Drury's pronouncement regarding the future policy for hydro-electric power and hydro radials, as applied to the whole Province will be awaited with interest.

### The Farmers' Movement in Nova Scotia.

The United Farmers of Nova Scotia are breaking into the political arena at the forthcoming provincial elections with candidates in a number of counties. The movement is new in the Insular Province, the organization meeting taking place as late as April 14 last. On June 9 a Directors' meeting was held and policies adopted, but since then the clarion call has gone out to ridings in Nova Scotia and there is considerable response. During the month of June the writer visited Nova Scotia, and while there discussed the matter with farmers, both in and out of the new organization. At that time the County of Colchester was, perhaps, the most forward in regard to the movement, due, no doubt, to the fact that the U. F. of N. S. has its headquarters in Truro and due also to the fact that the President, H. L. Taggart, and one of the Directors, Capt. Hugh A. Dickson are successful farmers and very favorably



H. L. Taggart.

The first President of the United Farmers of Nova Scotia.

known in that part of the Province. The officers and directors of the United Farmers of Nova Scotia are: President, H. L. Taggart, Belmont; Vice-President, A. E. McMahon, Kentville; Second Vice-President, D. R. Nicholson, Coxheath; Secretary-Treasurer, Fred A. Chipman, Middleton. The Directors are: V. B. Leonard, Clarence; Capt. Hugh A. Dickson, Onslow; J. A. MacDonnell, Judique, C. B.; Wm. O'Brien, Windsor; Allan Mackenzie, Malagash. Harry Taggart is one of the most successful and extensive farmers in Eastern Nova Scotia. His farm comprising about 500 acres in all, has 100 acres of dyked marsh and 150 acres of arable upland, and winters 100 head of cattle. Capt. Dickson also works a large acreage and caters to the town of Truro, as well, with truck crops. These men, already too busy with their own farming operations, have been giving their time and energy to the new movement in the hope of evolving something better for the industry. The other Officers and Directors are all farmers or interested in agriculture, and are highly

### The Wheat Board Abolished.

The Government has decided that the present Wheat Board will not function in so far as the wheat crop of 1920 is concerned. The marketing of the 1920 crop will revert to the usual and normal method of pre-war times. The Government, however, promises to watch conditions at home and abroad, and it has retained the right to have the Wheat Board function again if conditions warrant or demand it.

In announcing this decision, Sir George Foster, Minister of Trade and Commerce, drew attention to the three factors which made a Wheat Board necessary to handle the 1919 crop. These were, in brief: 1, European countries were purchasing wheat under control, either separately or in concert. There was virtually one purchaser; 2, Financial conditions necessitated advances of credit by foreign Governments and which could only be adequately met by governmental agencies in Canada; 3, The control by the United States of the purchase and sale of wheat and the fixation of prices thereof, together with an embargo on imports of both wheat and flour. The Government's statement then continues:

"These factors either do not exist or are not in force to the same extent at the present time. From the best information available it would now appear that while, as far as can be ascertained, European buying will be in a greater or lesser degree controlled by the Governments of practically all countries in Europe dependent upon imports of wheat, there does not seem at the present time reason to believe that the purchase by the various Governments or Governmental agencies will not be made independent of each other, both as to transport and purchase, thus constituting conditions of competition that should result in a fair market value being obtained for the Canadian crop.

"The United States has decontrolled the market in grains and flour, and the exchanges therein are now open for trading in December and later options, and there is no longer any embargo upon imports of wheat or flour. All the indications, therefore, are that the marketing of grain and its products in the United States will resume the normal methods and flow in the usual channels.

"It must be remembered, however, that the United States has legislation under which control can be brought into effective force if at any time their Government was to decide that national interests demanded such action.

"Under the circumstances above set forth the Canadian Government has decided to take no steps at present to proclaim the enabling act, which means that the present Wheat Board will not function in so far as the crop of 1920 is concerned, and that the marketing of this crop will revert to the usual and normal methods of pre-war times. The Government will, however, carefully watch the conditions outside of Canada, and will exercise the right to proclaim the enabling legislation of last session if circumstances make it necessary to act in the public interest. From the present point of view, the Government hopes that no such action will be found necessary."

### Crop Outlook Good in Western Canada.

There is a feeling of optimism throughout the entire West this year due to the splendid outlook for a good wheat crop. There are certain districts of course, which have been blown out, and accidents have befallen local sections, but the feeling is that generally speaking there will be a bumper crop. The Bureau of Statistics, at Ottawa, has just issued a revised estimate of the areas sown to grain this year in the three Prairie Provinces, which is as follows:

In the three Prairie Provinces, the estimated area sown to wheat is 15,771,000 acres, as against 17,750,167 acres, the final estimate of 1919, a decrease of 10 p. c. In Manitoba the area is 2,687,000 acres as against 2,880,301 acres (decrease 7 p. c.), in Saskatchewan 9,440,000 acres as against 10,587,363 acres (decrease 11 p. c.) and in Alberta 3,644,000 acres, as against 4,282,503 acres (decrease 15 p. c.).

# Toronto, Montreal, Buffalo, and Other Leading Markets

Week Ending July 15.

## Receipts and Market Tops.

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

	CATTLE						CALVES					
	Receipts		Top Price Good Steers		Receipts		Top Price Good Calves		Receipts		Top Price Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending
Toronto (U. S. Y.)	July 15	1919	July 8	July 15	1919	July 8	July 15	1919	July 8	July 15	1919	July 8
Montreal (Pt. St. Chas.)	721	1,160	424	14.50	14.00	14.75	978	1,551	2,278	18.50	22.00	16.50
Montreal (East End)	825	1,348	786	14.50	14.00	14.75	1,157	2,064	1,219	15.00	17.00	13.50
Winnipeg	1,935	2,273	3,118	13.50	13.25	12.50	1,194	1,222	1,311	15.00	17.00	13.50
Calgary	470	4,099	449	11.50	12.50		354	502	500	16.00	16.00	15.00
Edmonton	379	1,326	298	12.00	10.50	11.00	75		46	13.75	8.50	13.00
							39	209	86	12.50	9.00	12.50

	HOGS						SHEEP					
	Receipts		Top Price Selects		Receipts		Top Price Good Lambs		Receipts		Top Price Good Lambs	
	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending	Week Ending	Same Week	Week Ending	Week Ending
Toronto (U. S. Y.)	July 15	1919	July 8	July 15	1919	July 8	July 15	1919	July 8	July 15	1919	July 8
Montreal (Pt. St. Chas.)	1,584	3,038	2,344	21.00	24.00	21.00	3,213	2,534	3,753	18.00	21.00	19.00
Montreal (East End)	1,179	2,699	1,031	21.00	24.00	21.00	993	1,624	1,020	16.00	19.00	16.00
Winnipeg	3,482	6,871	5,406	18.50	23.50	18.50	925	1,398	1,280	16.00	19.00	16.00
Calgary	453	1,589	393	18.15	22.75	18.00	515	799	1,061	13.00	16.00	14.00
Edmonton	596	445	504	17.75	22.50	18.00	197	13	508	13.50	12.50	14.00
							83	348	7		13.00	

### Market Comments.

#### Toronto (Union Stock Yards.)

On account of the series of price cuts made on medium and common grades of cattle during the past two weeks, and the fact that farmers are making good use of the excellent pastures provided by the recent liberal rain-falls, the receipts were very meagre being 1,500 head fewer than the light arrivals of the previous week. The quality of the cattle was far better than for some time past, and the tone of the market was much improved. The value of the improved quality was manifest on the opening day, when prices made a slight advance, sales on good butcher steers and heifers being fully 50 cents per hundred higher. The market held steady at the advance until well into Thursday forenoon, when, however, local packers after having sorted out the few good loads offered, practically left the market in the hands of the local butchers and speculators. As a consequence of this lack of competition, the market on all classes of butcher stock was lower by 25 to 50 cents per hundred. In expectation of fairly heavy runs, the market was well cleaned up and only a few head of milch cows and stocker cattle remained in the pens. A keen demand for choice killers was very evident in the early activities on each opening market, and also from the attractive and firm prices obtained. One four-year-old steer which tipped the scales at 1,510, sold at \$18 per hundred; 25 steers which averaged 1,250 pounds sold at \$17, medium weight steers of good quality moved readily from \$14 to \$16.50 and the common kind from \$11 to \$14. Approximately 50 per cent of the receipts consisted of light butcher stock, and those of choice quality of this class sold at strong prices; 24 steers which averaged 970 pounds, sold at \$15.25, and a number up to \$16; most of the good light killers moved from \$11 to \$12.50. Female stock moved at steady prices, heifers topping at \$15.50, selling generally from \$13.50 to \$14.50 if choice, while butcher cows which showed much improvement in quality, sold at firm prices until the afternoon of the closing market, when in an effort to effect a clearance, prices were cut 50 cents per hundred. A number of graziers took advantage of the decline in cows and bought the leftovers for grassing purposes. Butcher cows sold mostly from \$11 to \$13 for the good kind and from \$8 to \$10 for common. Cows for pasturing moved around \$8 per hundred ranging from 50 cents to \$1 above and below that figure according to quality. Bulls sold from \$10.50 to \$12.50 for good quality and from \$7 to \$10 for common. Cannors and cutters were weaker at prices ranging from \$3.50 to \$5.50. The stocker and feeder trade was very quiet, and whilst prices held fairly steady the market closed somewhat weaker. Farmers are busy with haying and are not interested in cattle at present. Calf receipts were light, less than one thousand being offered, and on this account the market was stronger on good stock, and closed from \$1.50 to \$2 higher. A number of calves which averaged 200 pounds, topped the market at \$18.50, while most of the sales were made from \$15.50 to \$18. Receipts of sheep and lambs were fairly liberal; while the market was

#### TORONTO

CLASSIFICATION	No.	Avg. Price	Price Range Bulk Sales	Top Price
STEERS heavy finished	79	\$16.50	\$15.00-\$17.00	\$18.00
STEERS* good	330	15.25	14.00-16.00	16.50
1,000-1,200 common	172	12.75	11.00-14.00	14.00
STEERS good	504	14.00	13.25-15.25	16.00
700-1,000 common	173	12.00	11.00-12.50	13.00
HEIFERS good	804	14.00	13.50-14.50	15.50
fair	269	12.00	11.00-13.00	13.50
common	40	9.75	8.50-10.50	11.00
COWS good	382	11.75	11.00-13.00	14.50
common	974	9.75	8.00-10.75	11.00
BULLS good	67	11.25	10.50-12.00	13.00
common	54	8.25	7.50-10.00	10.00
CANNERS & CUTTERS	148	4.50	3.50-5.50	5.50
OXEN	3			
CALVES veal	978	17.75	15.00-18.00	18.50
grass				
STOCKERS good	178	9.50	9.00-10.00	10.50
450-800 fair	73	8.50	8.00-9.00	9.00
FEEDERS good	116	11.60	10.50-11.50	12.00
800-1,100 fair				
HOGS selects	4,728	20.50	20.25-21.00	21.00
heavy	5	19.50	19.25-20.00	20.00
(fed and watered) lights	487	18.50	18.25-19.00	19.00
sows	232	17.00	15.25-18.00	18.00
stags	3			
LAMBS good	2,115	17.50	17.00-18.00	18.00
common	10	15.00	14.00-16.00	16.50
SHEEP heavy				
light	*865	11.25	10.50-12.00	14.00
common	223	8.25	6.00-9.00	9.50
* Yearlings				

#### MONTREAL (Both Yards)

No.	Avg. Price	Price Range Bulk Sales	Top Price
71	\$14.50	\$14.50	\$14.50
149			
89	14.00	13.00-14.50	14.50
186	11.00	9.00-12.00	12.50
44	13.00	12.00-14.00	14.00
108	11.00	10.00-12.00	12.00
179	8.00	6.00-9.00	9.00
91	11.00	10.50-11.50	12.50
395	8.00	7.00-9.00	10.00
21	11.25	11.00-11.50	11.50
108	6.75	6.50-7.50	9.00
68	4.75	4.00-5.50	5.50
10	9.00	8.00-10.00	10.00
2,176	10.00	6.00-12.50	15.00
185	7.50	7.50	7.50
1,790	20.80	20.50-21.00	21.00
281	19.00	18.00-19.50	19.50
126	19.00	18.00-19.50	19.50
554	16.80	16.50-17.00	17.00
12			
592	15.00	15.00	15.00
805	13.50	12.00-14.00	14.00
88	9.00	9.00	9.00
433	7.50	7.00-8.00	8.00

active on most grades, it was somewhat draggy for heavy sheep. Ewes moved from \$6 to \$9, yearlings from \$11 to \$12.50 for good and as high as \$14 for choice, lambs of choice quality at \$18 and good lambs from \$17 to \$18. The market for hogs opened strong closed from 50 to 75 cents higher, selects selling on the closing market from \$20.75 to \$21, fed and watered. Receipts were light. The total receipts from January 1 to July 8 inclusive, were 154,783, cattle, 49,838 calves, 179,389 hogs, and 34,106 sheep; compared with 166,234 cattle, 39,069 calves, 200,898 hogs and 38,802 sheep, received during the corresponding period of 1919. Montreal. There was a very much better tone to the market throughout the week than at any time during the three previous market periods. Prospects are good for a fair volume of trading on good quality cattle for butcher purposes, but thin and inferior cattle are not in demand. During the week two straight loads of steers averaging 990 pounds and 1,030 per animal respectively were moved at \$14.50 per hundred. Ten steers which averaged 1,020 pounds were sold at \$14.50 and twenty steers averaging 1,055 pounds were weighed up at a similar

figure. Fairly good steers weighing around 850 pounds sold at \$12.90; most of the common steers around \$11. Four cows of good quality from the Winnipeg market sold at \$12.50, while the price of \$12 was paid on several small lots of picked animals. The general price range on good cows was from \$11 to \$11.50, and on fairly good cows around \$10. Most of the common butcher cows were weighed up at prices ranging from \$8 to \$9, while a number of very thin cannors were disposed of at \$3, this low price being chiefly due to the probability of the stock being condemned. Heifers were as usual practically all weighed up with other stock, at prices ranging from those for steers down to those for common light bulls. The top price for bulls was \$11.50 paid on a pair which weighed together 2,445 pounds; the most common range for bulls was from \$7 to \$7.50 for those weighing from 900 to 1,000 pounds, while from \$6 to \$6.50 was paid for yearlings. One choice calf which weighed 180 pounds sold at \$15, and good veal calves weighing from 100 to 125 pounds sold, in several cases, at \$13.50. Lots containing a percentage of pail-fed calves or drinkers brought from \$11 to \$12.50, and very thin calves were sold at a price as low as \$6. In the lots of calves other than those of choice milk-fed qualities, the good animals are used

to effect the sale of the poorer ones; or, in other words, there is a greater difference in the value in the good and common calves than is indicated by the market quotations. Good lambs sold during the week from \$15 to \$15.50, and a number of choice lots up to \$16. Young ewes moved from \$9.50 to \$10 and good sheep sold at \$9. Sales of selected lots of hogs suitable for local shop trade, were made at \$21 off cars, while the packers quotation was \$20.50 off cars. As some firms designated as local butchers purchased about 400 hogs weekly, local butcher prices have considerable influence on market quotations. There were so many sows offered that sellers preferred to dispose of them in mixed lots with other grades; these mixed lots sold from \$17.50 to \$19.50. Pt. St. CHARLES.—The total receipts from January 1 to July 8, inclusive, were: 15,928 cattle, 43,472 calves, 34,092 hogs and 10,830 sheep; compared with 17,377 cattle, 45,574 calves, 43,972 hogs and 11,074 sheep, received during the corresponding period of 1919. EAST END.—The total receipts from January 1 to July 8 inclusive, were: 17,746 cattle, 34,894 calves, 23,469 hogs and 9,830 sheep; compared with 19,646 cattle, 32,536 calves, 25,362

### Published.

The present Wheat crop of the 1920 crop method of pre-war promises to watch has retained the on again if con-

George Foster, new attention to Board necessary ere, in brief: 1, wheat under con- There was virtu- tions necessitated ents and which mental agencies ed States of the ation of prices imports of both statement then

are not in force ne. From the ow appear that uropean buying ontrolled by the ries in Europe e does not seem at the purchase mental agencies ther, both as to ng conditions of r market value

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### Western

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estimated area st 17,750,167 use of 10 p. c. es as against Saskatchewan res (decrease s, as against

hogs and 11,600 sheep, received during the corresponding period of 1919.

**Dominion Wool Market Report.**

No definite market as yet has been established for graded wools in Canada. Dealers and manufacturers are not active in buying although there is a considerable amount of inquiry for quotations, and stocks of wool are being looked over by prospective buyers. Everything points to a fairly favorable sale of graded wools, but to date no great amount has moved. Local dealers are inactive. Little wool is being purchased locally, and the prices remain at from 18 to 25 cents.

**Buffalo.**

**Cattle.**—Cattle trade at Buffalo for the week ending Friday the 16th, was strong to a quarter higher than for the previous week on shipping steers generally and the choice grades of handy butchering steers and heifers—dryfed and the better grass kinds—while about a steady market was had on the general run of medium and commoner grassers. Around thirty-five cars of Canadians were among the offerings for the week. Best native steers sold on a range of from \$16 to \$16.75, with the best Canadians from \$14.50 to \$15, but were not on the choice order. Yearlings ranged up to \$16.50 to \$16.75, with the best dryfed handy butchering steers from \$13.50 to \$14.50. In the handy butchering heifer line prices ranged from \$11 to \$12 generally for the best, a few extra good up to \$13, common and fair kinds ranging from \$7 to \$10. Stocker and feeder trade was slow, a range of from \$6 to \$8 being noted on stockers, feeders running from \$9 to \$10. On bulls, a good, strong trade was had. Heavy bulls on the choice, meaty order, sold up to \$9.75 to \$10, sausage grades from \$7.50 to \$8, light and common from \$6 to \$7. On milk cows and springers demand called for the better fresh cows and forward springers, a medium and common kind selling weak. Receipts for the week showed 3,275 head, as against 3,150 for the previous week and as compared with 6,675 head for the corresponding week a year ago. Quotations:

Steers — Canadians — Best, \$14.25 to \$14.50; fair to good, \$13.50 to \$14; common and plain, \$11.50 to \$12.  
 Butchering Steers — Yearlings, good to prime, \$16 to \$16.75; choice heavy, \$15 to \$15.50, best handy, \$13.50 to \$14; fair to good, \$12.50 to \$13.00; light and common, \$9 to \$10.  
 Cows and Heifers — Heavy heifers, \$12 to \$12.50; best butchering heifers, \$11.50 to \$12; good butcher heifers, \$10.50 to \$11; fair butchering heifers, \$8 to \$9.50; light, common, \$6 to \$6.50; very fancy fat cows, \$10 to \$10.50; best heavy fat cows, \$8.50 to \$9; medium to good, \$7.75 to \$8.25; cutters, \$5.50 to \$6; canners, good, \$4 to \$5.  
 Stockers and Feeders — Best feeders, \$9.50 to \$10; common to fair, \$8 to \$9; best stockers, \$8 to \$8.50; fair to good, \$7.75 to \$8.25; common, \$6 to \$7; grazing cows, \$7.50 to \$8.  
 Bulls — Best heavy, \$9.50 to \$10; good butchering, \$8.50 to \$9; sausage, \$7.50 to \$8; light bulls, \$6 to \$7.  
 Milkers and Springers — Best \$100 to \$125; medium to good, \$80 to \$90; common, \$55 to \$70.  
 Hogs.—Receipts at the local market were not overly heavy last week, but as a result of pretty good runs, and an unfavorable trade west, market here was slow all week and prices were on the decline. Heavy grades were especially slow sale and some on this order had to be carried over from day to day. Monday several decks that carried a big top sold from \$16.75 to \$17; handy grades landed mostly at \$17.25; few made \$17.35, with a deck or two up to \$17.50 and pigs landed at \$16. On Friday the most desirable grades, which were, yorkers and light mixed grades, brought from \$17 to \$17.15, some on the weighty order moved at \$16.65 and \$16.75 and pigs landed at \$15.75 and \$16. General price for good roughs was \$13 and stags ranged from \$8 to \$10. Receipts for the week were 15,700 head, as against 15,945 head for the week before and 16,000 head for the same week a year ago.  
 Sheep and Lambs.—Last week opened with best lambs selling from \$16.50 to \$17, best yearlings landed at \$12 and \$13, one deck of dry-feds \$14, best wethers were quoted from \$9 to \$9.50, and top ewes from \$8 to \$8.50. Trade was stronger the next few days, Friday's

market being fifty cents to a dollar higher than Monday. The fifth day of the week showed best lambs selling up to \$18, with culls \$14 down, top wether sheep were quoted from \$9.50 to \$10 and best ewes sold from \$8.50 to \$9. Receipts for the week were 3,100 head, the week before there were 3,845 head for the same week a year ago 3,000 head.  
 Calves.—Prices were on the jump again last week. Monday tops sold at \$17.50, Tuesday the best reached \$18 and \$18.50, Wednesday and Thursday bulk sold at \$18.50, few up to \$19 and Friday the tops reached \$19 and \$19.50, with culls selling from \$17 down, some on the drinker order going as low as \$10. Around ten decks of Canadians were here the past week and they sold fifty cents to a dollar under the natives. The week's receipts totaled 4,400 head, as against 5,861 head for the week before and 4,600 head for the same week a year ago.

**Toronto Produce.**

**Breadstuffs.**

Manitoba Oats.—No. 1 C. W., \$113<sup>3</sup>/<sub>8</sub>; No. 3 C. W., \$110<sup>3</sup>/<sub>8</sub>; extra No. 1 feed, \$110<sup>3</sup>/<sub>8</sub>; No. 1 feed, \$108<sup>3</sup>/<sub>8</sub>; No. 2 feed, \$105<sup>3</sup>/<sub>8</sub>; in store, Ft. William.  
 Manitoba Wheat.—No. 1 northern, \$3.15; No. 2 northern, \$3.12; No. 3 northern, \$3.08.  
 American Corn.—No. 2 yellow, \$2.30, nominal; track, Toronto, prompt shipment; No. 3, nominal.  
 Canadian Corn.—Feed, nominal.  
 Manitoba Barley, in store, Fort William.—No. 3 C. W., \$1.70; No. 4 C. W., \$1.38; rejected, \$1.33; feed, \$1.33.  
 Barley.—Ontario malting, \$1.84 to \$1.86.  
 Ontario Wheat.—No. 1, \$2 to \$2.01; No. 2, \$1.98 to \$2.01, f. o. b., shipping points, according to freights; No. 3, \$1.92 to \$1.93; No. 1 spring, \$2.02 to \$2.03; No. 2, \$1.98 to \$2.01; No. 3, \$1.95 to \$2.01.  
 Ontario Oats.—Nominal.  
 Buckwheat.—Nominal.  
 Rye.—No. 2, \$2.20 to \$2.25.  
 Peas.—No. 2, nominal.  
 Ontario Flour.—Winter, in jute bags, Government standard, prompt shipment, delivered at Montreal, \$12.90; Toronto nominal.  
 Manitoba flour and Government standard, \$14.85.  
 Millfeed.—Carloads, delivered Montreal; shorts, \$61; bran, \$52; good feed flour, \$3.75 to \$4.

**Hides and Wool.**

Hides f. o. b. Country Points. — Beef hides, flat cured, 10c. to 12c.; green hides, 9c. to 11c.; deacon or bob calf, 75c. to \$1.25; horse hides, country take-off, \$3 to \$5; No. 1 sheep skins, \$1.25 to \$2.00; yearling lambs, 75c. to \$1; horse hair, farmers' stock, 35c.  
 City Hides.—City butcher hides, green flats, 15c.; call skins, green flats, 20c.; veal kip, 15c.; horse hides, city take-off, \$4 to \$5.  
 Tallow.—City rendered, solids in barrels, 9c. to 10c.; country solids in barrels, No. 1, 8c. to 9c.; cakes, No. 1, 13c. to 14c.  
 Wool.—Unwashed, coarse, 16c.; medium, 20c.; fine, 26c.

**Country Produce.**

Butter.—The market on butter kept practically stationary, wholesale; fresh-made creamery prints selling at 60c. to 62c. per lb.; creamery solids at 59c. to 60c. per lb., and choice dairy at 50c. to 52c. per lb.  
 Eggs.—New-laid eggs firmed slightly, No. 1's bringing 58c. per dozen, and selects 62c. per dozen, wholesale.  
 Cheese.—The cheese market is very firm, old selling at 35c. to 36c. per lb., and new at 32c. per lb., wholesale.  
 Poultry.—Trade continues to be very light, with very little demand for any but spring chickens and ducks; the following prices being quoted to producers: Live weight, dressed: Chickens, spring, 40c. to 50c. per lb.; ducklings, 30c. to 35c. per lb.; hens, under 4 lbs., 26c. to 28c. per lb.; hens, 4 to 5 lbs., 28c. to 30c. per lb.; hens, over 5 lbs., 32c. to 32c. per lb.; roosters, 23c. to 25c. per lb.; turkeys, 40c. to 45c. per lb.

**Wholesale Fruits and Vegetables.**

Domestic fruits have been shipped in pretty freely the past week, and have had varying prices, according to the quality and quantity shipped in; though for the most part prices have kept pretty firm, only hitting low spots one or two days, when the quality or some fruits, straw-

berries and raspberries, particularly, was very poor, being soft and wet.

Vegetables have come in in increasing quantities; cabbage becoming almost unsalable, beans declining materially. Peas would sell if they were of good quality, but most of them have been too old and poor varieties, so they, too, are a glut on the market. Carrots and beets are selling fairly well at reduced prices. New potatoes are beginning to come in and selling well at high prices.

**Fruit Prices.**

Apples.—Green, 40c. per 6-qt. basket.  
 Blueberries.—\$2 to \$3 per 11-qt. basket.  
 Cherries.—Sour, 50c. to \$1 per 6 qts.; \$1 to \$1.65 per 11 qts.  
 Cherries.—Sweet, 75c. to \$2.50 per 6 qts.; \$1.50 to \$4 per 11 qts.  
 Currants.—Red, 10c. to 18c. per box; 50c. to \$1.25 per 6 qts.; \$1.25 to \$2 per 11 qts.  
 Currants.—Black, \$1.75 to \$2 per 6 qts.; \$3.50 to \$4 per 11 qts.  
 Gooseberries.—75c. to \$1.25 per 6 qts.; \$1.25 to \$2.25 per 11 qts.  
 Raspberries.—15c. (for poor) to 25c. to 35c. per box.  
 Strawberries.—13c. to 23c. per box; a few at 25c.  
 Tomatoes.—Hot-house, 30c. per lb.; outside grown, No. 1's, \$3.50 to \$3.75 per 11 qts.; No. 2's, \$2.50 to \$2.75 per 11 qts.

**Vegetables.**

Asparagus.—\$2 to \$3 per 11-qt. basket.  
 Beans.—75c. to \$1.25 per 11 qts.  
 Beets.—25c. to 35c. per dozen bunches.  
 Cabbage.—\$2.50 to \$3.50 per large crate.  
 Carrots.—35c. to 40c. per dozen bunches.  
 Cauliflower.—\$1.50 to \$3 per doz.; extra choice, large, \$3.50 per doz.  
 Cucumbers.—Hot-house, \$2 to \$2.50 per 11-qt. basket; outside grown, \$1.50 to \$2 per 11 qts.  
 Peas.—25c. to \$1 per 11-qt. basket.  
 Peppers.—Green, 75c. per 6 qts.; \$1 to \$1.50 per 11 qts.  
 Potatoes.—\$4.50 per bbl.; \$1.25 per 11-qt. basket.  
 Turnips.—White, 25c. to 30c. per doz. bunches.

**Montreal.**

Dressed Hogs.—Quotations for dressed hogs were strong with abattoir-dressed, fresh-killed stock selling at 30c. per lb. in small lots for light weights and 29<sup>1</sup>/<sub>2</sub>c. per lb. for heavier weights.  
 Poultry.—The market for poultry continues firm with broilers, weighing from 2<sup>1</sup>/<sub>2</sub> lbs. and over being quoted at 50c. per lb. Fowl was steady at 33 to 34c. per lb. for heavy and 26 to 30c. for medium and light. Ducklings were 35c. to 40c.  
 Potatoes.—The market for potatoes continues easy and the feeling is for lower prices in the near future. Sales of Canadian stock took place at \$5.50 per bag of 90 lbs. while new American crop sold at \$14.50 to \$15 per barrel for No. 1 red stars; \$11.50 to \$12 for No. 2 and \$8.50 to \$9 for No. 3.  
 Maple Products.—There is little or no demand for maple syrup and sales of odd lots were made at \$2 per gallon in wood and at \$2.10 to \$2.25 per gallon in tins. Maple sugar sold at 26 to 28c. per lb. according to quality.  
 Eggs.—A good demand continues for the best eggs for local consumption. Selected fresh eggs were quoted at 60 to 62c. per dozen; straight candled 57 to 59c.; No. 1 fresh 54 to 55c. and No. 2 fresh 49 to 50c. per dozen.  
 Butter.—Demand for butter continues good although the market for higher grades is less active. Prices continued firm with pasteurized creamery at 59<sup>3</sup>/<sub>4</sub> to 60c.; finest creamery 59<sup>1</sup>/<sub>4</sub> to 59<sup>1</sup>/<sub>2</sub>c. and fine creamery at 58<sup>1</sup>/<sub>4</sub> to 58<sup>1</sup>/<sub>2</sub>c. per lb.  
 Cheese.—Demand for cheese continues quiet and prices easy at around 28<sup>1</sup>/<sub>2</sub> to 29c. per lb.  
 Grain.—There is no great demand for oats and prices are displaying weakness. No. 2 Canadian western were quoted at \$1.38 to \$1.40; No. 3 Canadian western at \$1.36 to \$1.37 and No. 2 feed at \$1.33 to \$1.34 per bushel, ex-store with car lots offering enroute at several cents per bushel under these figures.  
 Flour.—There is no improvement in the demands for spring wheat flour and the market is consequently quiet at steady prices. Car lots of Manitoba spring wheat flour were quoted at \$14.85 per barrel, in jute bags, ex-track, Montreal

freights, and to city bakers, with smaller lots at 10c. higher, all less 10c. per barrel for spot cash. Ontario winter wheat flour was unchanged at \$14.40 to \$14.50 per bbl. in new cotton bags and at \$14 to \$14.10 in second hand jute bags, ex-store. White corn flour continued unchanged at \$12.80 for shipment of broken lots to country points and at \$12.90 to city buyers. Rye flour sold at \$21 to \$21.50 per barrel in jute bags, delivered to the trade.

Millfeed.—A fair amount of business is being done at steady prices. Bran was \$55.50 and shorts \$62.50 per ton in mixed car lots with flour, while without flour bran was selling at \$58 and shorts at \$64, including bags, ex-track, less 25c. per ton for spot cash.

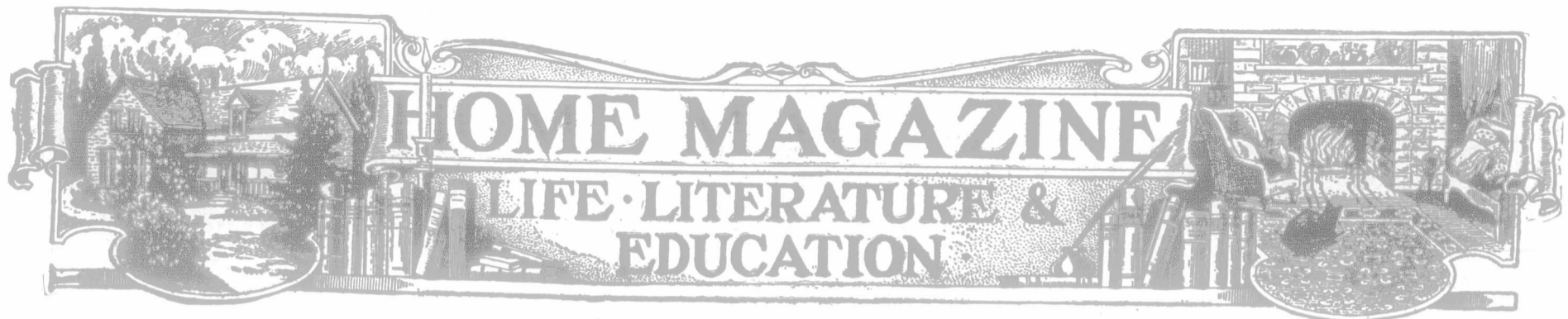
Baled Hay.—No. 2 timothy hay was quoted at \$29 to \$30; No. 3 timothy \$27 to \$28, and clover mixed at \$25 to \$26 per ton, ex-track.

Hides.—Prices of hides continued firm with steer and cow hides at 16c. per lb.; bull hides 12c. per lb. Calfskins 22c. to 24c. per lb. and kips 15c. per lb. Lambskins were 35c. each and clips 50c. Horsehides were \$5 each.

**Monday's Live Stock Markets.**

**Toronto, July 19.** Cattle.—Receipts, 2,823. Market opened strong but soon developed a weak undertone in all classes. Two loads of forty-one heavy steers, averaging 1,240 lbs., sold at 16 cents; 12 heavies, averaging 1,285 lbs., sold at 16<sup>1</sup>/<sub>2</sub> cents; 25 medium steers, averaging 1,170 lbs., sold at 16 cents. The bulk of butchers sold from \$14 to \$14.50. Common cattle were very draggy and hard to dispose of at even a 50-cent drop. Quotations: Heavy beef steers, \$14.50 to \$16.50. Butcher steers, choice, \$14.50 to \$15.50; good, \$12 to \$14.25; medium, \$10 to \$12; common, \$8 to \$10. Butcher heifers, choice, \$13.50 to \$15.50; medium, \$10.25 to \$13.25; common, \$8 to \$10. Butcher cows, choice, \$10.25 to \$13.25; medium, \$8 to \$10; canners and cutters, \$3.50 to \$5.50. Butcher bulls, good, \$10 to \$12; common, \$7 to \$9.50. Feeding steers, good, \$10 to \$11.50; fair, \$8.75 to \$10. Stockers, good, \$8.75 to \$10; fair, \$6.50 to \$8.50.  
 Calves.—Receipts, 469. The calf market was 50 cents weaker, with tops selling at 18 cents. The bulk went at 16 to 17<sup>1</sup>/<sub>2</sub> cents. Quotations: Choice, \$16.50 to \$18; medium, \$11.50 to \$15; common, \$8 to \$10. Milch cows, choice, \$125 to \$175; springers, choice, \$70 to \$120.  
 Sheep.—Receipts, 1,191. The sheep market was steady to strong, lambs holding steady with tops selling at 18 cents, while the bulk sold at 16<sup>1</sup>/<sub>2</sub> to 17<sup>1</sup>/<sub>2</sub> cents. Ewes sold from \$6 to \$8, and lambs from \$15.50 to \$18.  
 Hogs.—Receipts, 1,420. The hog market was stronger, with selects topping at 21 cents. Quotations, on fed and watered basis: Selects, \$20.75; lights, \$18.75 to \$18.75; heavies, \$19.25 to \$19.25. Sows, \$15.75 to \$17.25.

**Montreal, July 19.** Cattle.—Receipts, 1,390. There was a fairly good demand for cattle at prices fully as strong as these paid last week. Common cattle were of better quality and a larger percentage of sales were made at prices ranging from \$8.50 to \$10.00. Good steers sold up to \$14.50 and top cows to \$12. Quotations: Good, \$12.50 to \$14.50; medium, \$10.50 to \$12; common, \$8 to \$10. Butcher heifers: Choice, \$12 to \$14; medium, \$9.50 to \$11.50; common, \$6 to \$9. Butcher cows, choice, \$10 to \$12; medium, \$6 to \$9. Canners, \$3 to \$4.50. Cutters, \$4.50 to \$5.50; common, \$5.50 to \$8.  
 Calves. Receipts, 1,430. There were very few milk-fed calves on sale. The most of the calves were light grass calves from the east and sold at \$6.50 to \$8 per hundred. Packers quoting \$12 for fairly good lots. Quotations: Good veal, \$11 to \$12.50; medium, \$6 to \$11; grass, \$6 to \$8.  
 Sheep. Receipts 2,177. Small lots of good lambs sold up to \$16; small poor lambs, \$12 up. Offers lower than these were made on account of lambs being wet. Ewes sold at \$7 to \$9; lambs, good, \$15 to \$16; common, \$12 to \$14.  
 Hogs. Receipts, 1,851.—Picked lots were weighed up at \$21; mixed lots from \$17 up. Market reported strong.  
**Buffalo, July 19.** Cattle.—Receipts, 3,500. Best dry-fed shipping steers, 50 cents lower; tops, \$16.25. Grassers



**My Great Aunt's Patchwork Quilt.**

BY FLORENCE RIPLEY MASTIN.

Sedate and silent little quilt of mine,  
What wonder that I dream 'neath thy  
caress?  
Soft forms sway phantom-like in curve  
and line,—  
Thy flower bright patches shimmer into  
dress!

Within this bit of silk as blue as May,  
A little girl in hoops is curtsying low.  
Her lover dons that velvet on the day  
When all the blossoms of the Springtide  
blow.

Such snowy satin sheaths a lily maid  
As fair as one in Astolat who died;  
And, mischief in jade green, some lad is  
paid  
Who steals a kiss while sitting by thy  
side!

O stern old maid, in sober, Sabbath brown  
Of silk magnificent that stands alone,—  
I see thee look askance upon the gown,  
Peach colored, in the pew beside thine  
own!

And now, behold, within that sapphire  
square,  
As dusky as the blue of summer night,  
Beribboned masters pledging to their fair  
In foaming tankards till the dawn is  
white!

Hark how the music of the minuet  
Calls from the dim brocade each  
shadowy face.  
It seems as tho they all were living yet,  
Pale lovers swaying slow with stately  
grace.

Dear little grand aunt in the silver grey,  
Unconscious of thy patchwork wizardy,  
Thy placid hands have summoned yester-  
day  
Down pansy 'broidered paths of dreams  
to me.

**Ladies' Work at Fall Fairs.**

A PAPER BY MISS M. V. POWELL, WHITBY.

A needle, though it be but small and  
slender,  
Is truly both a maker and a mender;  
A needle is an instrument,  
Of profit, pleasure and of ornament.

**M**R. Chairman, ladies and gentlemen,  
in speaking to you on this subject  
for a few moments, we would like  
to transport you back to the ancient days  
that we may learn something of the  
dignity which characterized the needle-  
craft of olden times.

To the enthusiast in needlecraft it is  
interesting to trace the history of the art  
back to its beginning, and discover if  
possible how and why the processes which  
are our heritage, came to be a part of the  
knowledge of the world. A great deal of  
its early history is told in that intimate  
book of reference—the Bible—where we  
read, that God gave "wisdom of heart"  
to certain men to practice all kinds of  
cunning work, of the embroiderer in blue,  
and purple, and scarlet and fine linen.

We find also that those who practiced  
the art of embroidery were chiefly, and  
up to a certain period of time, exclusively  
men, called men of genius, and their skill  
was inspired.

This art was held to be a matter of such  
dignity and importance, as to be worthy  
of direct inspiration, and in the robes of  
Aaron and his sons, even the designs of  
the borders were according to divine  
command. This gives the work a dignity  
and importance of which it has been  
robbed, more or less, in modern times.

In late history we find both men and  
women practice the art, and raiment of  
needlework counted as among the riches

of the world, and has always been held  
as one of the valued arts of the world;  
and that in the days when banks, and  
stocks, and bonds were unknown, and  
riches and wealth confined to the treasure  
chests, rare and fine specimens of needle-  
work represented riches, and were kept  
as a part of the nation's wealth.



**Mrs. Arthur Meighan.**

Wife of the new Prime Minister of Canada.

All along the ages, even down to our  
own time, the histories of peoples have  
been written in their needlework. How  
they lived, what they liked, what they  
possessed—we may know it all, if we  
study the needlework of the different  
periods. It tells its story in the indications  
it gives of the tastes, habits and tendencies  
of the times. Indeed, in this way we

are even now, telling our own history in  
the luxuriance of our household linens  
and decorations, upon which we embroider  
unfading wreaths and flowers which add  
to the luxury of our homes.

That environment exercises an influence  
on health and temperament is a  
proposition that is gaining wider recog-  
nition year by year. If the day is begun  
in an atmosphere free of the obtrusions  
of grotesque design and bad coloring the  
probabilities are favorable to the "head of  
the house" man reaching the place of his  
work in a condition fit to make the most  
of the opportunities which present them-  
selves, and for the homemaker to maintain  
an equable temper throughout the day.  
There are certain colorings which possess  
a brightening effect, and others a de-  
pressing tendency. The home decorator  
should become familiar with these qualities  
and effects, whether it be in drapery or  
needle decorations. It has been truly  
said that the history of the origin and  
development of beautiful artistic forms,  
constitutes a portion of the history of  
civilization, and in the evolution of each  
particular people, we may find, in their  
effort to express ideal beauty in form and  
color, a reliable test of the degree of  
progress attained.

A survey of the artistic expression of  
any people brings out the fact that  
varying periods of time have been required  
to produce results. In the growth of a  
nation, as the sense of order, proportion,  
and beauty is gained, artistic impulse  
expands and finds expression. It prob-  
ably adds to the pleasure of any occupa-  
tion, to know what other people who be-  
longed to other races and other times,  
have done with the same practice, and to  
know that we are making a record of our  
own time, through our needlecraft, which  
our descendants will study with interest.  
They will find at least that this particular  
generation possessed exhaustive skill with  
the needle, and was also distinguished  
for its luxurious and refined tastes in  
domestic art and life.

There are fashions in fancywork as in  
most other mutable things with which

frail humanity has to deal. The earliest  
art work to be recorded in Canada, is the  
pottery made by the Indian women, of  
which a great variety of specimens are  
still to be seen. In weaving and dying,  
in bead work and many other ways, the  
Indian women made a creditable begin-  
ning in handicrafts and home industries.  
It is also very interesting to note the  
many devices, and the skill displayed by  
our grandmothers in the decorations of  
the home. Knitting, embroidery and rug-  
making formed an important industry,  
and many beautiful specimens remain to  
show that the artistic spirit was not  
dormant. The art of rug-making has  
been revived in these latter days, and  
takes a foremost place among the modern  
handicrafts.

It is scarcely three decades ago since  
Canadian women began to display their  
needlecrafts at various loans and ex-  
hibitions. The Provincial and local  
Agricultural and Industrial Exhibitions,  
inaugurated in the sixties, stimulated  
home industries and fine arts. Prizes  
were offered for everything, from the  
crazy patchwork quilt, or product of the  
loom, to paintings, original and copied,  
of subjects varied and picturesque.

The reason of these fairs, which still  
exists, and in which interests we are met  
to-day, was at first to provide a rendezvous  
where the farmers could exhibit, compare,  
buy and sell every product of their  
domain. The Canadian women vied with  
each other in their crocheting, knitting  
and patching. Tides and rag carpets not  
only displayed a desire for comfort, but  
gave opportunity for some artistic ex-  
pression in coloring and design. Wax  
flowers, hairwork, beadwork, scenes gay  
and grave, displayed taste or the lack of  
it, on the part of the originators, but  
showed more than anything else the  
innate love existing in women under all  
conditions for artistic expression.

That love of the artistic has been  
accelerated through the medium of loans  
and exhibits, and also through qualified  
teachers giving instruction in the art as  
an accomplishment.

The old-time beadwork, wax flowers and  
similar work, has been replaced by more  
modern decorations of household linens,  
in Madeira, Roman cut work, the now  
popular Filet crochet designs, the revival  
of lace-making of all kinds, as Honiton,  
Point, Renaissance and pillow laces,  
bringing into play the skill of the worker  
in both design and execution.

The beautifying of personal wearing  
apparel, lingerie wear and household sup-  
plies, give broad scope for the develop-  
ment of the arts, and giving added culture  
to the possessor.

The use of many hued threads in the  
carrying out of designs should receive  
the encouragement of the beholder or  
possessor, lending, as it does, character,  
form and personality, to work which, if  
carried out in the white threads, lack  
depth and individuality. The conserving  
and developing of the artistic, the  
aesthetic sense, is of vital importance as a  
national quality. The nation which  
neglects or undervalues the influence of the  
aesthetic in her people, is the nation that  
fails to measure up to the civilization  
demanded of it.

We are writing the history of our people,  
the degree of culture we possess, by the  
needlework of our time. The recon-  
struction work in Canada, now that the  
war is over, should extend to the needle-  
craft as well as to every other depart-  
ment of national life, and it is important  
that the rising generation be instructed  
carefully in the arts that may become  
expert needle-workers, not only in the  
plain household stitchery, but also in the  
more decorative work.

There has been a most erroneous idea  
among many workers that "fancy work"  
was something that any person could  
"pick up" and "do" without having  
made any study of the fundamentals of



**Ex-Empress Eugenie.**

Who passed away recently at the age of ninety-four, while on a visit to Spain. King Alfonso has ordered a period of twenty-one days court mourning to pay the customary royal honors to the dead. The late ex-Empress was the widow of Napoleon the Third, a Spaniard by birth, and a great beauty when she was young. She was a life-long friend of Queen Victoria, and for many years has made her home at Farnborough, England.

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less 10c. per barrel  
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bags and at \$14  
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timothy hay was  
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es at 16c. per lb.;  
o. Calfskins 22c.  
tips 15c. per lb.  
each and clips  
\$5 each.

**Stock**

Cattle.—Receipts,  
strong but soon  
tone in all classes,  
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85 lbs., sold at  
steers, averaging  
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to \$14.50. Com-  
raggy and hard to  
eat drop. Quota-  
\$14.50 to \$16.50.  
\$14.50 to \$15.50;  
dium, \$10 to \$12;  
Butcher heifers,  
; medium, \$10.25  
to \$10. Butcher  
\$13.25; medium,  
cutters, \$3.50 to  
ood, \$10 to \$12;  
Feeding steers,  
ir, \$8.75 to \$10.  
o \$10; fair, \$6.50

The calf mar-  
with tops selling  
rent at 16 to 17½  
e, \$16.50 to \$18;  
common, \$8 to  
e, \$125 to \$175;  
\$120.

The sheep  
ong, lambs hold-  
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½ to 17½ cents.  
and lambs from

The hog mar-  
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\$19.25. Sows,

attle.—Receipts,  
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to \$12. Quota-  
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n, \$8 to \$10.  
e, \$12 to \$14;  
; common, \$6  
choice, \$10 to  
Canners, \$3  
to \$5.50; com-

There were  
on sale. The  
ght grass calves  
at \$6.50 to \$8  
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s: Good veal,  
o \$11; grass,

Small lots  
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—Picked lots  
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Receipts,  
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the art. From personal experience, while giving instruction to one of my classes in art needlework, I had a pupil present herself for instruction and requested to be given one of the most advanced pieces of work, requiring skill and knowledge, while she innocently confessed she did not even know upon which finger the thimble should be worn, and admitted never having made the most simple garment for herself. Hence the importance of proper instruction in our public schools and colleges under capable qualified instructors, that the fundamental principles of needlework, and the student becoming familiar with the underlying principles may apply them to any kind of needlecraft. The church sisters have rendered efficient service in this regard, as the very high standard of the work done in the church schools will testify, and the ecclesiastical embroidery which is done in many parts of our Dominion, supplying a large portion of this style of needlework for the old land.

During the last decade, the class of work displayed at our Agricultural and Industrial Exhibitions, has undergone a decided change for the better. The former dust-catching wool crochet mats, tidies, hassocks and similar work, have given place to the more useful, and certainly more decorative and refining style of work, in the dainty designs woven upon household linens, for bed chamber, dining-room and personal wear. The beauty, harmony and utility of the linens for living-room and porches, giving an individual, personal touch to each part of the home. Then the brass work, the pen pictures, the variety of art designs for wall hangings and for china shows a most marked advance in colorings in design and in execution. This work should receive special care and attention, especially in the exhibits of the Great Industrial Exhibition at Toronto, as practically all the smaller societies throughout the Province, take the Toronto Industrial as their standard. There should be a weeding out of the imperfectly executed, the faulty design, the crude workmanship, if we hope to raise the standard, and the competitive value in our various smaller localities. We should have a style of work distinctively Canadian, in its origin and its development.

The inlaid, Madeira and colored embroideries belong to the people of France, the crochet designs to Ireland, the Swiss peasants are the original workers of white embroideries, Bulgaria, Roumania and other countries have their special native work, Italy and Malta being the home of many of our most beautiful laces.

A very interesting story is told of the origin of the famous guipure lace. It is that of a sailor lad from the Indian seas, who, returning to his home in Venice, brought to his betrothed, a worker in needlepoint, a bunch of the delicate pretty coraline, telling her it was lace that the mermaids made in the coral caverns under the waters of the Indian seas. "Pretty as it is," said the needleworker, "I will make something with my needle far prettier. My bridal veil shall be of the mermaid's lace." The sailor lad sailed away, and was gone for months. Day by day the young girl worked with her needle, forming white knots and tiny stars and uniting them all by delicate "brides" until an exquisite long scarf of guipure was produced, so marvelously beautiful that when she wore it as her bridal veil all Venice went wild with admiration, and many noble ladies, princesses, and queens became the patrons of the young lace worker.

Many other kinds of work might be mentioned. As yet there is no distinct branch of needlecraft, which is characteristic of our country women.

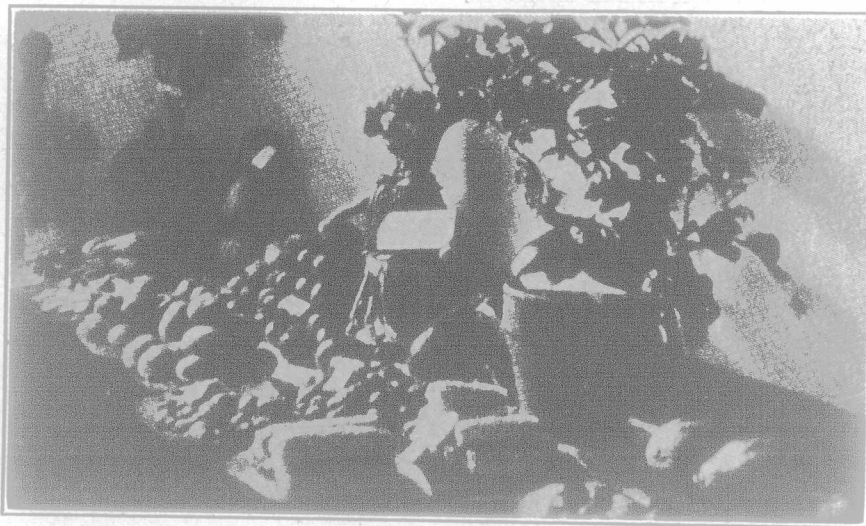
In closing may I give these suggestions to the various representatives of the agricultural societies? First—Include one or two influential ladies of the community upon your directorate as well as on committee work. Second—To encourage local exhibits—where you admit professional workers to enter—have a different class for the amateur as well as professional work. Third—If possible send out, to prospective exhibitors, with your prize-lists, a scale of judging, for example, style, 15%; suitability, 30%; execution, 35%; general display, 20%. At the fairs throughout the Province, there is a need for improvement, and encouragement in the making of button-holes, button-hole edges and darning work. I should like just before closing to refer for a moment to the school children's exhibits.

Many of the societies are giving special attention to the school work, and too much praise and commendation cannot be given for the interest in this line of work. Still more may be done by a large number of societies in encouraging children to exhibit their work, either with the needle, pen, brush or plant cultivation. In this respect Prince Edward County stands far in advance of any fall fairs where we have had the privilege of visiting.

The future depends upon the foundation now being laid. The place the artistic occupies in the child life to-day, will determine in a large degree the culture, refinement and decorative abilities of to-morrow. In ancient days the designs and works of art were deemed to be by direct inspiration. In modern time, cultivation and development of the finer senses by careful teaching and by a high standard of work at our National and Provincial Exhibitions, will tend to

It isn't hard to get up a local show of this kind. Use the school-house, if no better building is available, and arrange the show for Friday evening and Saturday. Get everyone to bring the best single specimens in his or her garden, and arrange these singly. Be sure to label each specimen. Then have a competition, besides, for bouquets, and bird-houses;—birds and gardens should be spoken of in the same breath, since birds help the gardens both practically and aesthetically. A bit of a musical program—even a victrola with good records—will help along in the evening. Encourage everyone to come and have a good time chatting while looking at the flowers.

A few of such shows cannot fail to inspire the planting of flowers. England's gardens are the secret of England's beauty. Why should not Canadian gardens contribute to Canada's beauty? We cannot look at beautiful things without being happier therefor.



An Ent'ing Corner.

A corner of the fruit and vegetable exhibit at a fall fair. Note the labels.

maintain a dignity and value to the needlecraft of our fair Dominion, such as is due the fairest land of all the lands.

### Getting Up a Local Flower Show.

Of course, there's the Fall Fair. But many places are going still further and having a local show besides, of flowers and fruit. Still others go further still and have three or four flower shows during the summer, at least one in peony and iris time, one in rose time, and one when all the fall flowers are in.

As a rule no prizes are given, but it is something to have the blue or red ribbon attached to one's favorites. If at all possible to find him or her, a skilled horticulturist should be asked to do the judging.



A Table at a Flower Show.

### Your Health.

BY "MEDICUS."  
Food and Hives.

It has been well known for many years that certain people are peculiarly distressed by certain foods, the reaction taking various forms. Most often it is manifested by hives, vomiting, or even intense prostration. I know a patient who is "poisoned" by eggs. She vomits, has a headache and has to go to bed for 2 or 3 days. She suffers from "anaphylaxis" (the word means without protection) or perhaps a more common name is "Protein Sensitization." In other words, the body reacts in an abnormal way when certain proteins are absorbed into the blood.

Protein is known as the building or repair material in our diet, and is found in meat, fish, eggs, curds, fowl. But a

certain amount of protein is found abundantly in practically all foods, and some of the foods such as strawberries and tomatoes, which are not regarded as protein foods, still have sufficient protein to cause very serious disturbances in people who are sensitized to these particular foods. Proteins may gain access to the body in other ways than by food, for example, by inhalation and by bacterial infection.

Some people may develop hay fever (protein of the pollen of the golden rod, ragweed, etc.), asthma (a primrose in a room may cause some people to "wheeze") urticaria (hives) from strawberries, acute eczema, acute and chronic digestive disturbances. Proteins are usually broken up during digestion into their component parts—amino acids—and are absorbed as such, and naturally the body has no difficulty in using the amino acids or building-stones to build up new cells or repair old ones. The amount of protein material reaching the blood unchanged is ordinarily very small. Minute particles of protein may find their way through the mucous membrane of the intestinal wall or through the respiratory tract; or as living germs in infections may enter and grow in the body.

The body may dispose of the foreign material (protein) by excretion through the kidneys or through the intestinal tract. One of my students could get egg white in the urine if he took from 3 to 5 raw eggs a day. At times the foreign protein is digested in the blood or in some special organ or tissue, in which case the body has acquired and retains to a marked degree the power to digest in its tissues this particular protein and in the process of digestion products are formed which are responsible for the reactions—hives, asthma, etc. When this protein again gains entrance to the blood, digestion takes place more rapidly. More toxic substances are formed and the patient is again disturbed.

It is now possible for your doctor to test you for Protein Sensitization. This is especially important if you are subject to acute skin rashes, eczema, or periodic digestive upsets. All he will do will be to run in a small amount of the extract of the food or substance to be tested in a slight scratch on your arm, and if you are sensitive a reaction (swelling, redness) occurs in a few minutes. Preparations are now available to test for sensitization for ragweed, horse dandruff, cow dandruff, as well as common food articles such as wheat, potatoes, tomatoes, strawberries.

It is possible that failure often reported in hay fever and asthma cases is due to a neglect to make a thorough search for all types of protein to which the patient is sensitized. By excluding such articles from the diet or by certain methods of desensitization (to be carried out by your doctor) very remarkable relief is often afforded.

If you eat strawberries and have hives, Calamine Lotion will give relief if applied freely. (Calamine 15 grains, zinc oxide 15 grains, lime water 80 drops, glycerine 20 drops, water 1 oz.). A half a teaspoonful of baking soda three times a day and a dose of salts in the morning will also be helpful.

### Health Slogan.

Don't cough,—the less you cough  
the less you have to cough.

### The Children's Poem.

#### The Brave Little Girl.

A brave little girl (perhaps 'twas you)  
Once thought she met a bugaboo—  
As large as any ever seen,  
Twice as cross, and twice as green!  
It seemed to be just—standing there,  
With something between a grin and a glare.

But this little girl said to the bugaboo,  
"Oh, pooh! I don't believe in you!  
There is no need for you to stay,  
So—shoo! you'd better run away!"  
And just as sure as sure can be,  
That bugaboo changed to the stump of a tree.

Then the brave little girl just nodded her head;

"I see it's true as mother said—  
That the bugaboo isn't even an elf;  
It's only a 'when-you-scare-yourself,'  
If you just keep cool and say 'oh, pooh!'  
It puts an end to the bugaboo."



### Hope's Quiet Hour.

#### That Ye May Obtain.

Know ye not that they which run in a race run all, but we receiveth the prize? So run, that ye may obtain.—I Cor. 9:24.

Fair before us lies the way,  
Time for work and time for play,  
Fill the measure while we may.  
Up!—and On!  
Life and Time will not delay,  
Time is running fast away,  
Life is NOW—to-day, to-day!  
Up!—and On!

St. Paul was a specialist. He did not fritter away his time by having a lot of small ambitions. When he was Saul of Tarsus he put all his energies into the task of destroying Christianity. When he chose Christ as his Master he had only one object in life, and that was to please Him Who had chosen him to be a soldier. Looking on this life as a race, he does not allow his attention to be distracted from the business of pressing on towards the goal. In the Christian race all the runners may be winners. It will be a joy to the King to crown them all. And yet St. Paul told the Corinthian Christians to strive as earnestly for the prize as if only one could win it—the satisfying reward of the Great Master's "well done!"

If a man wants to win success in an earthly business he knows that his attention must not be distracted from the main issue of trivialities—and many things which are important to others are trivial to him. A dress-maker must study the fashions, but it would be terrible waste of time for a doctor to do so. A farmer should, of course, read the "Advocate," and a machinist should study his own special business.

That does not mean, most certainly, that any person should become obsessed with one idea or confine all his reading to one subject. To feed the mind on a single thought would be more disastrous than to feed the body entirely on one article of diet. That is a kind of insanity, and St. Paul was wonderfully balanced and sane.

One who makes it the aim of his life to please Christ will be appreciative of all the manifold gifts of God. He will not work intemperately, but will keep body, mind and spirit "fit" by judicious change and rest. He will take time to enjoy the beauties of nature, and will find God in hours of recreation as well as in hours of business. He will read books on many subjects—according to his opportunities—and will not allow himself to get into a narrow rut. But neither work nor pleasure will be permitted to stand as a barrier between his soul and God. He must be about His Father's business; whether he is eating or drinking, or doing anything else, his object in life is to glorify God by undivided service.

Yesterday I was reading an account of some experiments recently made in the modern science of advertising. By careful testing of the two methods—the one of having special advertisement pages in a magazine or newspaper, and the other way of trailing the ordinary reading matter through crowding advertisements—it was discovered that more advertisements were read and remembered when they were on an advertising page than when they were distractingly mixed with stories or other articles in the printed pages.

The attention of readers is so frittered away by the effort to turn the mind from one kind of thing to another, that much of the time is simply wasted—just as we waste time when we try to do several things at once. You know how nerve-racking it is when you are trying to make a dress or a cake, and have to stop every few minutes to answer the 'phone or run after the baby or get a meal ready. One of the causes of "nerves" is a lack of unity of purpose. Sometimes we are living for God, sometimes for self or the world. We worry over troubles which may come in the future, forgetting that God is able and willing to give us needed strength when the time comes. We fret over shabby or unfashionable clothes, as if they were matters of vital importance. We are crushed by the burden of tomorrow's work, because we don't take one task at a time from the hand of God.

# Gillette Safety Razor

*The Shaving Service for Every Man Everywhere*

## Prosperity!

**YOU** would say that the man pictured here was well-to-do. His smart appearance gives an air of Prosperity that is a distinct asset in his business and social life.

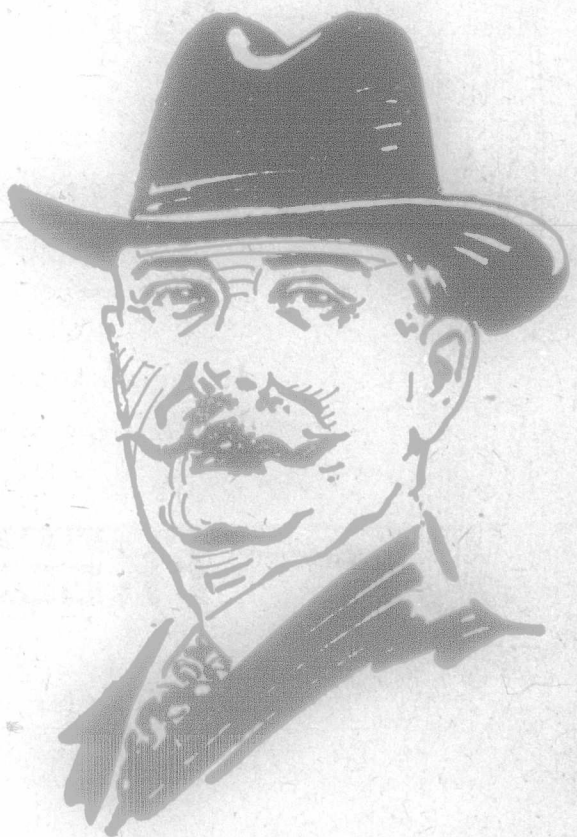
Now imagine him with a couple of day's growth of beard! Who now would guess his prosperity. He no longer holds his head so erect!

Yet a few swift strokes of his keen-edged Gillette, and he is ready to face the world again—sure of respectful attention!

Are YOU depriving yourself of far more than you can imagine by delaying the purchase of your Gillette Safety Razor?

Do you realize that there is something more than easier shaving, time saved, and a smoother chin coming from your investment of \$5.00 in a Gillette?

Look prosperous—it is the first step towards being prosperous!



**NO STROPPING  
—NO HONING**

Make a point of asking your town dealer to show you some GILLETTE Safety Razor Sets, including the new "Big Fellow" at

**\$5.00 the Set**



We miss the beauty and sweetness of life because—like the men in our Lord's parable—we are so taken up with other interests that we refuse the invitation to the feast of good things which God has provided. In Pearl Watson's composition on "true greatness" (in "The Second Chance") there is the story of a woman who "lived near a pig-pen, and when the wind blew that way it was very smelly indeed; and at first when she went there to live she couldn't smell anything but straight pig, but when she lived there a while she learned to smell the clover blossoms through it."

There may be something in your life which is very disagreeable and which you can't escape from. You can spoil your life by concentrating your attention on that unpleasant thing, or you can lift up your head and catch the fragrance from the high places. At night, when you have time to think, you can rake up all the unpleasantness of the past day;

or you can lie back on the Heart of God, drinking in the sweetness of His Love, rejoicing in the thought that He is training you and trying to help you to grow more and more into the image of the perfect man.

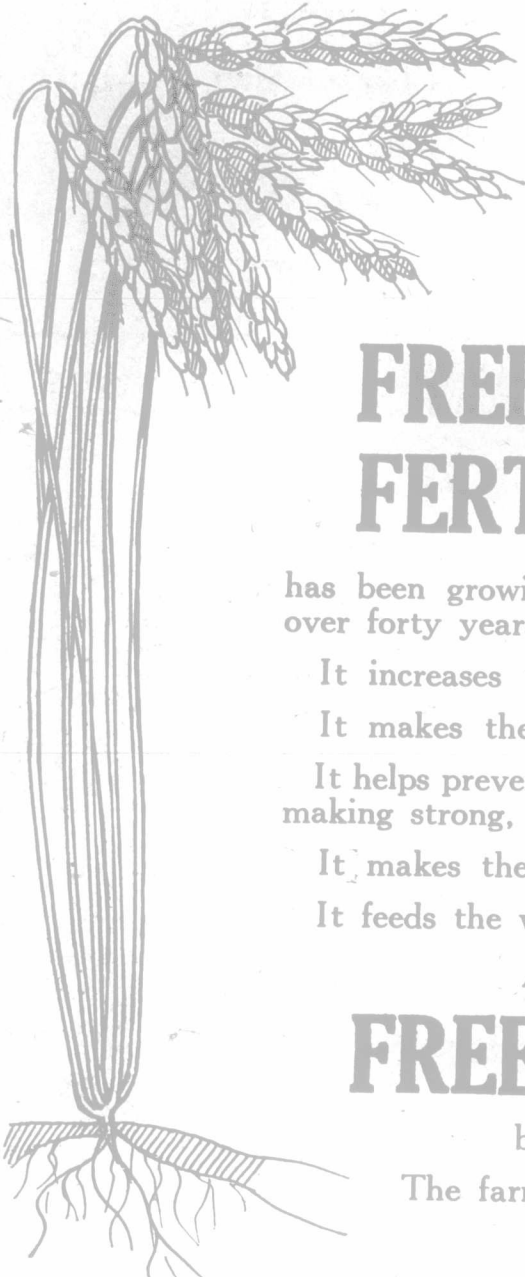
The living creatures in Ezekiel's vision "went every one straight forward; whither the spirit was to go, they went; and they turned not when they went." There was no vacillation of purpose in their movements.


St. James warns us against double-mindedness and says we should not be like waves of the sea, driven with the wind and tossed.

When I turn off the electric light the thought often comes to me that, as the wire in the bulb is dead and dark and only shines when connected with the source of power, so our lives are dull and helpless when we get out of touch with God. The living creatures Ezekiel saw

"ran and returned as the appearance of a flash of lightning," and the noise of their wings was "like the noise of great waters, as the voice of the Almighty." Above their heads was a throne, and on the throne was "the likeness as the appearance of a man above upon it."

Was it any wonder that they went forward, making steady progress? The Man, enthroned on high, is still mighty to save and ready to direct those who spend their lives in His service. Yesterday I was calling on a man who has poured out his life in eager, loyal Christian work. He suddenly collapsed in the midst of his business and has spent two weeks in the harder work of enduring intense pain and weakness. He is rather inclined to fancy that he is only "marking time," waiting for the strength to go forward and do some more work for the Master he loves. And yet—during all the years of enthusiastic work for Christ—his favorite hymn was Bishop Bickerstett's



1880  1920

## FREEMAN'S FERTILIZER

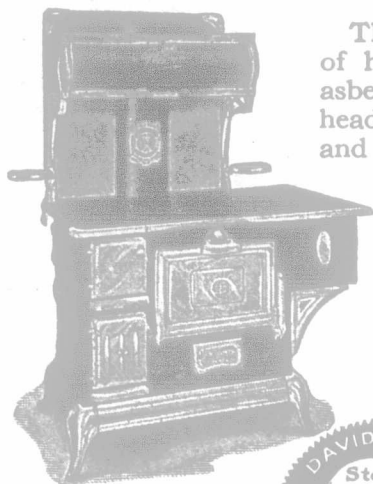
has been growing good wheat for over forty years.

- It increases the yield per acre.
- It makes the wheat grade high.
- It helps prevent winter killing by making strong, healthy plants.
- It makes the wheat "stool out."
- It feeds the wheat.

Ask for  
**FREEMAN'S**  
by name.  
The farmer's favorite.

**The W.A. FREEMAN Co**  
HAMILTON - Limited - CANADA

## "Premier Leader" STEEL RANGES



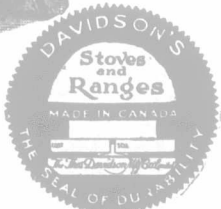
These Davidson Ranges have a body of heavy polished steel, protected by asbestos and hand-riveted with cone-headed rivets, cast iron tops, centres and covers ribbed.

A contact reservoir can be supplied to attach to either left or right end. Steel Persian closet at top is an extra convenience.

An exceptionally moderately-priced range of thoroughly reliable quality.

*The Tho Davidson Mfg Co Limited*

Head Office: Montreal  
Branches: Toronto & Winnipeg  
Steel Foundry Division:  
Lachine Canal, Turcot



# DAVIDSON

**Boys—Are You Earning Money and Saving ?**

Write to *The Farmer's Advocate and Home Magazine*, London, Ont., and find out how you can earn money in your SPARE TIME.

"Come ye yourselves apart and rest awhile,  
Weary, I know it, of the press and throng;  
Wipe from your brow the sweat and dust of toil,  
And in My quiet strength again be strong.

"Come, tell Me all that ye have said and done,  
Your victories and failures, hopes and fears,  
I know how hardly souls are wooed and won:  
My choicest wreaths are always wet with tears."

He has suffered patiently for Christ, and now he is resting in his weakness on everlasting strength. Certainly he is not losing time, but rather is "resting in His chariot for the swift, glad race." His strength is to sit still.

Why should we wait until we are forced to go quietly apart from the world's rush of work to rest with our Master? Why should we act as if we can please Him better by copying Martha than Mary? He is not a hard Master. He wants disciples to be friends rather than slaves. He knows us, but we can't learn to know Him unless we enter into some secret chamber with Him and shut the door to all beside. How can we let our light shine unless we keep up our connection with the Source of power,—the Light of the world? Christ is the Way as well as the Prize. We must run with patience the race set before us, run with the light of joy glorifying the road, looking unto JESUS the Captain and perfecter of our faith.

We are weak, but we do not have to depend on our own strength. We could never run the race if Christ were only waiting for us at the end of the course; but He is our Life, our Strength, our Comrade from start to finish. So we look up exultantly and say:

"Thou art the Way.  
Hadst Thou been nothing but the Goal  
I cannot say,  
If Thou hadst ever met my soul."

DORA FARNCOMB.

## The Ingle Nook

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

### A Trip to Ekfrid.

**T**HE *Farmer's Advocate and Home Magazine* cannot very often discuss very local events or name very local people, because, you see, besides going all over Canada, and even up into the Yukon, it goes to a great many overseas places; I have just been looking over the mailing sheets and find, among the number, the British Isles, France, South America, New Zealand, Australia, India and Venezuela. But when "the picnic" was at Peter McArthur's (and "Peter McArthur" is a household word in Canada) and "Marian Keith," Amy E. Campbell, and Beatrice Taylor (who won one of the prizes in the Canadian National Literature Contest), were members of the party, one may be pardoned for being a bit personal and mentioning a few names.

There were fifteen, all told, in the party that left London, and the one solitary individual *not* in skirts was the driver. Also the only person not guilty of scribbling stuff to foist upon the public, was the driver. . . . One of the party, counting heads, discovered that nine of the skirted individuals had brown eyes and five blue.

—So now, perhaps, you can see us.

From the cobblestones of the market square we clambered into the long side-seated motor carry-all, and off we went, shaking the dust of the city streets off our feet for one long, glorious afternoon—and getting a fair supply of the real country article instead. But the roads weren't very dusty; the recent rains had looked to that, and were even obliging enough to sprinkle a few more drops on the way, then "hold up" and let the sun shine out for the rest of the time. If they can be forgiven for interfering a bit with

the hay crop they must be thanked for a good many things this year, for never, I think, did the crops look better, never was the pasturage deeper, and never did the whole countryside look more green and jubilant. "In our lives alone does Nature live," says Coleridge, "Ours is her wedding garment, ours her shroud," etc. But surely the soul must have been "fit for treasons, stratagems and spoils" who could have failed to see the beauty everywhere on that afternoon of the 10th of July,—the tall wheat and oats billowing before the breeze as the sun-glints chased one another over the surface, the misty blue shadows lurking among the trees and hills beyond, and the deep sky above all with gray-and-white clouds sailing across like ships with all their sails set before the wind.—It's a prosperous bit of country, that lying from London westward; the comfortable homes, sleek herds and well-kept fields bear witness to that fact, and tell also that in the matter of scientific agriculture the farmers of Western Ontario do not, like "little Dan," "come last."

The girls were very much interested on hearing that "Peter" lives in the very log house in which he was born.

I remember hearing a very artistic minister (a Presbyterian—who believes in choral chants and cruciform churches) say, once, that the log house is the most artistic architectural creation that our continent has yet produced. Some people may be surprised at that, yet the minister made out a very good case. He pointed out that the log house is original with this continent; that it fits into the rural landscape perfectly, appearing as an outgrowth of it rather than an excrescence upon it; and that the weathered silver of the unpainted logs is one of the most beautiful color-tones in the world.

I am sure we of the Women's Press Club of London all agreed with that as our long car swept up the new road past the orchard at "Peter's" and came in sight of the vine-covered McArthur home, snuggled behind the trees at the edge of a big, flower-bordered lawn shorn to a velvet greenness.

There were exclamations beneath the roof of the car:

"Oh what a darling place!"  
"There are the big trees!"  
"Look at the roses!"  
"Is that Peter?"

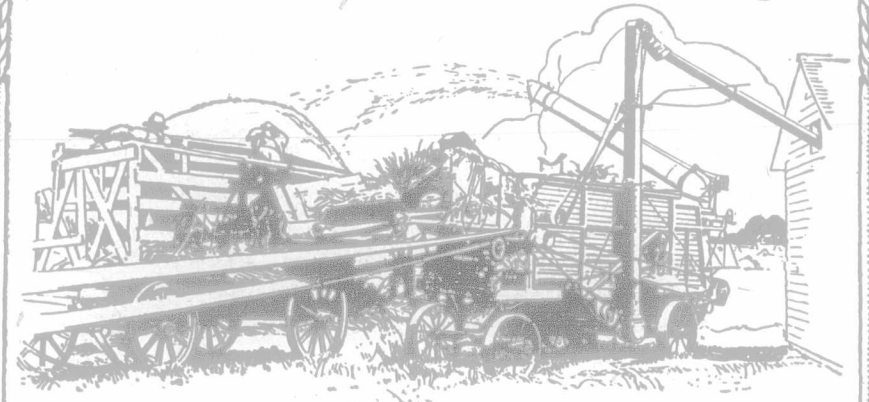
Yes, it was Peter, and his wife, too, and Elizabeth, and little Ian, and Elizabeth's friend whom she met through the Beaver Circle that used to run in this paper. . . . So we all "piled out" and introduced everybody, and everybody knew "the McArthurs' names and the McArthurs *didn't* know anybody's (how much good breath is wasted introducing crowds in a body!)—but that didn't matter; everyone was smiling.

I wonder if Mrs. McArthur will think me very bold for taking you right indoors. But I want to tell you that people have told her that her big living-room looks "just like a Ladies' Home Journal room." And so it does. For it has burlapped walls in a soft shade of brown, and lovely old mahogany furniture that makes one green with envy, and "heaps" of house-plants, and real artists' pictures on the walls.

Among these last Elizabeth showed with pardonable pride several drawn by "Dan."—Dan Carman McArthur, who may one day be as well-known "in print" as his Daddy, and will have the advantage of knowing how to draw pictures to illustrate. "This is one of McKellar," explained Elizabeth, to the little group she had drawn to her (McKellar, by the way, was named after a famous Canadian artist), "and this is one of father ("oh, yes," from the group), "and there's one of mother somewhere." Somehow Dan never gets mother very well.—How could he? For he *never* could work in her merry little laugh, and a picture of her with the laugh left out would not seem just quite like "mother."

But we must hurry on. . . . Perhaps I have told you about the big living-room, because there "Peter" gave us a little lecture on Bliss Carman—the great Canadian poet now broken in health, who may come back to Canada this summer if he is able, and may spend a few weeks in this selfsame dear little log house. There were letters from Carman in Peter's correspondence treasure-box, and he read some extracts from them. If ever

# Your Tractor is Waiting



**YOU** farmers who own tractors—why let your tractor stand idle while a custom thresherman threshes your crops? An idle tractor represents inactive capital—an investment on which you are paying interest. And a custom thresherman represents grain profits shared with someone who had no part in the actual production of your crops.

Your tractor is waiting for an **International thresher**—waiting to save threshing fees and losses that are so often sustained through careless handling of your crop by disinterested threshing crews or through shelling or sprouting of grain left standing in the shock waiting for a delayed custom threshing outfit.

A 10-20 tractor will handle a **22 x 38 International thresher** with all attachments, and a 15-30 will furnish ample power for a 28 x 46 separator. These light threshing outfits are just the size for individual threshing on the average grain farm, and for neighborhood service. When you are through threshing your own crop, you can make a good profit threshing for your neighbors.

A post card addressed to our nearest branch house will bring you descriptive catalog.

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HAMILTON CANADA

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EASTERN BRANCHES—HAMILTON, LONDON, OTTAWA, ONT., MONTREAL, QUEBEC, QUE. ST. JOHN, N. B.

## Did it Ever Occur to You

why certain fellows, interested in the sale of other fertilizers, are so eager to take advantage of every opportunity to "KNOCK"

## SYDNEY BASIC SLAG?

If the goods were "no good," as they would have you believe, then it would not require their "knocks." We have confidence in the good judgment of Ontario farmers—they won't be seriously influenced by such twaddle. Apparently these chaps are really envious of the great success SYDNEY BASIC SLAG has attained.

Let us send you some very interesting literature, along with the names of many prominent users.

**THE CROSS FERTILIZER CO., LIMITED, Sydney, N. S.**  
Address your enquiry to our General Sales Agent,  
**A. L. SMITH, 220 Alfred Street, KINGSTON, ONTARIO**  
(Please mention this paper when writing)

## It Isn't What You Earn, But What You Save That Counts

In your SPARE TIME act as subscription agent for "THE FARMER'S ADVOCATE," and put what you earn in the bank. Write for instructions.

THE WILLIAM WELD COMPANY, LIMITED LONDON, ONTARIO

one man loved another, Peter McArthur loves Bliss Carman.

When the talk was over it was time to hike for the woods,—such a lovely bit of woods it is, with tall, tall trees and not too much undergrowth for a picnic. Through it the slanting sunshine came from the west, and the long shadows spelled "almost six o'clock."

It was a merry party. Peter built a big fire to make coffee—and blackened all the outside of Marian Keith's kettle! . . . and "Dance" (a lively little *Advertiser* reporter, the Puck of the party) was in terrible settle for fear eating "Manse rolls" would make us all solemn . . . and someone else said bravely "who's afraid of bugs!" (Certainly not the Western University Summer School Bulletin editor, who is going to be a doctor and had spent all morning tracing out the nervous system of a rabbit.) . . . And . . .

Of course Peter and the little *Echo* lady between them upset the kettle of water and put out the fire.—But that didn't matter; another kettleful was soon bubbling up as friskily as the first, and the *Free Press* girl and Junia set to work ladling out coffee from one end of the table.

If ever anyone tells you that "poets and things" are too ethereal to eat, don't you believe it. I helped to dish up the coffee, and I saw the "poets and things" eating, and I know how much "stuff was cleared up off that table in the space of half an hour or so!—And the Manse rolls didn't make anyone solemn either.

I wish I could pass the chatter on to you. I heard that two people were talking philosophy; I overheard that two more were talking poetry; and I know that by far the greater number were busy with just nonsense. More than once a regret was expressed that Arthur Stringer, the Cedar Springs novelist, and his wife, who were expected, had not arrived, but otherwise the banquet, out there among the green-gold lights of the woods, left nothing to be desired.

Afterwards Mr. McArthur led the way across a field so that we might see his new woods. Ten years ago he procured from the Forestry Department and planted out about 3,000 young Scotch pines and other trees; to-day some of them are quite fifteen feet tall and growing so lustily that the planter is likely to see a fine forest of godly trees as the result of his forethought.

At last it was time to go home, for the darkness comes on apace no matter how much one wishes to keep it back. Again everybody clambered into the carry-all, and before setting out a vote of thanks to the McArthur family was moved by Margaret Wade, The Philosopher of the Club and editor of *Wireless*. (No—she doesn't go into distracting abstractions, in spite of her nickname). The vote was responded to by the crowd with hearty hand-clapping and a cheer that sounded like a war-whoop but was well meant.—Why is it that women simply can't cheer?

Of course, on the way home, we had to have the proverbial "blow-out," and the whole countryside seemed to come to the rescue, one man arriving, like Diogenes, with a lantern. . . . Off again, after a patch had been affixed, with some difficulty, and then, of a sudden another standstill! Thus it was that eleven o'clock found us sitting in the darkness of a country road—fourteen helpless women all by ourselves—for our solitary man, conveyed by a good Samaritan who had happened along in a motor-car, had gone off on a tire-hunt. Some of the girls volunteered to cross the fields to a farmhouse for additional assistance, but "Dance" declared she heard "the rattlesnakes rattling in the hay," and then, between very material bites of a sandwich, looked at her watch and declared it would soon be "ghost-time." A white thing did suddenly loom through the darkness, and we had never even heard it coming!—Because, forsooth, everybody was talking and anything short of an express train couldn't possibly have been heard. Then, when talk failed, we sang "The end of a perfect day." Truly it had been a perfect day.

It was after one o'clock when the last of us reached our own thresholds. We promised the Lady of the Manse, "cross our hearts," that we wouldn't tell she was abroad at one o'clock Sunday m-m-morning!!!—And there, it's out now! They say a woman never can keep a secret anyway.

# LIFT OFF CORNS!

Apply few drops then lift sore, touchy corns off with fingers—No pain!



Doesn't hurt a bit! Drop a little Freezone on an aching corn, instantly that corn stops hurting, then you lift it right out. Yes, magic!

A tiny bottle of Freezone costs but a few cents at any drug store, but is sufficient to remove every hard corn, soft corn, or corn between the toes, and the calluses, without soreness or irritation.

Freezone is the sensational discovery of a Cincinnati genius. It is wonderful.

## KELLEY FEED & SEED CO.

Write for price list on feeds of all kinds—car lots or less.

We specialize on concentrates.

We can now supply Bran and Shorts in limited quantities.

We are buyers of Hay, New Potatoes and all kinds of Field Grains both for Feed and Seed.

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TORONTO, ONT.**

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RESIDENTIAL SCHOOL FOR GIRLS  
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Collegiate Courses, Music, Art, Expression, Business, Household Science, Physical Training.

Improved equipment, including Gymnasium, Electric Lights, Larger Grounds.

For Calendar write—  
P. S. DOBSON, M.A., Principal  
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R. I. WARNER, M.A., D.D.  
Principal Emeritus 35

## LEARN ALL ABOUT YOUR CAR!

the function of the different mechanical parts, and how to fix it, if it goes wrong. Save repair bills, trouble on the road, know how to keep your automobile tuned-up all the time. Enjoy greater motoring confidence and safety.

Our Automobile Course covers everything you ought to know about a car. Thorough, interesting, practical. Taught entirely by correspondence in your spare time. Information forwarded without charge. Write us today.

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### Worth Thinking Over.

"If you ever develop more troubles than seem possible to be borne, don't look outside for some means of unloading some of them, until you have first looked inside for the development of the necessary backbone and spirit for carrying them."—Margaret Wade.

"O foolish ones, put by your care! Where wants are many, joys are few, And at the wilding springs of peace God keeps an open house for you."—Bliss Carman.

### Canning the August Fruits and Vegetables.

**F**OLLOW the general directions for the cold pack method given in our issue for June 17. Note in addition the following rules:

**Peaches.**—Blanch 1 to 2 minutes, cold-dip, remove skins, fill with syrup as desired, and sterilize 16 minutes (after water boils).

**Plums.**—Wash, blanch 1 to 2 minutes, cold-dip, use thin or medium thin syrup, and sterilize 16 minutes.

**Early Apples.**—Pare, core and cut into halves or quarters, blanch 1½ to 2 minutes, cold-dip, fill up with thin syrup and sterilize 20 minutes. Or hot apple sauce may be put into well-sterilized jars and sealed at once.

**Sweet Corn.**—Blanch on cob for 5 minutes, cold-dip, cut kernels off and pack but do not quite fill the jars as the corn expands a little in sterilizing, fill up with salty water (1 teaspoon salt and 1 teaspoon sugar to the quart jar) and sterilize 3 hours. The corn should be canned the day it is picked.

**Field Corn.**—Blanch 10 minutes and cold-dip as above. Put through a food chopper, and cook in a kettle adding ¾ teasp. sugar and ¼ teasp. salt to each quart. Cook, stirring frequently until all is thick, then pack in jars and sterilize 3 hours.

**Sweet Peppers.**—Do not blanch. Fill up with water to which a very little vinegar has been added. Sterilize 1½ hours.

### Seasonable Cookery.

**Cucumber Soup.**—Simmer in 1 pint water 4 slices cucumbers and 2 sliced onions, until very soft, then put through a sieve. Add 1 pint scalded milk, 1 tablesp. butter and 2 of flour rubbed together, salt and pepper to taste. Simmer slowly for 10 minutes and serve with croutons. (Bits of buttered bread toasted in the oven.)

**Berry Pudding.**—Beat ½ cup of butter to a cream. Add gradually ½ cup sugar and beaten yolks of 2 eggs. Sift together 2 cups previously sifted flour, 4 level teaspoons baking-powder and ½ teasp. salt. Add to the creamed butter, sugar and eggs thus: Put in half of the flour mixture, mix, and then put in ½ cup cold water. Mix in the rest of the flour mixture, beat thoroughly, and last of all fold in the well-beaten whites of the 2 eggs. Sprinkle a cupful of blackberries with a little flour and add them to the batter as it is dropped, a spoonful at a time, into the mould which has been greased with butter. Steam an hour and a half, or bake 25 minutes and serve with blackberry hard sauce made as follows: Beat together ½ cup butter and 1 cup sugar, then beat in ½ cupful of crushed berries.

**Frozen Chocolate Pudding.**—Beat together until light the yolks of 3 eggs, ½ cup sugar and a level teaspoonful of cinnamon. Add slowly 1 cup milk heated to boiling, beating well, then pour gradually over 1½ ounces unsweetened chocolate melted over hot water. Place the mixture in a double boiler and stir constantly until it thickens and coats the spoon. Take off the fire. When cold add 1 cup rich cream, vanilla to flavor, and freeze. When almost done you may add, if you like, 1 cup of candied fruit, figs and raisins boiled in a thin syrup until done.

**Ice Creams.**—One of the best new creams is this: Make an ordinary vanilla ice cream by the regular rule: Scald a pint of milk with a cup of sugar; cool, flavor, add a pint of whipped cream. When this is half frozen take out the dasher and add a half pound of peanut brittle or two or three bars of peanut candy put through the meat-chopper; the result is a light brown cream tasting like caramel, with the nuts all through it; it may be served in glasses or put in a brick.

# IT PAYS BIG



**T**HOUSANDS of successful hog raisers have proven by actual experience that SCHUMACHER FEED is an economical growing and developing feed for hogs—a feed that promotes rapid growth and develops the much desired big, stretchy framed type on which the feeder can put on more pounds of pork economically.

SCHUMACHER FEED being composed of specially selected by-products of Wheat, Oats, Barley and Corn, together with Linseed meal (the whole being finely ground and scientifically blended) meets the requirements of growing hogs so well that it has taken its place as the leading growing, developing hog feed.

## SCHUMACHER Feeding Plan

The SCHUMACHER Feeding Plan is helping thousands of farmers and hog raisers solve their feeding problem. As soon as your hogs are old enough to wean begin feeding them SCHUMACHER FEED either in self-feeders or in the slop. When hogs are on pasture, SCHUMACHER FEED is the only other feed necessary. They will develop big, strong, healthy frames and later on, by adding tankage to your self-feeder

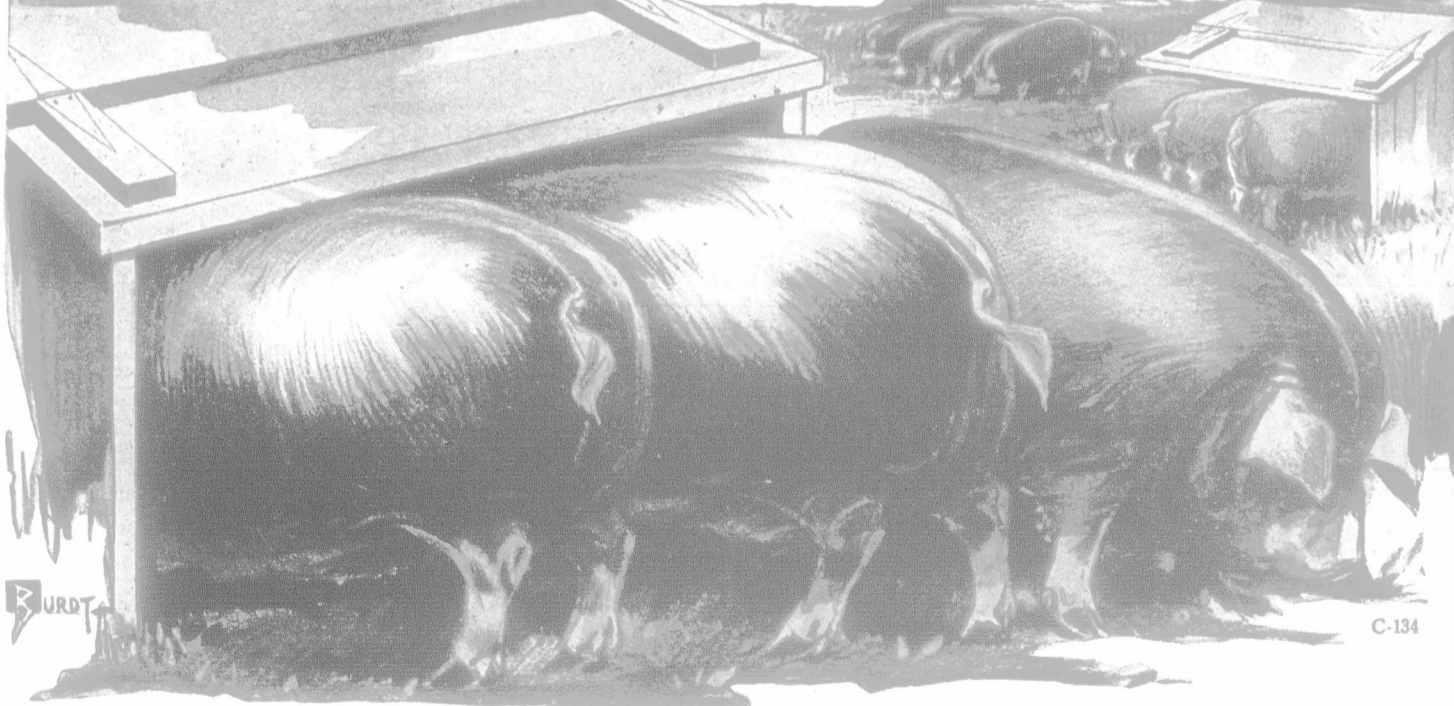
compartment, they will put on fat at a most rapid rate.

If you prefer the slopping method, make a thick slop of SCHUMACHER and give to your hogs regularly from weaning time to market time.

Either plan will prove exceedingly profitable and prove to your satisfaction that there is big profit in raising hogs today with the aid of SCHUMACHER FEED. Ask your dealer for SCHUMACHER—if he can't supply you, write us.

### The Quaker Oats Company

Hog Feed Department  
Peterborough and Saskatoon, Canada



A good chocolate moussé is easily made by adding to the rule given for the vanilla mousse four ounces or squares of chocolate melted with a quarter of a cup of hot milk, with a half-inch stick of cinnamon put in; when it is smooth and cold take out the cinnamon and add vanilla; mix this into the mousse with the whipped cream at the last. To make a delicious coffee mousse, use the same rule for the foundation, but add half a cup of coffee to the half cup of water in which the sugar is boiled, and at the last add a little very strong coffee to flavor it still more.

### The Scrap Bag.

#### Cleaning Hat.

Leghorn, Panama or ordinary straw hats that have become filled with dust and grime may be vastly improved by rubbing them well with damp cornmeal.

Leave on until it dries, then brush off.

#### Hint for Jelly.

A unique flavor may be given to jelly by adding 3 or 4 scented geranium leaves just before pouring into the jelly bag.

#### At Fly Time.

Miss Lillian D. Milner writes that she found the following idea in an old number of the Girls' Own Paper: "Flies will not come near an ordinary geranium plant, and a good way of keeping the dining-table free from them is to use one of these plants as a centerpiece." Of course, nowadays flies are not supposed to enter the dining-room at all, but the idea, if efficacious, should be very useful when eating out of doors, in a shaded corner of the yard or on the back porch, as many people prefer to do nowadays.

#### Swinging Hammock.

Did you know that you can make a splendid verandah hammock of a cot with folding legs, which may be let down if one wishes to stop the swaying, or of the springs and mattress of a single bed? Suspend from strong supports in the ceiling by ropes. A pulley arrangement may be used if liked.

#### Use for Nasturtium Seeds.

Every morning pick the nasturtium seeds clinging fast to the stems they have grown on, and drop them into a glass jar half full of vinegar. According as the seeds come to the top take them out and boil lightly in some fresh vinegar. Seal in bottles and use for capers in sauce for mutton, etc. Care must be taken that the seeds are not too old and hard when gathered.

# The Royal Bank of Canada



The Bank follows a liberal policy in extending Credits to Farmers.

If you are going to need a loan to buy seed or live-stock, see the Manager of the nearest branch of the Royal Bank early about your requirements.

This is an invitation to call at the Royal Bank the next time you are in town.

CAPITAL AND RESERVES \$35,000,000  
TOTAL RESOURCES - \$535,000,000  
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## The Purchasing Value of To-day's Dollar

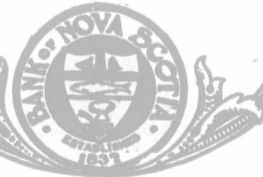
must necessarily increase when commodity prices decline. It is therefore in your interest to save every dollar possible when prices are high.

When the prices of commodities do settle down to lower levels your money will not only have greater purchasing power, but you will have the interest which has accumulated in the meantime if you deposit your savings to-day in the savings department of

Paid-up Capital \$ 9,700,000  
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The four essential points are here Strength and Looks — Price and Wear Johnson Ideal Halter Co., Sarnia, Ontario

## Current Events

At a meeting held in Winnipeg on July 13th it was decided to form a Farmer-Independent group in the Manitoba Legislature.

A new College of Art for Ontario is being built on the grounds of the Art Gallery of Toronto, and immediately east of Goldwin Smith's historic old residence, "The Grange," at the head of John St.

Arrangements have been practically completed whereby an adequate supply of bituminous coal will be sent from the coal fields of Alberta to meet the demands of Ontario this winter.

The Grand Army of United Veterans addressed a letter to the Toronto and South and West York members of the Dominion Parliament, asking them to follow the example of J. H. Burnham of West Peterboro, who resigned his seat in protest against continuation of the Union Government.

By-elections must be held in six constituencies before the end of the year, to fill vacancies in the House at Ottawa and provide seats for Hon. Messrs. McCurdy and Wigmore, the new Cabinet Ministers of Public Works and Customs respectively. The by-elections will be held in Colchester, N. S.; St. John, N. B.; East Elgin, Ont.; Yale, B. C.; West Peterboro, Ont.; and St. Antoine division, Montreal.

Great Britain is beginning to manufacture steel on a large scale instead of depending on the United States for it.

On July 14th the Germans notified Premier Lloyd George that they would accept the Allies' coal terms calling for deliveries of 2,000,000 tons monthly for six months. The agreement was reluctantly made to avoid occupation of the Ruhr district by allied troops.

President Wilson, in accordance with the power conferred upon him by the Covenant, has summoned the first assembly of the League of Nations for November 15th, immediately following the Presidential election, which will be on November 2nd. The Assembly will embrace all nations excepting the United States (kept out by the blockade imposed by the "Lodge" faction in the U. S. Senate), and possibly China, Germany, Austria, Bulgaria, and three Central American Republics. Each nation will have one vote but may send three representatives, and the gathering will be the nearest approach to the "Parliament of Man," foretold by the poet Tennyson, that the world has yet seen.

It is thought that Tuan's rebellion in China is about at an end. He has been severely worsted about 20 miles from Peking. Peking and Tientsin still remain under martial law.

Soviet envoy Krassin, who went to Petrograd from London, has returned with the acceptance by the Soviet Government of Premier Lloyd George's ultimatum, the three principal conditions of which are: (1) Release of all the allied prisoners in Russia. (2) Cessation of propaganda by Russia and of interference in the Near East, especially Persia. (3) Compensation to foreigners for all private property confiscated in Russia. In return Krassin will ask Britain to assist Russia in establishing credit with the Allies.

Great Britain and Japan have notified the League of Nations that they have prolonged their treaty alliance for a year.

Leading Zionists estimate that at least 75,000 Jews will emigrate to Palestine during the coming year.

### Sale Dates.

July 31.—Ontario Duroc-Jersey Breeders' Association, Essex, Ont.  
Aug. 11.—Jas. R. Fallis, Brampton, Shorthorns.  
Aug. 18.—J. F. Brethour, Canadian Exhibition Grounds, Toronto, Yorkshires.

## Draw on Your Customers



through the Merchants Bank. With Branches in all parts of Canada, and correspondents abroad, this Bank is in a position to present Drafts promptly, have them accepted, and collect payment, with the least possible trouble and cost to you.

The Manager will be glad to take up this matter with you

## THE MERCHANTS BANK

Head Office: Montreal OF CANADA Established 1864.

With its 149 branches in Ontario, 47 branches in Quebec, 1 branch in New Brunswick, 3 branches in Nova Scotia, 44 branches in Manitoba, 44 branches in Saskatchewan, 47 branches in Alberta and 11 branches in British Columbia, serves rural Canada most effectively.

WRITE OR CALL AT NEAREST BRANCH.

## Markets

Continued from page 1326.

were 50 cents to \$1 lower. Best Canadians, of which there were 35 cars, sold at \$15.

Hogs.—Receipts, 6,400. Heavies sold at \$16.75 to \$17; lights, \$17.25 to \$17.40; pigs, \$16.50.

Sheep.—Receipts, 2,000. Lambs were \$16.50 down; best ewes, \$9.

Calves.—Receipts, 2,000. Tops sold up to \$18.50, with Canadians bringing top prices.

### Chicago.

Hogs.—Heavyweight, \$14.50 to \$15.80; medium weight, \$15.35 to \$16.10; light heavy, \$14 to \$15.75; heavy packing sows, smooth, \$13.75 to \$14.40; packing sows, rough, \$13 to \$13.75; pigs, \$12.75 to \$14.50. Cattle.—Compared with week ago; good to best yearling steers about steady; grassers and strong to heavy-weight cornfeds, largely 25c. to 60c. lower; best she-stock and canners, strong to 25c. higher; others slow, steady; bologna and handy butcher bulls mostly 50c. higher; best stockers and feeders, 10c. to 20c. higher; other slow and uneven; veal calves, 25c. to 50c. higher.

Sheep.—Compared with week ago; lambs about steady; yearlings and aged wethers are 75c. to \$1 higher; ewes, 50c. to 75c. higher; feeding and breeding stock steady to 25c. higher.

### Cheese Markets.

Napaneese, 28 5-16c. bid—no sales on board; Picton, 28 3/4c.; New York, State, whole milk, flats, current make, white and colored specials, 27 1/2 to 28c.; do. average run, 26c. to 27 1/2c.; state, whole, milk, twins, current make, specials, 27c. to 27 1/2c.; average run, 26c. to 26 3/4c.; Cornwall, white, 28 1/2c.; colored, 28 5-16c. Owing to the strike of the C. P. R. carters in force at Montreal, the United Dairymen Co-operative, Limited, did not handle as many cheese on Friday last as usual. Their total sales were 1,389 boxes. Number 1, colored sold at 28 13-16 cents; special white at 28 3/4c.; Number 1 white at 28 1/4c.; Number 2 white at 27 1/2 cents.

He had fairly puzzled the good village folk, had that clever ventriloquist, and now he was going to perform his last and greatest feat.

"Ladies and gentlemen," he announced, with a grand bow, "I will proceed to sing that famous ballad. "Good-bye," in a lady's voice, which will appear to proceed from the empty air above your heads."

The minutes passed. Looks of strain and agony, doubt and anger, chased one another across the performer's face; but there was no song.

Then a voice suddenly broke the silence.

"'Tain't no good, guv-nor," it said. "I've bin an' lost the gramophone needle." —"Answers."

## THE MOLSONS BANK

Incorporated in 1855

Capital and Reserve, \$9,000,000

Over 130 Branches

We invite a call from farmers seeking a good banking connection giving courteous and efficient service.

Savings Departments at all Branches.



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

TERMS—Five cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order. No advertisement inserted for less than 75 cents.

AUCTION SALE—SPRING FIELD FARM. Lot 3, Broken Front, Pickering Township. This farm will be sold by auction, Tuesday, July 27th. On the premises are good out-buildings, solid brick house (ten rooms), beautiful lawn and ornamental trees, near lake shore and 1 1/4 miles to corporation town of Whitby. This farm is one of the best in Pickering Township. Easy terms. Sale to be held on the premises at 4 o'clock p.m. For full particulars apply to R. Richardson, Box 43, Whitby, Ontario, or Wm. Maw, Auctioneer, Whitby, Ont. Phone 288.

SCOTCH COLLIE PUPS FOR SALE—DAM registered. Sire is eligible. Males \$12, females \$8. G. Peal, Rockwood, Ont.

WANTED: DAIRYMEN, AT ONCE. MUST be good milkers. Steady employment, \$55.00 per month, room and board. Apply Dairy Dept., Speedwell Hospital, Guelph, Ontario.



Condensed advertisements will be inserted under this heading at five cents per word each insertion. Each initial counts for one word and figures for two words. Names and addresses are counted. Cash must always accompany the order for any advertisement under this heading. Parties having good pure-bred poultry and eggs for sale will find plenty of customers by using our advertising columns. No advertisement inserted for less than 75 cents.

Poultry Wanted—We have a special demand for LIVE POULTRY of GOOD QUALITY at this season of the year, which enables us to pay very top prices for any quantity. Get the best market in Western Ontario by selling to C. A. MANN & CO., 78 King Street, London, Ont. Phone 1577.

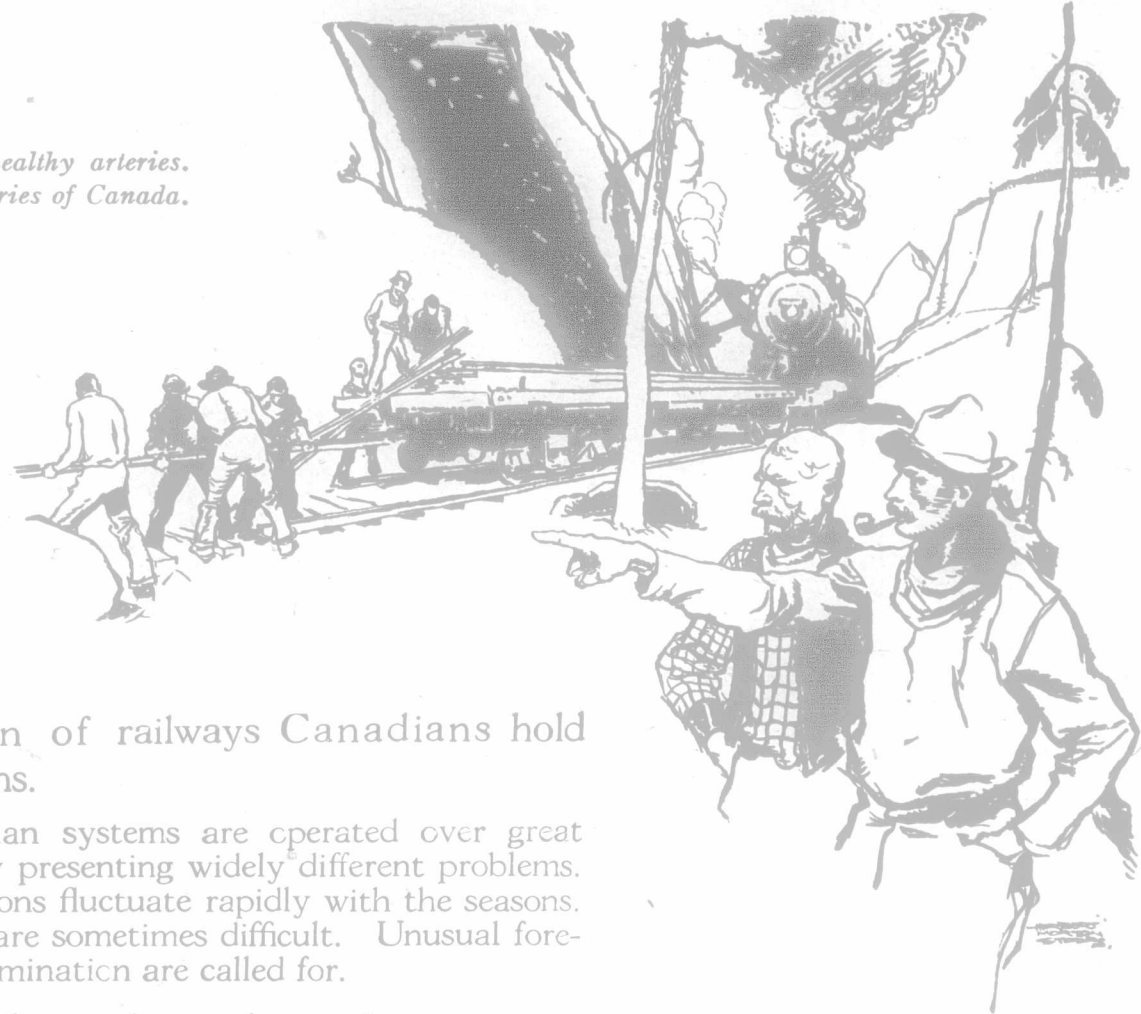
### FARMERS!

## Baled Shavings

Ask for delivered price your station. BUY NOW.

John B. Smith & Sons Limited, Toronto Established 1951

*A healthy body means healthy arteries.  
The railways are the arteries of Canada.*



**I**N the operation of railways Canadians hold high reputations.

The chief Canadian systems are operated over great stretches of territory presenting widely different problems. Their traffic obligations fluctuate rapidly with the seasons. Climatic conditions are sometimes difficult. Unusual foresight, skill and determination are called for.

\* \* \* \* \*

Yet the only unfailing highways for the heavy traffic across the New World from China to France during the war—were Canadian railways.

Canada alone among the allied countries had no war-time transportation crisis. When foreign roads choked under their loads, she relieved them of millions of tons. At a time when ships were the need of the hour no ship lost time in any Canadian port through failure of the railways to deliver cargoes at the docks.

To-day the Canadian producer still commands the fastest, the most dependable and the cheapest railway service in the world.

But the foresight that made this record possible could do nothing without MONEY! The skill that kept terminals uncongested had to be backed with MONEY! The determination that drove crippled engines ahead in the face of 40-below gales and mounting snow would in the long run have been useless without MONEY!

\* \* \* \* \*

Thus to-day the alarming fall in the net revenues of the railways is a menace to railway efficiency. It injures railway credit. It dissolves the reserves needful to meet the expanding needs of a growing country. It imperils national prosperity.

Increased freight rates are imperative therefore, not merely on behalf of railways but in the interests of Canada itself!

*This advertisement is published under the authority of*  
**The Railway Association of Canada**  
formerly the CANADIAN RAILWAY WAR BOARD

In July 1918 the Canadian roads were threatened with a general strike. To prevent this public catastrophe they agreed to follow the American scale of wage increases. The Government of Canada meantime allowed freight rate increases intended to make up the cost of these new wage rates.

Leaving aside all question of increased cost of material, the new wages cost the railways of Canada an extra eighty million dollars for the first year alone.

The new rates yielded them an additional forty-three millions!

The annual deficit on wages alone was thirty-seven millions and is constantly growing!

**BOOK ON**  
**DOG DISEASES,**  
**And How to Feed**

Mailed free to any address by the Author,  
**H. Clay Glover Co. Inc.**  
 118 West 31st Street,  
 New York, U.S.A.

America's  
 Pioneer  
 Dog  
 Remedies

**Aberdeen - Angus**  
 A few types young bulls and females to offer, of choice breeding and individuality.

**Shropshire and Southdown Sheep**  
 Yearling Rams and Ewes for breeding purposes or fitted for the show ring.

Inspection invited, satisfaction assured.

Larkin Farms - Queenston, Ont.

**SUNNY ACRES**  
**Aberdeen - Angus**  
 Present offering—A few young bulls ready for service.

G. C. CHANNON, - Oakwood, Ont.  
 Telephone—Oakwood. Railway—Lindsay.  
 G. T. R. and C. P. R.

**Aberdeen - Angus**  
 Meadowdale Farm  
 Forest, Ontario

Alonzo Mathews Manager H. Fraleigh Proprietor

**ALLOWAY LODGE STOCK FARM**  
 Angus—Southdowns—Collies

Recent addition of Imp. Idealist of Maise more as junior herd sire. Yearling rams and ewes, all of superior merit, priced to sell. No Collies at present.

ROBT. McEWEN, R. R. 4, London, Ont.

**Messrs. A. J. Hickman & Co.**  
 Halse Grange - Brackley, England  
 Exporters of all Breeds of Pedigree Live Stock.

Send for an illustrated catalogue and see what we can do for you. Whether you want show or breeding stock, buy direct from England and save money.

**SUNNY SIDE HEREFORDS**  
 12 bulls, serviceable ages; 5 by breeding; size and individual merit are good enough to head any pure-bred herd. Females of different ages. Inspection invited. They are priced to sell.

ARTHUR F. O'NEIL & SONS, Denfield, Ont., R. No. 2  
 Phone 27-12 Granton

**Aberdeen-Angus**—Cows and heifers in calf. Breeding and quality excellent. Prices very reasonable. Write

JAMES G. SHARP - Terra Cotta, Ontario  
 Phone via Erin.

**Aberdeen-Angus**—"Middlebrook Abbot 2nd," a prize winner at Toronto and Ottawa, for sale, as have had 5 years—price \$500. Young bulls and heifers \$175 and up. Get a pure-bred sire, even if herd grades—it pays. A. Dinsmore, Mgr., "Grape Grange" Farm, Clarksburg, Ont.

**Maple Shade SHORTHORNS**

A dozen young bulls imported and my own breeding at moderate prices.

W. A. DRYDEN  
 Brooklin - - - Ontario

**PATENT SOLICITORS**—Fetherstonhaugh & Co. The old-established firm. Patent everywhere. Head Office: Royal Bank Building, Toronto. Ottawa Office: 5 Elgin Street. Offices throughout Canada. Booklet free.

**Spraying Tobacco for the Horn Worm.**

BY D. D. DIGGES, SUPT., HARROW TOBACCO STATION.

Spraying tobacco with either Arsenate of Lead or Paris green is the most effective and economical method for controlling the horn worm. By spraying not only are all worms on the tobacco killed but also all that hatch within a week or ten days after spraying.

For this purpose Arsenate of Lead has been found to be superior to Paris green in that there is more danger of burning the tobacco with Paris green than with Arsenate of Lead; the Paris green washes off more readily and, therefore, its period of effectiveness is shorter; and too, if it is necessary to spray several times, the Paris green seems to collect at the point where the leaf joins the stalk killing the leaf tissue and either causing the leaves to drop off in the field or to break off more easily when harvesting.

Arsenate of Lead may be used either in the form of a paste or of a powder, and may be applied either in solution or dusted on the tobacco. If used in the paste form twice the quantity recommended for the powdered form should be used.

Until the tobacco is about half grown spraying with a solution consisting of six pounds of dry powdered Arsenate of Lead per 100 gallons of water, is most effective, the solution apparently covering the plant more completely and adhering to it longer than the powder. However, after the tobacco becomes larger the middle leaves so nearly cover the bottom leaves as to render the spray cart ineffective. Then it must be put on in the powdered form with a dust gun. For use in the dust gun the powdered form must be mixed with a carrier to enable the gun to distribute it evenly over the tobacco. Dry sifted wood ashes has been found to be the best carrier; however, if ashes can not be obtained dry air-slaked lime may be used. The powder must be put on early in the morning while the dew is still on the tobacco and while there is very little wind. For tobacco nearing maturity five pounds of Arsenate of lead per acre (mixed with an equal weight of ashes) is required; for smaller tobacco three and one-half pounds of Arsenate of Lead per acre.

Since there are several forms of Arsenate of Lead, all of which are not suitable for spraying tobacco, the buyer should demand that form having not less than 30 per cent. of Arsenic Oxide of which not more than 1 per cent. is water soluble. Those forms having a lower percentage of Arsenic Oxide are too slow in their action; and those with much more than 1 per cent. of water soluble Arsenic Oxide are liable to burn the tobacco.

**The Western Fair.**

LONDON, ONT., SEPT. 11th to 18th, 1920.

Something new this year in connection with London's Exhibition will be the issuing of a Catalogue of the Live Stock Entries. In order to do this the Management will be obliged to close the entries at an earlier date than previous years. All Live Stock entries will, therefore, close on Saturday, Sept. 4th. This rule will be strictly enforced, and late entries will have to be refused. Will all Live Stock Exhibitors kindly note this and make their entries early. The Prize List, especially in the cattle department, has been increased considerably, and it is fully expected that this year's Exhibition will be the best ever held in London.

Prize Lists, entry forms and all information from the Secretary, A. M. Hunt, London, Ont.

Some years ago a party of prospectors were looking for minerals in the Ozark Mountains of southeastern Missouri. It was during the month of February, and the prospectors encountered a period of very bad weather, varying from rain to snow and sleet and back again to rain. One day, when discussing the weather in the presence of Uncle Bill Hunter, a native Ozarkian, one of the party inquired if the weather would not change soon.

"Oh, yes, hit'll change, all right," replied Uncle Bill. "All the gosh-durned weather in the United States comes here to change."

**Preserved Raspberries**  
 will keep their natural color if you use

**Lantic Sugar**

the "fine" cane sugar which dissolves at once. Order by name in original packages.

**Lantic Sugar**  
 10, 20 and 100-lb. Sacks  
 2 and 5-lb. Cartons  
**LANTIC LIBRARY FREE**  
 Send red ball trade-mark cut from a bag or carton to  
**Atlantic Sugar Refineries Limited**  
 MONTREAL, QUE. ST. JOHN, N.D.

**IMPERIAL BRAND HARNESS**

Fifty-four years in the Harness business is assurance that our goods are right. We manufacture the strongest and best looking harness it is possible to make and we figure our prices as low as they can be sold for. Ask your dealer for Imperial Brand Harness, made by Samuel Trees & Co. He will recommend it. If your dealer does not handle Imperial Brand, write us direct for prices on any style of our guaranteed Harness.

**SPECIAL** We have made an extra good Team Harness, No. 640, at a special price. **\$57**  
 NO. 640 Ask your dealer or write to us about it.

**SAMUEL TREES & CO., LTD. (Established 1866)**  
 Manufacturers of Harness and Wholesalers of Auto Supplies  
 42 WELLINGTON ST. EAST TORONTO, ONT.

**BROOKDALE HEREFORD FARM**

Young stuff for sale at all times. Visitors always welcome and met any time.  
 Telephone. W. READHEAD, Milton, Ontario

**A NEW IMPORTATION OF 40 SCOTCH SHORTHORNS**

arrived home Dec. 17th. From our herd of 125 head we can offer a large selection in choicely-bred bulls and females. Anyone in need of foundation stock may find it to their advantage to look over our offering before making any purchases.

**J. A. & H. M. PETTIT** :: **FREEMAN, ONTARIO**  
 Burlington Jct., G.T.R., only half mile from farm.

**20 Bulls—SPRUCE LAWN—100 Females**—Clydesdales, Shorthorns, Yorkshires. Herd headed by Imported Golden Challenger 122384, a Rubyhill, bred by Earl of Northbrook, by Ascott Challenger, bred by L. De Rothchild. Special bargains in farmer's bulls. Cows and heifers in calf, yearling and heifer calves. Yorkshires either sex. J. L. and T. W. McCAMUS, Cavan, C.P.R.; Millbrook, G.T.R. and P.O., Ont.

**Newcastle Herd of Shorthorns and Tamworths for Sale**—Three nice bulls, 11 to 13 months old, and several yearling heifers and cows with calves at foot, both sexes, all splendid milking strain. Several Tamworth sows due to farrow in May, June, July. Young stock, both sexes, at weaning up to six months old. All from prize-winning stock.  
 Long-distance Phone. A. A. COLWILL, R.R. No. 2, Newcastle.

**Pear Lawn Shorthorns, Hackneys and Yorkshires**—One imported-in-dam Miss Ramadan bull, 14 months; one Secret bull, 12 months, imp. sire and dam; one Golden Rose bull, 6 months, imp. sire and dam; one bull, a Flattery, 12 months, imp. sire. A few young cows with calves at foot. One imported Hackney stallion, A 1; two Hackney stallions rising one year; one registered Clyde mare; also Yorkshires at weaning time. HERBERT J. MILLER, Keene P.O., Ont. Stations—Keene G.T.R.; Indian River C.P.R. Peterborough County.

**Pure Scotch Shorthorns** Special offering in bull calves and a few choice females. Our herd includes some of the best Scotch breeding in Ontario today—Brawirth Bud's, Mina's, Roan Lady's, Cecilia's and Castilla's. Herd headed by the Miss Ramsden sire, Royal Ramsden by Golden Edward. Dam by Royalist. Write or call.  
 JOSEPH BREWSTER :: SEAFORTH, ONT.

**Roan Bull—Calved April 23rd, 1919**

Sire, Chief Orator =122385 = (Imp.). Dam, Spring Beauty =138815 = (Imp.). Good enough individually and in breeding to head a good herd. Could spare a few females.  
 J. T. GIBSON, Denfield, Ont.

**Puslinch Plains Shorthorns**

Five bulls for sale by Burnbrae Sultan =80325 =.  
 A. G. AULD - - - R.R. 2, Guelph, Ontario

**Spring Valley Shorthorns**—Herd headed by Sea Gem's Pride 96365. We have a number of good bulls for sale, including the Champion Ivanhoe 122760, and his full brother also, an extra well-bred Rosewood, and others. Write for particulars.  
 Telephone and telegraph by Ayr. KYLE BROS., Drumbo, Ont.

**Imported Scotch Shorthorns** For Sale—Three imported bulls, one yearling one two-year-old and our three-year-old herd sire; also a choice two-year-old Orange Blossom of our own breeding, and three well-bred bull calves about a year old. Would consider exchanging an imported bull for Scotch females.  
 R. M. MITCHELL, R.R. No. 1, Freeman, Ont.

**BLAIRGOWRIE SHORTHORNS!**

Three imported bulls. Ten imported females in calf or calf by side. Two Scotch-bred bulls. Five Scotch-bred cows with calves by side.  
 JOHN MILLER - - - ASHBURN, ONTARIO  
 (Myrtle C. P. R. and G. T. R.)

## Heaves

**AND HOW TO CURE**  
—A Standard treatment with years of success back of it to guarantee results is

**Fleming's Tonic Heave Remedy**

Use it on any case—No matter what else has been tried—and if three boxes fail to relieve, we will refund full amount paid. Further details in

**Fleming's Vest Pocket Veterinary Adviser**  
Write us for a Free Copy  
**BEST EVER USED**

Dear Sirs:—Enclosed find \$1.00 for 1 package of Tonic Heave Remedy. I used a package last year and completely cured a case of Heaves of some 5 years' standing.  
H. B. BURKHOLDER, Lillooet, B.C.  
Per Box, \$1.00; 6 for \$5.00

**FLEMING BROS., Chemists**  
75 Church St. Toronto

## English Dual-Purpose Shorthorns

We offer a grand choice of young bulls and bull calves from imported dams and sires, bred on the English system for milk and beef. They will add value to any herd. The dual characteristics have been impressed by scientific treatment for continuous years. Prices moderate.

Always on hand, sows and boars of the most satisfactory breed of pigs, English Large Blacks.

**F. W. COCKSHUTT**  
Lynnore Stock Farm, Brantford, Ont.

## Mardella Dual-Purpose Shorthorns

Two sappy, strong young bulls, now ready for service, for quick sale. Females all ages. Some bred to The Duke. Dam gave 13,599 lbs. milk, 474 lbs. butter-fat. All have size and quality. Great producers.

**THOMAS GRAHAM, R. 3, Port Perry, Ont.**

**FOR IMMEDIATE SALE**

### Dual-Purpose Shorthorn Sire

Monteith Duke 2nd, 100792. Calved June 12th, 1915. Sire, Bowling Duke = 91275 = (114416). Dam Fortune 20th 91415, by The Patriot (Imp.) 50100. Splendid breeder. Weighs 22 cwt. in breeding condition. Sure and active and very quiet. Apply to—

**J. H. WIGGINS, - Kemptville, Ont.**

### DUAL-PURPOSE SHORTHORNS

A number of females, some with heifer calves by their side. Also Dorset Horned sheep.

**VALMER BARTLETT - Canfield, Ontario**

### Scotch Shorthorns

—Herd headed by Master Marquis = 123326 =, by Gainford Marquis. Stock of either sex for sale. Also Oxford Down ewes.

**GEO. D. FLETCHER, Erin, R.R. 1, Ont.**

Wanted to buy, **Shorthorn Bulls**, not particular about fancy breeding; must be fat, straight individuals, reds and roans, from 12 to 18 months old.

**PALMER BROS., Belding, Mich.**

## Cream Wanted

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

### ONTARIO CREAMERIES Limited

LONDON ONTARIO

## RAYMONDALE HOLSTEIN SIRE

We have for immediate sale a 24 months bull sired by King Segis Alcartra Spofford and from Princess Echo De Kol 2nd, who has the following record—

Butter—	7 days	-	-	35.32 lbs.
"	30 "	-	-	146.42 lbs.
"	60 "	-	-	281.12 lbs.
"	90 "	-	-	398.92 lbs.
Milk—	7 "	-	-	708.9 lbs.
"	30 "	-	-	2,904.3 lbs.
"	60 "	-	-	5,829.0 lbs.
"	90 "	-	-	8,448.9 lbs.

This young bull is a good individual and is guaranteed right in every way. Write quick or come and see him.

**RAYMONDALE FARM, - Vaudreuil, Que.**  
D. RAYMOND, Owner,  
Queen's Hotel, - Montreal

**20,000 lb.—Holstein Bulls—20,000 lb.**  
Write us for extended pedigrees and full particulars of 1920 bulls whose dam and sire's dam average over 20,000 lbs. milk and 850 lbs. butter in R.O.P. **R. HONEY & SONS, Dartford, Ont.**

### Questions and Answers. Miscellaneous.

**Caraway Seed.**  
Is Caraway seed of any value? Where could I dispose of it? How is it cut and threshed? C. C.

Ans.—Caraway seed is frequently used by confectioners and bakers. The plant is cut when the seed is matured and the seed rubbed out by hand. You might try some of the bakeries or spice factories. They are the most likely sources we know of where you might dispose of the seed.

### Railway Fencing—Cattle at Large.

The country south of our farm is an old "burn", fired by the railroad company of course. It produces a lot of good pasture and our stock feed upon it. The railroad has a fence on both sides of their right of way, but it is in very bad order.

1. Must they keep it in good repair?
2. Could we claim damages if our stock got out on the tracks and were killed? Only our clearings are fenced.
3. We have spent several days every year fixing the railroad fence, can we claim pay for this work (not on our own place)?

Ontario. T. A. T.  
Ans.—1. Yes.  
2. We doubt very much your being in a position to legally maintain a claim of damages in the event of your cattle being killed in the circumstances stated.  
3. No.

### Blueberries—Rubber.

1. How can blueberries be dried?  
2. How can rubber soles be stuck to leather boots? J. D.

Ans.—1. It is quite possible that the berries may be dried by spreading them out thinly in a flat dish in the sun or putting them in a slow oven.

2. It is sometimes rather difficult to get the rubber to stick to leather. You might take one dram of gutta percha, dissolved in one ounce of bisulphide of carbon. Filter through coarse filter paper. Add 15 grams of pure rubber. Rub the whole smooth with a knife and put the two parts to be cemented together quickly. Another recipe is carbon bisulphide, nineteen parts; oil of turpentine, one part; gutta percha cut in small pieces and added until a thick paste is obtained. All fatty or greasy matter should be removed from the parts to be cemented.

### Sweet Potatoes.

How are sweet potatoes grown? A. S.

Ans.—Sweet potatoes are grown on a very sandy loam soil which is warm and contains plenty of moisture, the soil similar to that used to grow melons. The ordinary sweet potatoes sold on the market in the winter would be satisfactory seed in most cases. These potatoes are sprouted in warm conditions (in a hot-bed) during the months of March or April; the sprouts are broken off and planted in the field when all danger of frost is over, (it would be about June first in most cases). They are planted in a similar fashion to melons; that is, ridges are made about 3 feet apart and the plants are set 18 inches apart in the row on the south side of the ridge which is about 4 or 5 inches high. They are handled very much the same as water melons; the vines looking very much like this plant. If any particular brand of seed was wanted I would advise getting either the seed or the young plants from some of the growers in New Jersey or Virginia. A. K. M.

### Will Cost Ten Cents to Register Letters.

According to an amendment to the Post Office Act passed during the recent session of Parliament the Registration Fee on letters and other matter mailed in Canada is fixed at ten (10c.) cents per each letter or article.

The above fee shall apply to all registered mail matter posted in Canada on and after the 15th July, 1920.

The public are advised in order that they may see that all registered matter is fully prepaid as regards both postage and registration fee.

Volume 101 of the American Shorthorn Herd Book is off the press. It is an extensive volume, containing abbreviated pedigrees of animals numbering from 757,001 to 787,000.

## LISONALLY FARM

OAKVILLE, ONTARIO  
F. W. BAILLIE, PROPRIETOR

# WORKING HERD MANAGER

FOR SCOTCH SHORTHORNS, WANTED AT ONCE

When applying give full particulars of past experience and state wages,

**A. PETRIE, Manager**

## Burnbrae Shorthorns

Eighty-three years without change, we have been breeding Scotch Shorthorns. The foundations of many of the best herds in America were laid from our farms.

I am in a position to furnish you with the best in either sex that can be found. High-class young bulls for the breeder and the farmer. Cows and heifers of the finest breeding to start you right, and you cannot afford to start wrong. Every animal that I have sold in two years has been satisfactory, the most of them sold by letter. I can satisfy you with the best in what you want at a price that will give you a chance, and I will pay the freight or express to your station. Augusta Sultan = 93092 =, one of the greatest living sires at the head of my herd. Write and if possible come and see, it is worth while. Post Office, Telegraph, Telephone and Station is Stouffville, Ont. 30 miles from Toronto.

**ROBERT MILLER :: Stouffville, Ont.**

## Reyburn Milking Shorthorns

Herd headed by Victor 3rd, Imp., Grand Champion at Erie Show and Congress. Herd average over 9,500 lbs. milk per cow. Choice cows, heifers and herd-heading sires for sale.

**R. R. WHEATON :: THORNDALE, ONTARIO**  
Long-distance phone and telegraph.

### DUAL-PURPOSE SHORTHORNS

Herd headed by Dominator 106224, whose two nearest dams average 12,112 pounds of milk in a year. Bulls from 1 to 6 months old for sale, also a cow or two. Inspection of herd solicited.

**WELWOOD FARM - Farmer's Advocate - LONDON, ONT.**

### MILKING SHORTHORNS

Young stock from R. O. P. cows by imported sires.

### BERKSHIRE PIGS

Choicely bred sows and boars, all ages. Can supply pairs, not akin.

**J. B. PEARSON, Manager - Credit Grange Farm - Meadowvale, Ont.**

### SPRUCE GLEN SHORTHORNS

We have a few choice, well bred, thick, deep level, mellow young bulls of breeding age for sale; also heifers in calf to a right good sire. Write for particulars.

**JAMES McPHERSON & SONS - Dundalk, Ontario**

## Hamilton House Holstein Sires

Our young bulls of serviceable age have all been sold but we have a number of the best young calves we have ever bred. All are from dams with good combination records for both milk and butter. Several are up to 700 lbs. of milk and 31 lbs. of butter for 7 days. If you are interested in a good calf, write or see them now—they can be purchased at considerably less than we will be pricing them next winter.

**D. B. TRACY - (All Railways) - COBourg, Ont.**  
Bell Phone

## Hospital for the Insane, Hamilton, Ont.

### HOLSTEIN BULLS ONLY FOR SALE

Senior sire is from one of the best sons of King Segis Alcartra Spofford. Junior is grandson of the noted May Echo Sylvia, by Champion Echo Sylvia Pontiac.

Write to the Superintendent for prices, etc.

### HOLSTEIN BULLS FROM 30-lb. DAMS

If you want 30-lb. bulls—good individuals—and priced right—you should see my present offering. I also have lower priced bulls, and am offering females bred to Ormsby Jane Burke. Correspondence solicited.

**R. M. HOLBY, Manchester G.T.R., Myrtle C.P.R., PORT PERRY, ONT.**

### Cloverlea Dairy Farms

—Herd headed by King Pontiac Rauwerd, who combines the blood of Canada's greatest sires and dams. His offspring are a choice lot. We have stock for sale, both male and female, 75 head to choose from. Consult us before buying elsewhere. Could book a few more cows for service to "King."

**GRIESBACH BROS., L.-D. 'phone, Collingwood, Ont.**

### WALNUT GROVE HOLSTEINS

I am offering a choice lot of bull calves sired by May Echo Champion, who is a full brother of world's champion, May Echo Sylvia; also a few cows just fresh.

(Take Radial Car from Toronto to Thornhill). **C. R. JAMES, Richmond Hill, R.R. No. 1, Ont.**

### Sylvius Walker Raymondale

is the sire of the majority of our young bulls appreciate them. Their dams are mostly daughters of King Segis Pontiac Duplicate. Don't delay if you want a good bull at a right price. We are also offering females.

**R. W. WALKER & SONS, Port Perry, Ont.**

### Elderslie Holstein-Friesians

—Am all sold out of heifers, just have three bull sired by Judge Hengerveld De Kol 8th, a 32.92-lb. bull. The dam of one is a 20.225-lb. cow. Write for prices and come and see them.

**ARCHIE MUIR, Elderslie Farm, Scarboro' P.O., Ont.**

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(Farm one-half mile from Inglewood Station, C.P.R., G.T.R.)—We are offering two young sons of Highland Pontiac Sylvia (his two nearest dams average 36.51 lbs. of butter, 786.4 lbs. of milk), a son of Avondale Pontiac Echo—Write, or call and see them—don't delay.

**CEDAR BROOK FARM (B. Misener, Manager) Inglewood, Ont.**

### "Premier" Holstein Bulls

ready for service—I have several young bulls from dams with 7-day records up to 32.66 lbs. of butter, 755.9 lbs. of milk, with a brother to May Echo Sylvia. Step lively if you want these calves.

**H. H. BAILEY, Oak Park Farm, Paris, Ont.**

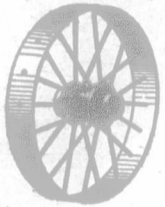


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It's no trouble at all for you to find out what a set of steel wheels will cost you. Just write us giving size of the skain or axle bearing on your wood wheel wagon, width, and diameter desired, and you will promptly receive order-blanks and full particulars about wide tire Steel Wheels for work about your farm.

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We also manufacture Low Down Wide Tire Steel Wheel Trucks.

Tudhope-Anderson Co., Limited  
Orillia, Ontario  
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**Glencairn Ayrshires**—Herd established 40 years. Producing ability from 8,600 to 11,022 lbs. If that sort of production appeals to you, we have heifers all ages and young bulls for sale. Thos. J. McCormick, Rockton, Ont. Copetown Station, G.T.R.

**RAPLA STOCK FARM COTSWOLDS**  
Yearling rams for flock headers. Yearling ewes and breeding ewes in car lots.  
Chas. J. Shore, - Glanworth, Ont.

**Shropshire Yearling Ewes** bred to Bibby's 84 (imp.) ram and ewe lambs sired by him. Two Shorthorn bulls. Two Clydesdale stallions.  
W. H. PUGH, Myrtle Station, Ont.

**Cotswolds and Yorkshires**  
Special Offering: Bacon type sows and boars for sale. Orders taken for fall delivery of Ram Lambs. Write us.  
R. HONEY & SONS, - Dartford, Ontario

**Chester Whites**  
Our sixth importation has just arrived. One litter farrowed in quarantine—sired by Champion boar Ohio State Fair—and a sow in pig to "Volunteer," Champion of Nebraska. Also ten litters sired by 1st and 2nd prize aged and champion boars at C. N. E. Unrelated pairs as a baby herd. Illustrated catalogue.  
JOHN G. ANNESSER, Tilbury, Ont.

**Berkshires**—Boars ready for service and boar pigs, rich in the blood of Lord Premier's Successor 161500, Grand Champion, 1914, Champion sire of 1915, 1916, 1917. His descendants have won Grand Champion honors at the largest and strongest shows of 1919. The Champion Berkshire barrows of 1918 International were double grandsons of Lord Premier's Successor. We have shipped many Berkshires to Canada with satisfaction to customers. Prices on request.  
HOOD FARM, INC., Lowell, Mass.

**YORKSHIRES**  
Pigs of different ages, both sexes, from large litters.  
WELDWOOD FARM  
Farmer's Advocate, London, Ontario

**CHESTER WHITES**  
Choice young pigs, both sexes, sired by Qauwa Collaway Edd, Imported, No. 19831. Also a few gilts bred to same boar.  
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Young sows, bred for September and October farrow. Choice boars of all ages.  
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Young sows, bred for June and July farrow, and boars for sale. Write or phone.  
JOHN W. TODD, - Corinth, Ontario

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G. E. Talcott, Brighton, Ont.

**Lakeview Yorkshires**  
If you want brood sows of any age, stock boars of any age, or young pigs, write me. All bred from prize-winners for generations back.  
JOHN DUCK, - Port Credit, Ont

**Questions and Answers.**  
Miscellaneous.

**Slack Quarter.**  
Is it possible to treat cows with slack quarter, similarly to milk fever, by pumping air into the udder?  
M. S.

Ans.—We have not heard of this method being practiced. Possibly some of our readers have had experience in treating this trouble.

**Preserving a Hay Rope.**  
What would you advise putting on a hay rope? It seems dry and brittle.  
J. M.

Ans.—A preservative recommended by some authorities is to soak the rope for four days in a solution made in the proportion of 20 grains of sulphate of copper per liter of water, then dry and pass through a hot tar bath to set the copper in the rope. We have not used this material nor seen it used. Some merely tar the rope, while the majority use no preservative.

**Bee-keeping.**  
What is a reliable book for beginners in bee-keeping? What does a hive of bees cost, and when is the best time to buy?  
D. M.

Ans.—"A. B. C. of Bee Culture," by Root, is considered one of the best books for bee-keepers. It costs about \$3 at the present time, and may be secured through this office. We cannot state what a hive of bees would cost at the present time, as the price varies considerably. Bees can be bought more cheaply in the fall than in the spring, but we would prefer purchasing in the spring and thus save the risk of wintering the colony.

**Weed Seeds.**

1. What penalty is there on misrepresenting clover seed? We bought one bushel of sweet clover which was graded and stamped: Fancy No. 1, Government test. We sowed part of it on four acres for seed, and mixed the balance with other clovers for next year's pasture. The seed contained wild mustard, and we now have it on about 13 acres.

2. What would be a fair compensation for our extra work trying to keep fields clean?

3. The seed is now being analyzed at Ottawa. Kindly advise us what proceedings we should take.  
H. K.

Ans.—1. What you complain of is a violation of the Seed Control Act (Revised Statutes of Canada, 1906, Chapter 128), and is punishable by fine and costs and imprisonment in default of payment. The amount of the fine varies—according to circumstances—from \$1 to \$25.

2. We can hardly venture an estimate.

3. You may either prosecute under the Act mentioned, or bring an action for damages, or do both.

**Rodded Barns.**  
In rodding a barn all metal parts should be wired we are told. Our barn was rodDED last year. Steel stanchions are connected with litter carrier track and with the ground wires outside. In the event of the barn being struck would not all in the stanchions be on a live wire, as it were, and so be more likely to be damaged or killed than if stanchions were unwired? State if it is best to have the stanchions connected or not.  
R. T.

Ans.—It is generally considered that it is advisable to ground the steel stanchions and litter carrier track. It is also a good plan to have grounded wires on wire fences so as to carry off the lightning. This will assist in preventing casualties. In the case of a wire fence, it should be grounded every 20 rods. Prof. W. H. Day says: "Steel stanchions, litter carrier tracks, etc., should be connected to ground wires when located near them, or else grounded separately. When a flash occurs all metals in the vicinity are charged, and if located near a ground wire, along which a flash is travelling, there is liable to be a side flash from the rod to the metal. If that metal is not well grounded and stock were standing in the vicinity, and particularly if touching metal, they would act as an absorbing field for the surge current and possibly be killed, but if the metal is well grounded and at the same time connected to the ground cable, then this danger is avoided. I may say that the steel stable fixtures are the most difficult part of the barn to protect properly."

Gentlemen,—  
Thus far we find the Metal the best we have ever used. The writer's son has had charge of some of the largest Government jobs in the United States. He pronounces your metal first-class.  
Yours truly,  
Frankford Canning & Packing Co.  
A. H. ALLEN, Manager.

**"Best We've Ever Used"**

IN this testimonial an expert of wide experience plainly states his high opinion of

**PRESTON SAFE SHINGLES**

Our shingles are different from others in their method of defying the severest strains.

The interlocking construction locks the shingle together in a way that makes it impossible to separate or spread them in the slightest degree.

The nails are covered and protected by the cleverly-de-

signed, locking overlap of the shingle on the next row above.

Specially important is the heavy galvanized coating of purest spelter, reinforced inside by the new copper-bearing process, the most durable steel known to science. It means many added years of perfect service, and safety from rust.



Write for Descriptive Folder of Preston Safe Lock Shingles.

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THE LARGEST JERSEY HERD IN THE BRITISH EMPIRE  
At Toronto Exhibition, 1919, we won twenty-five of twenty-seven first prizes. We now have for sale first-prize young bulls from R. O. P. dams, as well as females of all ages.

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ALL BULLS OF SERVICEABLE AGE SOLD

A few young bulls sired by Financial Raleigh King, son of the \$6,000.00 Financial Beauty King for sale, from R.O.P. dams.  
JAS. BAGG & SONS, (Woodbridge, C.P.R., Concord, G.T.R.) EDGELEY, ONT.

**Laurentian Producing Jerseys**—The oldest bull we have at present is a year old youngster, sired by our herd sire, Broadview Bright Villa, No. 5630, and from Brampton Astoria, one of the best imported cows in the herd. We also have others younger of similar breeding, as well as a few bred heifers for sale.  
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Farm at Morin Heights - F. J. WATSON, Manager

**The Woodview Farm Jerseys**  
London, Ontario  
JNO. PRINGLE, Prop.

**DON HERD OF PRODUCING JERSEYS**  
We have three young bulls of serviceable age—good individuals and priced right. Could also spare a few choice bred heifers. Visitors welcome.  
D. DUNCAN & SON, TODMORDEN, ONT.

**Stockwood Imported and Ayrshires**—Write me for your next herd sire. I have several youngsters at present sired by my own herd sire, Killoch Gold Flake (imp.) 51225, and from imported dams that are still in the herd. Call and see the kind we breed. Also pricing a few young cows safe in calf to herd sire.  
D. M. WATT, St. Louis de Gonzague, P.Q.

**Oxford Down Sheep, Pioneer Flock**—We are offering this season an up-to-date lot of yearling and two-shear rams; also imported two-shear ram and a number of yearling and two-shear ewes; also ram and ewe lambs.  
HENRY ARKELL, Office and Telegraph, 207 Sherman Ave. South, Hamilton, Ont. Shipping Stations, Guelph and Corwin.

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Richly Bred Duroc-Jersey Hogs offered at your own price  
BRED SOWS, SERVICE BOARS, SPRING BOARS  
Only choice individuals entered in sale at  
Essex Agricultural Grounds, Essex, Ontario  
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Write for catalogue and further particulars to  
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Shakespeare Station, G.T.R.

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Half Sugar  
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**LILY  
WHITE  
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**CUTICURA  
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For Shaving, Bathing  
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The secret of healthy up-to-date shaving is use of Cuticura Soap, the "Cuticura Way". No mug, no slimy soap, no germs, no free alkali, no irritation even when shaved twice daily. One soap for all uses—shaving, bathing and shampooing.

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It KILLS  
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**Queen Bees.**

BY HY. W. SANDERS.

The queen bee has been for centuries the study of many naturalists, and we probably know more about her nature and habits and life-history than of any other insect that exists. In olden days, before the truth of many facts of natural history had been suspected, the queen bee was observed when she came out with a swarm of bees, and great was the speculation as to what the relations might be between the thousands of ordinary bees and the one large one. Bees were kept in very ancient days, and in the Roman classics there are works relating to bees, and in these the idea was first expressed that the large bee was the "king" of the hive. Virgil, indeed, goes one step further and speaks of the rival kings leading out their armies to war—that being the interpretation of the phenomenon of the swarm. The idea that she could actually be the mother of all the other bees in the hive was not suspected until many centuries later.

In the Middle Ages, writers on bees mostly spend their time in exploring the ancient classics for ideas, instead of attempting to carry out independent observations, as we would do in these times. Supposing that our civilization was to be swept away, but that a great many of our books were to be preserved, we can imagine that men might get into the same frame of mind, and assume that what was in the books contained the whole of wisdom, and that anything not confirmed by the printed page could not be considered correct. So it was in the dark ages. The inhabitants of Europe were so sunk in ignorance after centuries of warfare and destruction, that the few who actually did have the ability and opportunity to study (generally they were monks), naturally became absorbed in the classics of the greater men who had preceded them. Now the Romans, however advanced they had become in some things, were all at sea in their explanation of bees. They believed that bees could be bred from the decaying carcass of a cow, that they brought the young bees home from the flowers, and that the pollen they carried on their legs was beeswax. Above all, they believed that the large bee was the king, ruling over his subjects as a human king might, and wondrous wise. All these things were duly copied by intervening writers, and came down pretty nearly to our own times. As late as the reign of Charles II the "King's Beemaster" wrote a book in which he argued that as the bees had a king it proved beyond doubt that the monarchy was a divine institution. It isn't recorded whether he got a raise but we suppose he did!

Strangely enough, the man to whom we owe the foundation of our knowledge on bees was totally blind. Francois Huber was the keenest observer on bees, though he had to use another's eyes. His assistant was a man of great patience, and with Burnens, the observer, and Huber, the thinker, the truth of the bees' relationships was given to the world. There is one thing at the very outset about the queen that has never been explained. She is hatched from the same egg as an ordinary worker, or female. This can be proved by any beekeeper by taking the egg out of a queen cell, and placing an ordinary worker egg from a worker cell in place of it. A queen will be developed just the same. Further, she will get to maturity earlier, being full grown in fifteen days, whilst the worker bee takes twenty-one. Yet she has certain organs that the worker bee does not possess, and she lacks some that the worker bee does possess. The explanation that is given us is that the queen bee gets a great deal more of the specially-prepared food than the ordinary worker, and this is correct, but it only pushes the mystery a little further back; for of what nature is this wonderful food? We only know that it is produced by the bees as a sort of digestive process and that the young bees in the larval stage are fed thereby. It is given to the embryo queen in such abundance that

for the first few days the larva actually floats upon it, and it probably constitutes her food during the laying season, for she then lays many times her own weight of eggs in a day, and the consumption of food inside her body must proceed at an extraordinary pace.

About a week after she has been hatched out from the cell in which she developed from the egg, the young queen will set forth on her wedding trip.

The day after the nuptial flight the queen begins to lay eggs, and here we are brought up against another of the mysteries of beekeeping, for the queen seems to have the power to lay either male or female eggs at will. The drones or male bees are developed in a larger cell than the females or workers, and the queen begins in a circle in the centre of the hive and lays eggs in a circle, much like a spider spinning its web, and when she comes to a worker cell she lays a female egg, and when she comes to a drone cell she lays a male egg. This is the only explanation of the fact that the respective eggs thus laid all develop into their proper bees.

The only time the queen leaves the hive, other than to mate, is when she accompanies a swarm. She has often been described as leading out a swarm, probably the phrase being a relic of the times when she was supposed to be a queen in reality. As a matter of fact the queen is usually one of the last of the bees to emerge when the swarm comes out, and so far from taking any initiative in this or in anything else, the queen is probably more in the nature of an egg-laying machine than anything else. Her presence in the hive is essential to its welfare, however, and well do the bees know it. It takes only a few hours for them to ascertain her absence, if she is removed, and they will set up a plaintive hum in place of the brisk sound that every beekeeper knows. Immediately queen cells are erected to replace the missing queen, and rather than take chances with one, the bees will start quite a number, often a dozen or more in different parts of the hive. From one of these a queen will in due time emerge, and soon afterwards she will go around and kill the others in their cells, for a queen will brook no rival. A week later she will take her wedding trip and soon will be hard at work keeping the cells replenished with eggs.

**The Theory of Silage.**

Silage is kept in the silo very much as fruit, vegetables and other articles of human food are preserved in air-tight cans. The germs which cause fermentation and decay can only grow when there is a supply of oxygen present. Hence, if the air is kept from silage it can be preserved almost indefinitely. As soon as the silo is filled fermentation begins and continues until the supply of oxygen is exhausted. If the material put into the silo is neither too ripe nor too green, this fermentation will continue but a short time. That is, the heating which takes place is due to fermentation, and carbon dioxide gas is liberated by this action. This gas, being heavier than air, settles to the bottom of the silo and gradually fills all of the space in the silo, thus effectually stopping all fermentation, as no germs can live in the presence of carbon dioxide gas. Hence it is very essential that the silo be perfectly air-tight, so that this gas will not drain out and air enter. The top of the silo need not be air-tight as there will be a thin layer of from six inches to a foot of silage that will mold and form a tight covering.

The value and palatability of the silage depends considerably on just how far the fermentation goes. That is, silage cures very much as cheese, and is greatly improved if this process of heating or curing is allowed to continue to the proper point.

The progress of silage making is merely a partial digestion which aids and precedes the subsequent digestion in the animal's stomach. Many of the chemical changes are rather complicated, but interesting to any one who has a partial understanding of such subjects.

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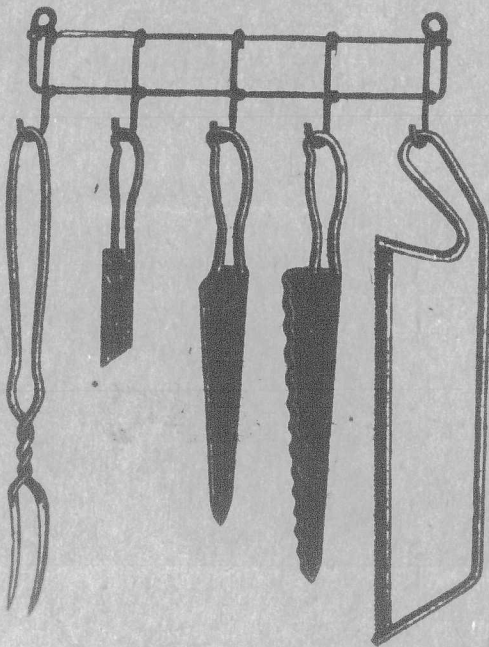
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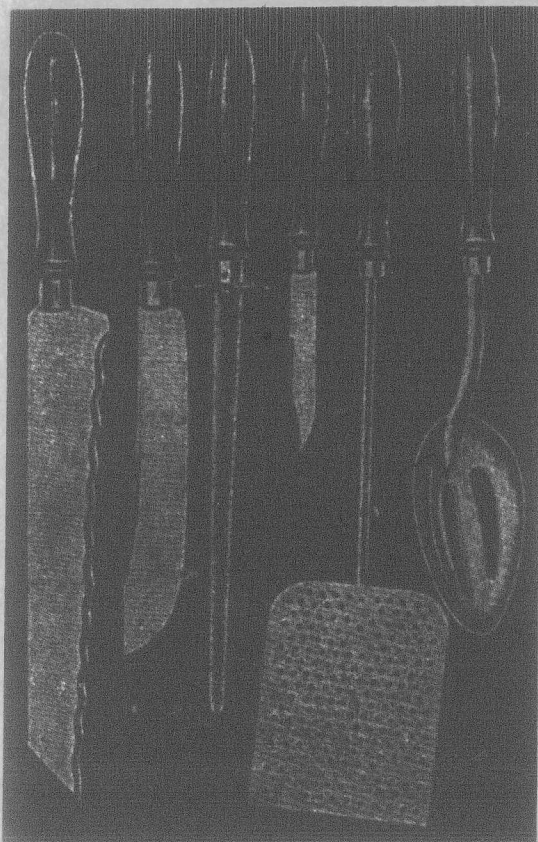
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For instance, the threshing outfit owned by G. Malchow & Sons, and working around Stavely, Alta., reports that their Goodyear Extra Power Belt does not slip even in the heaviest threshing. No trouble with lagging being worn out or torn off the pulleys. No stretching in the belt.

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Both as a main drive and on separator drives Goodyear Extra Power assures steady running under all conditions. Power farmers all over the country are using them as general service belts for all tractor and gas engine work. Because they are not stitched, they are not only exceptionally pliable, but they are free from troubles caused in stitched belts when moisture and drying shrink and stretch them.

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The Goodyear Tire & Rubber Co. of Canada, Limited  
Toronto, Ontario

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