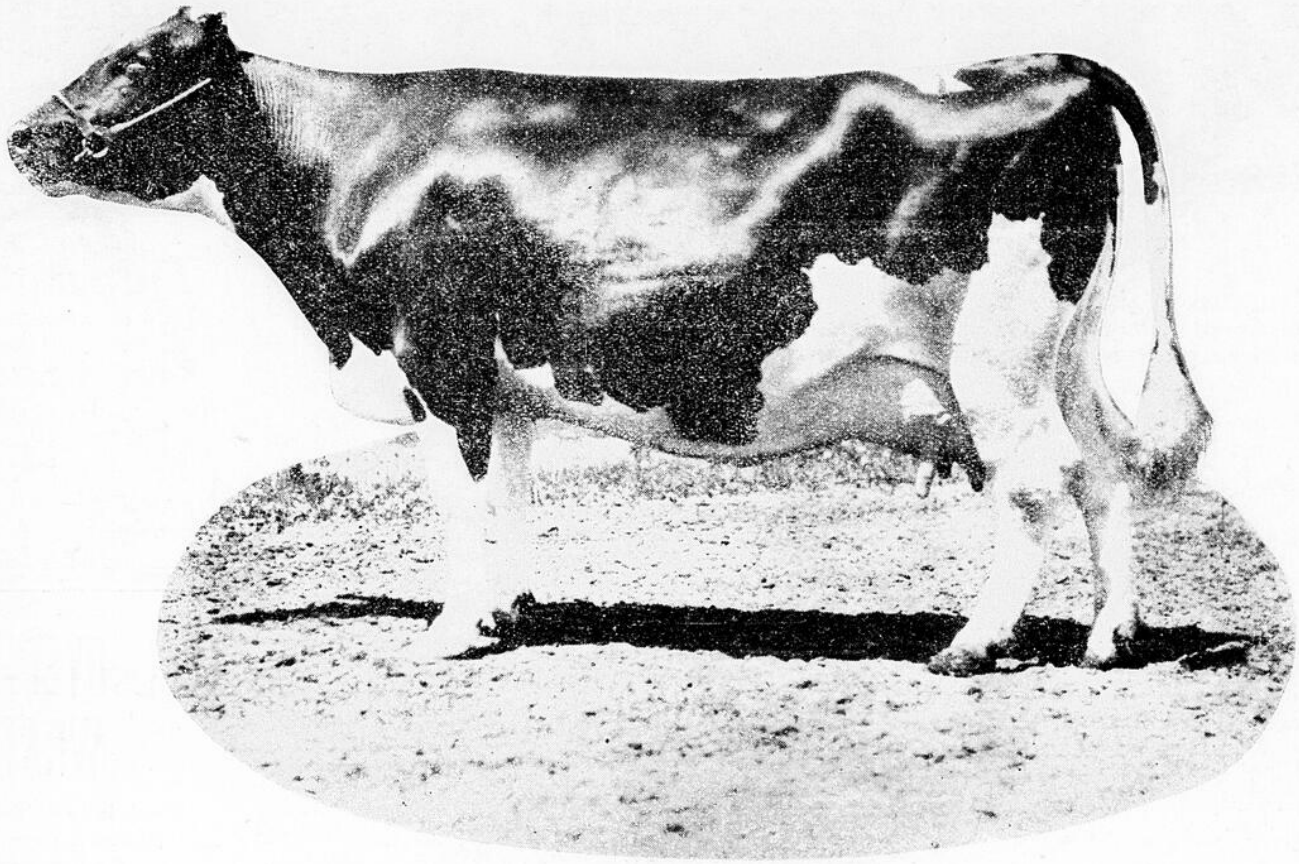
The JOURNAL of AGRICULTURE
AND HORTICULTURE

Volume 28 — October 1st 1924 — Number 4



A "GRAND CHAMPION" HOLSTEIN

Woodland Banostine Jewel is becoming exceedingly well known on the Eastern Show Circuit of Canada. For a number of years now she has stood at the top in the Holstein cow classes of our most important Quebec exhibitions, and this year she has carried off Grand Championship honors at Ormstown, Valleyfield, Sherbrooke, Three Rivers, Quebec, and Ottawa. She is owned and exhibited by P. J. Salley, Lachine Rapids, Que. (Photo by The Editor).

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Those having their first experience in the good Maxwell, marvel that any four can produce such smooth and quiet performance.

To those who own Maxwells, their economical, care-free service is a never-ending revelation of the pleasantest sort.

There you have, in brief, the two main points in which Chrysler engineering now enables Maxwell so decidedly to excel its field.

The man who has owned the average four-cylinder car probably expects from Maxwell nothing more than average four-cylinder results; and he is delightfully surprised to encounter an entirely new degree of vibrationless performance.

Maxwell's bull-dog power is delivered in a flow as smooth and soft as satin.

Not only are the reciprocating parts of the sturdy engine balanced to the fraction of an ounce; but the exclusive Maxwell spring mounting for the front end of the engine practically eliminates all sense of vibration.

With no annoying engine vibration, and with the unusually easy riding of the car springs, Maxwell comes close to providing the ultimate of motoring comfort.

The large crankshaft revolves in its big bearings on a film of oil under pressure, reducing main-bearing friction and wear to the vanishing point.

Higher utilization of power—and greater economy—are made possible by the generous use of ball and roller bearings throughout the chassis. You can actually roll the good Maxwell with the push of one hand.

Such things—and the use of high alloy and heat-treated steels, of a transmission and rear axle sturdy enough for a truck, of a six-inch heavy-gauge frame with six stout cross members—are important contributions to Maxwell's unusual merit.

They constitute tangible superiorities which are inducing thousands to choose the good Maxwell in preference to anything at anywhere near its price.

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Walter P. Chrysler, Chairman of the Board

Maxwell and Chrysler dealers are in a position to extend the convenience of time-payments on a plan that is attractive to the buyer.

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Dependable
(*60 Million Satisfied Customers*)
Good Looking
(*Clean Cut and Handsome*)
Big Value
(*You get the benefit of the saving from immense quantity production*)

TELL DYSPEPTICS WHAT TO EAT

Avoid Indigestion, Sour Acid Stomach, Heartburn, Gas On Stomach, Etc.

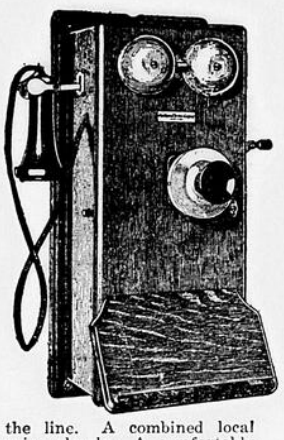
Indigestion and practically all forms of stomach trouble, say medical authorities, are due nine times out of ten to an excess of hydrochloric acid in the stomach. Chronic "acid stomach" is exceedingly dangerous and sufferers should do either one of two things.

Either they can go on a limited and often disagreeable diet, avoiding foods that disagree with them, that irritate the stomach and lead to excess acid secretion or they can eat as they please in reason and make it a practice to counteract the effect of the harmful acid and prevent the formation of gas, sourness or premature fermentation by the use of a little Bisurated Magnesia at their meals.

There is probably no better, safer or more reliable stomach antiacid than Bisurated Magnesia and it is widely used for this purpose. It has no direct action on the stomach and is not a digestent. But a teaspoonful of the powder or a couple of five grain tablets taken in a little water with the food will neutralize the excess acidity which may be present and prevent its further formation. This removes the whole cause of the trouble and the meal digests naturally and healthfully without need of pepsin pills or artificial digestents.

Get a few ounces of Bisurated Magnesia from any reliable druggist. Ask for either powder or tablets. It never comes as a liquid, milk or citrate and in the bisurated form is not a laxative. Try this plan and eat what you want at your next meal and see if this isn't the best advice you ever hand on "what to eat."

A 'PHONE YOU WILL BE PROUD TO OWN



THE first requisite of a good telephone is to furnish an easy speaking connection with any desired place, one with which you may hear clearly and distinctly every word spoken. The Northern Electric telephone gives you this satisfaction.

After service, dependability and wear, comes finish and beauty. The Northern Electric telephone, as pictured here, is an added attraction on the wall of any home. It is as beautifully finished as a piece of furniture. It is of polished oak, durable, handsome.

Loud, clear gongs announce calls. A powerful generator allows for ringing several telephones at once or calling Central as desired. A push button enables you to call Central without disturbing others on the line. A combined local and long distance transmitter carries your voice clearly. A comfortably sloped writing shelf assists you to take notes while talking. The receiver switch hook is built for action and durability. The ringer clapper between the gongs is properly protected. All you need to mount this telephone or to make any adjustment is a plain screw driver.

These famous telephones come packed in individual cases, ready to install, complete with screws and battery connections. Each weighs complete for shipping, 32 pounds.

If your community has no telephone system write us. Our many years' experience is at your service. We shall be glad to help you organize a system in your locality.

Northern Electric Company
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Makers of the NATION'S TELEPHONES

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Halifax	Hamilton	London	Regina	Vancouver

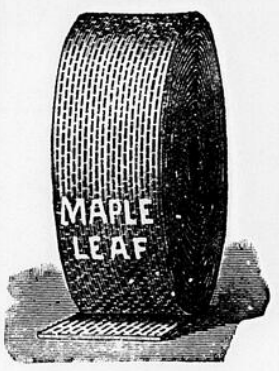
Bladder weakness remedied

"I suffered from bladder weakness and frequent urination. I had tried other kidney remedies, but got no relief. Was advised to take Gin Pills, did so, and after taking half a box noticed much improvement."
George F. Doetterl, Buffalo.

Why suffer? Get a box of Gin Pills from your druggist to-day.

National Drug & Chemical Co., of Canada, Limited, Toronto, Ont. Gino Pills in the U.S.A. are the same as Gin Pills in Canada.





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STITCHED COTTON BELTING

A BELT that is the most economical, truest running and strongest belt on the market. Being thoroughly waterproof it is particularly well adapted for general farm use such as threshing machines, gasoline engines and other farm machinery. Also suitable for saw mills, flour mills, etc.

ASK FOR "MAPLE LEAF" BELTING
IT IS CHEAPER THAN RUBBER OR LEATHER BELTING

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IN making En-ar-co Oils we average over a million tests a year. These tests are of every kind and cover every step of our Scientific Refining process.

Some of these tests are so accurate that they are timed with a stop watch, and their accuracy is a matter of split seconds.

That is why En-ar-co Motor Oil is endorsed by all of the leading motor builders and is considered everywhere the best to be had.

Try it in your motor! Drain out the old oil, put in fresh En-ar-co and you will at once notice a difference. You will have less trouble and less repair cost.

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For Differential and Transmission.

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Send En-ar-co Auto Game — FREE. I have never received an En-ar-co Game. (Write your name and address plainly — preferably printed.)

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For You—A Free Test

The way to prettier teeth, new safety, new delights

This offers your home something everybody prizes — whiter, cleaner, safer teeth. It has brought these benefits to millions, the world over. The results are seen in every circle now.

Make this free test. Learn what this method means to you and yours.

Film must be combated

Film is the great tooth enemy — that viscous film you feel. Under old-way cleaning methods, much of it clings and stays.

Film becomes discolored, then forms dingy, clinging coats. That is why so many teeth look cloudy.

Film also holds food substance which ferments and forms acid. It holds the acid in contact with the teeth to cause decay. Germs breed by millions in it. They, with tartar, are the chief cause of pyorrhea.

You can better escape those troubles by efficiently fighting film.

Dental science has now found effective film combatants. One disintegrates the film at all stages of formation. One removes it without harmful scouring.

Able authorities have proved these methods effective. A new-type tooth paste has been created to apply them daily. The name is Pepsodent.

People the world over have adopted this method, because of evident results. Leading dentists of some 50 nations are advising it today.



None who see can doubt

Pepsodent effects are seen and felt at once. It does more than fight film. It multiplies the alkalinity of the saliva, there to neutralize mouth acids. It multiplies the ptyalin in saliva, there to digest starch deposits on teeth. These combined effects bring at once a new conception of clean teeth.

Send the coupon for a 10-Day Tube. Note how clean the teeth feel after using. Mark the absence of the viscous film. See how teeth become whiter as the film-coats disappear.

Then you will realize what a tooth paste should accomplish. Cut out coupon now.

Protect the Enamel

Pepsodent disintegrates the film, then removes it with an agent far softer than enamel. Never use a film combatant which contains harsh grit.

Made in Canada
Pepsodent REG. IN CANADA
The New-Day Dentifrice

Based on modern research. Now advised by leading dentists the world over.

10-Day Tube Free 1653 Can.

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Dept. 248, 191 George St.,
Toronto, Can.

Mail 10-Day Tube of Pepsodent to

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Only one tube to a family.

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Pig Chow

makes pigs grow—fattens and regulates—better pigs—bigger profits.

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Great reduction sale of 30 head, 6 males, 24 females

Registered Holsteins

Tuberculine tested under Government Supervision, two clean tests, including a 4 year old senior herd sire, Females up to 20,000 lbs. milk in 365 days, and young stuff from R. O. P. dams. Young bulls from R. O. P. Dams up to 22,519 lbs. 2 year old. Sale held at Farm situated at Lachine Rapids, Que. October 22nd 1924, at 1 p. m.. For catalogues address

P. J. SALLEY, Prop., Lachine Rapids, Que.

PARKER, PHILLIPS & FRANKLIN,
Auctioneers.

LAKESIDE AYRSHIRES

We are offering for sale the young bull Lakeside Fair Cockade, born November 12th 1923. Sire: Killoch White Cockade (imp) 75738, whose dam was also the dam of Killoch Latest News, grand champion at Ottawa. Dam: Lakeside Fairmaid, a R. O. P. cow with 8,500 lbs. milk, testing as high as 5% to her credit during the first six months of her present lactation. Price $100.

FRANK PEWTRESS, Manager,
Philipsburg, Que.

G. H. A. MONTGOMERY, K. C., Proprietor,
Dominion Express Building,
Montreal.

"Save the surface and you save all"—Paint & Varnish

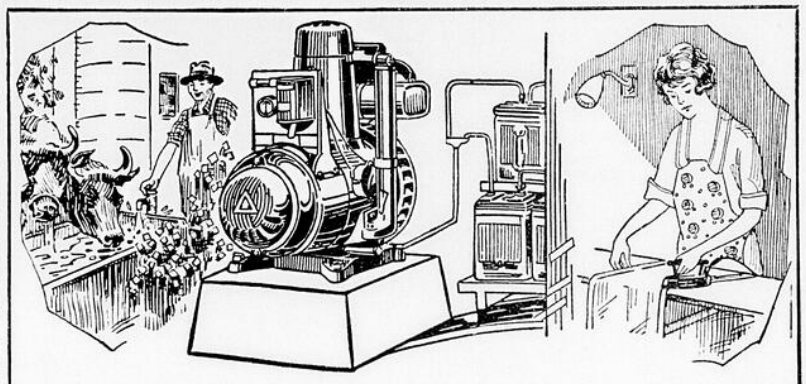
THE LAST LEAF

O. Henry wrote a story called "The Last Leaf" in which the life of a frail little girl hung upon the slender stalk of a leaf that fluttered in the wind outside her tenement window. For, she thought, when that leaf falls, then I shall die. It was Autumn, this very time of year, and all the other leaves had fluttered down and away. Still this leaf did not fall. It stayed and stayed and—at last—encouraged by its persistence and will to live, the little girl lived also and grew well. For the last leaf that would not leave the vine was *painted* upon the brick wall—painted there at night while she slept—by a master hand.

And in that story lies this great truth that the author never meant to include in a tale of human devotion—that paint is the mighty counter weight to Nature's destructive forces. What nature would destroy through rot, rust and general decay, that paint will preserve. The truth applies in YOUR home too. Look around at the surfaces exposed everywhere, outdoors and within, and see how many there are for paint and varnish to save. It is downright economy to paint this fall because you will be saving repairs in the Spring.



Save the Surface Campaign,
601 Keefer Bldg.,
Montreal.
A co-operative movement by Paint, Varnish and Allied Interests.



Delco-Light Probably Costs Much Less than You Think

DO you *know* how little Delco-Light costs, how easy the terms are? Do you realize that Delco-Light will practically earn its cost while you are paying for it? Do you know that it pays for itself several times over during its long life?

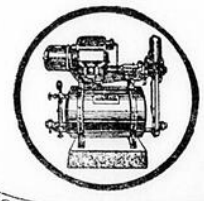
Why should you deprive yourself of the comfort and joy of electric light and power when it costs you nothing? Just by operating light machinery and by enabling you to do chores after dark in a flood of light and in perfect safety, Delco-Light helps you make more money from your farm. You can spend an extra hour in the hayfield and beat the rainstorm. You can get to market earlier and get the best prices. You can easily pay for Delco-Light out of extra earnings.

Delco-Light Prices are Low

You'll probably be astonished when you learn the low Delco-Light prices and the easy Delco-Light terms. It may only cost you half what you expected to pay for electric light and power. Investigate—get the full particulars. Satisfy yourself that this year is the best year to invest in Delco-Light. Write us now—send a postcard.

Delco-Light Co. of Canada, Limited

122 St. Antoine Street,
Montreal.



PRODUCT OF GENERAL MOTORS

Dependable

DELCO-LIGHT

Over 200,000 Satisfied Users

How I Averaged $65.00 A Month Working in Spare Time at Home

This is an actual letter copied word for word from the original

By Mrs. H. E. STEVENS

Ontario



"FOR a long time I had been looking for a way to make some extra money, owing to crop failures. Two years ago I purchased an Auto Knitter and in two or three days I had learned to make standard socks, and a in a very short time I could make also women's and children's hose, sweaters, lace, etc.

"I have two small children to look after and my own housework to do, but during the last six months I have averaged $65.00 per month clear profit. I have made as high as $5.00 profit a day.

"You may use this letter and my photograph, as this may be of benefit to some other woman in similar circumstances."

(Signed) Mrs. H. E. Stevens.

Mrs. Stevens' experience is by no means exceptional. In thousands of homes similar experiences are happening. To be able to earn, even a few hundred dollars a year, has proved a great blessing, especially to men and women who can only work spare-time and could not consider a canvassing or selling proposition.

Make Money at Home

Auto Knitting is a tested, established, dependable method for turning spare hours at home into extra money for the things you want. Mrs. Stevens' letter is only one of many. Hundreds of men and women have written to tell us of their success, many reporting averages of $50.00, $60.00 and $70.00 a month earned in spare time alone.

We Enter Into a Contract With You

The plan, briefly, is this: You knit for us at home in your spare time—whenever you like, as much or as little as you like. For every pair of standard socks you send us—standard meaning, knit to a standard measurement — we pay you a fixed, guaranteed price. Our contract protects you because you are assured of a constant guaranteed market for all your output at a good substantial profit.

But this contract does not bind you in any way, because you have the privilege of selling your output to neighbors or local dealers if you so desire. Remember this, though — for every dozen pairs of standard socks you send us, we send you not only your pay cheque, but sufficient yarn to replace that used in knitting your shipment of socks.

There is no reason why you cannot earn extra money for yourself at home, just as thousands of others are doing. There is a refined dignity and privacy in Auto Knitting that is not to be found in any other work. The fact that you deal privately with us is disposing of all your work is something which appeals very much to men and women who could not in any way consider a canvassing or selling proposition.

You work as much or as little as you please, and in those hours and half hours that you best can spare. No need to neglect your home or your children. No need to stop your present occupation.

No Experience is Necessary

The Auto Knitter comes to you with a sock started in it, we do this in order that you may follow the actual knitting operation by slowly turning the handle, and by following the simply written instructions, you cannot make a mistake. Speed comes with experience and in a little while you may turn the handle as fast as you like.

Many of our workers have developed nice private trades for themselves, as for instance Mrs. G. W. Rogers whose home is in Ontario. Mrs. Rogers says, "For a long time I had been wishing for something to do to fill in the spare hours, especially in the winter." She tells how she discovered "Auto Knitting" and how she began to turn her spare hours into dollars. "I have three little ones of my own" her letter reads, "and my little boy 8 years of age, is able to set up the machine for me. My private trade alone amounts to an average of $50.00 a month." And yet, Mrs. Rogers is a busy housewife, with a home and children to look after.

The Details Are Free

We will be glad to send you, absolutely without the slightest obligation on your part, complete particulars concerning Auto Knitting. If you will put your name and address on the coupon, and mail today, we will send you a beautifully illustrated booklet which you will find very interesting.

Don't hesitate. You owe it to yourself at least to find out about this wonderful money-making plan. Think of being able to sit down any time you like during the day and earn some extra money for something you especially want. Let us send you the booklet. Clip and mail the coupon NOW.



The foundation of the Auto Knitter business is based on co-operation. We need men and women to knit socks and they need us to supply the machines and buy their work. It is a business of mutual help.

The soundness of the business is proven by its ten years of success. The demand for Auto Knit socks was never so great. We need many more workers.

T. W. CHADBURN, President.

The Auto Knitter Hosiery Company, Limited

Dept. 8710, 1870 Davenport Road, Toronto, Ontario

The Auto Knitter Hosiery Co., Limited,
1870 Davenport Road, Toronto, Canada.
Department No. 8710.

Please send me free the full particulars about making money at home with the Auto Knitter. It is understood that this does not obligate me in any way.

Name .....

Address .....

City ..... Prov? .....

Journal of Agriculture and Horticulture, October 1924.



Some day a debutante

The same mild daily cleansing that has retained mother's schoolgirl complexion will give baby, when she grows up, an attractive, wholesome skin, and gain her life-long gratitude.

A debutante! That little bundle of fluff—baby. Mother remembers her own début, not so many years ago. The thrill of parties, attentions, popularity. Some day baby, too, will make her bow. Will she be lovely, attractive—popular? Or will she be handicapped by a poor complexion—a wallflower?

Mother's duty to baby is obvious. The tender, rose-petal skin needs the same simple care that mother's does. Constant attention, the thorough cleansing that dermatologists recommend, will give baby, when she grows up, the complexion that women envy—men admire.

For by this simple method, superior to costly beauty treatments, the complexion is built, wholesomely protected, with a result which renders cosmetics unnecessary or of secondary importance. For if the skin itself is right, artificial aids are little needed.

A simple, wholesome "beauty treatment"
—do this just one week—then note result

Use powder and rouge if you wish. But *never leave them on* over night. If you do, they clog the pores, often enlarge them. Blackheads and disfigurements often follow. They must de washed away.

Wash your face with soothing Palmolive. Then massage it gently into the skin. Rinse thoroughly. *Then repeat both* the washing and rinsing. If your skin is inclined to dryness, apply a touch à good cold cream—that is all. Do this regularly, and particularly before retiring.

Sallow, unattractive skin
no longer excusable

Thus in a simple manner, millions since the days of Cleopatra have found beauty and charm.

No medicaments are necessary. Just remove the day's accumulations of dirt, oil and perspiration, cleanse the pores, and nature will be kind to you. Your skin will be of fine texture. Your color will be good. Wrinkles will not be the problem as the years advance.

Avoid this mistake

Do not use ordinary soaps in the treatment given above. Do not think any green soap, or represented as of palm and olive oils, is the same as Palmolive. The Palmolive habit will keep that schoolgirl complexion.

And it costs but 10c the cake! So little that millions let it do for their bodies what it does for their faces. Obtain a cake today. Note the difference just one week makes.

Volume and efficiency produce 25c quality for only

10c

Palm and olive oils—nothing else—give nature's green color to Palmolive Soap



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All maters relating to the reading columns must be addressed to S. R. N. Hodgins, Editor, Macdonald College P. O., P. Q.

The JOURNAL of AGRICULTURE AND HORTICULTURE

FOR RATES OF ADVERTISEMENTS ADDRESS TO THE CANADA PUBLISHING CO., Limited 73 St. James St., Montreal.

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EDITORIAL COMMENT

Advancement in Agriculture

THE sciences in Canada have received a considerable stimulus as a result of the holding of the British Association meetings in Toronto this year. At these meetings were brought together workers from every branch of scientific study, who met to discuss their common problems and to collate their findings in the multitudinous fields in which they labor. And not least important were the meetings of the section on Agriculture, which were presided over by Sir John Russell, Director of the Rothamsted Experiment Station of England.

From the papers delivered at these and other meetings of agricultural workers during the past season, it would appear as though considerable strides should be made in agricultural knowledge and in farm practice within the next few years. In live stock work, for instance, tremendous progress has been recorded during the past three or four years in the fields of nutrition and veterinary endeavor. The discovery of "vitamins" and of their close relation to health and growth, the rapidly accumulating data on the importance of the various minerals in the rations of the various farm animals, the solution of the "goitre" and "hairless pig" problems through the feeding of iodine in some form—these all have their practical application in general practice, and all represent new additions to our store of knowledge. And in the veterinary field the work of accreditation, with all that it means, goes on apace.

In this connection, it is encouraging to know that in the province of Quebec 900 herds have been entered for this work, and are either accredited or under test at the present time. As Prof. H. Barton, of Macdonald College, pointed out recently in this connection, the work of accreditation is doing more than merely cleaning up the T. B. mess : it is helping establish more purebred herds of cattle (for the man with a few cows to test frequently goes into breeding more strongly to get sufficient numbers to qualify); it is discouraging dealing, peddling and trading amongst breeders; and, above all, it is helping to make breeders of men who heretofore have not given much thought to the building up of high quality herds from their own stock.

The same thing might be said of the advancement that is being made in the other branches of agriculture. Our scientists (who started so much later than our practical workers, and who have had to spend so much time and energy finding out the "whys" of the things that were known to be good practice) are now getting to a place where they can give a definite lead to agriculture. Yet nothing stands out more clearly as a result of the present great advancement in agricultural science, than the fact that many problems of a so-called "practical" nature are being solved through the application of discoveries made in the field of "pure science". In this connection we should like to quote from the closing words of Sir John Russell's address delivered at Toronto on "Present-Day Problems In Crop Production", in which he says :

"The nineteenth century took the view that agricultural science was justified only in so far as it was useful. That view we now believe to be too narrow. The practical purpose is of course essential; the station must help the farmer in his daily difficulties — which necessitates co-operation between the practical grower and the scientific worker. But history has shown that institutions and investigators that tie themselves down to purely practical problems do not get very far; all experience proves that the safest way of making advances, even for purely practical purposes, is to leave the investigator unfettered. Our declared aim at Rothamsted is ' to discover the principles underlying the great facts of agriculture and to put the knowledge thus gained into a form in which it can be used by teachers, experts, and farmers for the upraising of country life and the improvement of the standard of farming'."

Quebec at The Fall Fairs

QUEBEC Live Stock breeders have given a good account of themselves at the fall fairs this year. In this issue of *The Journal* we are publishing reports of the showings of live stock at Sherbrooke, and of cattle at Quebec, in both of which improvement is noticed over the showing made last year. And, according to reports coming in from the Toronto and Ottawa fairs, exhibitors from this province who have taken part in the live stock exhibitions at those points have carried off their share of the honors.

❖ ❖ ❖

A particularly good showing was made at Toronto by the Ayrshire herd of R. R. Ness & Sons, Howick,—the only Quebec herd represented at that show. In one of the best Ayrshire competitions seen at the Toronto exhibition in recent years, the Ness herd secured five championships, including both Grand Championship ribbons, sixteen first prizes, and seven seconds. To this herd went the greater number of the group prizes—for senior and junior herds, get of sire, etc.

Provincial Plowing Match

The 1924 Provincial Plowing Match, tractor and farm machinery demonstrations, will be held at Riviere-du-Loup, on the farm of Mr. Alfred Dionne, situated on the Riviere-du-Loup — Edmundston highway, on October 7th, 8th, 9th, 1924. All good plowmen are invited to take part, and to share in the liberal prizes offered.

One of the interesting things in the Ness record is that the two animals carrying off Grand Championship honors were both bred and reared on the farm. And another still more interesting thing is that the Grand Champions were mother and son. The mother was Burnside Andrietta Blossom, first prize dry three year old, and an animal that has carried off Grand Championship honors for three successive years now. The son was Burnside Supreme Victory, first in the senior calf class.

Incidentially this was the twenty-fourth year that the Nesses have shown cattle at Toronto—without a break.

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At the Ottawa exhibition Quebec's outstanding exploit was the carrying off of both "permanent trophies" in the newly arranged inter-county competitions for bacon hogs and market lambs. A full account of this event and of the important part played in it by Quebec live stock men will be found on another page of this issue of *The Journal*. This report was prepared for us by A. A. MacMillan, Chief of the Sheep and Swine Division, Department of Agriculture, Ottawa, and is well worth reading.

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In the regular classes as well Quebec secured its share of the honors at Ottawa—particularly in the dairy cattle classes and in Percherons and Belgians in the horse classes. Space does not permit of the publication of a full report of the awards at Ottawa, but we are printing below a list of the championships in those classes in which Quebec exhibitors figured most largely. From a review of this list it will be seen that Quebec carried off most of the high honors in Ayrshires and Jerseys, while Salley of Lachine Rapids broke into the Holstein championships with his splendid cow Woodland Banostine Jewel; and that in the two heavy horse classes mentioned above Quebec breeders had things all their own way :

Jerseys.—Senior and champion male: C. O. Edwards, Hillhurst, Que., on Petune's Lad (aged). Junior and grand champion female: Edwards, on Petune's Golden (senior calf).

Ayrshires.—Senior and Grand Champion Male : J. H. Black, Lachute, Que., on Killoch Latest News (2 years). Junior Champion male: R. R. Ness & Sons, Howick, Que., on Burnside Supreme Victory (senior calf). Senior and Grand Champion Female: Ness, on Burnside Blossom Andrietta (aged, dry). Reserve Senior Champion Female: Melvin Begg, Moose Creek, on Milkmaid of Bridgeview (aged, in milk). Junior and Reserve Grand Champion Female : J. P. Cavers, Ormstown, Que., on Braeburn Genevieve (senior yearling, dry).

Holsteins.—Senior and Grand Champion Male : D. A. McPhee, Vankleek, Hill, on Sir Francy Mercena Burke (2 years). Reserve Senior Champion Male : W. J. Elgie, Sault Ste. Marie, on King Ormsby Piebe Mercedes (aged). Junior Champion Male: Elgie, on Sir Della Alban (senior yearling). Reserve Junior Champion Male: McPhee, on Sir Francy of Crystal Spring (junior calf). Senior and Grand Champion Female: P. J. Salley, Lachine Rapids, Que., on Woodland Banostine Jewel (aged, dry). Junior Champion Female: McPhee, on Gracy Sylvia Abbekerk (senior calf). Reserve Junior Champion Female: Elgie, on Julia Abbekerk (senior yearling).

Percherons.—Champion Stallion: J. K. L. Ross, Vercheres, Que., on Neuville (aged). Reserve Champion Stallion: J. E. Arnold & Son, Grenville, Que., on Mastoc (3 years). Champion Mare: Arnold, on Arnoldwold Liberty (yeld). Reserve Champion Mare : Arnold, on Arnoldwold Rose (3 years).

Belgians.—Champion Stallion: A. Reid, Chateauguay, Que., on one year old colt. Reserve Champion Stallion: Reid Bros., Chateauguay, Que., on Pasteur (2 years). Champion Mare : Reid Bros, on Nellie de Valaines (brood mare).

Notes by The Way

A great deal of cool weather with torrential rains in some sections, notably in The Townships and in the district of Quebec, has made this a trying harvest season for Quebec farmers. Pastures generally are reported as good, and a fair hay crop has been harvested—some having suffered through being left too long.

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According to the Fruit Branch report for September, the prospect for a Canadian apple crop indicates a 30% decrease in the Eastern barrel sections, while B. C. is down 35% inboxes as compared with 1923. This situation seems to be general. Both in England and United States the crop will be below last year's. There is therefore every indication of a firm market with favorable returns for Quebec's apple crop—which, unlike those of Ontario, Nova Scotia and B. C., will be larger than that of last year.

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The Abbotsford Fruit Growers' Association made application recently through the Fruit Branch to the Dominion Express Company for adjustment of their express rates on fruit and vegetables, particularly to Sherbrooke and Montreal; to Sherbrooke in consideration of the considerable volume of traffic that has developed and the traffic increase that a lower than 2nd class rate would encourage; to Montreal in respect of the competition now offered for this traffic by the Montreal & Southern Counties

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Subscribers and members of agricultural societies, of farmers' clubs and of the Provincial Dairymen's Association, who do not regularly receive either the English or the French Journal of Agriculture and Horticulture are requested to address their complaints to the Secretaries of their respective Societies, who will transmit them to the Secretary of the Council of Agriculture at Quebec.

Railway. To Sherbrooke a commodity rate of 75 cents has now been put into effect and to Montreal a competitive commodity rate of 60 cents, reductions from 2nd class rates of 95 and 75 cents, respectively. Commodity rates lower than 2nd class rates have been added also from Abbotsford to Three Rivers, Shawinigan Falls, Quebec, Lennoxville and Grand Mere, and to Ottawa and North Bay.

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In connection with the Provincial Campaign for the increased consumption of Quebec cheese that is being carried on this year, we are publishing in the Woman's World section of the present number of *The Journal* recipes for many different kinds of dishes that have as their basis the use of this commodity. Canadian Cheddar cheese of which we manufacture so much and consume so little in this province, is highly appreciated as a nutritive and economical staple in the English diet. When we in this country learn its value, not only for eating in its usual form, but also for combining with other foods in general culinary practice, its home consumption will vastly increase.

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That Western Canada will be our greatest market for purebred live stock, "if only the farmers in that part of the country can get one or two more decent years", was the opinion expressed by Prof. George E. Day, Secretary of the Canadian Shorthorn Breeders, in addressing the Macdonald College Branch of the C. S. T. A., at Sherbrooke, recently. Prof. Day stated that he had noticed from year to year a marked tendency throughout the west towards smaller holdings and more mixed farming. The conservative farmers of that country, he said, have realized that a large part of their crops must be marketed in the form of beef, milk, pork, and mutton.

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We should like to call attention to a new department that we are opening in the columns of *The Journal*—a department called "Farm Engineering", and conducted by Mr. L. G. Heimpel, of the Department of Agricultural Engineering, Macdonald College—the first instalment of which appears in this issue. In Mr. Heimpel's new department he will deal from month to month with care and management of machinery, the handling of gas engines, drainage problems, and the hundred and one applications that must be made of engineering and mechanical principles to farm and home. Look for it.

ECONOMIC FALLACIES

By Dr. H. D. Brunt.

1. The Significance of the Balance of trade

WE propose, in this series of articles, to discuss some theories, complacently assumed to be unquestioned and unquestionable, yet which seem to us either untrue, relative, or only true with some explanations and reservations.

Every year we receive, from various sources, especially the Department of Trade and Commerce, a statement of the amount of exports and imports, reckoned in money. When the two amounts are exactly alike, there is said to be no balance of trade. When the exports are greater than the imports we are said to have a favorable balance of trade; and when imports exceed exports we bewail an unfavorable balance of trade.

Prosperity is frequently reckoned by the size of the favorable balance of trade, by the excess of exports over imports. One prominent Canadian financier committed himself to the statement that we should import as little as we can, export as much as we can, and thus build up a large "credit" abroad. What does his statement mean (so far as it has any meaning)?

There are two ways of accepting this favorable balance; either by receiving gold (which is the international money) or by establishing "credit", which means much the same as credit for an individual at a store. Ultimately these are the same, as the gold, apart from its use by goldsmiths, etc., is only of value as a deferred payment of goods.

Our Canadian financier spoke no new doctrine; in 1630, Thomas Munn, a Director of the East India Company, wrote a book, "England's Treasure by Foreign Trade". He says :

"The ordinary means to increase our wealth and treasure is by foreign trade, wherein we must ever observe this rule—to sell more to strangers yearly than we consume of theirs in value. For that part of our stock which is not returned to us in wares must necessarily be brought home in treasure" (i. e., gold and the precious metals). He then asserts that every effort must therefore be devoted to increase exports and to decrease consumption of foreign commodities. This is the theory that held sway in England until the time of Adam Smith, whose "Wealth of Nations" laid the foundations of modern Economics, and who effectually answered Munn's idea, known as the "Mercantile Theory".

But ever and anon the theory comes up again—it won't stay "deaded" as the child said of the crushed snake.

Now in what does real wealth consist ? In commodities and services—beef, coal, clothing, houses, books, gardens, lectures on Latin, Greek, or Engineering, sermons, doctor's and nurse's aid, a vaudeville performance; anything that men do as a living produces wealth, whether an actual commodity or some service that heals, helps, amuses, educates, consoles mankind. Money or credit, either is only of value insofar as it gives us control of some share in these commodities and services—we may wait before presenting our claim to some part of these things denoted by our money or credit—in other words, we may save—but ultimately our credit or our money is only of value to us insofar as we thereby participate in some of the goods and services produced by someone else.

This is as true of a country as it is of an individual. Less than 10% of the international trade of the world is transacted with actual money—even the so-called balance may not cause an actual transfer of gold. It may remain in the form of "credits", or is often consumed by what are called *invisible exports*. For instance: the great merchant marine of Great Britain carries goods for most of the nations of the world, especially for the United States. This service must be paid for—how is it paid ? Actual money *may* be paid to the shipowners. But this money is of little value until it buys something and to *Britain as a whole* is of little value unless it buys something *from abroad*. Otherwise, the country as a whole has given important services to another country and has received nothing in return. Think this point out carefully. The shipowner has the money from that foreign country. Good. But that money (or credit) only represents some service or commodity equal in value to the service of transportation furnished the foreign country. Unless, some time, some where, Britain gets some commodity or some service from abroad, the country as a whole is poorer by that amount. Whether she gets cotton from the South, silk from China, wheat from Canada—it matters not; but that money *must* buy something abroad unless Britain is to be that much poorer by reason of transportation services rendered.

But when those goods come, they will be *imports* and the size of figures will cause someone who has not thought the matter through some real concern.

But, says a Munnite, *raw* material is all right—it is when those imports take the form of manufactured articles which could just as well be manufactured at home that we protest. The manufactured article has had that much more labor added to it which must be paid for, of course. But *how* is it paid for ? Either by that much more transportation service, insurance service, telegraph service or by some commodity manufactured or produced (e. g., coal) in Britain, which services or commodities give about the same amount of labor as the labor consumed in producing the imported articles.

Goods and services pay for goods and services. Imports must ultimately be balanced by exports—either in the visible form of goods, or the invisible form of services, such as insurance, agency, transportation, communication, etc.

Let us examine exports and imports a little more closely. We are anxious to have, for instance British capital invested in Canadian resources; a young country has but little hoarded resources in the form of capital and most depend upon the capital of older countries. Britain has or had large amounts invested in Argentine ranches and wheatfields, Brazilian electrics, and in many other industries all over the world. Now, how does this capital come into Canada ? In gold ? Very little. Ultimately (a word we must use often in economics) capital flows into a country in the form of goods and services — goods, clothing, raw materials, services of experts, etc. Let us suppose capital *did* enter in the form of actual money and was used to purchase Canadian goods. Wherein has Canada been benefitted save for an increased money supply and a stimulated market ? Unless that inflow of money is finally used to get some *real* wealth from abroad, then there has been no real gain. As a matter of fact, it does come in as goods and services.

When we see the importation of American goods increasing and that of British goods decreasing relatively, it partly means that more American capital is being invested in Canada than British capital.

Again: interest on capital so invested in Canada must be paid—yearly dividends must be sent to the investors; annual premiums must be paid to American and British fire and life insurance companies, to foreign holders of stock in Canadian industries; cheques, money orders, warrants, bills of exchange, etc., these are sent to the persons concerned. But what is the value of these to the holders unless they eventually get something for them ? They may buy English watches, knives, or household goods, or go to an English theatre or doctor. But, finally those pieces of paper, whoever holds them, give a claim on some goods or services from Canada—these must go out in the form of exports.

Britain, annually, imports, apparently, far more than she exports; she should be getting poorer, should she not ? Not at all—those imports are really payment for transportation services of all kinds, premiums on insurance, dividends on capital invested abroad, realizing on letters of credit used by travellers in England or money sent home by Englishmen living in Canada, and many other such claims on real wealth.

Germany must pay her reparations. Some will be paid in gold. But the major part must be paid, directly or indirectly, by exporting far more than she imports. Will anyone assert such exports to be a sign of Germany's prosperity ?

In other words :

Before one can assert anything relative to a country's prosperity by noticing amounts of exports and imports, one must know much of the country's industrial and financial conditions and know just what the imports and exports represent.

Your great exports may mean that a country is heavily in debt, or is exhausting her raw material. Her imports may mean investment of capital on which dividends in the form of exports must be paid; or they may represent a great return in goods on capital judiciously invested abroad.

The "Pros" and "Cons" of T.B. Testing

Perhaps the replies of Dr. R. L. Conklin, Veterinarian at Macdonald College, to the objections to testing raised by "Illinois Dairyman" may answer some questions you yourself have wanted to ask.

"HOARD'S DAIRYMAN" published an article recently containing a dozen reasons against T. B. testing as given by an Illinois dairyman. This letter was read before the Eastern States Tuberculosis Eradication Conference by the editor, Mr. Glover, in an effort to show, that in spite of the propaganda carried out by newspapers for a number of years, the farmer does not grasp the true significance of this disease in cattle. The farmer does not need more sensational news of T. B., but he does need education and enlightment upon the subject.

The questions present in the farmer's mind are largely those mentioned by this one dairyman. They exhibit the need of advice from reliable sources. They show the willingness of humans to accept bad news by hearsay and to doubt the truth. Again we hear the Veterinary profession criticized as being interested in salaries only, and being incompetent. Why ?

Was the test not introduced as a factor to assist the animal husbandman in keeping a healthy herd? Have animals not been disseminated by the animal husbandman ? Have these people not applied the test to their own animals, and in some cases "plugged" their animals to prevent the "Vet's" from obtaining reactors ? In short, has the live stock owner always been above criticism in his relation to tubercular animals; in testing or disseminating of such ?

Many breeders and farmers are misinformed as to the true nature of conditions, and letters such as the one mentioned show the necessity of taking up the eradication by the area plan. In the early days it was necessary to test herds in scattered localities since only a few owners would submit herds to the test. A tested herd in an infected locality is a burden and a source of constant worry to the owner. Many "breaks" have occurred in these herds and have caused dissatisfaction among numerous stock owners since they do not consider their possible sources of infection.

At the present time area work should be pushed in order to eliminate many of the conditions which militate against T. B., testing. A few of the arguments in favor of area work are: (a) it arouses the interest of all owners; they no longer consider themselves as a separate unit but they feel that they are a part of the community; (b) it affords better protection to all owners; (c) the expense is reduced; (d) educational work may be carried out at same time as testing; (e) greater numbers may be tested in less time; (f) it advertises the locality and eventually affords a market, at better prices, for stock and products ; (g) production from T. B. free animals is greater, and other diseases are reduced.

When the live stock man and the veterinarian are ready to meet on a frank and honest basis more satisfactory results may be obtained from the pursuit of this work. While the farmer feels that he is being forced to test, and the veterinarian is suspicious of the farmer, little good may be expected to follow.

Illinois Dairyman's Letter

The letter mentioned above is as follows:

I have followed carefully articles and editorials appearing in your publication from time to time, bearing on the reliability of the tuberculin test which certain government officials, our farm bureau, and some farm papers are "hell bent" upon coaxing or forcing every cow owner in this country to apply to his herd. As the matter appears to me, you perhaps unconsciously fail to bring out some important features of the test which every dairyman should understand before he places his name on what is called a contract to co-operate with the federal government.

As owner of a herd of around fifty head of high grade Holstein cattle, it has been my object to give the question of submitting my animals to the test, more than passing thought. After a careful study of the matter, both pro and con, I can enumerate at least a dozen reasons why I should not test my good cows.

1. The question of whether or not bovine tuberculosis can be transmitted to humans through raw milk is, as yet, a matter over which scientists disagree.

2. The accuracy of the tuberculin test as practised at the present time is, to my mind, gravely doubtful. A neighboring dairy farmer owning a herd of registered cattle, known as "Federal Accredited", recently shipped his old herd bull to the Chicago stock yards, only to find that the animal was so rotten with tuberculosis that his meat was unfit for food, though he had never reacted to any of the applied tests. I could cite other cases of the same or more aggravated nature. The owner of the bull mentioned is now told that he will doubtless find that some of his valuable cows will be condemned as diseased owing to daily association with the infected bull.

3. I am told that only a small per cent of the cows condemned as diseased are found, upon slaughter, to be infected in organs from which the germs could be drawn through the udder, a large number of such animals showing but very slight or doubtful tubercular lesions.

4. A great many of the statements made to cattle owners in order to induce them to submit their cows to the test are either absolutely false or at least very misleading. The prospective subject is often told that his registered cows may be appraised at higher figures than the law allows, that having only one or two thin or unhealthy cows in his lot may mean that the others are free from disease, when as a matter of fact it is often the healthier looking animals which are found to be reactors.

The statement often made or implied that most of the carriers shipped to the slaughter yards are found to have tuberculosis, is flatly contradicted by a man who is in a position to known the facts.

5. I have been told that should I test my cows, clean up the premises, and use ordinary precautions to keep out further infection, my initial loss would probably be the end but I could mention a great many examples to prove that there is no end of a dairyman's loss after he once signs up. What he thinks is the end may be but the beginning. He may have an accredited clean herd for several years and suddenly learn that 50 per cent of his animals are diseased. Only a few months ago 17 out of 36 head of cows on an acredited Wisconsin farm were condemned as tubercular reactors. Where did it come from ? Nobody knows.

6. Authorities advise me that should I test my cattle, as a necessary precaution against reinfection, I must fence and bridge a stream from which my cows now drink in summer time and which stream during the freshest season is often wide as a large river. Also I must build a double line fence adjoining my neighbor in order to keep my cows from nosing a bunch of native steers which, by the way, the government authorities do not believe should be tuberculin tested. The only alternative is to abandon my large pasture.

7. Several members of the dairymen's organization to which I belong have been compelled to quit the business of dairying owing to the severity of their losses following a tuberculin test. One farmer owning as fine and healthy a looking herd of Holsteins as man ever saw, lost 42 out of a total of 44 head. One animal condemned was said to be the fattest black and white ever condemned as a reactor. The farmer mentioned was forced to the financial wall and lost not only his dairy business but his farm as well on account of the poor judgment he showed in submitting his cows to the hands of a county tester.

8. Milk carefully pasteurized before being bottled for market is free from dangerous bacteria.

9. My cows are valued at an average of nearly $200 each which is $150 more, not counting salvage, than I could recover should I test and lose them, even should they be appraised at the highest permissible figure which, of course, I could not expect.

10. If the drinking of raw milk from untested cows is dangerous to human health, why is the per cent of human infection traceable to the bovine type of tuberculosis so very low in rural districts.

11. As it appears to me, most of the propaganda now being so noisily broadcasted in an effort to coax or force us to test our cows, can be traced to men whose salaries would stop should the farmers refuse them further work.

12. If the milk from an animal affected with tuberculosis is a dangerous drink, who can explain why her steaks or rib meat are not equally as risky a food ?

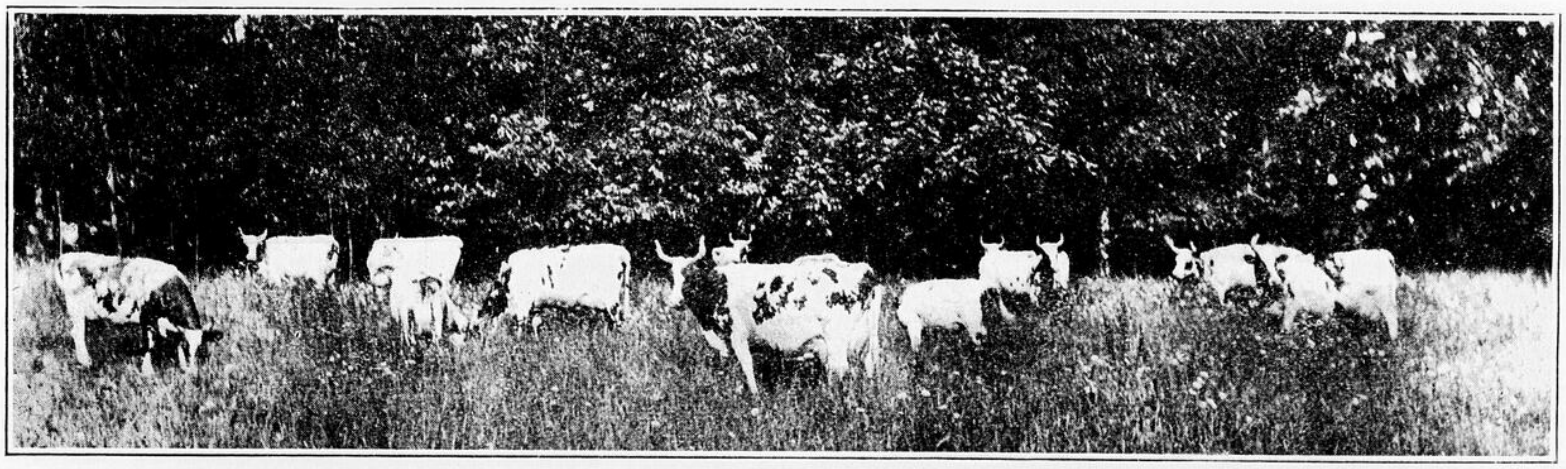
We are told that it is possible to isolate the tuberculous germ and, if so, why not submit samples of each cow's milk to a careful analysis instead of cutting her throat in order to learn the quality of her product ?

THE REPLIES

1. Not as common as formerly believed yet Park *et al* state that 10% of tubercu osis in children is from bovine origin. There is no disagreement as to the ability of the tubercular bacillus of bovine origin to produce the disease in the human family.

2. It is a well known fact that the tests are not infallable and also that many extensive generalized cases do not give reactions. It is therefore possible that such cases might be located. The writer knows of an incident similar to the one mentioned, with the exception of the fact that the physical examination proved helpful in diagnosis. It is not the fault of the test nor the man applying the test that all infected cattle do not react—yet the rush of the present day is causing the physical examination to be put aside.

3. Figures given at the Eastern States Tuberculosis Eradication Conference at Albany N. Y., show that over 90% of reactors show, lesions and about 2% udder lesions and 1.5% skin lesions. Of course if one chooses to assume that all infectious organisms of milk come directly from the udder,



A pretty pastoral scene, showing the milking herd of W. C. Tully, the well known Ayrshire breeder, at Beaver Meadow Farm, Athelstan, Que.

then only a small percentage are dangerous. Much of the infection carried by the milk, however, comes from contamination. Therefore an animal that is eliminating the tubercular organism from any part of the body is dangerous.

4. A person making such a statement is either uninformed upon Goverment policies or has been misled by an unscrupulous worker. Unfortunately there are people of this class in all walks of life.

5. The use of ordinary precautions as mentioned does not as a rule go very far. The farmer may have been feeding steers on his place, or breeding his neighbors' animals, may be located next to a highly infected herd and become re-infected through the water supply, or even by the purchase of a supposedly "clean" animal which later proves to be a reactor. Many have just reason to complain along this line, but little is actually heard. These cases appear and they are bad "breaks", usually appearing in herds where the initial infection was 50% or more.

6. This is a very good argument for area testing as the most economical method of handling the situation. It gives better protection for all, lessens the cost, stimulates interest, and advertises the stock from such an area thereby allowing them to command better prices.

7. Number seven quotes one of the best reasons any man can give *for testing*. Had this man started testing earlier, he would have been able to remove the source of his trouble. As to the finance—there is no doubt that men with pure bred cattle often suffer as mentioned, yet by switching these cattle to a "Bang herd" this man might have averted such an end. There is one great lesson drawn from the successful management of a "Bang herd". A man, who has looked after one and pulls out, may be trusted to keep his herd "clean" once it is "clean".

8. *Correct*

9. Appraisal and salvage value must be very low and the value given by the owner extremely high.

10. The percentage of tuberculosis of bovine type in human is extremely low as compared to the human type. Children under 5 yrs. are the most susceptible. If the infected child is properly handled it may resist the disease and the layman would never know of the latent infection. In rural districts a child has much better opportunities to raise its resistance to any infection than a child from the slums of a city.

11. Let all those who feel this way compare the cost of keeping and the return from products of two herds, one free from tuberculosis, and the other infected. The owner who has "cleaned-up" will tell you that the other minor ailments which troubled constantly before have been reduced to a minimum. No doubt some men are drawing a salary by doing the work for salary only and those should be weeded out.

12. Meat is usually consumed in a cooked condition nowadays, and since the bacilli of tuberculosis are destroyed in the process of cooking, no danger will follow the use of these products.

(b) This is possible, yet a good percentage of the tuberculosis from milk, no doubt is present in the milk as the result of contamination during the handling by manure, etc.

Lamb and Bacon Honors for Quebec

Province Wins in Inter-County Competition for Bacon Hogs and Market Lambs at Central Canada Exhibition.

By A. A. MacMillan, Sheep and Swine Division, Ottawa.

A novel feature of the sheep and swine exhibit at the Central Canada Exhibition this year was the Inter-County Competition for pens of six bacon hogs and six market lambs. Each county was limited to one entry in hogs and one in sheep. No one farmer was allowed to contribute more than two head and the entry from each county was made in the name of the Agronome or Agricultural Representative.

The attractiveness of the pize money offered and the donation of two perpetual trophy cups, one given by Mr. E. W. Beatty, president of the C. P. R. and the other given by Sir Henry Thornton, president of the C. N. R., as well as assistance in defraying freight expenses by the provincial departments of agriculture, brought out sixteen entries in lambs and fourteen entries in hogs. The Central Canada Exhibition Association equipped one of its largest stock barns for the accommodation of these exhibits and throughout the fair this building was the centre of interest to visitors at the exhibition.

Numbers And Quality of entries were outstanding

Never before were so many select bacon hogs and choice market lambs brought together at any one Canadian fair. The hogs were all af bacon type and it was evident from the average of weights taken that a finished hog of two-hundred pounds was the ideal of those making the selections. In the market lambs it was also evident that market requirements were kept closely in mind, since the pens averaged between eighty and one hundred pounds. The winning pens, which carried the most finish, averaged between ninety and one hundred pounds.

Agricultural field men know how to exhibit

The older exhibitors at the fair were amazed to see the Agronomists and Agricultural Representatives trimming lambs and washing hogs. Monday and Tuesday previous to the judging were busy days of preparation and the Inter-Counties building rang with the click-click of shears and the gurgle of water. The result was that every lamb entered was blocked out to best advantage and the hogs were snow white when presented for the judges' decision.

Quebec wins both perpetual trophies

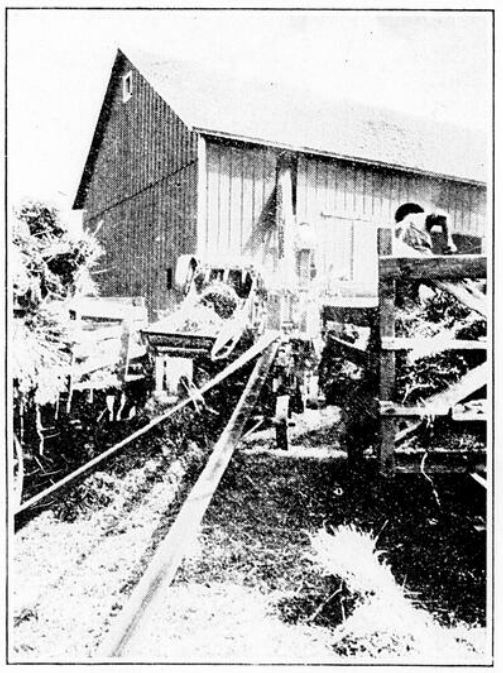
The competition was very keen in both hogs and sheep. However, Quebec province had the better of the contest in both classes. Mr. Geo. E. Mayrand of Rouville County won first place in hogs and has the honour of winning the Beatty cup for the first time. The Rouville County hogs were of a decided bacon type. They were shown in the pink of bloom and as the judge, Mr. D. Flatt of Hamilton, stated they were correct in finish, meaty on the backs and not wasteful from a killing standpoint. This pen of hogs averaged 188 lbs. in weight. They were of Yorkshire breeding, in fact all the entries in hogs were from Yorkshire boars. Mr. L. Therrien of Mississiquoi was a close second in hogs, This entry was up to the maximum in weight and while ideal in bacon type showed signs of having grown slightly stale in finish. Other entries in hogs from Quebec were H. Lauziere, Arthabaska, 6th prize, Jules Angers, Vercheres, 8th prize, Mr. Landry, Terrebonne, 12th, Mr. E. Boivin, Yamaska, 13th prize, and O. Descotes, Shefford, 14th prize.

In lambs, Mr. L. C. Roy, Agronome, Compton, won first place and captured the Thornton perpetual trophy. These lambs were of Hampshire breeding. They were slightly the heaviest pen and carried the most finish. They might have been more uniform in weight but their uniform breeding and finish together with excellent legs of mutton easily put them to the top. Mr. Robt. Miller, the judge, stated that this pen of lambs would kill out with an abundance of lean meat and had plenty of finish to yield a highly desirable carcass from the butcher's standpoint. Quebec won the first five places in the market lamb class; R. Belzile of Sherbrooke was second, W. G. MacDougall of Stanstead, third, J. W. Delaney Hull, fourth, and J. W. Graham, Pontiac County, fifth. Other winnings by Quebec were J. A. Proulx, Richmond, eleventh, A. F. Bothwell, Argenteuil, fifteenth, and H. Lauziere, Arthabaska, sixteenth.

Ontario had the honour of winning two cups, one for best bacon hog, which went to E. Neff, Leeds, and one for best market lamb, which went to Mr. W. Sirrett, Frontenac County.

Both sheep and swine exhibits sell for good money

Mr. R. B. Faith, Editor of the Ottawa Farm Journal and Chairman of the Sheep and Swine Committee, deserves great credit for his untiring efforts in securing the excellent prizes—the perpetual trophy cups and other cups offered in the various classes. Associated with him were members of the Dominion Live Stock Branch, breeders and Agricultural Field Men, of the two provinces. Both the lambs and hogs were sold by tender. In lambs the first prize pen, being ewe lambs, were sold for breeding purposes, and were bought by Mr. Cuthbertson, Shawville, Que., the price being $100 for the six head, or slightly better than 17 cts. per lb. A total of 72 head were sold to the Wm. Davies Co., of Toronto at .12 cts. per lb. This is probably the best carload of lambs ever consigned to any Packing Company, as it undoubtedly contained the best lambs from each of sixteen counties. The hogs were purchased by the Canadian Packing Co., Hull, Que. The first prize pen brought $12 per cwt., the second pen $11.75 per cwt., the third prize pen $11.50 per cwt., the fourth prize pen $11.25, per cwt, the fifth prize pen $11 per cwt. all other pens in the prize money $10.75 per cwt., and the balance $10 per cwt. These prices, as will be seen, are considerably above market values, denoting that the market is always prepared to pay a premium for quality stock. Other firms who bid on the hogs and sheep were Wm. Davies, Montreal, Harris Abattoir Co., Toronto and Harry Crouch, Ottawa.



With the advent of the farm tractor with its ability to do work by belt as well as hauling in the field, a new type of thresherman, the farmer-thresherman, is coming into being and is fast replacing the custom thresherman. This man is first a farmer and threshes as a side line.

Government policies play important part in sheep and swine improvement

Naturally considerable interest centres on the sheep and swine production policies of the counties that were among the successful competitors in a competition of this size, and it so happens that the assistance of the Provincial Departments of Agriculture and the policies of the Dominion Live Stock Branch, Ottawa, have played no small part. In hogs the first prize pen is the progeny of a boar loaned under the Sire Loan Policy of the Dominion Live Stock Branch to the Boys' and Girls' Swine Club in Rouville County This boar was bred by Macdonald College, Que. In Missisquoi County, where the second prize pen was produced, two years ago the Dominion Live Stock Branch and the Provincial Department of Agriculture for Quebec through the County Agronomist co-operated in assisting farmers to select good bacon type sows which were shipped in from the province of Ontario. One carload of such sows were sold in this county and the use of good bacon type boars was encouraged.

The operation of ram grading, the organization of ram clubs, and the holding of sheep fairs, has greatly stimulated the use of purebred rams on a community basis in many counties of Quebec. During the past two years upwards of one thousand rams have been sold direct to farmers at the instance of Government effort, this being altogether outside private sales and purchases which still take place in the usual way. It is also worthy of note that in Ontario the two counties out of three making the best showing in sheep, namely, those of Messrs. F. Forsyth and M. H. Winters, are counties where sheep fairs have been held and where assistance has been granted by the provincial Government in the formation of ram associations backed up by demonstrations and field work by the Dominion Live Stock Branch.

An experiment worthy of repetition

On account of the competition at the Central Canada Exhibition being the first of its kind in Canada, it may be looked upon as an experiment. However, the interest and enthusiasm which it has stirred up among agricultural field men and breeders, the fact that it produced over fifty new exhibitors, and its bearing on the average of market stock in the various counties marks it as an accomplishment of paramount importance. The Central Canada Exhibition will certainly continue to offer prizes large enough to ensure its future success from year to year, and it would seem as if other exhibitions which are strategically located for such a project might well copy Ottawa's example.

Dairy Cattle Strong Feature at Quebec

Canadians, Ayrshires, Holsteins Out In Strength—Jerseys And Shorthorns Each Represented By a Couple of Good Herds.

FROM an agricultural standpoint the most interesting department at the Quebec Exhibition is that of dairy cattle—for in no other department is there exhibited quite the same steady improvement from year to year in the showing made, both from the standpoint of numbers of entries and from that of average quality, as in the cattle ring. There are still weaknesses in this department, it is true. Too many "tail-enders" still continue to turn up in the classes — animals that are not properly grown or properly fitted for showing, the presence of which give to an otherwise splendid line-up a ragged appearance. But men who have visited this fair from year to year remark upon the constant improvement in the showing made by this section as a whole.

And while it would be impossible to outline, in a short report of the exhibition, all the features of interest to the visitor, there is one in particular that should be mentioned before we pass on to a detailed discussion of the livestock — with which this report must chiefly deal. This feature was the splendid exhibit of honey assembled this year in connection with the holding of the World Congress of Beekeepers at Quebec. To this a great number of countries contributed samples, while the place of honor was occupied by a miniature Eiffel Tower, some forty feet high, which was built up of samples of Quebec honey, in the making of which every county had a share and 2,857 samples were employed.

THE DAIRY CATTLE

The dairy industry is the corner stone upon which has been built whatever prosperity is enjoyed by Quebec agriculture. It is therefore fitting that the dairy cattle showing at the Provincial Exhibition should be a strong one—and this it is becoming year by year. It was unfortunate that bad weather attended the judging of the dairy cattle, but in spite of the rain a splendid exhibition was made, and a goodly number of interested spectators watched the judging from the ring-side. Canadians, Holsteins, and Ayrshires were all out in strength. In each of these breeds competition was keen, and in order to get "into the money" (and the prize list at Quebec is a generous one) an animal needed to be a good one. The only other breeds represented were Jerseys and Shorthorns—the former by two full herds, both of good quality, and the latter by a couple of herds of quality and a number of individual entries of varying merit by three or four other exhibitors.

AYRSHIRES.

The Ayrshire exhibit, while not quite so good as that made by the breed this year at Ormstown, was better than the showing made by the red and whites at Sherbrooke, Three Rivers, or Valleyfield. Some particularly good classes came out. The aged cow sections with ten in the milking class and nine in the dry class, the senior yearling heifer class with its fourteen entries, and the senior heifer calf class with its seventeen entries, were perhaps the outstanding ones. A safe generalization, however, would be that the first two or three animals in each class were splendid individuals.

In the bull classes competition was not quite so keen as we have sometimes seen at Quebec. Six sires came out in the aged class, but one or two at the bottom of the class added nothing to the showing. This class was headed by Hobsland Speculator, for D. T. Ness, (Howick), with Burnside Pearline, for A. Legare & Son, (Petite Rivière) next. The two year old class brought out the champion bull, Overton Lochiel, a nice straight imported bull now in the herd of F. Byrne, Charlesbourg. This bull has the proud bearing of a champion, and if properly fed to give him more middle, should make a show bull that will be hard to beat. The only other outstanding male was J. P. Cavers' (Howick), senior bull calf, Braeburn Barney, which was a good one.

In the aged cows in milk the first three animals were real good cows. These were Snowball, for D. T. Ness, Braeburn Dewdrop's Pride, for J. P. Cavers, and Cedarcroft Nancy, for F. Byrne. The champion cow, Primrose de la Petite Riviere, owned by A. Legare & Son, headed the dry cow class. This cow is one of the finest show cows of Canada, and has held the championship at this fair for several years past. Cavers had second and third places in this class. The three year old class in milk was topped by a Byrne entry, Byrnehill Irene, and the dry class by a heifer from the Cavers' herd, Braeburn Floss. D. T. Ness secured first place in both classes of two year olds with stiff competition, while in the senior yearling class with its fourteen entries A. Legare & Son secured premier honors. Ness, Byrne, Cavers, and Legare divided the top positions amongst them in the younger classes. F. Byrne had first place in senior herds, with D. T. Ness second, J. P. Cavers third, A. Legare & Son fourth; while in junior herds Ness was first, Legare second, and Cavers third.

The exhibit was judged by J. A. Ste Marie, Superintendent of the Experimental Farm, Ste. Anne de la Pocatiere.

CANADIANS.

The breed showing greatest improvement was undoubtedly the French Canadians. With 142 entries, shown by 8 different exhibitors, this breed made a splendid showing—and those who have had an opportunity of watching its progress at Quebec from year to year remark very favourably upon the strides that have been made by this breed. Adrien Morin, secretary of the association, placed the ribbons to the satisfaction of the exhibitors.

In the bull classes one of the best exhibits was made by the aged sires, of which seven were out. The four at the top were very good representatives of the breed, and the first prize animal in this class, Joyon, for A. Sylvestre, St. Simon, was later made champion bull. Six came out in the two year old class, the winner, from the herd of A. Denis, St. Norbert, being a very nice one. In the yearling class, and again in both calf classes, the entries from the Cap Rouge Experimental Farm headed the classes and did much towards making them the strongest bull classes in the show.

One of the best classes was that of the aged cows in milk, with twelve entries headed by a few fine big milky cows at the top. It was an exceptionally creditable line-up, and a number of very nice animals had to go down to make room for entries with a little more size. It was from this class that the champion female came, for the Cap Rouge Experimental Farm, while the second prize went to an entry by E. Sylvestre, Ste. Hyacinthe. In the aged dry cow class A. Sylvestre carried off premier honors, while in the heifer and calf classes the prizes were pretty well divided by the Cap Rouge Experimental Farm, E. Sylvestre, A. Denis, A. Sylvestre, and H. W. & O. A. Fowler, Kingsbury. Cap Rouge Farm won the herd prize, with A. Sylvestre second, A. Denis third, and E. Sylvestre fourth.

HOLSTEINS.

The exhibit of Holsteins at Quebec this year was a large one, and while constant improvement is being made in the showing by this breed at

(*Continued on page VIII*)

Creditable Showing of Live Stock at Sherbrooke*

Better Exhibit Than That of Last Year, Due to Increased Entry In Cattle Classes—Jerseys Lead Dairy Breeds in Point of Numbers.

A twenty-five percent increase in cattle entries was the factor that makes it possible to report the live stock exhibit at Sherbrooke Fair as showing a considerable "improvement over that of last year". This increase, the result equally of somewhat augmented numbers in the dairy cattle sections (particularly among Jersey and French Canadians) and of the replacement upon the list of "favoured breeds" of the Hereford, had a strengthening effect upon the live stock showing as a whole—as could be seen by the live stock parade—which is such a feature at this fair. For the rest of the show, if an exception be made in the case of poultry in which a large increase was to be found, was just about on a par with that of last year.

DAIRY CATTLE

Sherbrooke always has a good showing of dairy cattle. And, while sometimes the numbers in some of the sections are smaller than could be wished for keen competition, there are always a few really first class herds in each breed to keep up the quality of the exhibit and to make for keen interest both in the judging and in the animals coming into the ring. This year's showing was no exception. Good stock was to be found in all the breeds, as could be seen from the excellent herds that lined up in the parade already referred to. And in the line-up for the Davidson Special, which was open to accredited herds from any dairy breed, a splendid lot of dairy cattle came out. This special, by the way, which was competed for by seven herds, consisting of three groups of Jerseys, three of Ayrshires, and one Holstein herd, was awarded as follows: 1st. A. E. Fish, Ayer's Cliff (Ayrshires); 2nd. P. J. Salley, Lachine Rapids (Holstein); 3rd. C. O. Edwards, Hillhurst (Jerseys).

JERSEYS.

To the Jersey breed went this year the honor of leading in dairy cattle in point of numbers. With a total of 86 head, many of which were shown by breeders who had not previously exhibited, the Jersey show was an interesting one, even if the quality in some cases was not up to the standard set by some of the splendid exhibits made here by this breed in the past. Five herds were out, shown by F. G. Gale, Waterville; C. O. Edwards, Hillhurst; W. E. Burton, Milby; H. S. Snaden, Danville; and R. W. Hunting, Lennoxville. And while F. G. Gale was the largest winner, carrying off 12 firsts, the division of the championships show that he did not have it all his own way. W. E. Burton, a new Jersey breeder, carried off Senior and Grand Championship honors with his two year old bull, Cosma's Golden Lord, that was last year Junior and Grand Champion here and third at the National. The Junior Champion bull was C. O. Edwards' young calf, Noble Napoleon. Edwards also had the Junior Champion Female in Petune's Golden, a senior calf that carried off Grand Championship honors for females as well. The first prize aged cow in milk, Sophie's Surprise, was senior female champion for F. G. Gale.

The progeny classes and the young classes generally were outstandingly good, as were also the two aged cow classes. Outside of the champions the most interesting individual was F. G. Gale's Pogis Lady Golden that stood first in the dry cow and the R. O. P. classes. This splendid producer who topped the latter class of 12 entries with a score of 116 points has three records that give her the highest three-year average in Canadian Jerseydom.

HOLSTEINS.

The Holstein exhibit was about the same size as that made last year, but brought out some fine quality stuff. Herds were shown by Dickie Bros., Truro, N.S.; P. J. Salley, Lachine Rapids; M. Miller, Brome; J. Harvey, Frelighsburg; while A. C. Paige, Sherbrooke, and McCullough Bros., Sutton, each had a number of entries. The aged bull class, while containing but three entries, was an interesting one, since Dickie and Harvey each had an entry of merit. On a close decision the Dickie Bros. bull, Cobequid La Honda Jim, went to the top of the class and was afterwards made Senior and Grand Champion. Another animal from the same herd, Cobequid Colantha Oswald, a junior calf was made Junior Champion Male. The outstanding classes in this breed were the two aged cow classes. From a group of six in the aged dry cow class came the Senior and Grand Champion Female, Woodland Bonastine Jewel, owned by P. J. Salley. Another of Salley's good cows, Ourvilla Canary Queen de Kol, led the class of aged cows in milk. Dickie carried off Junior Female Championship honors with a calf, Cobequid Patsy Abbekerk.

AYRSHIRES.

The Ayrshire exhibit this year, while not a large one, was a creditable one. The quality was good, and the tops of classes were individuals that have been prize-winners before. Three full herds were out, shown by A. E. Fish, Ayer's Cliff; D. T. Ness, Howick; and J. P. Cavers, Ormstown, while a few entries were made by F. Sevigny, Hillhurst. A. E. Fish carried off Senior and Grand Crampionship honors for both male and female classes. His Alta Crest Toreador was champion bull, while Isleigh Stella, last year's champion, and this year's first prize cow both for the aged cow class in milk and

(*Continued on page VIII*)

*Note—This report, prepared by the Editor, but too late for inclusion in our September issue, has already appeared in The Farmer's Advocate. Any of our readers who have read it there may just pass this over.

Good Farmers Honored

Medals and Diplomas Presented to Winners in the 1924 "Merite Agricole" Competition.

NOT least important among the features of the Provincial Exhibition, held last month in Quebec, were the gatherings in honor of the winners in the "good farming" competition for 1924. This competition, which in French is known as the competition of "Merite Agricole", has been for thirty years now an annual event—and is one of great and ever growing importance in the agriculture of the province. Rotating from year to year through the five large districts into which the province, for purposes of competition, is divided, it searches out and honors the best farmers in the province—as the show ring at the exhibition searches out and gives publicity to the best types of stock or produce—and stimulates and encourages other farmers in these districts, and throughout the province, to emulate the work and systems of farming practised by these leaders.

In all, more than eighty medals and diplomas were given out at the Quebec convocation. The main guest of honor this year was Mr. Arthur Légaré, of Petite Riviere (situated some four miles out of Quebec City). Mr. Légaré, the winner of the gold medal and of the diploma of "Very Great Exceptional Merit", is well known as a breeder of Ayrshire cattle and as a champion plowman. So interesting is his story, and so excellent his methods of farming, that we have decided to deal with these in a separate article. So of him we shall say nothing further here. Of the other medalists special mention should be made of Master L. Couture, a thirteen year old boy, who this year won the gold medal in the junior competition. Master Couture is from a family of good farmers, both his father and his grandfather being holders of gold medals and of diplomas in the Order of Agricultural Merit.

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Two diplomas of special significance were awarded. One, a diploma of "Very Great Exceptional Merit", was presented to Mr. Walter Stewart, represented by Mr. Smart, of the W. C. Macdonald R g'd, in consideration of his efforts in behalf of educational work, particularly in the field of agricultural education. It will be recalled in this connection that the W. C. Macdonald Reg'd. gives each year a number of scholarships throughout Canada, and tenable at Macdonald College, to encourage the taking of advanced work in agriculture. The other, a diploma of "Very Great Special Merit", was for Mr. Frank Byrne, of Charlesbourg, well known Ayrshire breeder and this year president of the Canadian Ayrshire Breeders' Association. Mr. Byrne was given the same rating on his farming as Mr. Legaré, but, being classed by the committee of judges as an "amateur" rather than a "professional" farmer, was given a diploma of merit while the medal went to the latter.

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Some idea of the interest taken in the distribution of the medals may be had in the fact that over three hundred farmers were in attendance at the event. Amongst those who took part in the proceedings were the Hon. Narcisse Perodeau, Lieutenant Governor of the province, Hon. J. E. Caron, Minister of Agriculture, Mr. Narcisse Savoie, representing the Deputy Minister, Canon Garneau, representing His Eminence Cardinal Begin, the judges of the competition, and a great number of former winners of medals.

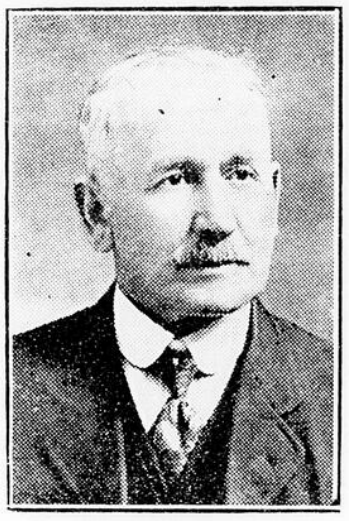
The celebration was opened by Li ut. Governor Perodeau, who hoisted the special flag of the Order of Agricultural Merit precisely at half past two on Wednesday afternoon, September 3rd, in the presence of a large crowd of spectators. Mr. Savoie then, on behalf of Mr. J. A. Grenier, welcomed the guests and visitors to the event, after which Mr. Oscar Lessard, Secretary of the Council of Agriculture, read out the list of names of the winners of the various medals and diplomas. As these nam s were read out the competitors went forward to receive from the Governor and the other dignitari s present the prizes that were their due and felicitations on their success.

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After the distribution of prizes Lieut. Governor Perodeau spoke for a few moments, congratulating the winners on their success. He was followed by the Hon. Mr. Caron who pointed to the great growth in the number of competitors from year to year as an indication of the growing interest in this competition. Mr. Caron recommended the farmers to go in still more widely for competitions of this sort. They encourage good farming, he said, and good farming has far reaching effects. It is a thing that passes from father to son, and that makes its effect felt throughout a community. After a few words from the Hon. Mr. Moreault, Minister without portfolio, mainly of congratulation to the farmers of the Lake St. John district on the splendid showing made in the competition, the afternoon celebration closed with a parade of prize winning live stock.

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At the banquet given that evening by the Exhibition Commission in honor of the winners in the competition of Agricultural Merit over six hundred were present—farmers and their wives. Mr. Narcisse Savoie presided, with Mr. Légaré, winner of the gold medal, on his right and Hon. Mr. Caron on his left, and at the close of the dinner proposed a toast to the province. This was replied to by Mr. Caron, who spoke at length on the benefits of co-operation. Without co-operation, said Mr. Caron, our farmers are unable to reap the greatest benefits from their products. He spoke of the Federated Co-operative and of the work that it is doing and asked for still further support for this organization. Fifteen thousand farmers are now taking advantage of the facilities for buying and selling offered by this organization, he said, but still more



Mr. Arthur Legaré, of Petite Riviere (near Quebec) this year carried of premier honors in the "Merite Agricole" competition. He was awarded the gold medal and a diploma of "Very Great, Exceptional Merit." Of his farming methods we shall say more next month.

should do so. Mr. Caron instanced the case of our competition with Australia and New Zealand. Last spring, he said, three members of Australasian co-operatives approached him to see whether it would be possible to come to some agreement whereby Canada, Australia, and New Zealand might each have their week for exporting goods to the British market. Mr. Caron had to reply that such an arrangement was impossible at the present time because we in this country are not yet sufficiently organized. The Minister closed his address with the advice to farmers to get together if they would achieve the greatest success.

The assembly then drank the health of the winners of the day, and Mr. Légaré and Master Couture replied briefly. The former ascribed the merit to his family that had helped so much in building up his farm, and to Mr. Gauthier, the Agronomist for his county, to whose counsels he was indebted for much of the success of his practices; and young Couture timidly thanked the Minister for organizing the competition for boys.

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The names of the winners and competitors taking part in the 1924 competition of Agricultural Merit are as follows :

Winner of the Gold Medal and the Diploma of "Very Great Exceptional Merit"

	Points obtained
Arthur Légaré, Petite Riviere, Quebec....	948.6

Winner of the Diploma of "Very Great Special Merit"

Frank Byrne, Charlesbourg, Quebes, amateur farmer.....	948.6

Competitors for the Gold Medal

Alphonse Fortin, Hebertville Village, Lake St. John.....	922.5
Joseph Henry Couture, St. Augustin, Portneuf.....	921.8
Joseph Jeremie Villeneuve, Carlesbourg, Quebec.....	920.7
Leonidas Couture, St. Augustin, Portneuf..	921.5
Pierre Sanfaçon, Charlesbourg (R.R. No. 1), Quebec.....	910.8
Hildevert Racette, St. Augustin, Portneuf..	901.5
Eugene Couture, St. Augustin, Portneuf....	886.7
Charles Pilote, St. Felicien, Lake St. John..	880.1
Jules Delisle, Neuville, Portneuf.....	865.0
Dydime Bouchard, Bagotville, Chicoutimi..	854.1
Osias Tremblay, St. Bruno, Lake St. John..	852.3
Philemon Morissette, Cap Sante, Portneuf..	841.0
Adelard Fortin, Chambord, Lake St. John..	840.8
Jos. Louis Sinai Mayrand, Lachevrotiere, Portneuf.....	815.8

Winners of the Silver Medal and of the Diploma of "Very Great Merit"

Edmond Savard, Grande Baie, Chicoutimi..	905.3
Augustin Rainville, St. Prime, Lake St. John	900.8
Almas Thibault, Hebertville Village, Lake St. John.....	898.0
Francois Tremblay, Hebertville Village, Lake St. John.....	885.0
Charles Fortin, Ste. Croix, Lake St. John..	883.1
Edmond Grenier, St. Prime, Lake St. John	873.0
Pierre Auclair, Loretteville (R.R. No. 1), Quebec.....	870.3
Nil Bouchard, Jonquiere, Chicoutimi.....	869.0
J. B. Dubeau, Loretteville, Quebec.....	865.2
Joseph Sansfaçon, Loretteville (R.R. No. 1), Quebec.....	862.9
Joseph Page, Les Ecureuils, Portneuf.....	862.1
Almanzor Blouin, Ste. Famille, I. L., Montmorency.....	862.1
Alphonse Dufour, St. Jerome (Metabetchouan), Lake St. John.....	861.0
Nazaire Drolet, Ancienne Lorette, Quebec..	860.6
Joseph Cloutier, Chateau-Richer, Montmor	858.5
J. B. Allard, Loretteville, Que.....	858.3
J. H. Boutet, Loretteville, Quebec.....	858.0
Egide Tremblay, Hebertville, Village, Lake St. John.....	858.
Victorien Parent, Giffard, Quebec.....	857.2
Victor Labbe, St. Urbain, Charlevoix.....	854.8
Ernest Simard, Metabetchouan, Lake St. John.....	853.5
J. Adelard Gobeil, Chicoutimi (Grande-Ligne).....	853.1
Ovide Roy, Hebertville Village, Lake St. John.....	852.3
David Gauthier, Hebertville Station, Lake St. John.....	851.9
Alfred Roy, St. Prime, Lake St. John.....	851.8
Jean Tremblay, Jonquiere, Chic.....	851.5
J. B. Paquet, Loretteville, Quebec.....	851.4
Eugene Constantin, St. Augustin, Portneuf	851.1
Polydore Villeneuve, Jonquiere, Chicoutimi	851.0
Jos. Ovide Boily, Baie St. Paul, Charlevoix	850.9
Georges Galarneau, Pont Rouge, Portneuf..	850.8
Ovide Trepanier, L'Ascension, Lake St. John	850.8
Thomas Ouellet, St. Prime, Lake St. John..	850.5
Almanzor Blouin, St. John, I. O., Montmorency.....	850.5

Winners of the Bronze Medal and of the Diploma of Great Merit

Cyrille Cantin, St. Raymond, Portneuf.....	844.8
Francois Paquet, Loretteville, (rg. St. James) Quebec.....	840.6
Jean Drolet, Loretteville, Quebec.....	840.0
Heracleus Dore, Metabetchouan, Lake St. John.....	837.5
Joseph Bergeron, St. Felicien (r. Box 12), Lake St. John.....	837.3
Dorila Villeneuve, Ste. Croix, (Lake-à-la-Croix), Lake St. John.....	837.1
Albert Girard, St. Urbain, Charlevoix.....	835.5
Joseph Riverin, Chicoutimi-West (rg. St. Paul), Chicoutimi.....	830.8
Arthur Couture, Loretteville, Quebec.....	827.7
Charles Drolet, Ste. Foy, Quebec.....	825.8
Odina Potvin, St. Jerome, (Metabetchouan), Lake St. John.....	822.9
Mendoza Laroche, St. Basile (station), Portneuf.....	822.5
Aime Tremblay, Chambord, Lake St. John (Medal).....	820.3
Odilon Lirette, Loretteville, Quebec.....	812.1
Medard Hudon dit Beaulieu, Ste. Anne, Chicoutimi (Medal).....	810.2
Leonidas Gagnon, St. Peter, I.O., Montmorency.....	808.3
Joseph Faucher, Ste. Famille, I.O., Montmorency.....	805.9
Paul Rainville, St. Prime, Lake St. John...	805.3
Alfred Boivin, Roberval, Lake St. John....	802.9

Francis Hudon (Adelard), Hebertville Village, Lake St. John	802.8
Mendoza Bedard, St. Basile (station), Portneuf	802.5
Antoine Laberge, Ste. Foy, Quebec	802.2
Victor Bouchard, St. Alphonse, (St. Louis de-Bagot), Chic. (Medal)	801.5
Flavien Grenon, N.-D. de Laterriere, Chicoutimi	798.6
Moise Dupuis, St. John, I.O., Montmorency	788.0
Eugene Maltais, La Malbaie (Riv. Mailloux), Charlevoix	784.5
Ludger Petit, fils, St. Honore (Martel), Chicoutimi	798.6
Jos. Laberge, Ste. Foy, Quebec	784.2
C.-T. Parent, Charlesbourg-West, Quebec	780.6
Laurent Bedard, St. Prime, Lake St. John	778.5
Joseph Belanger, St. Methode, Lake St. John	776.2
Joseph Menard, St. Urbain, Charlevoix	775.0
Elie Villeneuve, Charlesbourg, Quebec	772.2
Alfred Pleau, St. Ubald (bureau St. Achille), Portneuf	771.0
Louis Moisan, Ancienne Lorette (Champigny) Quebec	771.0
Louis St. Amant, St. Ubald (bureau St. Achille), Portneuf	767.7
Arthur Plamondon, Les Ecureuils (2e rg.), Portneuf	767.5
Armand Lachance, St. Thuribe, Portneuf	764.0
Joseph Paquet, St. Basile (rg. Ste. Anne), Portneuf	757.3
Joseph Trudel, St. Basile (rg. St. Joseph), Portneuf	755.8
Joseph Martel, Cap Sante, Portneuf (Medal)	753.6
Winners of the Diploma of Merit	
Joseph Mottard, St. Basile, (station), Portneuf	739.2
Onesime Fortin, La Malbaie, Charlevoix	721.6
Ferdinand Guay, Cap à l'Aigle, Charlevoix	719.8
Albert Grondines, Grondines, (station), Portneuf	665.1

HARVESTING THE ROOT CROP

By L. C. Raymond, Agronomy Dept., Macdonald College.

NEXT to thinning, the labor and time consumed in harvesting the root crop is the greatest single factor of expense in connection with root growing. Where hand methods entirely are employed it not only takes considerable time but is exceedingly hard work. The expense involved in this process is one of the reasons why roots are not more extensively grown than they are. It will be appropriate therefore at this time of the year to consider briefly the systems of harvesting that may be employed to overcome some of the difficulties experienced in the past.

The first question regarding the harvesting of roots is that of the proper time to start as applied to the various classes. Three classes of roots are commonly grown, viz., mangels, carrots and swedes, and a fourth, turnips, is often used as a catch crop. All of these present different requirements so far as time of harvesting is concerned. Mangels should be lifted first of all. They are the most exposed, and at the same time most susceptible to injury from frost. They should always be pulled before there is danger of a frost, that will freeze the surface of the ground. Once a mangel crop has been badly frosted it will never recover—rot sets in at once and it is entirely useless to attempt to store the crop.

Carrots are much better protected from frost danger by reason of the fact that practically all varieties grow almost entirely in the ground. The root proper, however, is just as readily affected by frost as is the mangel. They can therefore be safely left until after the mangels, but should not remain much longer.

Swedes are the most hardy crop of the lot. It is not only possible, but advisable not to remove swedes until just as late as possible. No harm whatever will be done to a crop of swedes that have been allowed to freeze into the ground, provided they are allowed to thaw out in their natural position before pulling.

Turnips, as previously indicated, are usually planted as a catch crop. They are often spoken of as fall turnips indicating their use for fall feeding. That is the way in which they can be most effectively used. For that purpose harvesting begins early and they are pulled tops and all and fed to stock in a paddock or outside run of some sort. It is rarely, if ever, advisable to attempt to store turnips for winter feeding.

The actual time of harvesting must be determined for each locality in accordance with the average time when heavy frosts are expected. It is very important from the storage standpoint however, to harvest as late as possible, consistent with safety. At Macdonald College we aim to have all mangels pulled by October 25th, carrots by October 30th, at latest, and swedes by November 10th. In the colder sections these dates must be advanced.

It is in the method of harvesting that much can be done to cheapen and make the process less laborious for some classes of roots at least. Mangels as a class are not difficult to lift in any case. There is of course considerable difference between the different types but they are all relatively easy. They all leave the ground cleanly with no feeding roots or dirt adhering. The tops may be twisted off or cut. If cut they should not be trimmed too closely or the cut surface is more likely to decay. Owing to the texture and brittle nature of the root it is not advisable to resort to harrowing out the crop as it will result in a lot of injury and later will cause rot in storage. Pulling by hand then and throwing four rows together into heaps or rows is the best all round method for handling mangels.

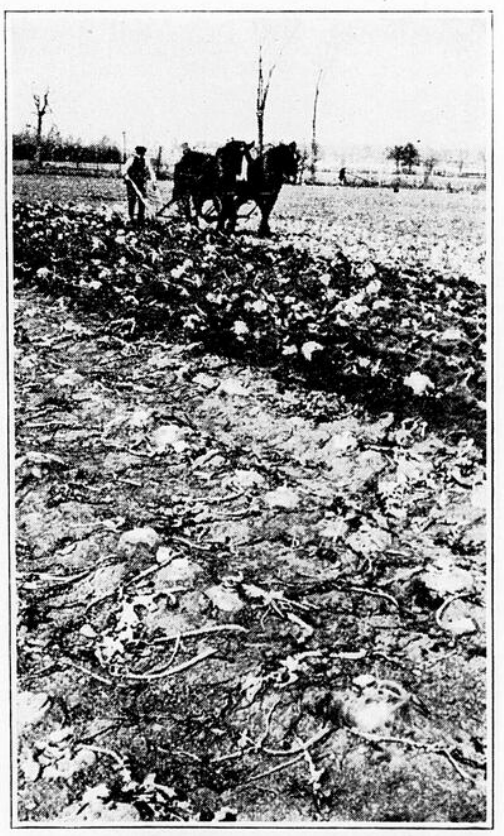
Carrots present a different proposition. When properly grown they should be so thinned that at harvest time they will form a solid row in the ground. Being so deeply seated it is practically out of the question to pull them by hand as they stand, for in addition to their depth in the ground the top is rather weak and readily pulls away. The easiest way to remove them is to plow a furrow—running the land side of the plow as close to the row as possible without damaging the roots. They may then be readily pushed over into the row and taken out. The tops may be removed before by a sharp hoe and raked up and fed, or they may be twisted off when the roots are taken out. Carrots are at best rather expensive to handle but they have a distinct use on the average farm.

The vast majority of roots grown in the Province of Quebec are swedes for reasons that we need not discuss here. Swedes are difficult to lift by hand for they have a heavy lot of feeding roots which have a firm grip on the soil and to which much dirt adheres. In addition the top must be cut to be removed. A number of slightly different methods have been employed to overcome the expense and labor of lifting this crop. One of the most efficient methods consists of first of all harvesting the tops. About two weeks before the crop is to be lifted a start is made by cutting off as many tops as can be utilized to feed to the stock. By the time harvesting is to commence a considerable portion of the field will be cleared. A plow is then used and each row plowed out with a furrow just deep enough to pass under the roots proper. Any light harrow can then be run over the field to shake the dirt off. One of the best for this purpose is a spring tooth harrow turned upside down. The roots may then be gathered with the aid of a scoop fork. This consists of a fork shaped like a grain scoop having knobs on the ends of the tynes to prevent their sticking into the roots.

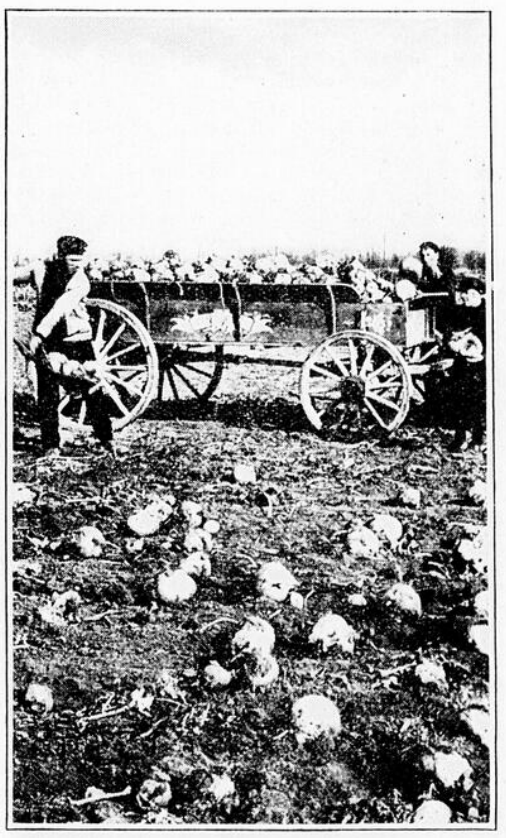
Careful records have shown considerable decrease in man power required by this method and it certainly is a much easier way of handling the situation. This general system is sometimes modified by using the harrows directly to lift the crop after the tops have been cut. This does more damage to the roots but rarely gives any trouble through rot in storage. Still another method of lifting the crop, after topping, is that of using the potato digger. When such a machine is available it is a most efficient way of doing the work.



Stage I

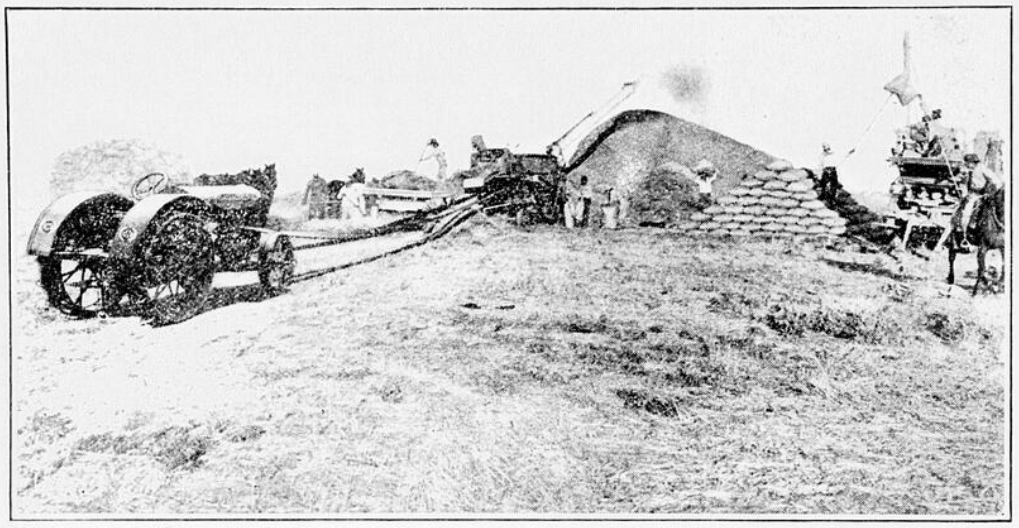


Stage II



Stage III

HARVESTING THE SWEDE CROP : — Stage I—Tops removed ready to plow. — Stage II—Plowing out begun. — Stage III—The harrow has gone over and they are being loaded on the wagon.



Large-scale threshing in Argentina, Canada's chief rival in the production of wheat. The sacks of wheat are loaded by means of gin pole and horse on huge wagons with wide-tired wooden wheels that sometimes are as much as fourteen feet high. From 200 to 300 sacks of wheat are loaded on these wagons at one time; figuring 132 pounds to the sacks, this means a load of from thirteen to twenty tons. Ten to twenty horses are required to pull such a load. The big wheels are used because of the frequent mudholes (called by the natives pontanas) encountered in the Argrentine grain country.

For the swede crop there is no doubt that one of the methods described will help considerably in handling the crop. It does not necessitate the purchase of any new machinery, does not in any way lessen the value of the crop, and does cheapen what is otherwise an expensive and laborious farm operation.

In next month's issue we will consider the question of root storage pointing out the essentials desired and the ways they can be met on the average farm.

FARM ENGINEERING

To Make the Thresher Efficient

L. G. Heimpel, Dept., of Agr., Engineering, Macdonald College.

NO matter how good a grain crop may be in the field it is the grain that runs out of the separator spout, and that alone, that is of use to the owner. Grain in the stack is of no use as such, and any grain which is not separated from the straw as it passes over the decks of the separator goes into the stack. Most of these machines do good work so long as they are kept in good shape, are properly adjusted in the threshing and cleaning compartments, and run at correct speed. What we have seen of the condition of threshers in this province, however, leads us to believe that there are a great many machines in use which do not put all the grain in the bushel boxes.

Cylinder speed is one of the most important things in connection with clean threshing. A 12 bar cylinder should never be run at less than 1075 R.P.M. and the large or 20 bar cylinder should be kept at a speed of 750 R.P.M. This results in a tooth speed which insures effective removal of the grain from the heads. To keep up this speed, however, often requires more power than is available from the small engines used for threshing throughout the province. The cylinder and concaves should always be kept fully "spiked" with teeth which will at least "draw" well. It is a waste of power to have more rows of concave teeth in the machine than is necessary for effective threshing of the kind of grain at hand, nor should they be more closely adjusted than is essential to good work. Where there is a shortage of power, however, there is the contrary, the average operator is inclined to run with as few rows of concave teeth as possible and to carry these as far from the cylinder as is permissible. Ordinarily, from four to six rows of concave are necessary for wheat, two rows for oats and rye, which are two very easy crops to thresh, and six rows for barley. The condition of the grain has of course, a great deal to do with this part of separator operation, but for average conditions this will be found to be about right.

In testing for clean threshing it is advisable to catch some of the straw as it is passing along the decks before it gets to the blower. There should be no plump kernels in the heads once they have passed the cylinder, but the presence of a few soft or shrunken kernels should not be taken too seriously. These sometimes stick so hard that to loosen them would require an adjustment so close that a great deal of damage from cracked grain would probably result. To test for clean separation a scoop shovel held just behind the tail-board so as to catch some of the tailings will stop any heavy kernels which will be going over if the machine is wasting grain.

While it is true that poor work in threshing is often due to the inefficiency of the operator, yet we are convinced that a much greater loss is caused by senseless "slugging" which many separators are subject to. Feeding a separator does not mean keeping the feeder piled high with sheaves; they should be dropped head foremost on the conveyor so that they will enter the cylinder heads fore most and no faster than the cylinder can take them without losing speed.

So much for the prevention of waste in the machine. Another source of loss is due to the slovenly handling of grain and carelessness around the machine. When threshing in the barn, the floor should be kept clean so that no droppings from the feeding end will find their way into the chaff and straw. When doing field threshing a large piece of canvas stretched on the ground under the feeder will save its cost in one setting of the separator.

Conveniences we can Install Before Freeze Up

Watering Bowls For The Cattle

AT this time of the year the minds of many of us are considering the possibility of installing a few conveniences in house or barn to make things a little more pleasant and a little less laborious during the coming winter. In not a few cases this "annual improvement" will have something to do with the farm water supply, and drinking cups for the cows are not only a convenience—they are a profitable investment.

The ease with which tuberculosis is transmitted from one animal to another, through either the water trough or the continuous manger when it is used for watering, is becoming well known. Nor is the common gravity drinking cup much better because, unless there is a valve under each cup to prevent it, water will circulate from one cup into another and disease germs which may be in it will be carried with it. The only kind of bowl which has any right to expect stable room in present day installations is the automatic, detachable bowl. In choosing the make, however, it is important to pay particular attention to the fastening used to hold the bowl in place. It should be easily removable for cleaning, yet should be held sufficiently firmly to prevent cows from knocking the bowls loose. Covers for bowls are of questionable advantage. Many cows get sore noses or callouses on the nose from the opening of drinking cups. If cups are properly placed and easily removable they will not need very frequent cleaning and when they do need it, it is an easy matter to clean them.

The best type of bowl or cup is that in which the cow trips the valve to admit the water while she is drinking. In order to make it possible to do this readily it is necessary that the cup be so placed that she does not need to hold her head too high nor should she have to twist her neck to get at it. The height of the cups should be determined by the breed of the animals using them. A height of 26 inches from the top of the cup to the top of the stall floor is about right for Jerseys and other small breeds, while for Holsteins they may be placed at from 28 to 30 inches above the floor. They should be placed as high as is permissible, because the lower the cups the more dirt and litter will get into them; yet the animals should be permitted to drink in comfort. We have seen cups which were placed so high that cows were forced to lap the water out of them as best they could; this is cruelty to animals.

The sizes of piping and its location are two factors worth considering here. The automatic cups are usually tapped to receive three quarter inch piping and this is the size which should be used between the main and the cup, while the main should be no less than one inch. In cases where water is fed to the cups under only very low pressure it is often necessary to specify 1¼ to 1½ inch piping for the mains to insure a flow sufficiently fast to supply a cow at her rate of drinking, about 2½ gallons per minute. Pipe lines should be so located that they can be drained if necessary, nor is it wise to bury them under the floor. The temperature at the ceiling is usually a few degress higher than it is at the floor; therefore the ceiling is a better place along which to run such pipes. Besides, there is plenty of room for them up there.

If these suggestions are born in mind when planning such an installation increased satisfaction is sure to follow.—L. G. Heimpel.

Tile Drainage Badly Needed Now

THIS has been an unusally wet summer. In districts where land is flat there were many instances where a grain binder could be run only with great difficulty and, due to recent rains, the corn crop in these districts can hardly be cut by the harvester. Early fall cultivation when not rendered impossible, has been ineffective, to a great extent, because of the excessive amount of water in the soil, while fall plowing is almost certain to be a very muddy job on flat land. Nor are we through paying for the damage caused our lands by this year's excess of rain. A heavy soil always suffers when worked too wet and, while it is true that frost will undo a great deal of that damage by next spring, much of our heavy, flat land will go into the next year in very poor tilth and depleted of almost all available plant food. Pasture fields are being punched full of holes by horses and cattle and will bake hard as a brick next summer. It will take several years to undo the damage done to wet, undrained fields after such a period of saturation as they have undergone this year.

Tile drained lands on the other hand, came through the season very much better. On one such farm which we visited recently, harvesting and cultivation operations were carried on very much as usual though the land was flat and the soil very heavy. Owing to the fact that the land was underdrained, seeding was much earlier than on neighboring farms; this meant earlier maturity of the grain, which allowed the owner to get it in before the last of the recent heavy rains.

To plow our fields in narrow lands so as to provide surface drainage helps very little in a wet season. Yet these narrow lands are a source of much additional expense and trouble in plowing as well as in every other operation which must be performed on the fields throughout the year. Tile drainage is the only solution of this problem. Narrow lands are unnecessary on even the flattest of lands once they are properly tiled. Instead of fourteen foot lands we can use thirty yard lands or we can safely split a field in two and plow around each part. These practices allow the use of the two furrow plow, which cuts down plowing costs considerably when given a chance. The narrow lands, on the other hand, almost prohibit the use of any but the single plow. The dead furrows must be narrow, deep, and clean, so as to act as drains; these can best be made with the single plow. How much is taken out of the life of the average implement through its being hauled back and forth over the continual bump and jolt of these narrow lands is hard to estimate. But we do know what it feels like to ride a binder over such lands for a week or two and the horses also realize what it means to pull machinery over such a surface.

The Quebec Government offers substantial assistance to those who wish to underdrain their farms or part of them.—L. G. H.

THE HOME LANDSCAPE

Preparation for Winter — Bulb Planting

By M. H. Howitt, Horticultural Dept., Macdonald College.

THE frequent rains of early September will have rather delayed the planting season, but by the time this article appears it should be pretty well finished. There is still time, however, in the first week or so of this month. Fairly complete directions for various kinds of planting were given in last month's issue of *The Journal.*

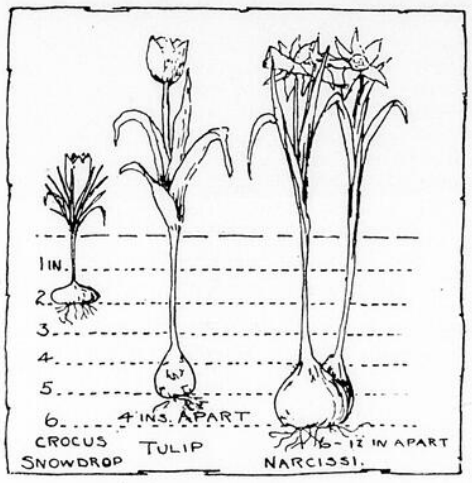
Cut the grass as long as it continues to grow. Do not let it grow so long that the dead grass will give trouble in the spring. The value of long grass as a winter protection even in a cold climate is doubtful. A little extra length, just before growth ceases, is of value in giving vigor to the grass.

Grading for new lawns should be done as circumstances permit. If the grading is already done put in a cover crop rather than leave the ground bare through the winter.

Annuals to be cleared out as soon as frost cuts them down. Dig over all vacant beds and leave them as rough as possible so that the frost will break up the soil. Dahlias, Gladioli, Cannas, Coladiums, etc., and all summer flowering bulbs to be taken up and stored away. Air dry and store in some airy place free from frost. See complete directions in last month's *Journal.* An illustration of the proper treatment of the gladiolus corm accompanies this article.

Decorative purpose plants should be brought indoors on the approach of frost.

If you are growing everlastings (Helichrysums, Gomphrenas, etc.) cut them before frost and dry them out in the sun before bringing them indoors.



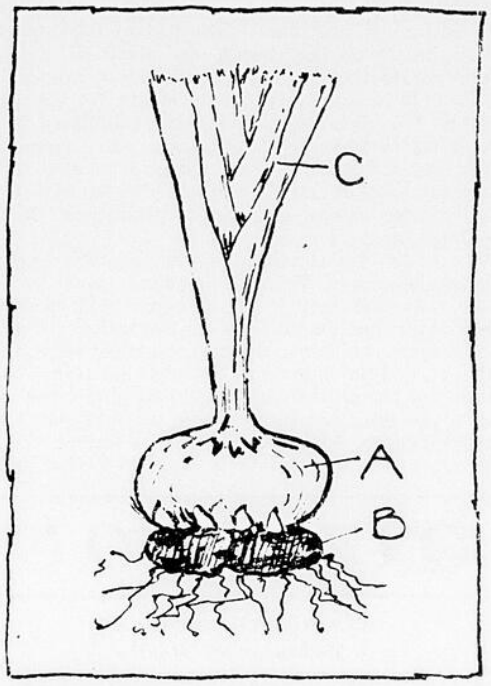
Bulb Planting

To make the home grounds attractive in the spring we must plan now and put in our bulbs. In order to have them established before winter they should be planted as soon as they can be obtained. Early planting allows them to make root growth, so that they get a good start in the spring.

Bulbs may be planted in clumps in the perennial and shrubbery borders, naturalized under the trees or on the edge of the lawn, or may be used in formal beds. In the writer's opinion formal beds should be reduced to a minimum around the farm home grounds, or better still not used at all. The other or more natural treatment of planting in clumps is far better suited to the country and just as bright effects can be produced.

A mellow, rich and well-drained soil is essential for success. They will not flourish in wet, heavy soils. No fresh manure should come in contact with the bulbs, so that only well rotted manure should be dug in in making the bed. That from a mushroom or old hot bed is good. The depth at which they may be planted depends on the kind of bulb and the size. Planting depths for the various bulbs are shown diagramatically in the accompanying illustration. In planting do not simply make a hole, push in the bulb and expect it to flower. With small bulbs this may do as they are readily pushed into direct contact with the soil. With the larger bulbs, however, as Tulips, Narcissi, etc., an air space is some times left between the bottom of the hole and the base of the bulb. In such a case the bulb is said to be "hung", a very bad condition for it to be in. Dig a trench in formal beds or make sure to use the trowel or dibble carefully and get the proper contact with the soil. Six to eight inches apart each way is a good average distance.

Plant the bulbs in bold groups, one variety to a group, in the border. They will look very well mixed with the young green foliage of the perennials. Narcissus poeticus, Daffodils and Crocus especially look well among shrubbery. Where the foliage is not too dense in spring, such as dogwood, the bulbs may very well be planted well in underneath the shrubs.



A.—The new corm.
B.—The old withered corm to be removed.
C.—Top—To be removed when it is dry enough to break off quite easily.

After the ground is frozen the beds should be mulched with a layer of leaves or litter to be taken off in the spring before growth starts.

If the beds are required for summer bedding the bulbs may be taken up carefully with the foliage on, after they have finished flowering and turned yellow or died down naturally. They should then be "heeled in", in a convenient and out of the way spot where they can ripen, or they may be planted after lifting and taken up in the fall and replanted in their original bed. Cutting off the foliage and digging too early is a not uncommon and serious mistake. When thoroughly ripened they may be dried in the sun for a few hours and stored away until fall in a cool dry place.

It is advisable to buy fresh strong bulbs of crocus, tulips and hyacinths each year, using the old bulbs for shrubberies and mixed borders.

Lawn planting and naturalizing—Crocus, squills, snowdrops and grape hyacinths are all very suitable for planting on the lawn. They may be either dibbled in, or a sod may be lifted, the bulbs planted and the sod then replaced. Beautiful effects may be obtained this way but care should be taken not to mow the lawn too closely until the bulbs have ripened.

Narcissi (Daffodils and poeticus) are very suitable for naturalizing. Naturalizing consists of planting bulbs in natural groups in the wilder parts of the garden or under trees where the grass is allowed to grow long and where they may remain undisturbed for years. They will last a long time but will require renewing when they show signs of deterioration.

Winter Protection in General

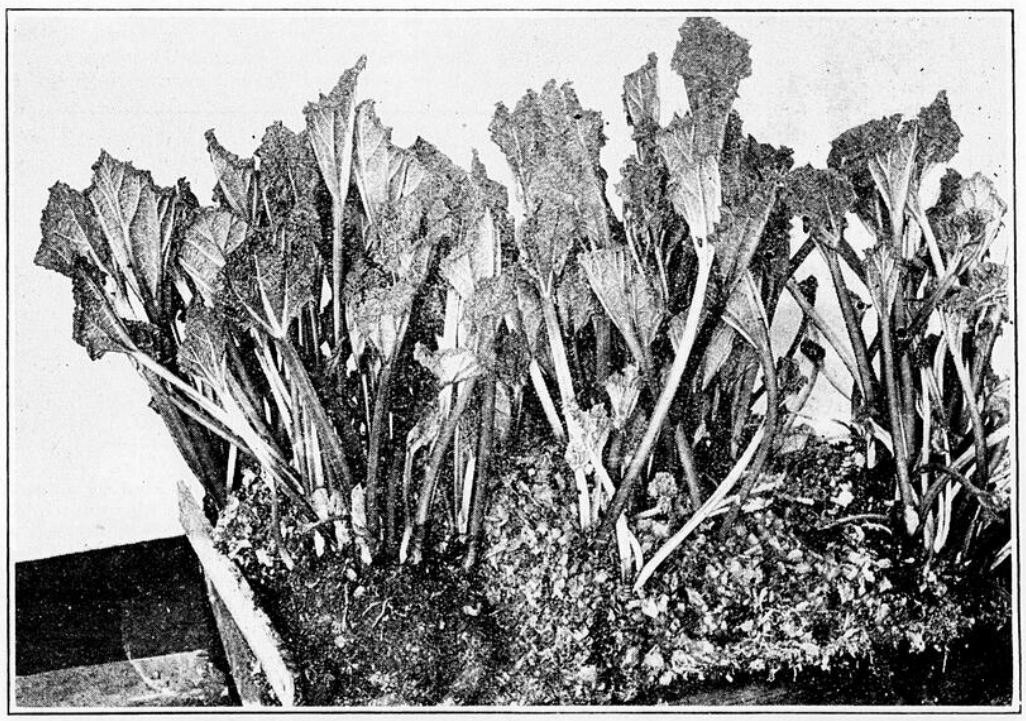
Middle to late October is the time of preparation for the protecting of roses, and the mulching of fall planted and other trees, shrubs, and perennials. Care taken to see that everything is well protected in our northern climate will prevent much loss of plant material and consequent disappointment.

Mulching material should be put in some convenient place so that it may be applied after the ground freezes sufficiently. A mulch should not be put on too early. There are two chief dangers in respect to this : 1st—During a warm spell of unseasonable weather the plants may be smothered, and 2nd—Mice are liable to start working under the cover if it is put on before the soil surface freezes. It is therefore wise to have everything ready in October, though it may happen that the protection need not go on until considerably later.

Protecting Roses.—All roses need protection in our cold climate. There are numerous methods. One is to lay the branches down carefully, weight them with bricks or stones and cover to a depth of six to eight inches with soil. This is the best method.

Another method is to cover with leaves to about a foot in depth. Boxes without covers laid upside down over the leaves and all will keep out the moisture and make a much more satisfactory job of the protecting. Where climbing roses are grown against a wall, heavy building paper, or better still, boards placed at the angle of a roof over the covering leaves will prove satisfactory. With this protection from moisture the rose will come through the winter in much better shape.

Perennial borders should be mulched thoroughly with well rotted manure every second year at least. Do not allow the manure to rest on the crown of any of the plants. Perennials are not all alike in their ability to withstand our severe winter, and we should determine just what they need in the way of protection. The kind and degree of protection depends somewhat on the situation. On a southern exposure, where the sunshine will cause frequent thawing of the surface and subsequent freezing, the need for covering as compared to a shady situation where the surface remains constantly frozen, may readily be greater. This alternate freezing and thawing is a frequent cause of injury in gardens, by heaving the roots out of the ground, as well as by injuring the plant cells.



Rhubarb may be easily forced during the winter in every cellar if a rough box is made to hold the roots and a covering of planer shavings is worked in around and over the plants as illustrated. In a series of tests the shavings were found to be equal to sand, ashes or soil and they are much lghter and easier to clean up than the other materials. Plan to try this covering when forcing the next rhubarb.
The illustration shows how the roots are set in the rough tray and the covering of shavings.

Precocity and Persistency

By W. A. Maw, Poultry Dept., Macdonald College.

PRECOCITY and persistency are two of the most important factors to be considered in our selection work. The precocious pullet is the one that matures sexually at an early age and commences to lay eggs. The persistent layer is the one that continues to lay over a long period of time, such as the twelve calendar months following the date laying commences.

Early maturity and laying is a valuable asset in economic egg production providing the females are bodily mature. If body maturity has not been attained we will find not only that females lay small eggs, but also that they are not physically fit to continue to lay steadily throughout the cold winter season. It is because of these facts that body maturity is so essential in combination with early sexual maturity or precocity. Body maturity can be attained with early sexual maturity by the proper management of the pullets in the growing stage. They must be fed heavily with grain and less heavily with such foods as milk and beef scraps, which encourage egg production.

At what age is it best to have the pullets come into production for the production of full sized eggs and to have continuous production ? Normally, the pullet should be aproximately two hundred days, or slightly over six months old. Some pullets lay at ages slightly over four months, but these are the exceptions. Of course the females of the lighter breeds such as the Leghorns mature earlier than such breeds as the Rocks or Reds which are heavier in body. All flocks of pullets being selected for winter production must be uniform in respect to body and sexual maturity so that the feeding methods adapted will be such as to bring all pullets into production at one time or at least close together.

Persistency in laying over a long period of months means high individual production and higher flock averages, as well as lower cost of production and higher returns from the flock. The persistent layer undoubtedly is as a rule the higher producer. On the other hand high producers must lay over a continued long period in order to make their record. High monthly average productions are necessary to get the high yearly average production. This emphasizes the importance of proper management of pullet flocks during the late fall and winter months in order to get winter eggs. At the same time fall and winter eggs are the commercial eggs and the commercially high valued eggs. Non-persistent layers may or may not be winter layers. Those that do lay during the fall and early winter as a rule stop laying early in the summer and go into a moult. Early moulters are generally expensive boarders in the flock during the summer. They should be culled out and sold, unless they have proved their value as high winter producers and breeders that have laid a fairly high yearly production and may make valuable breeders along those lines for another year. Persistent layers either do not moult at all until their production is completed or else they take on a partial body moult while still laying, and hold their main wing and tail feathers until laying has ceased.

Where the laying flock is not trap-nested to record the date laying commences or ceases, it is necessary to divise some scheme by which such records can be made. It is quite easy to ascertain whether a pullet is laying or not upon physical body examination. The external body characteristics such as head parts, comb and wattles, designate the approach of laying condition. The condition of the vent and abdomen will designate whether laying has actually started or finished. In starting to lay the abdomen becomes soft and pliable, the pelvic bones spread apart, and the vent becomes dilated and moist. When laying is ceasing the reverse happens, the abdomen draws up, the skin becomes dry, the pelvic bones close in and the vent closes to a dry puckered condition and takes on a yellow color denoting that the yellow color is returning to the skin. We can therefore discover by individual examination at regular intervals, as to whether the females are laying or not. Since this is possible a method of marking the females to denote laying commencing and finishing and the approximate date of same happening must be adopted. The following system has been worked out and serves the purpose fully :

Four different colors in celluloid key ring leg bands are used, each color denoting a different month. For example, the blue band is used for September beginners, the red band for October beginners, the green band for November beginners, and the black band for December beginners. This allows for a color for each of the four fall and early winter months, during which time all pullets should have commenced to lay. If the pen of birds was examined previous to the end of each month all beginners during that month could be marked according to the color schedule. This examination would only be necessary once a month for the four months. The birds not starting before January first, providing they were of the same ages, could be separated and sold as meat or kept separated from those intended as breeding stock. The bands representing precocity or starting of production should be placed on the left leg.

The same idea can be used for the recording of the persistency of laying. The colors would be the same, only that they would be reversed in use, the black being put on the July quitters, the green on the August quitters, the red on the September quitters, and the blue on the October quitters. These bands are put on the right leg to designate the different meaning of persistency in place of precocity on the left leg. After this has been done we can at once spot the individuals in the flock that commenced early or late and finished early or late as the case may be. You will also be able to note that some start early and lay late, laying over twelve months, whereas others start late and quit early. This allows for a valuable record being kept without the use of trap-nests or book records of hen numbers. It is a practical application of important breeding record work, most essential to improvement work, which can be adapted to any flock by any person with little extra time spent.

TABLE OF COLOR BREEDING

Precocity	*Persistency*
Left Leg	Right Leg
Laying Commences	Laying Finishes
Sept. — Blue	July — Black
Oct. — Red	August — Green
November — Green	September — Red
December — Black	October — Blue

The use of some such methods of recording such factors as precocity and persistency in laying will do a vast amount of good in the improvement of our farm flock average egg productions in the course of a very few years' work. These factors are generally thought to be hereditary and are handed on from generation to generation, hence their value in improvement breeding work.

OUR YOUNG FOLKS

MOONBEAM FROLICS

A Medley of the Months

By Dorothy S. Dunford

ERIC was only a very ordinary little boy. He wasn't fond of school and didn't like lessons, of which he hated Latin in particular. He thought life would be fine if there were no schools and he were free to wander in the woods at the back of his father's farm, where he could read his favorite books to his heart's content.

One night, when the moon was shining brightly and fairly coaxing him to come out, he had the usual lessons to prepare for the next day and he thought it pretty hard not to be able to seek for adventures out of doors.

"Come to our party, come to our party." Eric rushed to the window and looked out into the garden, where he saw a great crowd of people, who all seemed to be calling to him. Their leader was an old man, with a scythe in his hand, who beckoned to the boy. "I am Father Time," he said, "and I am giving a party tonight for the Months in the clearing about a mile away. My guests and I would like you to come too." The others by this time had disappeared. Eric crept downstairs and his new friend took him by the hand.

"We must be quick, or we shall miss some of the fun," said Father Time. They hurried along and presently came to the clearing, which was covered with beautiful grass and surrounded by trees.

It was a gay sight. All sorts and conditions of men were there. Right in the middle of the lawn four people were having a merry dance. Each had a band round the head bearing the numbers 7, 8, 9 and 10 respectively. "Seven" wore a wonderful robe of many colours—a riot of red, gold and mauve—which dazzled the eyes; "Eight's" dress was a blaze of colour, too, for it seemed to combine every conceivable shade of brown, red and yellow; "Nine's" costume was brown and it fitted her to perfection; while "Ten's" dress was grey. They pranced around madly for some time, and at first it seemed as if the two gaily coloured ones would outdance their more sober sisters, but at last they sank laughing and exhausted on the grass and the other two stood and watched them. "Nine and Ten always get the better of us," they gasped.

"Who are they and why do they wear numbers on their heads?" asked Eric. "Their names are September, October, November and December, and they wear those numbers because they are the seventh, eighth, ninth and tenth months of the year," said his host.

"How queer, for I thought September was the ninth month..." Before he could say any more the four came up to the boy and said: "Don't you learn Latin at school? Septem is 7, octo 8, novem 9 and decem 10, and *we* be'ong to the *Roman Empire*. The first month in *our* year is March." Eric didn't say a word, for he thought of all the Latin he had skipped and wondered whether he might not find it interesting after all if he stuck to it.

Suddenly a roar was heard and a fierce looking man with a red face rushed into their midst. He was shouting at the top of his voice and making everyone feel most uncomfortable. However, when Father Time mildly asked him what was the matter, he calmed down a little and said he had been visiting friends and didn't receive his invitation until so late that he had to rush along to be in time. Eric wasn't sure whether he cared for this latest guest, for he seemed so angry, but as he watched him he found that his face gradually changed until he looked quite gentle.

"That is March," said Father Time, who had been watching the boy's bewilderment. *"He comes in like a lion, but goes out like a lamb.* You see he was called 'March' by the Romans after Mars—the God of War—and he feels he has to make a noise to keep up the reputation of his Godfather. If you speak *peacefully* to him, he always subsides"

Eric's attention was next attracted by a lovely lady, who stood by herself in a corner of the clearing. She seemed to be surrounded by a light, shimmering mist, which had a most peculiar effect on her dress, for sometimes she appeared to be garbed in silver grey and sometimes in the palest of greens. The most curious thing about her was her face, for at one moment it was wreathed in shy smiles and then, without any warning, it was flooded with tears.

"Whoever is that ?" exclaimed Eric. "That is April," said Father Time. "She was called so by the Romans, because during that month the buds began to open after their long winter's rest. There is a Latin word 'aperire' meaning to open." "How beautiful she is, but I wish she wouldn't cry so much," said the boy.

Eric was privately thinking that he was having a pretty good Latin lesson and, looking round to see what else he could learn, he observed two men, evidently Roman soldiers, who bore themselves very

Essay-Writing Competitions For Our Young Folks.

New Competition Each Month — Money Prizes Offered — Outline of Rules.

1. Each month a subject will be announced upon which rural pupils of fifteen years and under will be invited to write essays or compositions. These should be mailed to THE EDITOR, THE JOURNAL OF AGRICULTURE, MACDONALD COLLEGE, QUEBEC, before the end of the month.

2. Fives prizes will awarded each month : $3.00, $2.50, $2.00, $1.50 and $1. The prize wining essays will then be published on our Young Folks Page

3. Essays should be accompanied by a letter from parent or guardian certifying as to child's age, and stating that the matter and work of composition embodied in the essay is work of child only... (Note : name and address of parent is always necessary for postal directions in case of prize winners.)

4. That our young folks may learn thrift, it is suggested that the money won in these competitions be used by them for starting bank accounts.

SUBJECT

"How I spent my Summer Holidays"

Note :—Prize winning essays will be published in the December 1st issue of The Journal.

proudly and did not seem to mix well with the company. "Those two are July and August. They were called after the Emperors Julius Caesar and Augustus. They appear stand-offish, but they are really not so bad when you get to know them."

While the old man was explaining all this there were shouts of laughter coming from a group of girls and boys, who were pelting a pretty woman with flowers. She seemed to be almost smothered in blossoms and was enjoying the fun as much as anyone. Eric wondered which month she was, but felt so ignorant that he did not like to ask his friend. "Afraid of more Latin, Eric ?" said Father Time slyly. "That is May. Her Roman godmother was Maia, the mother of Mercury. She is awfully fond of flowers and at all the parties the boys and girls have a battle of flowers with her."

A sad looking woman now arrived at the party. Father Time went forward to greet her. "Why, February, I thought you were not coming." "I don't go to many parties," she replied, "but I thought I might make an exception in this case. Besides, I wanted to see Eric. I know he is wondering why I am called February, so I will explain. In the days of the Roman Empire I was the twelfth month of the year and during my term of office the Romans held their festival of Februarius, which was really a period of expiation. Eric doesn't know any Latin, so I'll tell him there is a Latin word 'februare' to purify."

The three of them strolled over towards two groups of people who were quarrelling violently. The first was led by a proud looking woman, who was seated in a chariot drawn by magnificent peacocks, and she was surrounded by beautiful maidens; the other was composed entirely of young men. "Now then, now then," said Father Time, "I can't have my party spoiled by your bickering. Forget your grievances for awhile." "Why are they quarrelling ?" asked the boy. "Oh, they both claim that the month June was named after them. She, in the chariot, is the goddess Juno, and the young men are the followers of Junius Brutus, who divided all the men of Rome into two classes—Seniors and Juniors."

"The only month I haven't seen yet is January," said Eric. "I wonder if he is at the party." Father Time told Eric to follow him and presently they came up to an extraordinary looking person. He had only one head, but two bearded faces. One face, which appeared to be looking at the past, had a regretful expression, as if reflecting over wasted time, but the other face, looking towards the future, was full of hope. "Tell Eric about yourself," said the old man. "I am January. I, too, belong to the Roman Empire. I was called 'Januarius' by the Romans, in honour of their two-headed god Janus. I was the eleventh month in their year."

"Good-bye, good-bye, we must be going now." The figures all seemed to fade away and Eric rubbed his eyes. He looked around him and found that the clearing had disappeared and he was back in his own room, with his Latin grammar open in front of him. "I suppose I must have been asleep and dreaming. It was a jolly fine dream, though, and I guess I had better tackle my Latin lesson now. I simply must find out whether there really is a Latin word 'aperire' to open !"

The Saguenay District

Dear Boys and Girls :—

THE Editor of the Journal told me before I left Macdonald College that he would like me to write something for you young folks after I came up here to work at Kenogami. Well, here I am in Kenogami all right but it does not seem very easy to think of anything that would be of very much interest to you. I have made up my mind that the best thing I can do is write you a friendly letter and let you be the judges as to whether it is interesting or not.

Ever since I left Montreal on the boat to come up here I have been seeing and learning many new things which I had not noticed or heard about before. I had travelled over most of Quebec south of the St. Lawrence river and thought I had seen most of the Province, but I find that there is a country north of this mighty river which is even larger and also very much different.

If you will take your geographies and turn to the map of Quebec you will see how true this is. The first historical place we stopped at after leaving the ancient city of Quebec was Tadousac. I had often read about this settlement in my history book but had never expected to see it. It was here that we turned up the Saguenay river, but before we started our trip between its rock bound shores we stopped at Tadousac for about twenty minutes. I would have liked to stay much longer to see the many old, historic places for this village is one of the oldest out-posts of early days.

In 1600 the first trading post was established there, over three hundred years ago, by Pierre de Chauvin who came out from France. Years before this, however, Spanish fisherman and traders had visited this spot and traded with the Indians who came down the Saguenay from the great country which stretches back from its shores. Here they bartered their furs, and other goods for the knives, blankets, biscuits, raisins and porcelain beads of the traders. There also came here the brave priests, filled with a desire to meet these roving savages of the north, and if possible, convert them to the Christian faith.

We find that Tadousac went through many ravages from fire and disease, and that at times it was deserted for years. In the 17th century it became more important and was the headquarters for the fur trade, the centre of the missions of the Saguenay, and the spot from which these brave pioneer priests departed to visit the tribes of this vast northern country.

But I must not bore you with too much history so we shall pass on up this majestic river with its towering shores and mountains, its mysterious shadows and gloomy bays, its deep silence and its wonderful sunsets. This river has an Indian name which means "the river of death" and the name is a very suitable one. Most of my trip up the river was taken after dark so I did not see as much of the scenery as I would have liked. Although it was very dark the captain brought us all safely to our stopping place which was Bagotville a short distance below Chicoutimi.

Leaving our very comfortable steamer, we took a train and soon arrived at Jonquieres which is quite close to the place where I am now working.

And now just a few bits of news about the things I have seen and heard since I came here. Kenogami is about 200 miles north of Montreal and so you might think that no nice flowers or vegetables could be grown here. I was very much surprised to find that these can almost all be grown up here to perfection. At the horticultural show I saw just as excellent vegetables as one would see at Sherbrooke or most of the other large fairs. Of course, the season is short and they cannot grow corn or tomatoes as well as futher south.

Up here we never see an elm or a maple tree. It seems to be too far north for them. Their place is taken by the white birches, the poplar and the evergreens of different kinds. Raspberries grow in abundance and of course the crops of blue berries are almost unbelievable.

You may also be surprised to know that there is a great deal of good farming land and that the crops are quite heavy. They are later in ripening and this year are exceptionally late owing to the cool summer. The oat crop grows just as strongly here as else where and hay does extra well. The strange thing about a lot of the land is that it is so high up above the river, and yet is so good instead of being sandy or rocky. The houses and barns on the farms would be just as good as the ordinary buildings on other farms in the south of the province. I only tell you these things because we are too apt to think that if a country is farther north than our own it must be too cold and rocky to be any good for farming.

The two biggest industries of this country are the production of electric power by damming the very large rapids and falls of its mighty and many rivers, and the production of paper from the evergreen timber growing in the forests. One of the biggest power plants in the world is now being built just below the spot where Lake St. John empties into the Saguenay river. When the plant is completed about 1,000,000 horse power will be ready to turn the motors of every kind of mill, or light the homes of people hundreds of miles away.

The mill here turns out the paper on which newspapers are printed. A vast stream of pulpwood enters this plant every day and comes out in large rolls of paper about 19 feet wide. This is then cut into rolls over 6 ft, in width, and shipped out in cars to the various places in the States and Canada. There are 7 machines in the mill and one of them has turned out 110 tons in 24 hours. Much of this paper also goes to England by boat. It is shipped from Chicoutimi in large cargo boats which come up the river that far. Of course Chicoutimi is an Indian name and it means "It is deep up to here".

Well, there are lots of other bits of news I would like to send you but I must stop for now. When I start judging your compositions next month I shall try to send along some more with my report. I would be very glad if some of you would send me a letter in reply to this one as sometimes I get a bit lonesome up here for a little news from "home".

Good-bye for now, and best wishes for success in your work at school and at home.

J. EGBERT McOUAT.



"Never mind, John, I found the key."

Dairying in New Zealand

THE following notes are taken from the last report of the National Dairy Associtaion of New Zealand:—

"The past season (1923-24) was rather unfavourable for the production of milk and the returns from the graders stores show a decrease of 3 percent as compared with the previous year putting butter and cheese both on a butter fat basis.

In New Zealand it is safe to say that in ordinary seasons there will be a steady increase in the production of butter. The manufacture of cheese will fluctuate within certain limits, but with the universal adoption of home separation it is doubtful if there can be any great increase in cheese production.

The season has been a trying one for factory managers in many districts and very considerable difficulty has been experienced in keeping up the quality of both butter and cheese. Speaking generally the industry has every reason to be proud of its factory managers, and when up against difficulties as above mentioned, they have left no stone unturned to enable them to keep up the Dominion's high standard of quality.

Woman's World

THE CLEANING CLOSET

May Chute Maw

"CONSERVATION of time and energy is obviously one of the problems of the housekeeper. Time and strength may be saved in two ways, first by taking thought as to the way one uses strength, and second by making use of labor-saving equipment. This may easily make the difference between a tired, overworked housekeeper and one who has some time and energy left for reading and recreation after the day's work is done".

A very valuable piece of labor saving equipment is the cleaning closet. Entrance of dust and dirt into a house is unavoidable, and some time must be spent every day in cleaning. The modern housekeeper insists on plenty of closet space for clothes and linens, but very often the cleaning closet is forgotten. This closet should be near the kitchen and easily accessible to all parts of the house. It should be well lighted and so situated that it allows of ventilation.

The modern house with the cleaning closet specially built contains many labor saving devices, —a deep sink where all water used for cleaning purposes may be emptied, a garbage can, a shelf or drawer for cleaning cloths, etc. If a house does not contain such a closet a place can usually be found where one can be built, or a cupboard or wardrobe placed and made into a satisfactory one. The closet should be high enough to accommodate long handled brooms and mops hung up, with additional space above for a shelf. It should have plenty of hooks and racks for utensils and shelves for cleaning materials.

The following equipment is suggested for the cleaning closet, and every housekeeper should choose utensils according to her own needs and the requirements of her house :

A. Utensils—

1. Brooms—Two types of brooms are necessary, the *corn broom* and the *hair broom*. The *corn broom* is used only for sidewalks, cement floors, stone floors and soft wood floors that have not been properly finished and the wood is "splintering". Hanging the broom will do much to lengthen its wear; and if a new broom is plunged into a pail of hot water and allowed to remain in the water until it is cold, it seems to have a greater power of endurance. With a hot wire or skewer, bore a hole into the broom handle and insert a heavy string with which to hang the broom. The *hair broom* is used for all finished wood, tile and linoleum sweeping. It has hair bristles and does not scratch the floors. It should be hung, head up, on a rack in the closet.

2. Brushes—A *short handled hair broom* or bannister brush is used for sweeping waste into dustpan, sweeping stairs, etc. A *furniture or upholstery brush* for wicker and upholstered furniture; a *whisk* for cleaning heavy fabrics; a *radiator* brush for cleaning between radiator pipes; a *scrub brush;* a *lavatory brush* for the lavatories, a *stove brush* for the stoves, a *wall brush* to clean walls, mouldings and ceilings; etc.

3. Carpet cleaners—A corn broom is used in many homes for cleaning carpets and rugs, a *carpet sweeper* or better still a *vacuum cleaner* makes the work much easier. The vacuum cleaner removes practically all dust and dirt from carpets in a dustless manner and is a very easy and efficient way of cleaning not only carpets but upholstered furniture, heavy hangings, and mattresses.

4. Mops—Two types of mops are necessary, the *dry* mop used for dusting wood floors; and the *wet* mop for cleaning tile, linoleum, etc.

5. *Dust-pan*, long handled, with trap; *pails, pans,* etc.

6. Stepladder.

B—Cleaning Supplies—All cleaning supplies should be carefully labelled.

1. *Abrasives*—used for all scouring purposes and including sandpaper, steel wool, polishes, scouring powders (Dutch Cleanser, bath brick, whiting, etc.) and friction soaps.

2. *Acids*—Vinegar, oxalic acid, etc.

3. *Alkalis*—Ammoni, washing soda, borax, etc.

4. *Varnish*—floor wax, furniture polish, etc. These all have various uses which will be discussed in later articles.

C. Cleaning Cloths—All cleaning cloths should be soft and absorbent.

1. *Scrub cloths* for washing sinks, tubs, and tables.

Pine Trees

Down through the heart of the dim woods
The laden, jolting wagons come.
Tall pines, chained together,
They carry; stems straight and bare,
Now no more in their own solitudes
With proud heads to rock and hum;
Now at the will of men to fare
Away from their brethren, their forest friends
In the still woods, through wild weather
Alone to endure to the world's ends;
Soon to feel the power of the North
Careering over dark waves' foam;
Soon to exchange for steady earth
Heaving decks; for the scents of their home.
Honeyed wild-thyme, gorse and heather.
The sting of the spray, the bitter air.

L. Binyon.

2. *Floor cloths*, regular floor flannel may be bought for this purpose; there are often, however, old pieces of flannel in the house which may be used for this.

3. *Scouring cloths*—When dish cloths, etc. become too worn for use they may be torn up and used as scouring cloths.

4. *Lavatory Cloths*—used only for washing lavatories.

5. *Dusters*—Dusters should be soft, clean, non-scratching, and nonlinting. Cheesecloth, worn silk and flannelette may be used for making the dusters or dustless dusters may be used.

The cleaning closet should be cleaned once a week and everything put away clean and in its proper place. *Brooms and brushes* should be brushed with a whisk every time after using and washed carefully as often as is necessary. To wash,—wash by shaking them up and down in cool water to which a few drops of ammonia have been added. Rinse in cool water and shake out all the water possible. Stand in the air to dry with bristles down in such a way that the water will run out of the bristles away from the back. Very soft-fibred brushes had better be hung with bristles down to dry, as the bristles would spread under the weight of the back if it stood to dry.

The *carpet sweeper* and *vacuum cleaner*, — the brushes in sweeper should be brushed with a whisk each time after using and the sweeper emptied and cleaned thoroughly as often as necessary.

Mops,—The *dry mop* should be well shaken each time after using and washed as often as is necessary. The *wet mop* should be washed each time after using.

All *supplies* should be put away clean and each in its proper place. The *cloths* should have special care each time after using and sent to the laundry once a week.

CHEESE RECIPES*

Delicious Ways to Cook and Serve Canadian Cheese

CHEESE FONDU A LA SAVARIN

GRATE enough well flavoured Quebec cheese to fill four tablespoons rounding full. Put it into a saucepan with one tablespoon of butter and at once break in four eggs. Season with salt and pepper and scramble the mixture. Dish it the second the eggs are "set". This is tempting and satisfying on buttered toast or toasted crackers.

CHEESE RAMIKINS

Roll pie pastry out thin and cover with grated Quebec cheese, fold it over itself and roll again. Do this twice, then cut it out with biscuit cutter and bake. Nice for luncheons.

FRENCH SCALLOPS

Crumb stale bread and soak it in a batter made with one cup of milk and two eggs, one tablespoon of butter, melted, and one quarter pound of Quebec cheese grated. Season with pepper and salt. Mix thoroughly and pour into scallop shells or patty pans, cover with buttered crumbs and bake in a moderate oven until brown and light.

SCALLOPED CHEESE

Three slices bread well buttered, one pound of Quebec grated cheese. Lay bread in layers in a buttered baking dish, sprinkle with grated Quebec cheese, salt and pepper to taste. Mix four well beaten eggs with three cups milk. Pour over bread and cheese. Bake in a hot oven as you would bread pudding. This serves four persons.

SCRAMBLED EGGS WITH CHEESE

One-half doxen eggs one-half cupful of grated Quebec cheese, two tablespoonfuls of butter, one-half teaspoonful of salt, six tablespoonfuls of cream, and pepper. Beat the eggs well, and add the salt, pepper, and cream. Melt the butter in a pan, and when hot turn into it the egg mixture. Stir it as it thickens. When almost done, sprinkle in the cheese. Stir for a moment longer, and then turn it into a hot dish, and serve.

CHEESE OMELET

Beat three eggs well; if the yolks and whites are beaten separately the omelet is lighter; add three tablespoonfuls of grated Quebec cheese, pepper and salt. Pour into an omelet pan into which two tablespoonfuls of butter has been melted and skimmed. Stir until the omelet begins to set, fold one-half over the other crescentwise, allow to brown slightly on both sides, and serve immediately.

BAKED CHEESE

Buttered bread, one egg, 1½ cups dried Quebec cheese, three-quarter cup milk, salt and pepper to taste. Butter a baking dish or casserole and line it with buttered bread. Put in cheese; beat egg, add to it the milk and seasoning. Pour over cheese and bake in a moderate oven until the cheese is melted and brown.

CHEESE CAKES

Two tablespoons butter, three and one-half tablespoons flour, four tablespoons grated Quebec cheese, whites of three eggs, one-quarter teaspoon salt, few grains cayenne.

Melt butter, add flour, and stir until well blended. Remove from range and add cheese, salt, and cayenne. Fold in whites of eggs, beaten until stiff, and drop from tip of spoon on a buttered sheet one inch apart. Bake in a moderate oven twelve minutes. Serve with salad.

WELSH RAREBIT

Half pint milk; one-quarter pound Quebec cheese; one teacupful bread-crumbs; salt, pepper, half teaspoonful mustard; toasts.

Place the milk and cheese, with the seasonings. in a saucepan, and heat until the cheese is melted. Add the crumbs and make all thoroughly hot. Spread the mixture on toasts and serve immediately.

MACARONI TURNOVERS WITH CHEESE

Two ounces macaroni, one gill of milk, salt and pepper, one tablespoon butter, one tablespoon grated Quebec cheese, one saltspoon mustard, a little cayenne. Break macaroni into very small pieces and cook in salted boiling water till tender. Strain, add the butter, milk, cheese and seasoning. Mix well. Make a short pie crust, roll it out thin and cut into squares. Put a spoonful of the mixture in centre of each square. Fold over the edges and bake a golden brown.

CHEESE WITH CORN

Cook one tablespoonful of chopped green peppers, either fresh or canned, in a tablespoonful of butter; have ready a sauce made by thickening two cupfuls of milk with quarter of a cupful of flour, and add to it one cupful of canned corn, one cupful of grated Quebec cheese, the beaten yolks of three eggs, half a teaspoonful of salt, the cooked peppers, and last of all the whites of the eggs stiffly whipped. Turn into a buttered baking dish and bake for thirty minutes in a moderate oven.

CHEESE AND TOMATOES

Three tablespoonfuls of grated Quebec cheese, four ripe tomatoes, two eggs, one tablespoonful of butter, salt and paprika to taste. Skin the tomatoes and rub them through a sieve, add the cheese, salt, paprika, and eggs well beaten. Melt the butter in an earthenware dish, pour in the mixture, and bake in a moderate oven for ten minutes. Serve immediately.

SALT CODFISH AND CHEESE

Cut one-quarter pound of shredded salt fish into one quart of boiling water for five minutes, drain on a sieve and press out water. Heat two tablespoons butter in a saucepan, add two tablespoons

*The cheese recipes given herewith are from a booklet of the same name prepared and sent out, by A. Desilets, B.S.A., Chief of the Home Economics Service of the Quebec Department of Agriculture, in connection with the Provincial Cheese Campaign, of which mention has been made in our columns from time to time.

flour, stir well while heating for a moment, pour in one cup hot milk, stir well until it comes to a boil; add codfish, season with a little cayenne pepper and grated nutmeg, mix well and let cook 5 minutes longer, pour into a baking dish, dredge with two tablespoons of grated Quebec cheese; divide tablespoon butter into small pieces on top; set in oven ten minutes.

CAULIFLOWER CHEESE

One cauliflower; quarter pound grated Quebec cheese; pepper, salt, mustard.

Place one large cauliflower in a kettle of boiling water with a little salt. Cook until it can be removed from the kettle without breaking, take it from the stems and lay it in small pieces, in a deep round dish. Cover it well with grated Quebec cheese that has been seasoned with pepper and a little mustard. Put in oven and bake until brown.

CORN MEAL AND CHEESE

One pound of yellow corn meal; quarter pound of Quebec cheese (one cupful grated); one tablespoonful of salt; two quarts of water.

Put the water in the top of a double boiler; when boiling add the corn meal slowly; boil until thick. Set the top of the boiler into the bottom, and boil for one hour; remove from the fire; add the salt, and the Quebec cheese which has been grated or put through a food chopper; stir until the cheese is melted, pour into brick pans which have been brushed with drippings; smooth the top and brush with drippings to keep from forming a crust. When cold cut in half-inch slices and brown on a hot, greased griddle.

OATMEAL WITH CHEESE

Put one quart of boiling water and teaspoon of salt over a quick fire; gradually stir in two cups of rolled oats; continue to stir until the mixture thickens somewhat, then cover and let cook over boiling water, about two hours. When about ready to serve stir in one cup of grated Quebec cheese and a tablespoon butter, and, at the last moment before serving, fold in one egg, beaten light. Serve with milk or thin cream as the main dish at luncheon or supper.

BAKED EGGS AND CHEESE

Six hard cooked eggs, one cup medium white sauce, half teaspoonful salt, quarter teaspoonful pepper, one cup grated Quebec cheese. Cut the peeled eggs into rather thick slices. Butter a casserole, add layer of sauce, then a layer of sliced egg, then grated cheese. Repeat until the baking dish is full. Place buttered crumbs on top. Bake in a moderate oven until the cheese melts.

Celery

FOR many years celery was considered to have little food value and was principally served as a relish. Many people still think of it as such, but it is now known to be rich in vitamins, mineral substances and cellulose, all of which play an important part in keeping the body healthy.

Celery should be white, crisp, and firm when purchased. As soon as it comes from the market or garden, cut off roots, separate stalks and cut off leaves, wash and if necessary scrape the stalks. Place in cold water until crisp, drain and place in a covered container or wrap in a damp towel and put in a cold place.

Every part of the celery should be used,—the root washed and used for flavoring soups, salads, stews, etc.; the leaves carefully washed through several waters, dried slowly, stored in glass jars and used for flavoring soups, stews, etc.; the outer stalks cooked and served raw. The water in which celery is cooked should be made into soup.

Cream of Celery Soup

1½ cups celery	2 tablespoons butter
3 cups water	4 tablespoons flour
2 cups milk	Salt and pepper

Cook celery in boiling water until very soft, press through a strainer (there should be 2 cups stock and pulp). Melt butter, add flour and seasoning, stir well together, then add milk gradually, cooking mixture until smooth after each addition of milk. Stir and cook until thick. Add celery and reheat. The outer stalks and green leaves of celery, or dried celery leaves (1 tablespoon to 1 cup boiling water) may be used.

Creamed Celery

2 cups celery	Salt and pepper
2 tablespoons butter	1 cup milk, or
2 tablespoons flour	½ cup milk and ½ cup water in which celery is cooked.

Wash, scrape and cut celery stalks in one inch pieces; cook until soft in a small amount of boiling water. Drain, make a sauce of remaining ingredients, add celery and reheat. This may be served as a vegetable or on toast.

Celery Scallop

Make as for Creamed Celery, pour into a greased scallop dish; cover with grated cheese or mix cheese with sauce; brown in a hot oven.

Celery Salad

Select small stalks of celery having deep grooves, wash, dry, and cut in two-inch pieces. Fill stalks with Cream Cheese, mashed and seasoned with salt, pepper and salad dressing. Serve (two for a serving) on lettuce leaves. Or, make cheese into balls and arrange the celery and cheese balls on lettuce leaves.

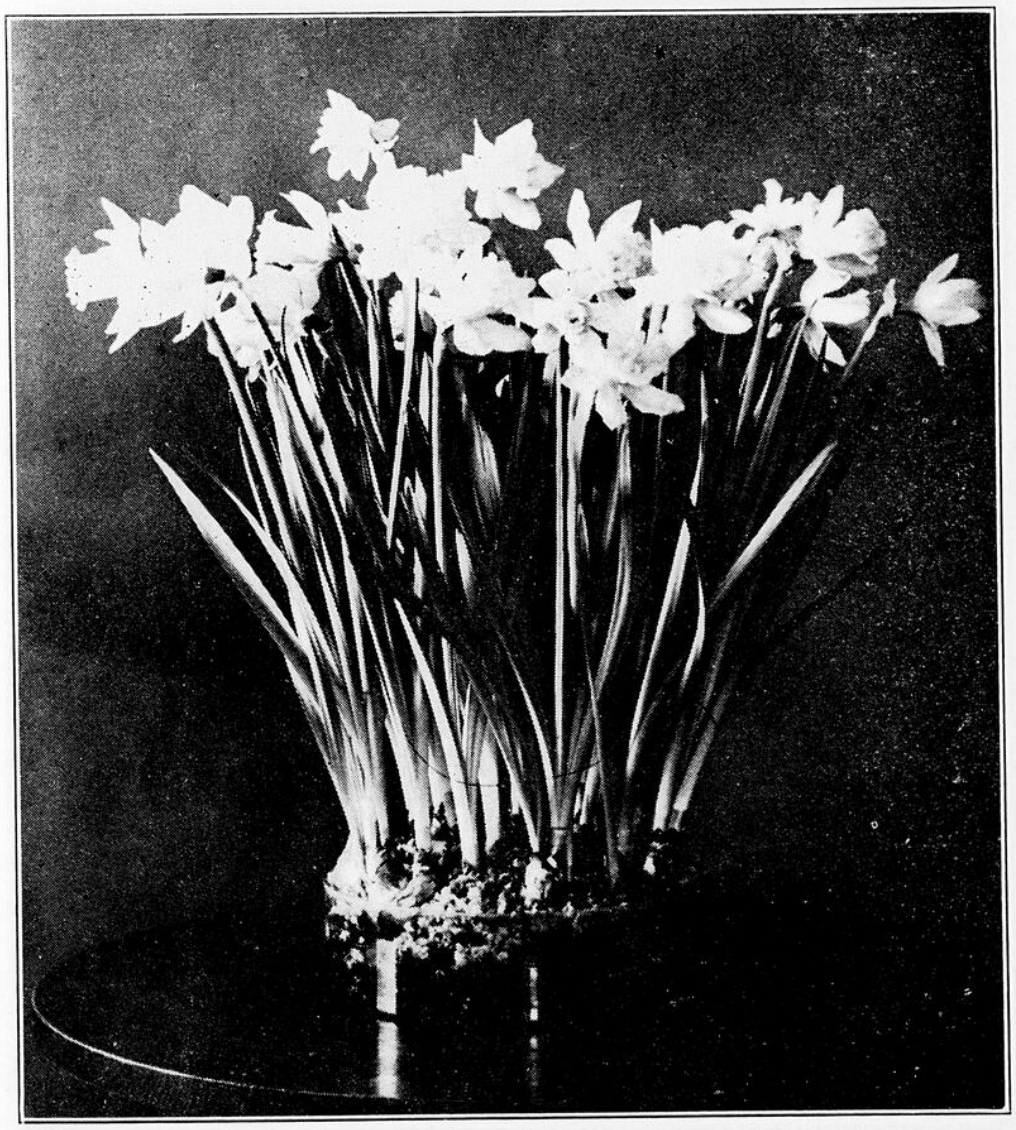
Celery may be diced and mixed with chicken, lobster or any vegetables and served as a salad.

Celery Sauce

1 peck ripe tomatoes	1 teaspoon cinnamon
4 onions, medium sized	1 teaspoon allspice
2 heads celery, large	1 teaspoon cloves
2 cups brown sugar	¼ teaspoon cayenne
1 quart vinegar	2 teaspoons salt

Wash and peel tomatoes and cut in small pieces. Add onions and celery chopped together, then other ingredients. Simmer slowly until thick, then bottle.

M. C. M.



This beautiful bunch of daffodils is one of two lots grown last spring by Miss Philp and Miss Babb of the School of Household Science, Macdonald College, in gravel. Large glass petri dishes were used for pots. These were simply filled with ordinary gravel, and the bulbs planted in this and kept watered. The dish shown in the photograph had twenty-six blooms when all were out; the other dishful had thirty blooms.

Report of Quebec Women's Institutes

IT has been said that Women's Institute members form the busiest group of women in the world. The truth of this statement is no doubt the reason why so few of the branches have reported their August Meetings and in some cases no meeting has been held during this busy month.

ARGENTEUIL COUNTY

Argenteuil has made two quilts to the sent to the Children's Home. An interesting paper was read giving an account of the first paper mill in Canada. The Roll Call was answered with helpful hints on doing housework.

Jerusalem-Bethany had an interesting report of the June Convention and voted the sum of Five dollars to the Local School Fair.

Lakefield. This club also contributed money to the School Fair. The County President was in attendance and gave some helpful advice.

BONAVENTURE COUNTY

Cross Point. The August Meeting took the form of a Picnic and was much enjoyed. Fifty additional chairs have been ordered for the Community Hall. This branch is planning much Community work after the busy season is over.

Port Daniel. This Club is making extensive plans for a Bazaar, which is to be held soon. This branch has passed a resolution barring some of the modern dances from entertainments given under the auspices of the Women's Institute. One new member has joined.

BROME COUNTY

Foster's and *South Bolton's* chief interest is School Fair work this month.

McNeil's Crossing discontinued their meeting during the summer months.

Abercorn. This new branch is taking up Women's Institute work in the different departments and has appointed convenors. They have added two new members.

CHATEAUGUAY COUNTY

Howick. This club is always doing something interesting. Their Annual Picnic was something unique and we will try to give an account of it later.

The usual plans are being made for the School Fair.

COMPTON COUNTY

Brookbury. This Club, through the Child Welfare Convenor is giving assistance to a family of motherless children.

Canterbury. This club was given assistance to the Baseball Team. Roll Call was answered by each member giving One dollar and telling how she earned it. A visit from the County President was much enjoyed.

MEGANTIC COUNTY

Crawfordville. Plans were made for a Social Evening and a paper entitled "It must be done" was read. The remainder of the time was spent in making arrangements for the School Fair. *Lemesurier* held its August meeting on the 26th. One new member joined. Plans were made for offering Prizes in the Schools and for the School Fair. Teachers are being assured of the Institute's interest and support.

HUNTINGDON COUNTY

Huntingdon. Papers and a Demonstration on

"Canning" made a most interesting programme. One new member joined.

Dundee. This branch reports holding an enjoyable picnic and ice cream social. Plans are made for a Bazaar. A paper was read entitled "Good Reading", its influence in the family."

SHEFFORD COUNTY

Shefford Mountain held a most successful lawn social, the proceeds of which amounted to $108.37, Twenty-five dollars has been given to the Girls' Industrial School at Sweetsburg; Twenty-five dollars to the Orphan's Home at St. Hyacinthe and Thirteen dollars towards School Prizes for the coming year.

Granby Hill reports holding a Lawn Social the proceeds amounting to One hundred and sixty-five dollars. Assistance is being given to the Sweetsburg Hospital and also the Sweetsburg Industrial School.

SHERBROOKE COUNTY

Ascot is planning to hold a Reception for the Teachers at the beginning of the school year. The subject of Medical Inspection is being investigated. A paper "Value of Eggs in the Diet" was read. One new member joined.

Ascot Girls are already planning for a Christmas Sale. The Girls report holding a successful Ice Cream Social in July.

Brompton Road is planning to give a Play in the near future. A successful Lawn Social was held.

Belvidere. The County President was in attendance at this meeting and took part in the discussions. One new member joined. A pleasant feature of the afternoon was that one of the members in recognition of her approaching marriage was given a Handkerchief shower and a cheque.

Lennoxville held no meeting in August but participated in the Farmer's Picnic which was held at the Experimental Farm.

Quebec Women's Institutes

ONE of the most enjoyable events of the Institute programme occurred on August 6th when members and friends of the four branches of the Institutes of Missisquoi County assembled on Eccles Hill to celebrate their annual picnic, and to pay tribute to those who in days not so long ago (about 50 odd years) defended this part of our country from an invading foe.

After a hearty repast partaken of under the spreading branches of the maples on the hill and also in the vicinity of the monument erected there, every member of the gathering to the number of almost 100 individuals assembled to hear a very stirring narrative of the battle of Eccles Hill given by Dr. M. C. Baker who commanded a company in defense of our border. The story of the event was told so clearly that one could picture each incident that had occurred and an impression was made upon the hearers that will never be forgotten. As the narrative, with its touches of humour and revelation of grim danger and tragedy, proceeded, everyone present was made to understand as never before, what has been accomplished for us by those men who protected our homes and safeguarded our rights. An added interest to the occasion was the presence of Mr. Yates, one of the men of the Home Guards to whom Dr. Baker addressed several questions regarding points of interest as Mr. Yates also was present and on active service in 1870, and knew every detail of what had taken place in that vicinity where he is now living.

The sincere thanks of every member of the Institute present is due Dr. Baker for his authentic, vivid and impressive account of the events that took place on Eccles Hill in 1870. Such a narrative could only be given by one who had actually participated in the events which there took place. The peace we enjoy is the heritage given to us by those who defended our border then and on previous occasions, and is something which should surely be sometimes brought to mind "Lest we Forget".

Dr. Baker's address was followed by one by Brig. Gen. Draper, which also deeply impressed itself on the minds and hearts of those present. Gen. Draper paid an eloquent tribute to those who made secure the safety of home and country and set that example of honour and sacrifice which inspired the men who sprang to the defense of our country in 1914.

Sheriff Jamieson and Colonel Stockwell also in appropriate words dwelt on the value of the service rendered by the men who fought in 1870, and commended the Institute for endeavouring by such gatherings as these to keep their valour in memory.

After appropriate thanks had been paid to the speakers by Mrs. D. A. Rodger who presided as County President, those who were present stood at attention at the foot of the monument beneath our beloved Union Jack, and with hearts stirred by memories of the past, sang with fervour our National Anthem. Three cheers and a tiger were then proposed by Colonel Stockwell for the Women's Institute. These were given with a will by the gentlemen of the party, after which all dispersed to their several destinations.

A Smile or Two

"Ah see yo' is housecleaning," said Mrs. Snow White.

"Yes," replied Mrs. Marsh Green, "dey is nothin' like movin' things 'round once in a while. Why, I jes come across a pair ob slippers under de baid Ah hadn't seen foh five yeahs."

"I hear, Si, that while ye were in the city ye took up this here golf. How'd ye like it?"

"Wall, tol'able. It's a leetle harder than hoein' corn an' leetle easier than diggin' potatoes."

The Canadian Pacific Railway and The Canadian People

IN order that the people of Canada may have a clear understanding of the relation of the Canadian Pacific to the national interest and to the interest of the people individually, we have chosen the press of Canada as the medium through which to make a series of statements in which will be frankly told the story of the beginning and development of the road, and its services to Canada.

We believe the people of Canada will be interested in these statements. We believe when the people of Canada know and understand the relation of the Canadian Pacific to the country that the company will continue to receive its due measure of esteem and public confidence. The Canadian Pacific frankly desires this esteem and confidence because it is good business for a great corporation to be on terms of good will with its customers—the public.

Canada and the Canadian Pacific Railway must continue together the work of nation-building that was begun the day the C.P.R. commenced to fling its steel rails from coast to coast. This co-operation has been in the nature of a great partnership for the advancement of mutual interests.

It is one of the proudest pages of Canadian Pacific history that no government, no province, no community has ever lost a dollar through this national partnership. The record of this railway for forty years reveals one unbroken course of constructive achievement.

The creed of the Canadian Pacific has been to carry its own burdens, and to proceed with cautious and well-measured plans for the steady, forward march of its own and the national progress. Exploitation is unknown in its annals, despite the tremendous difficulties of financing in the lean eighties. For every dollar received from the nation, the Canadian Pacific has contributed an abundant dividend in national progress.

The partnership of mutual advancement must remain unbroken. It must not be weakened nor jeopardized by misunderstanding or lack of knowledge of the facts, so that the Canadian Pacific may continue to do its full share toward the greater development of Canada, as it has so abundantly proven its ability to do in the past.

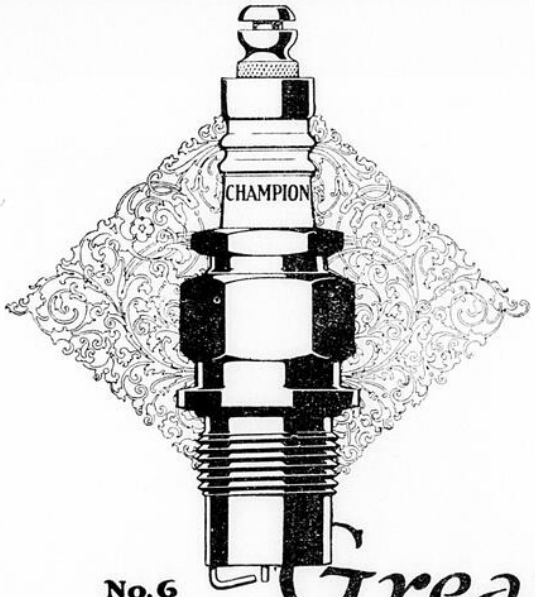
The Canadian Pacific asks only to be judged by its past record and to be measured only by the service it renders. It makes no appeal for business on grounds of sentiment, but, confronted by such appeals, it does ask that its national significance, its record as a nation-builder and its world-wide service to Canada be remembered.

Chairman and President.

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Jeffrey Lafontaine, Macamic	Major King	Percheronne	2
Joseph Moreau, La Reine	Hercule	Percheronne	2
Omer Blanchet, Authier	Tom	Cross-bred	4
Albert Cloutier, Privat	Tom	Cross-bred	4
Louis Ducharme, La Reine	Jos Swing jr	Cross-bred	4
Antoine Bédard, Privat	Dan	Cross-bred	4
Adélard St-Pierre, Lamotte	Jos	Cross-bred	4
Charles Trottier, Dupuy	Carlmann	German Coach	1
Ovide Bédard, Barraute	Thom	Cross-bred	4
Alex. Lauzé, Coffee	Prince	Cross-bred	4

Argenteuil

J.-E. Arnold & Son, Grenville	Arn. Huchet jr	Cross-bred	3
Isaie E. Laurin, Lachute	Brillant	Belgian	1
Isaie E. Laurin, Lachute	John	Belgian	1
J.-E. Arnold & Son, Grenville	Laclede	Cross-bred	3
J.-E. Arnold & Son, Grenville	Barney Boy	Percheron	2

Bagot

Amédée Lapalme, St-Hugues	Tom	Cross-bred	4
Adélard Paré, St-Théodore	Ben	Cross-bred	4

Beauce

René Latulippe, Beauceville-Est	Pitre	Cross-bred	4
A. Lessard, East Broughton	Conducteur	Belgian	1
Omer Poulin, fils Ab., Beauce Jct.	Jimmy	Cross-bred	3
Adélard Drouin, Grande Montagne	Frank	Cross-bred	4

Berthier

Armand Denis, St-Cuthbert	Ivanhoe C. R.	Canadian	2

Bonaventure

James Campbell, New Richmond	Kent Axworthy	Cross-bred	3
George Prince, Port-Daniel-Ouest	Sultan	Percheron	2
Jos. Gauthier, St-Jean-l'Evangéliste	Patriot	Percheron	1
Edgar Lawrence, Port-Daniel-Centre	The Mischief	Standardbred	1
Edgar Lawrence, Port-Daniel-Centre	General Currie	Clydesdale	2
Théodore Daigneau, Robitaille	King	Cross-bred	3
Edgar Lawrence, Port-Daniel-Centre	Ildelfence of Arn.	Percheron	1
Thomas Young, Oak Bay Mills	Restig. Laddie,	Clydesdale	1
Ulfranc Leblanc, Maria Cape	Sir D. McGregor	Clydesdale	1
Thomas Young, Oak Bay Mills	Bonaventure Pride	Clydesdale	1
Wm. Bourque, Ruisseau Leblanc	Darkie	Cross-bred	4
Thos. Mann, Escuminac Nord	Dick	Cross-bred	3
Jos. Leblanc (Chs.), New Richmond Sta.	Morrison	Cross-bred	4
Firmin Arsenault, Petit Bonaventure	Rob	Cross-bred	4
Louis Roy, St.-J.-l'Evangéliste	Diamond	Cross-bred	4
Léon Lavoie, St.-J.-l'Evangéliste	Prince	Cross-bred	4
Achille Fortier, St-André, 4e rang	Harry	Cross-bred	4
Oliva Fortier, St-André	Pit	Cross-bred	4

Chambly

Achille Ménard, St-Basile	Bonhomme	Cross-bred	3

Champlain

Séraphin Plamondon, Ste-Thècle	Javert	Percheron	1
Josaphat Trépanier, St-Adelphe	Boy	Cross-bred	4
F.-A. Marcotte, M.D., Ste-Anne-Pérade	Trim	Cross-bred	4

Châteauguay

Armand Jenneau, Ste-Martine	Harry Gazette	Cross-bred	3

Chicoutimi

R.-B. Ness, Kénogami	Baron Stockwell	Clydesdale	1
François Asselin, St-Ambroise	Maple Grove Palm	Percheron	2

Compton

R.-A. Smith, Cookshire	Balsico	Standardbred	2
Chs. E. Taylor, East Angus	Gamie	Percheron	1
Chs. E. Taylor, East Angus	Kartonnier 2nd	Percheron	1

Dorchester

Hugh Kelly, Fir Grove	George	Cross-bred	4

Gaspé

Frank Labrie, Cap Chat	Harker II	Percheron	1
W.-J. Maloney, Barachois	Napoléon	Percheron	2

Hull

Frank Hall, Perkins	Pit	Cross-bred	3
Orville Boyes, Ste-Rose-de-Lima	Prince Craigie	Clydesdale	1
Ferd. Paquette, Maniwaki	George	Belgian	2

Huntingdon

R.-T. Brownlee, Hemmingford	Oak. Sir Robert	Clydesdale	1
R.-T. Brownlee, Hemmingford	M. Spencer	Clydesdale	1

Iberville

E. Nadeau, Henryville	Bruce	Belgian	1
E. Nadeau, Henryville	Gantham	Percheron	2

Iles-de-la-Madeleine

J.-A. Delaney, Pointe Basse	Kentucky Marque	Standardbred	1

Jacques-Cartier

Isaie Meloche, Ste-Geneviève	Pit	Percheron	2

Joliette

Oscar Bergeron, Lavaltrie-Sta.	Oscar Swing	Cross-bred	3



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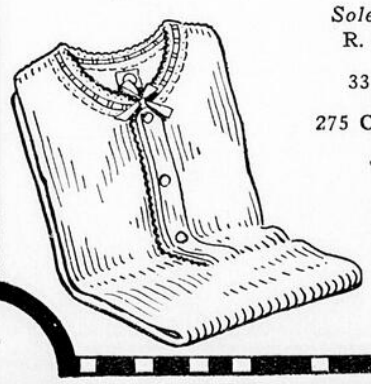
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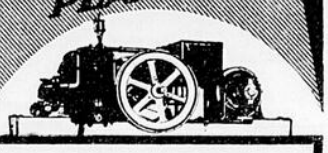
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Ovide Lapierre, St-Prime	Prospect	Percheron	1
Rod. Senneville, St-Félicien	Governor	Percheron	2

Lotbinière

D.-O. Landry, St-Sylvestre	Prince	Cross-bred	4
M.-A. Powers, St-Sylvestre	Indigo	Percheron	1

Maskinongé

Jos. Morais, Louiseville	Prince	Cross-bred	4
Henri Simard, Louiseville	The Scribe	Cross-bred	4

Matane

Frédéric Pelletier, Grand Méchin	Prince Méchin	Canadian	2
Arsène Thibault, Sandy Bay	Gosset	Belgian	2
Charles Viens, Amqui	Prince	Percheron	1
J.-B. Ruest, Mont-Joli	Jules	Belgian	1
Jos. Richard, Métis	Pit	Cross-bred	4
Alexandre Fortin, Ste-Félicité	Prince	Cross-bred	3
Magloire Dion, Sandy Bay	Médard	Cross-bred	4
Alphonse Truchon, Matane	Stud	Cross-bred	3
Léon Michaud, Amqui	Dick	Cross-bred	3
Adélard Lamarre, Rivière Blanche	Smart	Cross-bred	4

Missisquoi

Adrien Hébert, North Stanbridge	MacKinley	Belgian	1
John Perreault, Clarenceville	John Dewey jr	Cross-bred	3

Napierville-Laprairie

Cléophas Pinsonneault, Napierville	Fanfaron	Belgian	2
Edmond Perrier, Laprairie	Prince Pitou	Canadian	2

Papineau

Thomas Jamieson, Masson	Gaston Gabrine	Belgian	1
Alcibiade Régimbald, Papineauville	Georges	Cross-bred	4

Pontiac

S.-J. Wilson, Beech Grove	Baron Starling 2nd	Clydesdale	1
T.-S. Harris, Shawville	Sparkling Coco	Percheron	1

Portneuf

Armand Picher, St-Alban	Bob	Cross-bred	4

Richelieu

C.-H. Tucker, St-Robert	Tom	Cross-bred	3

Soulanges

Régis Bélanger, St-Polycarpe	Dubois	Percheron	1

St-Hyacinthe

Hector Ménard, La Présentation	Poney	Cross-bred	3

St-Jean

Ernest Bouchard, St-Valentin	Pit	Cross-bred	3
Moise Brousseau, L'Acadie	Bob	Cross-bred	3

St-Maurice

Hilarion Lavergne, St-Barnabé	Frank	Cross-bred	3
Arthur Vincent, St-Barnabé	Bill	Cross-bred	4

Témiscouata

Pierre Dubé, Notre-Dame-du-Lac	Bayard	Percheron	1

Terrebonne

Adélard Godmer, Ste-Adèle	Gamin	Cross-bred	4

Verchères

J.-L.-K. Ross, Verchères	Urolithe	Percheron	1
Zotique Giguère, Contrecoeur	Hasso N.	German Coach	1

Yamaska

Louis Paquin, St-David	Lagos jr	Cross-bred	3

Montréal

H. Dubuc, 159 Beaudry	Viviani	Standardbred	1

Ontario

Byron A. Boyd, Stittsville	Rex	Cross-bred	3

Abitibi

Joseph Mageau, Coffee	Chub	Cross-bred	3

Beauce

Georges Pelchat, St-Honoré-Shenly	Dick	Cross-bred	4
Johnny Bureau, St-Benoit-Labre	Pit	Cross-bred	4

Beauharnois

Gustave Dorais, Beauharnois	Gallant Prince	Clydesdale	2

Bellechasse

Edgar Rousseau, Ladurantaye	Carmen	Cross-bred	4

Bonaventure

Pierre Pichette, Robitaille	Dan	Cross-bred	4

Champlain

Urgèle Magny, Ste-Geneviève	Sam	Cross-bred	4
Delma Bédard, St-Tite	Prince	Cross-bred	4

Charlevoix

Patrick Guay, Baie St-Paul	Jack Musiquofor	Cross-bred	3

Chicoutimi

Gédéon Bouchard, St-Louis-Nazaire	Prince	Cross-bred	3

Deux-Montagnes

Ecole d'agriculture d'Oka	Ridley Blind	Percheron	2

Gaspé

Ephrem Sergerie, Cap Chat	Noireau	Canadian	1

Joliette

Eug. Roch, fils Pierre, Ste-Elisabeth	Jim	Cross-bred	4
Arsène Mireault, Joliette	Claus Appleby	Cross-bred	4

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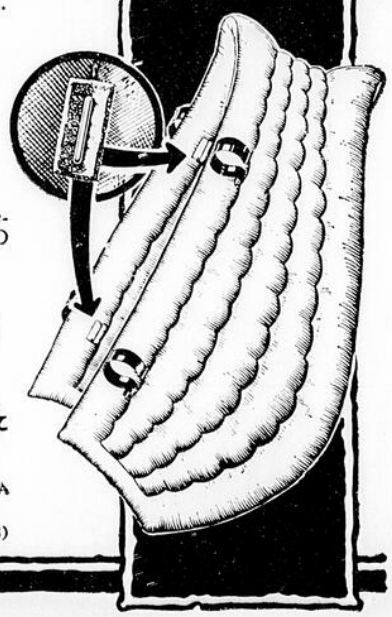
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Wilfrid Duchaine, St-Bruno	Marquis-de-Langrau	Belgian	1

Laval

Joseph Bourque, St-Frs-de-Sales	Laclede	Percheron	2

Matane

Francis McMullen, Matane	Tom	Cross-bred	3

Mégantic

Alphonse Bégin, Richardville	Arnoldwold Monogram	Percheron	1

Montmagny

Léger Théberge, St-François	Prince	Cross-bred	4

Montmorency

Wilfrid Côté, Rivière-aux-Chiens	Latin	Percheron	1

Napierville

Romuald Tremblay, St-Edouard	Bing Bang	Cross-bred	4

Nicolet

Ovide Nobert, Manseau	Ovido	Cross-bred	3

Pontiac

Josie S. Dowe, Beechgrove	Destiny	Clydesdale	1

Portneuf

J.-H. Beauchesne, St-Raymond	Royal Watts	Standardbred	1

Richelieu

Walter Cournoyer, St-Marcel	Billy King	Cross-bred	4
Jos. Papillon, St-Ours	Pine Knot	Cross-bred	3

Richmond

L.-C. Morrill, Asbestos	Perfection 2nd	Percheron	1

Rimouski

Georges St-Pierre, Rimouski	Robert Jr	Cross-bred	3

Shefford

Onésime St-Onge, St-Valérien	Conducteur	Percheron	1

Soulanges

Avila Bériault, St-Clet	Baron Rowena 2nd	Clydesdale	1

Témiscamingue

Alex. Lafrenière, Nord Témiscamingue	Pit	Cross-bred	3
Romuald Gagné, St-Bruno	Pit	Cross-bred	3
Raoul Jolette, St-Isidore	Prince	Cross-bred	3
Télesph. Carpentier, St-Placide	Prince	Cross-bred	3
Lorenzo Bergeron, St-Isidore	Frank	Cross-bred	4
Simard et frères, Fabre	Bruner	Belgian	1

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Creditable Showing of Live Stock at Sherbrooke

for the R. O. P. class, was female champion. Peach Blow Billy, owned by D. T. Ness, was made Junior Champion Male, and Braeburn Genevieve, from the herd of J. P. Cavers was Junior Champion Female.

FRENCH-CANADIANS.

The French-Canadian exhibit, consisting as it did of 71 entries, and standing second in point of numbers of the cattle breeds represented at the show, was by far the largest and best exhibit of the breed ever seen at Sherbrooke. Five herds were out, shown by A. Denis, St. Norbert ; E. Sylvestre, Ste. Hyacinthe ; A. Sylvestre, St. Simon ; O. Fowler, Kingsbury; H. Charpentier, Magog, A. Denis carried off herd honors and Junior Bull Championship, while the other championships all went to A. Sylvestre. The best class was phobably that of aged cows in milk, which brought out 12 entries, many of which were really excellent animals. An entry by A. Sylvestre secured first place in this line up and was afterwards made Senior and Grand Champion Female, while E. Sylvestre's cow, De Clairvaux 7th, last year's Grand Champion at the Royal, but who was not showing to good advantage, was placed second.

BEEF CATTLE

What was probably the best showing of beef cattle that has been made at Sherbrooke in recent years was made this year by the Shorthorns, Particularly in the young classes, both male and female, were numbers and quality in evidence, and the judge, Prof. Geo. Day, Secretary of the Canadian Shorthorn Breeders' Association, expressed himself as being well satisfied with the indications of growth offered by the exhibit. The main prize-winners were F. R. Cromwell, Cookshire; R. C. Johnston, Danville; E. Hooper, Hillhurst, while individual entries were made by a number of other breeders. F. R. Cromwell won the lion's share of championships when he carried off Senior and Grande Male Championship with White Master, Junior Male with Lord Compton, and Junior Female with Crimson Jennie 22nd., both of the latter being senior calves. E. Hooper, with Fairy Countess, secured Senior and Grand Female Championships.

The replacement upon the prize list of a class for Herefords was rewarded by a very fair show both as regards numbers and quality. The young bull that won for A. E. Groom, Bury, Junior and Grand Championship honors was one that in the opinion of the judge, L. O. Clifford, M.P. of Oshawa, would be good enough to put in any show. Some very good stock was brought out by Sanders and Sanderson, of Charlottetown, P.E.I., and by W. E. Hunt, Ayer's Cliff, the other exhibitors in this section.

Some excellent stock came out in the Aberdeen Angus section, especially the entries made by Horne Bros. and by J. R. Horns, both of Winslow, P.E.I. R. Onley, Danville, was also out with a herd. J. R. Horne's bull that carried off Senior and Grand Championships was an excellent animal, and the aged cow class was probably the best group shown by this breed.

HEAVEY HORSES.

The agricultural horse classes brought out about the same sized entries as they did last year. Clydesdales are the most important breed in this as in most of our Canadian shows and a few of the classes, especially the aged stallion class and some of the mare classes brought out good competition. Royal Master was again Champion Clyde Stallion for R. Ness & Son, of Howick, and Threave Lady from the same stable was Female Champion. The latter stood first in the yeld mare class, while Ness entries topped the brood mare, the three-year old mare, and the two-year filly classes, the winners being, Woodside Norah, Woodside Lady Alice, and Woodside Thelma respectively. Polly of the Briars, for D. A. McCormick, Brysonville, led the yearling filly class.

The other draft breeds were represented, but not largely.Reid Bros., of Chateauguay were out with a string of Belgians. A nice showing by a number of exhibitors was made in the aged stallion class of Percherons. And the Shire breed was represented by the splendid stallion, Snelston Topper, now owned by the Dominion Experimental Farms and kept at Lennoxville. This stallion, weighing 2,240 lbs. is an excellent representative of the breed — or of draft horse type for that matter. The Government Special for five animals, the get of a sire of any draft breed, went as follows: 1st. D. A. McCormick, on get of Spencer of the Briars; 2nd. A. C. Paige, Sherbrooke ; 3rd. R. T. Brownlee, Hemmingford.

SHEEP.

The sheep exhibit, a'though considerably smaller than that of last year was a very good show, containing as it did quite a lot of imported stuff. Most of the prizes for display went to M. & D. Roderigue of Compton, while A. Denis, St. Norbert carried off honors with Leicesters. The chief exhibitors in the various classes were : *Leicester*, D. Rodrigue, A. Denis ; *Shropshire*, D. Rodrigue, E. Lecavalier, St. Norbert; J. Woodward, Lennoxville; A. R. Olney, Danville ; *Oxford and Hampshire*, M .Rodrigue, A. Denis ; *Cotswold* and *Lincoln*, A. Denis & Son ; *Cheviot*, H. Charpentier, Magog. Prof. G. Godbout, of the Agricultural College of Ste. Anne de la Pocatiere judged the exhibit.

SWINE.

The swine exhibit this year was more than double than that of last. The quality, according to the judge, Mr. L. H. Hamilton, of Macdonald College, was excellent. The Yorkshire were outstandingly good, especially in the young classes, each of which had from 12 to 15 entries, while the young breeding sow class was probab'y the best in the show. The second best showing was made by the Tamworths, in which the herd of E. Sylvestre, Ste. Hyacinthe was outstanding. The Berkshire exhibit was fair, and the Chester Whites poor both in the matter of lack of competition and in quality.

The special prize for the best exhibit of hogs was won by E. N. Bonneau, Stanbridge East, on his splendid herd of Yorkshires, while Marshall Miller, Brome, another Yorkshire man, had a very creditable exhibit also.

Cement prices lowest in Canada

In connection with the price of cement, it is interesting to note that cement is selling lower in Canada than anywhere on the American continent. The figures listed below are taken from the Engineering News-Record, August 7, 1924, issue. From this tab'e it will be seen that the price of cement in Montreal is $1.90, 15 cents lower per barrel than the next lowest quotation in Dallas, Texas. The New York price being $2.15 per barrel.

	Carload lots delivered
New York	$2.15
Jersey City	2.33
Boston	2.64
Chicago	2.20
Pittsburgh	2.19
Cleveland	2.39
Detroit	2.40
Indianapolis	2.41
Milwaukee	2.35
Duluth	2.19
Peoria	2.37
Cedar Rapids	2.40
Davenport	2.39
St. Louis	2.30
San Francisco	2.61
New Orleans	2.80
Minneapolis	2.42
Denver	2.84
Seattle	2.90
Dallas	2.05
At'anta	2.35
Cincinnati	2.52
Los Angeles	2.75
Baltimore	2.90
Birmingham	2.40
Kansas City	2.82
Montreal	1.90
Philadelphia	2.41
St. Paul	2.42
Toledo	2.45

Dairy Cattle Strong Feature at Quebec

Quebec there is still great need of weeding out. At the foot of almost every class were to be found two or three animals that would have been much better at home. The exhibits of Dickie Bros., Truro, N.S., and of P. J. Salley, Lachine Rapids, were, as usual, in good show fit, while some fine individua's were shown by J. J. Villeneuve, Charlesbourg, G. E. Houle, Nicolet, P. Sansfacon, Charlesbourg, and others. The judge, Fred Mallory, failing to arrive, Mr. L. L. Blouin, Superintendent of the Asylum farm at Beauport, judged the exhibit —and not altogether without criticism, both from exhibitors and spectators. It must be remembered however that the judging of a large exhibit like this is not a easy task, especially when the exhibits show the variations found amongst the Holsteins at Quebec.

Seven entries were out in the aged bull class, which was topped by Dickie Bros. with Cobequid La Honda Jim, a very fine type of Holstein bull, that was afterwards made champion. Villeneuve was second in this class and Salley third. Dickie Bros. had things pretty well their own way in the bull classes, with the exception of the junior calf class in which G. E. Houle had an entry in first place.

In the aged cow classes Sal'ey took first p'ace, with Ourvilla Canary Queen De Kol for winner of the milking c'ass with its eleven entries, and Woodland Bonastine Jewel to top the dry cow class, which also had eleven contestants. The latter, which by the way is a cow that has never been beaten on this circuit, was afterwards chosen as champion female. In both of these classes Dickie Bros. came in for second place and Sal'ey repeated in third. And in both classes there were a couple of "scrub pure breds" that would have improved the showing by their absence. In the heifer and calf classes Dickie Bros. carried off most of the first prize awards, Salley coming in for premier honors in the two year old dry class, while seconds and thirds were taken by entries from the herds of Salley, Houle, Villeneuve

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22

and J. H. Couture, St. Augustin. Dickie Bros. were first in herds, with P. J. Salley second.

JERSEYS.

Two full herds of Jerseys paraded before the judge, W. F. Stephen, of Huntingdon. These were owned by C. O. Edwards, Hillhurst and W. F. Snaden, Danville. Edwards carried off both championships — the male championship going to his aged bull Petune's Lad, and the female championship to an exceptionally nice calf in Petune's Golden, from the senior heifer calf class. He also secured most of the first prizes, Snaden receiving first place in three classes. The Jerseys that came out were very good ; they lack competition.

SHORTHORNS.

Judge Stephen had more work in the Shorthorn ring than he had with the Jerseys, for here he had herds from F. R. Cromwell, Cookshire, Ed. Hooper, Hillhurst, and R. C. Johnston, Danville, all of whom brought out their stock in good shape, while amongst the smaller exhibitors H. J. Elliot, Danville was out with a number of entries.

Three splendid bulls came out in the aged class. Hooper's Royal Ringleader, a massive sire, was given first place with Cromwell's Fairy Prince a close second. In the two year old class Cromwell's White Master, a very nice type of Shorthorn bull and the Sherbrooke Grand Champion, was placed first with Hooper entries second and third. Hooper secured first place in the yearling class, while Cromwell came to the top in the calf classes. Hooper's bull, Royal Ringleader was made champion.

Hooper also carried off female championship honors — this time on Fairy Countess, the Sherbrooke Champion. She came from the aged dry cow class, which, with the champion at the top and a full sister in Cromwell's Fairy Princess next, and a couple of other very fair cows from the herds of Elliott and Hooper, made one of the best classes of the show. In the aged cow class in milk six entries were out, but after Johnston's leader the others dropped away rapidly. Cromwell had first place in the three year olds in milk and Hooper second, which positions were reversed in the three year olds dry. In the dry two year olds, which was a pretty good class, Cromwell had a pair of beauties standing first and second, and he carried his position through the younger classes, with Hooper coming in for second place. The herds went as follows: Old herd—1. Hooper, 2. Cromwell, 3. Johnston, 4. Cromwell; Young herd—1. Cromwell, 2. Hooper, 3. Elliot.

Our Worst Advertisement

By Robson Black

Manager Canadian Forestry Association

THE WORST advertisement for the business sagacity of Canadians is the record of forest fires. What's the use of begging immigrants to throw in their lot with us, if we are such wretched housekeepers as to turn five million acres of timberland into charcoal and firewood as we did during the summer of 1923? Every immigrant on the farm is a prodigious user of forest materials. In fact three fourths of the timber cut in America is taken for farm purposes. If we outlaw the forest we outlaw the farm, a procedure that has taken place already in scores of Canadians districts. Seventy per cent of the farmers of Quebec get a substantial part of their livelihood from work in the woods. The length of life we guarantee to our forest estate is precisely the measure of the life of agriculture in Quebec, New Brunswick, and a considerable portion of Ontario and British Columbia.

The public is absolute arbiter of the Forest. Whether we shall sweep downhill to bankruptcy or make the Forest redeem our war debt and put us on the highroad to prosperity depends on the deliberate decision of the thousands of Canadians who, for work or play, enter the woods and leave a path of red flame behind them. Fire is the one abomination of the woods. It is the killer of industry, the exiler of workmen. Its ravages make the devastations of axemen seem paltry. It lays low ten trees to the axemen's one. It destroys not alone the tree but the soil and postpones for half a century the ability of an area to grow more trees of the kind we want.

HOLDING POPULATION

Our public leaders are talking of population these days from the single point of view of vacant farm lands. The population problem does not end there. Eighty per cent of our habitable area in Canada is non-agricultural. If forest industries do not find a living there, that eighty per cent remains a No-Man's-Land forever. No other lure exists but the lure of standing timber. Furthermore, the farmer's working plant is derived from the forest and his production costs rise with lumber costs and lumber costs always carry an unseen percentage for forest fires. The late Sir Edmund Walker said shortly before his death that the greatest menace to the business future of Canada was the prevalence of forest fires and Sir Clifford Sifton has since declared that if the present rate of forest destruction continues we cannot avoid a heavy loss of population along with the industries and municipalities subsisting upon forest manufactures.

WHO OWNS THE FORESTS ?

The people of Canada own 85 per cent of the forest lands and at the same time are wiping off the ledger of national assets more than five million acres of forest lands a year. This is a day of rising forest values, when every district that possesses forests will pull to itself new industries, new population, based entirely upon the world scarcity of timber supplies.

A hundred years ago a forest fire was perhaps excusable but in 1924 the humanset conflagration is little short of treason. Hundreds of good fellows who would consider themselves blacklisted forever if they burnt down the Methodist Church on Main Street have yet to experience the first twinge of conscience when their campfire or cigarette sets ablaze a township of century-old spruce or pine.



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Training Young Bulls to Lead

By W. D. Thompson, in "The Agricultural Gazette and Modern Farming"

A SUITABLE age at which to commence leading young bulls is from four to five months. At this age, if they have been hand-fed, groomed, etc., no difficulty should be experienced in catching them, provided they have been handled quietly. With sucklers it is a more difficult business.

Presuming that the farmer has a bunch of lusty youngsters to train for the show or sale ring, straight from the rough, it is well to start by making friends with the animals and studying their temperaments. One may be sulky, another a kicker, and another vindictive, and the trainer must use his brains to combat their individual inclinations. Bullying must not be attempted; but the animals must never be trusted.

QUIET TREATMENT

In the first place, a halter must be chosen that will not cut the hands, and it should be adjustable at both joints. To commence, it should be adjusted to a little larger than the required size. Having got the bull into a corner, the trainer must speak coaxingly and advance slowly, while another person scratches the animal. An endeavour should be made to slip the halter under the chin first, and then up over the head to behind the ears. If the reverse method is tried the bull may lower his head, possibly charge; but more probably he will bring his head up sharply and hit one in the face. In any case, quiet treatment must be used.

Punishment is not advisable except in special cases of wickedness. When the youngster is caught, he must be tied securely to a ring and pacified by scratching, grooming, etc. If bull dogs, nose grips or punches are to be used, they should be put on now, carefully.

THE FIRST LESSON

All being in readiness, it is as well to make a loop on the end of the nose rope, through which to put the left hand. The halter lead should be held in the right hand in small coils and held close to the bull's head. Care must be taken not to let the leads trail around one's feet. The shortest hold should be kept on the halter lead; but should the bull rush forward or run back, the nose rope should be used.

The trainer need not be too keen to check the animal for going ahead; but running back is a bad fault which must be firmly dealt with at the outset. If it arises, it is well to get someone to walk behind for the first time or two. Failing this, a thin stick is useful; the bull must learn who is master; but no cruelty should be employed. Tail-twisting is not wise. If the animal tosses his head in the direction of his leader, he should be given a smart cut across the nose. If he kicks, the plan is to keep out of his way and ignore his kicks—never to thrash him. He will soon stop the habit.

It is always advisable to take youngsters into an open field for a start; and if a bull is extra fresh he should be taken on to ploughed land, where he can be held better. A gallop occasionally will do him good and help him to realize that he is held. He should never be allowed to get away; if he does, he will never forget it. In a bad case, the trainer should hang on to the nose rope, then the bull cannot take him far.

TEACHING TO WALK WELL

The bull should be taught to walk ahead of his attendant, and not drag behind. Nothing looks worse in the ring. A gay carriage of the head and a smart step should be encouraged. The attendant should set an example, for if he dawdles along, the bull will do the same. Care must be taken not to overdo the animal, especially at the outset. He should be allowed to rest occasionally and have a look round. If he seems sulky and not inclined to lead, it is advisable to take him in; he may do better the next day. But if he continues to sulk, he should be taken out behind a trained bull for a time.

On the return journey he is almost sure to set off at a furious pace, and this must be discouraged, as it may result in his sweating, and taking a chill. On arriving home, he should be tied up again and the nose grips removed; then untied and the halter removed by pulling it over the ears first. The trainer will be well repaid for the trouble of making friends with his charge before leaving his pen.

REGULAR EXERCISE

It is a good plan to exercise the bull about the same time each day, the best time being perhaps between meals, in the afternoon; unless the weather is very hot and flies troublesome, when the evening should have preference. In these days of restrictions, exercise on the roads is largely forbidden; but, where possible, road work should form the bulk of the exercising. This keeps the feet right and accustoms the youngsters to traffic, etc.

Young bulls should be taken up to everything that frightens them, at first sight. This practice saves the buyer's herdsman much trouble when the animals become adults. They should be got well used to all sorts of machinery in motion, game rising, dogs, rags on hedges, paper flying about, etc. The approach of strangers, in the proper manner, should also be encouraged, and anyone allowed to come forward and handle the bulls. This tends to make them proud, yet quiet, and thus facilitates judging. Incidentally, the buyer is helped to form a good opinion, as everyone dislikes the nervous, jumpy bull.

HILL-CLIMBING

Hill-climbing, if not too severe, and in moderation, is good for young bulls. It opens the chest, improves the lung capacity, and generally tones up and toughens the muscles and limbs. Too much exercise on the plough-land should not be allowed or foul in the foot will be encouraged. If a case of foul does arise, the foot should be cleansed and Stockholm tar applied daily, letting the patient lie up until sound. If the bull goes lame and there is no foul, over-conditioning may be suspected. He should be given a purgative, starved, and exercise increased.

When the youngster has become tractable, he should be taught to pull up instantly at the word of command, and stand well with his head up. He should also be taught to lead round a ring, etc. Brief words of command should be used, and always the same words in the same case or for the same result.

Personally, I do not believe in leading out several bulls one behind the other, as it only encourages fretting and fuming and jumping up. Also, very often a bull that is always led in a team will not lead willingly by himself. However, with regard to this practice as with all the others mentioned, the trainer must use his own common sense in deciding whether it is wise to follow it or not in a particular case.

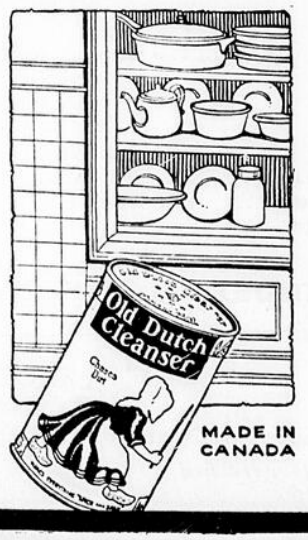
Old Dutch for Kitchen and Pantry.

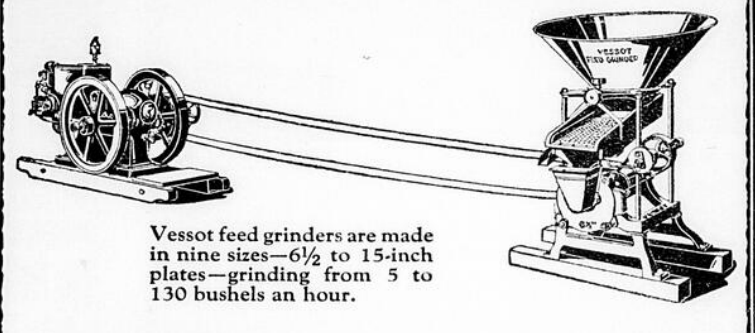
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Wilson Common-Sense Ear Drums

"Little Wireless Phones for the Ears" require no medicine but effectively replace what is lacking or defective in the natural ear drums. They are simple devices, which the wearer easily fits into the ears where they are invisible. Soft, safe and comfortable.

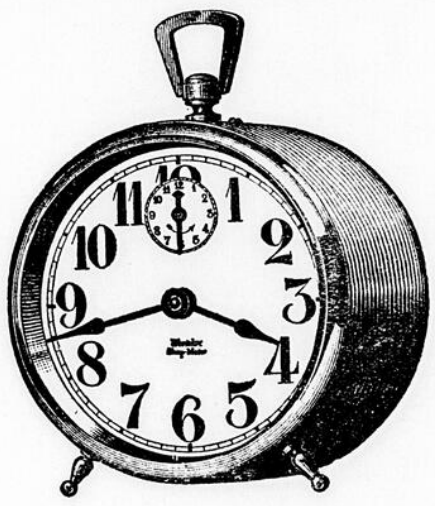
Write *today* for our 168 page FREE book on DEAFNESS, giving you full particulars and testimonials.

WILSON EAR DRUM CO., Incorporated
223 Inter-Southern Bldg. LOUISVILLE, KY

FARM WANTED

FARMERS ! If you want to sell your or borrow money on, apply to "CREDIT MOBILIER FRANCO-CANADIEN", 7, Notre Dame W., Montréal.

Westclox



For time around the house

SEVERAL clocks around the house save many steps. Time passes in every room in the house, yet many homes have it recorded in only one place.

Convenience and necessity considered, Westclox are about the least expensive items of house furnishing you have to buy.

So at least have one in the bedroom and one in the kitchen. One to call you in the morning, and one to time the meals and other household work.

When you find out what a convenience two are, you will want them in other rooms. Westclox are made in several styles and prices. Let the name Westclox on the dial be your guide.

WESTERN CLOCK CO., Limited, PETERBOROUGH, ONT.

87

Big Ben	Baby Ben	America	Sleep-Meter	Jack o'Lantern	Pocket Ben	Glo-Ben
$4.50	$4.50	$2.00	$3.00	$4.00	$2.00	$3.00



Stop sore throat before it starts

AS YOU know, sore throat is often the warning sign of more serious ills. The mouth is the open door for disease germs. You breathe them in unawares. Then comes trouble.

A simple precaution is to gargle systematically with Listerine, the safe antiseptic.

Stop sore throat before it really gets a start. Give Listerine a chance. It will protect you against many avoidable illnesses.

For half a century, now, Listerine has been trusted as a dependable antiseptic. You know it does its work and does it safely.

Always have a bottle handy in your medicine cabinet. It has dozens of other uses—all described in the interesting little circular wrapped about each package.—*Lambert Pharmacal Company, Toronto, Canada.*

LISTERINE



—the safe antiseptic

The NEW heart of the HOME

IN this day when the mad rush for pleasure tends to scatter families—when the home is in danger of losing its sacred meaning and of becoming a place where we can go when there is nowhere else to go—a new influence has come into the lives of the people, an influence that will make the home once more a place where the desire for pleasure and entertainment may be fully gratified.

This influence is Radio.

Radio came suddenly—a marvellous, scientific discovery—a thing to fire the imagination of the youth of the country and to engage thousands upon thousands of boys in an occupation that not only taxes their ingenuity, satisfied their desire to make something, and at the same time held for them all the romance they longed for.

Now, Radio has passed THAT stage.

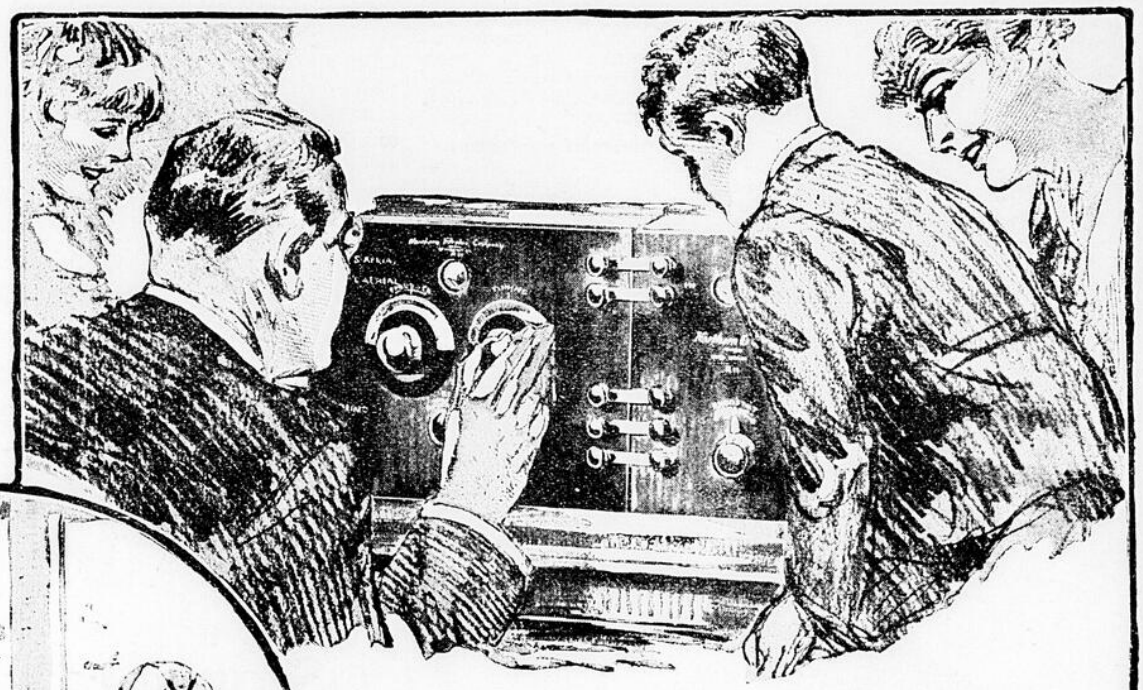
Without losing its romance it has been so perfected that it has become the new and unfailing source of entertainment.

It is truly, The New Heart of the Home.

There is still a thrill to be got from "tuning in" the message that comes from a thousand or fifteen hundred miles away, but the real pleasure of Radio and the thing that draws whole families night after night to the little magic mahogany box is the love for the wonderful music, the band concerts, the elections, the news of the day, the wonderful life that fills the air, and that is brought to us by Radio.

Radio sets are so simple to operate—and in a way simple to make—but the real enjoyment of a fine instrument cannot be got from the ordinary home-made set. The Northern Electric Company makes instruments that reproduce sound with all its truth and beauty as though it were in the same room with you. From their sets come the full tone and quality and the loveliest music. Remember, the Northern Electric Company has specialized in making instruments for the reproduction of sound. They have made over 900,000 telephones, practically all the telephones made in Canada; the knowledge that they gained in this business is responsible for the remarkable perfections of their Radio broadcasting and receiving sets.

In buying a set for your home—an instrument that will take such an important place in your daily life—you will surely want the benefit of the knowledge that Northern Electric inventors and engineers have brought to bear on Radio. Even if you are not ready to buy—if you are merely interested in knowing more about this great new source of pleasure and education—our engineers will be glad to supply you with information, answer your questions, and offer advice on any suggestions pertaining to Radio. Their services are placed at your command free of charges. Write to them, and you will receive prompt and courteous replies.



There is interest for the whole family in the magic mahogany box.



And on the "day of rest and gladness" those who perhaps cannot go miles to divine service can listen to the words of comfort from some far-away church and hear the rich peals of the grand organ and join with the congregation as they sing "Lead, Kindly Light, Amid the Encircling Gloom."

Excerpts from letters received by Broadcasting Station CHYC, which is owned and operated by the Northern Electric Company Limited, Montreal

A few nights previous we heard the Band of the New England Regiment from Boston, and it was very good, but Sergeant Major Jackson's Band was a half a dozen leaps ahead of it in every respect. We, in Halifax and Dartmouth, have been educated to good Band Music by the famous R.C.R.'s, but it is a good thing to hear a high class Band again. The reception of this music was absolutely perfect, with no trace of fading, and it came in very strong.

F. D. C., Dartmouth, N.S.

I entertained last night a very deaf lady who had not heard a church service for nearly 30 years. She heard every word perfectly. Needless to say her thanks were profuse.

C. J. D., Pointe Claire, Que.

Strange, is it not, that a man who has not been in a church for ten years, should speak so enthusiastically about churches? As I sat and listened, it was with an open Bible on my knees, and as the announcer expounded the theme and story of that wonderful sacrifice, I felt an uplift that no other Easter has given me. Those lovely voices and organ will soothe and leave lovely memories years after they are faded. Please accept my thanks and sincere assurance of the influence you have exerted for good.

H. M. W., Montreal, Que.

I think you will be interested to know that last evening, December 19th, we enjoyed your concert, which came in over the air clearer and better than any one of 17 stations in the States, and it was with real regret that we heard you say "Good Night" late in the evening.

A. H. M., Boston, Mass.

Last night at home, while calibrating a set, I picked you up transmitting the music from the Windsor Hotel, and I cannot express to you my feelings other than the reception at this point was as near perfect as ever I had heard. Of course, I realize the music was given by real artists; BUT it was not spoiled by your transmitter, for the modulation was wonderful. Thanking you for the pleasure you gave me, I gladly advise you that you have topped 152 other stations.

G. O. M., Ardmore, Pa.

I have been requested by the users of Northern Electric Sets, in this locality, to express to you the appreciation of your efforts in broadcasting the most eloquent speech of the Hon. David Lloyd George, from the Arena in the City of Montreal, to-day. We were enabled to hear every word as distinctly, and perhaps more so, as if we were in the building. Thanking you, I remain,

W. H. G., Hawkesbury, Ont.

Write to any one of these branches or to the Radio Engineering Department, Montreal.

Northern Electric
COMPANY LIMITED

"The people that made your 'phone"

BRANCHES:

HALIFAX QUEBEC OTTAWA TORONTO
HAMILTON LONDON MONTREAL WINDSOR
WINNIPEG REGINA CALGARY VANCOUVER

[*Owners and Operators of Broadcasting Station CHYC*]