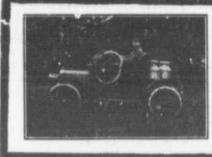


More Money for Rural Schools—See Page Three

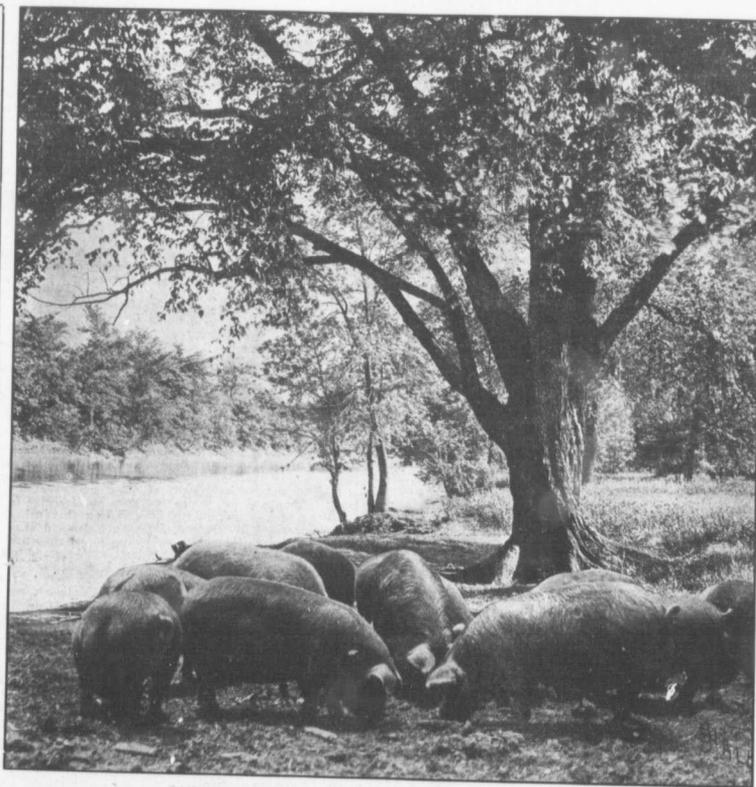
# FARM AND DAIRY & RURAL HOME



DEVOTED TO  
**BETTER FARMING**  
AND CANADIAN  
COUNTRY LIFE



Peterboro, Ont., Jan. 22, 1914



Money Makers for a Long Time to Come

ISSUED EACH WEEK

**Rural Publishing Co., Ltd., Publishers**

ONE DOLLAR A YEAR

# As Others See

THE

# B-L-K

## MECHANICAL MILKER

Mr. Benoit Trade, Sec.-Treas. of  
La C. De Laiteries, St. Laurent, Montreal.

Dear Sir—In reply to yours of the 4th inst. I may say that we are satisfied with the Burrell Cow Milking Machine.

It has now been in use for a few months, and has worked to our entire satisfaction in all respects.

Yours very truly,

R. R. PP. TRAPPIST,  
per Fr. M. Eschilleux Asst. Sec.

### "Without the Milker I Would Go Out of the Dairy Business"

Note the following

BEAVER MEADOW STOCK FARM  
A. M. Zoeller, Prop.,  
Importer and Breeder of High Class Holsteins  
New Hamburg, Ont. Sept. 25th. 1913

Messrs. D. Derbyshire & Co., Brockville, Ont.

Dear Sirs—Yours of the 2th received asking how I was getting along with the B-L-K Milkers. I am not only glad but am really proud to add my testimony in something I prize so highly. I have used it for a little over one year and have never missed even one milking with it except once when the power went wrong. One man operates two machines, milking four cows at one time. I intend soon to purchase another milker so as to milk six at a time. I will tell you, as I have told many others, that if I had to do without the milker I would go out of the dairy business. I have no trouble with any tests since using the machine. As to the upkeep of the machine my four-cow milker has cost me less than five dollars for the whole time that I have used it. I cannot recommend or praise the B-L-K machine too highly. It would certainly pay any farmer with fifteen cows or more to have the milking machine.

Wishing you every success. I am

Very truly yours, A. M. ZOELLER.

We do not need to say anything further this week about the profitable results that you, Mr. Dairyman, can obtain by the use of the B-L-K. The unsolicited testimonials above stand for more than we could possibly convey to you even in half a dozen advertisements.

We will, however, be glad to send you our literature on receipt of a post card.

Remember, too, that we handle the "Simplex" Cream Separator.

## D. Derbyshire & Co.

Head Office and Works - - - BROCKVILLE, ONT.

Branches: PETERBOROUGH, ONT. MONTREAL and QUEBEC, P.Q.  
WE WANT AGENTS IN A FEW UNREPRESENTED DISTRICTS

Use this on the Farm and in the Home

NO waxing time over a lantern. Wherever you want a powerful light—indoors—outdoors—in any weather—you can get it instantly if you have a

### "NINE LIVES" ELECTRIC FLASHLIGHT

Just press the button and get a bright, powerful stream of light in a flash. Handy, economical, economical. No wax. No wick. No wick. No wick. Always ready. "Nine Lives" is four times as strong as any other and costs but a trifle to recharge. You cannot be without it. Can be repaired and be like new again. It is a power key.

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Only  
\$2.00  
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## Enthusiasm

You Never Saw The Like of the enthusiasm of people who keep poultry. They are wide-awake—open to learn. They read everything they can get that will in any way help them make more money.

Our people are not poultry fanciers. They

too keep poultry. 98% of them actually keep hens.

That's why we devote a whole page each week to poultry, and on Feb.

5th will publish

Our Fifth Annual Magazine Number Wholly Devoted to Poultry

While the enthusiasm of one people is highest, our poultry—over that which is the psychological moment, your opportune time to get next with your goods. You must plan for it now. Better take to your special order.

Advertising Department FARM AND DAIRY Peterboro, Ont.



### Newly Notes from B.C.

(From Farm and Dairy's Special Correspondent)

Discussion around the compulsory tuberculin test has quieted somewhat following the announcement by the government that the appropriation had given out and no further tests could be made until after the coming session of the legislature. That the test is being abandoned is denied by the officials, who say that it will be resumed immediately funds are available. The question of compensation will doubtless be gone into by the legislature, and it is probable that an increase will be granted. While some opponents of the compulsory test base their antagonism on the ground of inefficiency, the majority object because of the low compensation.

In the cities of Vancouver and New Westminster, it is understood, bylaws will soon be in effect preventing the sale of imported milk from other than tested herds. If this proves to be true, one serious obstacle to the success of the act will have been removed. When the test's enforcement began to be felt this fall, dairymen claimed that, though owing to the loss through condemned and slaughtered cows, it was costing them more to produce their milk, there was absolutely no way of recovering because the milk imported from Washington kept the price down. This imported milk, of course, was from untested herds.

The Daily Columbian, of New Westminster, contained recently a sketch of the experience of a Matsqui dairyman, Charles L. Smith. Mr. Smith hails from Dufferin county, Ontario, where he got pretty thoroughly acquainted with Molly and her idiosyncrasies. When he came to British Columbia, however, he was cautious, and rented on lease the large farm of the Hygienic Dairy at Matsqui. That was two years ago last spring. At the expiration of his lease, he purchased 240 acres of the farm, including the buildings, and bought the nucleus of his herd, a young registered Holstein bull and a few pure bred and grade Holstein cows.

Although professedly moving along conservative lines, Mr. Smith has built up quite a considerable dairy farm. This fall he is milking 18 cows, sending the sweet cream to Vancouver and feeding the skim-milk to calves and nine bred Yorkshire pigs. He has 25 good cows which will freshen in January, besides a bunch of 25 grade Holstein heifers, which were brought out from Ontario in June; 40 grade Holsteins and Arrshires are bred to freshen next September.

Mr. Smith's farm 180 acres are now cultivated or in pasture. Some 60 acres covered with alder, cranberry and cottonwood will be slashed next summer and cleaned up. Then between the stumps the land will be seeded and for three years used for pasture, when the stumps will be uprooted without difficulty.

The dairy farm which Mr. Smith now owns is one with historic associations. Many dairymen of the province will remember the organization of the Hygienic Dairy Company. The purpose of the founders was to produce for Vancouver a perfectly pure supply of milk. They had abundant capital to carry on a large undertaking: 640 acres of good land at Matsqui was purchased; architects and expert dairymen consulted together and devised plans for a modern set of buildings. These included two cow stables, each with a stall capacity of 52 cows, and both equipped with cement floors, gutter drainage, ventilating shafts, litter and feed carriers, and every other improvement then invented. There were two barns, one 200 x 100 feet for hay, and the second, 90 x 100 feet, in which were constructed four silos with a storage capacity of 250 tons each. A modern creamery, horse stables and pig pens were also erected.

The farm began operations with 90 picked cows and apparently with every circumstance in its favor. Like other similarly favored enterprises, however, it ultimately failed.

The damage that one herd of tuberculous cows may do has been alluded to frequently. An instance came to the writer's notice recently. It was stated that from one herd in the Lower Fraser Valley tuberculosis had been spread directly to over 1,000 animals. The herd, which was practically wiped out when an inspector examined it some time previous to the establishment of the compulsory test, had been affected with the disease for years, and offspring likewise affected had been sold to many points in the province.

High prices continue to be paid for dairy cattle. I understand that quite a number of the breeders of pure bred are curtailing their sales, but the market is generally staying high, and that now is a good time to strengthen their herds. Several auctions and private sales have set high figures. Bedford Brothers, of Milner, sold a grade Holstein cow to Matheson, of Bonox, recently for \$250. At Chilliwack, a government auction of tuberculin tested imported grade cattle saw one six-year-old cow sold for \$210. It is predicted quite generally that prices will stay up, and the number of buyers is aware in excess of the number who care to sell.

Milk is the better for not being covered tightly until cool.

The Dairy Branch of the Department of Agriculture, Regina, cooperating with the Canadian Pacific Railway Company and the Grand Trunk Pacific Railway Company, have arranged for a dairy special train to be run over these lines during two of the winter months. Stops of half a day will be made at each point, and something of interest will be provided for the farmer, his wife and children.

# FARM AND DAIRY & RURAL HOME



We Welcome Practical Progression Ideas

The Recognised Exponee of Dairying in Canada

Trade increases the wealth and glory of a country; but its real strength and stamina are to be looked for among the cultivators of the land.—Lord Chatham

Vol. XXXIII.

FOR WEEK ENDING JANUARY 22, 1914

No. 4

## More Money for Rural Schools

RICHARD LEES, M.A., INSPECTOR OF SCHOOLS



35 Years in Use



One Example of Progress

**More Liberal Support the Remedy for Many of the Present Defects. Sources of Revenue that Would Not Burden Rural Taxpayers. How the Money Should Be Spent**

*"The Chief Business of a Commonwealth is Education."*

WHEN some of my readers observe the heading of this article they may be disposed to say that if no other remedy but increased expenditure can be suggested, things had better remain as they are. There will be the

tate proposition could possibly bring such handsome or satisfactory returns. But the return in material things is the least important. The others cannot be reckoned in dollars and cents. They are culture and morality, wisdom and happiness. There is certainly little in the argument that we cannot afford to pay more for education so long as we are paying five times as much for smoke and drink.

the rapid increase that has taken place during recent years. The statement has recently been made that there are employed in the departmental stores of Toronto a sufficient number of persons holding teachers' certificates to man the schools of the city. Why are they there? Can it be that they prefer the conditions of life in the big store to those in the schools? If so it is but another reason for a radical reform in school conditions. The more probable reasons, however, are that the pay is better and the chances for promotion much greater. In business life there are prizes to which every faithful worker can hope to attain that are entirely wanting in the teaching profession.

**In 1911**  
the amount spent on each pupil attending the Public Schools of the cities of Ontario was

**\$37.48**

The amount spent on each pupil attending the country schools, was

**\$17.64**

Is this fair to the country children?

Then if any of my readers have had the actual experience of paying for education in a private school, where the actual cost has to be met by

**"The Assessment of the city of Montreal rose from 428 millions in 1910 to 638 millions in 1912, an increase of over 100 millions a year, at least half of which was in increased land values.**

**In Toronto land values alone rose from 107 millions in 1910 to 210 millions in 1912, or an increase allowing for added area of over 80 millions in two years."**

**Who earned this immense increase of wealth? Who has it? Why should not part of it be used for rural educational purposes?**

those who use the privilege, they will have realized the full significance of the assertion that our public school education is costing a mere trifle.

The present scarcity of teachers is due in a larger degree to the smallness of the salaries than to any other single cause. Even in the cities where the larger salaries are paid the remuneration of the teacher is small compared with that of other callings that are comparable as regards qualifications and responsibility, notwithstanding

### HOW TO SPEND THE MONEY

Thoughtful readers will probably ask, what I would do with the additional money, and where I would get it. My reply to the former question is, that I would spend a considerable part of it in improving rural school conditions. The present out of date system should be abandoned, the rural schools consolidated as rapidly as those concerned can be induced to give their consent, and buildings erected in which provision would be made for the development of all that pertains to country life.

A considerable sum should be spent in the training of teachers specially fitted for the work of teaching a rural school. Recognition should be given to the fact that the rural school ought to be a type distinct from the city school, and that so long as the same training is given teachers of both classes at schools, so long will there be failure in one or both. Then salaries should be increased. Without taking time to combat

**IN BRITISH COLUMBIA**  
The Province Pays  
**\$480 of the Salary of Every Rural School Teacher**  
And in Addition  
**Half of the Balance Necessary to Secure a Teacher**  
Why should British Columbia do so much better in this respect than Ontario?

old story about high taxes and the present enormous cost of education.

In a former article of this series the statement was made that we are paying a mere pittance for education. A very reasonable estimate of the amount paid for intoxicating liquors by the people of Canada places it at about \$11.30 per head of the population. It is probably considerably more. For tobacco we pay at least two-thirds as much. Taking the population as determined by the last census and assuming that the average for Ontario is the same as for the Dominion as a whole we find that Ontario pays annually 28½ millions of dollars for liquor and 21 millions for tobacco. In 1911 we paid for public and separate schools, \$10,802,174. That is, for every dollar we pay for schools we pay two for tobacco and nearly three for liquor. Surely no one would contend that we cannot as a people afford to pay as much for public schools as for liquor and tobacco together, but as a matter of fact we are only paying a fifth as much. More than that the 50 millions that we spend for drink and tobacco bring no return, while all experience goes to show that no money spent by a people brings more ample and direct financial returns than that spent for schools.

If we should start now and spend four or five times as much on education, provided it were spent wisely, the increased productiveness of our people, in a very few years would meet the added outlay 10 times over. No gold mining or real es-

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the argument that the salaries being paid at present are sufficient for the services rendered, it may safely be said that one, probably the only way, of securing efficient service is to offer to pay what efficient service is worth. Salaries should be graded so as to increase with successful experience, and also with continued faithful service in the same school. In addition to all this there should be adequate provision for a pension fund, as there is now in some of the other provinces. There came to the knowledge of the writer recently the case of a teacher in another province, the holder of an Ontario certificate, who was offered in this province a salary considerably higher than he is receiving, but declined saying that by remaining he would in a few years be eligible for a pension in case of incapacity. This he thought of more value than increased salary.

As to the other question it has already been shown that the people can easily afford to pay many times more than they are doing for edu-



**A Rural School That Cost One Dollar for every Eight of the Total Assessed Value of the Section**

cation. If it were possible to cut our tobacco bill in two the money for schools could be doubled. Then if we should go a step further and divide our drink bill in the middle, we could have 35 millions for schools, instead of 10 as at present.

As was pointed out in a former paper, education is now universally recognized as the business of the state. According to our constitution it is made a provincial matter. If it be correct that the state, that is the province with us, should provide for the education of its children, surely the province as a whole should bear the burden, and not the local school section. The present system by which one section is compelled to pay a school tax 10 times as high as a neighboring section and still have a poorer school, is fundamentally wrong. To increase the unit to the township would be a partial remedy. But the advantage of that is at present obtained to a considerable extent through the uniform tobacco levy. If the county were made the unit and a considerable proportion of the revenue contributed to the county board in the form of a provincial grant, it would probably come nearest to the ideal condition. The burden would then be largely borne by the province as a whole and would be left to local sources to keep alive and stimulate the interest of the community, such things for instance as making provision for heating, caretaking, etc.

In opposition to this it may be held that if rural schools are to be maintained largely at the expense of the province, the burden will fall with disproportionate weight on the centres of population in the cities and large towns. Even if this were correct, there are many things to justify the making of such a condition. First, the superior conditions of life in the towns and cities constitute a good reason for asking them to bear some of the burden of an effort to better rural conditions. Should anyone doubt their superiority a sufficient reply is to ask how otherwise it is possible to explain the present tendency to flock to the cities.

Second, so long as this tendency cityward continues, the citizens would be merely helping to provide for the education of their future citizens. As long as the cities are draining the rural communities of their best life, it is surely a small thing to ask that they contribute in their turn to the uplift of these remote communities by making the rural school a more potent influence. But besides all this, we find the wealth in the country is gradually being accumulated in the cities and large towns. In 1901 the assessment of the towns and cities was 44 per cent. of the total assessment of the province, while in 1911 it had risen to 85 per cent. The wealth, the culture, the very existence of the urban centres depend on the rural communities. In the ultimate analysis the whole business and industry that creates, accumulates and maintains the wealth of the cities depends on the productiveness of the farms, which in turn depends on the skill, industry and frugality of the rural population.

A very large proportion of the wealth of the country is produced on the farms. Under our complex system the handling of this from producer to consumer is controlled by residents of the cities. Owing to the business created by the rural communities in this way, sudden and almost incredible increases have taken place in value of properties devoted to this business. These increases have in no case gone to the people whose productive energy caused them, but into the hands of fortunate owners or speculators. Not only is this so, but in order that the business may continue rents have to be paid on the basis of those inflated values, and hence every increase in value caused by the industry of the farmer becomes a tax on that industry.

These are some of the things that are robbing the rural communities of the fruits of their toil, and causing the depopulation of the rural districts. Can anyone suggest a sane and valid

**"THE public is not altogether to blame for present conditions," says Professor Fought, in his book on "The American Rural School." "The teachers themselves have hardly realized the shameful injustice worked the school children in a social system which will tolerate the expenditure of over two billion dollars annually for intoxicants and tobacco, while it gives all public education only three hundred million. The plain duty of the teacher is to inform himself of the facts, and then in no uncertain manner launch an "educational campaign" to enlighten his patrons and give them no peace till they realize the situation and act."**

reason why some of this wealth, made by the farmers and accumulated in the cities, should not be returned in the form of grants to rural schools? The continuance of this wealth is dependent on the continued efficiency of the productive processes on the farm. Just as soon as the rural districts should cease to supply the material which forms the basis of all commerce, so soon would this wealth cease to exist and any movement that tends to increase the productiveness of the farms tends at the same time to an increase of the wealth of the cities. Not only is this so, but the history of all the past goes to show that the very life itself of all urban communities depends on the country by which they are surrounded. The young, vigorous sons and daughters of the farms migrate to the cities, attain distinction or acquire wealth, and after three or four generations their descendants step down into the lower places or disappear altogether to make way for new blood with the energy and go of the fields and woods. For all these reasons and many others the wealth of the centres of population might fairly be asked to contribute to the uplift and efficiency of the life of the country.

## The Cement Silo Approved

Samuel Armstrong, Peterboro Co., Ont.

I have been very much interested in the discussion in recent numbers of Farm and Dairy on the best kind of silos to build. Mr. Martin asks

**"STRANGE as it may seem, the dollar-and-cents aspect of increasing the usefulness of the country schools is the first, last and only phase that appeals to many people. The question with them is, How much higher will the taxes be? Not Will the proposed improvement give us a better school and better returns for the money expended? \* \* \* Let us not cheapen educational opportunity for the country child. \* \* \* Country people can have better schools if they spend more money on them, and spend it in a better way. The money question is fundamental to the solution of the country-school problem." — Superintendent Kern of Illinois, in his book "Among Country Schools."**

whether or not concrete silos in Peterboro county would crumble after some years use by the acids of the silage. As I live in Peterboro county and know of one concrete silo that has been up for 20 years, another for 13, and another for nine, and in each case they are just as good as the day they were built, and look good for centuries.

So far as my observation and experience goes, the round concrete silo stands in a class by itself, away beyond anything else, except in one particular. Being a conductor of heat and cold, the silage freezes more than if the silo were wood or cement block. To get rid of the frost seems to be the great problem. One way in which this can be done is by going down into Mother Earth.

I find that the experience of many has been that the silage is better down near the bottom of the silo. The chief reason for this I believe is that it is away from the frost and air. I have given a good deal of attention to this question as my own silo is built of wood, sitting on the top of the ground at the back of a bank barn. The bottom of the silo is about five feet above the stable floor. I have decided to saw about four feet off the bottom, then dig down about eleven feet, and build up with concrete, using the earth taken out to bank up to the top of the concrete, thus having over 13 feet underground. This will make the floor of the silo five feet lower than the stable floor. By making the lower opening the size of an ordinary door so that one can walk right in with a basket, or better still run a feed carrier in, this ought not to be much disadvantage.

As to having a small silo for summer use, the idea suggested by a correspondent of Farm and Dairy sometime ago looks like a better plan, namely to build your silo as big as you think you will need, then build a thin partition about six or eight feet across the centre, so that one-half can be used at a time. This will give all the advantages of a small silo with none of the disadvantages.

## The Money Value of Breeding

Can we afford to invest money in pure bred stock? Compare these prices with those realized at an ordinary sale of ordinary stock, and then figure what you can afford to invest in a good pure bred sire.

The Johnson Bros. are a couple of wideawake farmers in Huntingdon Co., Que. They have been making it their business for some time back to improve their dairy herd by the addition of pure bred cattle and likewise by grading up their dairy herd by the use of pure bred sires. Just recently the Johnson Bros. held a sale. Their pure bred cows averaged \$340 each; their grade pure bred cows averaged \$160; their pure bred yearlings averaged \$220, and grade yearlings \$56. One grade cow actually fetched \$275.

### Why I Endorse Alfalfa

Walter H. Bowley, Middlesex Co., Ont.

I am a small dairyman and breeder of dairy cattle. I am in the business, because it is my hobby or fancy and also for the dollars that are in it. But if I could not raise alfalfa and corn ensilage, and considering the price of more concentrated food that one would have to buy, at least a good deal more of it one did not have these two wonderful fodders. I do not know how one could get very many dollars out of the business. With the help of these two fodders I am sure one can put up one hundredweight of milk 50 per cent. cheaper than without them; and that makes a great deal of difference to the profit side of the business.

To illustrate: In 1909 I had one particular cow in the test which gave 9,400 pounds of milk in the year. She freshened in November of 1908 and produced in the neighborhood of 50 pounds a day.

To make her do this without alfalfa, I had to feed her 10 pounds of mixed grain a day, with hay and corn (not ensilage). She freshened again in November, 1909, and all winter has milked about 37 pounds a day on first-class alfalfa and well matured corn ensilage alone. I ran her this way all winter to discover what alfalfa and ensilage would do, and while I did not get as much milk, you can readily see the profit was much greater than when I fed 10 pounds of grain to get 13 pounds of milk more.

#### SAME MILK—LESS GRAIN

There is another point: I am sure I could have had the 13 pounds of milk extra if I had started her on a five pound grain ration with alfalfa and ensilage, which I think would have paid two-fold: I would have had 13 pounds more, and my cow would have been in better condition this spring. Although she is in fair condition on alfalfa and ensilage alone, she is a little thinner than the rest of the herd and a little below my standard. I like to keep them in the pink of condition all the time. It pays.

Alfalfa is not only good for the dairy cow, but we have fed it to every class of stock on the farm with splendid results. We keep a few sheep—weed destroyers, and I have taken some of the best red clover hay I had, and given it to them, and then a small armful of alfalfa hay. All at once every sheep would leave the red clover hay and not go back to it till they had finished with the alfalfa.

#### FOR HOES AND HORSES

One season we wintered our sows entirely on alfalfa, and they did well and are in good condition. Horses will winter well on alfalfa, and a team at slow work will work as well on alfalfa as they will on coarse or over-ripe timothy hay with four quarts of oats. For driving horses the forage is not as good, as they are very apt to scour. Poultry in the winter seem to relish alfalfa leaves, and to aid winter egg production there is nothing better.

It seems strange to me that on land where alfalfa can be grown successfully (any land that is well drained) there is not more alfalfa grown. There are only two reasons that I can think of: First, those who do not know the plant can hardly grasp the idea that it is as valuable as it really is; second, the extra labor required to

harvest it successfully. I think probably the last is the principal reason. Great scarcity of help prevails over Ontario generally. But we sincerely hope that the time will soon come when every farmer—every dairyman in particular—will grow alfalfa, and grow lots of it, too.

### Methods of Sweepstake Winner

Jas. W. Finn Slyker, Desbroyne, Ont.

It was a pleasant surprise to me to learn that the first prize and sweepstakes has again been won by my herd in the class for cheese patrons with eight to 14 cows. I appreciate this win all the more so because I had not intended to enter until a great part of the summer was gone.

My herd is composed to a large extent of the same cows which won the sweepstakes three years ago. Some of the poorer cows of the previous year have been weeded out and their places filled by the offspring of the better animals. I always

### Yearly Closing of Farm Accounts

Jas. Stewart, Brome Co., Que.

Many of my farmer neighbors keep accounts only in order that they may know who owes them and whom they owe. Their accounts never show them just where they themselves stand in the business world. They never close their accounts, that is balance them up, and find out where they stand. I regularly close my accounts and I find that that balancing up will reveal bad management quicker than any other system of which I know.

I close my accounts about the first of February. The best time to close accounts is after the activities of one season are completed, the crops sold, and the activities of another season about to begin. It would be impossible to close accounts in the middle of the summer, for instance, for at that time we are not yet estimate on the value of our growing crops, as an untimely blight or early frost might work considerable injury on them. In February, however, the crops have all been harvested, those that go to market are already there, and we can estimate pretty closely just where we stand.

When we have the balance for one year and then compare it with the balance of the previous year, we are in a position to know just whether our year's operations have been successful or not, and if not, we soon find out why.

### The Evil of Blinders

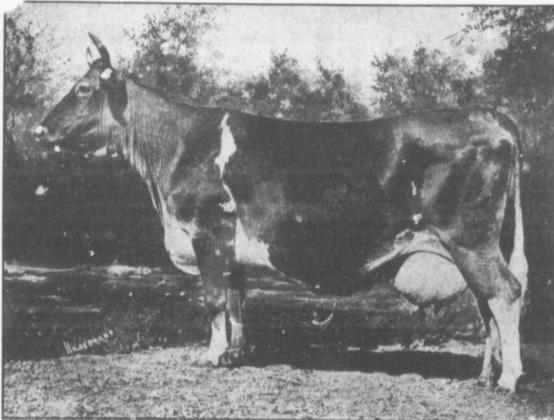
Jas. Armstrong, Wellington Co.

That spicy little paper, "The Farm Journal," has a story in a recent issue that I wish to pass on for the benefit of Farm and Dairy readers. On a farm in that country a young thoroughbred mare and a lighter and older mare were hitched together on a plow. The young mare was always ahead as far as the driver would permit, always worrying and fussing and tiring herself more in half a day's plowing than she should have done in a full day. Fortunately the young fellow who drove the team was a man of ideas. In a couple of days he removed the blinders from the bridle of the younger mare, and the results were immediate. The more energetic of the team immediately saw that she was giving her older companion more than the latter could stand, and from the day that the blinders were removed the team worked well together. This little incident shows brains on the part of both the horse and the driver.

A couple of years ago I bought a horse at less than its value because it had the "shying" habit. It would bolt at almost anything. The man who had previously owned the horse always used blinders. There isn't such a thing around my farm, and when the horse, a highly nervous animal, found that it could look around and see the things that frightened, it was soon cured of the shying evil.

The fact that my horses became accustomed to automobiles much sooner than most of the horses in the neighborhood I attribute to the fact that they could see freely in all directions. Blinders I regard as an evil.

Warmth is not the first essential in a good winter stable. Good ventilation and light are even more requisite.



One of the World's Greatest Guernsey Cows—Spottwood Daisy Pearl

Spottwood Dairy Pearl has an official record of 18,622 lbs. of milk and 957.38 lbs. of butter fat at seven years and five months old. She is owned at Anna Dean Farms, Barberton, Ohio. This photo was taken after her record was made, hence the cow does not show up to very best advantage. Like other great long-distance producers, however, she has every indication of strong constitution and great feeding capacity.

prefer to raise any additions to my herd myself, using my best cows. The present herd consists of seven veterans of the year 1910, and three younger cows, all grade Holsteins. The seven are the product of grade Durham dams and a pure bred Holstein sire. The three are from grade Holstein dams and pure bred Holstein sire. In all cases milking strain figures largely.

Good clover pasture constituted a great part of the summer feeding. When this began to dry up, a soiling crop of oats, sown early in June, was ready and helped out the falling pasture quite acceptably. This oat pasture lasted until the first week of September when sweet corn took its place. Very little grain was fed during the summer months, perhaps about three pounds a cow a day. This was in the form of oat chop.

We try to milk at regular hours. We stop the other work of the farm a little early in order that the night's milking may not be too far distant from that of the morning. I have always carried out this plan and it seems to be a good one. A good supply of fresh, cool well or spring water is always accessible to the cattle. The quality of the herd backed by these methods is the only reason I can give for winning the splendid trophies put up by the Association this year.

Feeding a cow as if she were a public nuisance will make of her a private nuisance—a star boarder.

# Large Holstein Farm in Niagara District

A division from the usual Niagara fruit farm is the Hamilton Farms, located two and a half miles from Niagara Falls. A fifteen minute ride on the St. Catharines trolley line brought an editor of Farm and Dairy, a few days ago, close to these farms, where he was met by Mr. Leach, manager of the stock farm, and shown one of the largest Holstein farms in Ontario, consisting of over 500 acres. Mr. Hamilton also has 100 acres given over to fruit, on which there are 40 acres of peaches.

This adjoins the stock farms. Hamilton Farms are not the hobby of a millionaire. They must stand on their own bottom or cease to exist—in other words, be a paying proposition.

At the present time there are 100 head of choice grade Holstein females on the farm, about 60 of which are milking; the balance are yearling heifers. Records are kept of all cows milked; none are kept that do not come up to the standard. As a result, 60 head of mature cows have produced from 7,000 to 11,000 lbs. each from April to December 1st. The milking is done with a Sharpless Milking Machine and gasoline engine. Electric power is expected will be installed shortly. At the central farm a modern cement block dairy stable was erected this past

have been gathered together after a lot of careful thought and time on the part of Mr. Hamilton and Mr. Leach.

spring that will be worthy of our closest attention—animals hard to beat. In the selection of this bull Mr. Ham-

ilton places himself at once in the front rank of Holstein breeders.

The 50 head of pure bred females represent most of the prominent blood lines of the breed, and individual perfection of form and udder has been the prime factor in choosing the animals themselves. In addition many animals have been selected eligible for registration in both United States and Canadian Herd Books, in order that advantage may be taken of both markets. Among the choice females may be mentioned Tyrina Netherland 3rd with a record of 57.35 lbs. butter in 7 days, 112 lbs. in 30 days, a daughter of Senior Paul de Kol Burke, Jr., who has five A. R. O. daughters, all of which range from 19 to 28 lbs. in 7 days, and one of which has a year's production of 805 lbs. butter. After milking for four months, and being fit for sale, she is still producing from 55 to 65 lbs. a day. A cut showing her excellence of form appears on this page.



1918 The Herd Sire at "Hamilton Farms".

Excellent in type and rich in breeding. Prince Hengerveld of the Pontiacs combines the blood of the two great producing families—the Pontiacs and the Korndykes—being a son of the great King of the Pontiacs, and a grandson of Pontiac Korndyke. His daughters are already proving his worth, the first tested one having produced 16.6 lbs. butter as a junior two-year-old. Another owned by Dr. Harwood at Vaudreuil, Que., is in the Ottawa Dairy Test, and promises well. The Prince is truly a herd leader. At "Hamilton Farms" there will be wider scope for his ability.

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Oscola De Ko', Beryl Wayne, a daughter of Duchess Azzie De Kol Beryl Wayne, 14 record daughters and full sister to Bliske Clothide Beryl Wayne, with 12 record daughters, is one of the superior individuals in the herd; her immediate ancestors are making grand records. She is also a heavy producer. Two big toony cows are Phocis Korndyke, a large 17 lb. three year daughter of Mantel Korndyke and Canary Queen DeKol, a 19 lb. high testing cow whose dam has two and grand sire 10 A.R.O. daughters.

Among the large number of thrifty young stuff coming on are six year-old



Another Big Producer with Quality Breeding

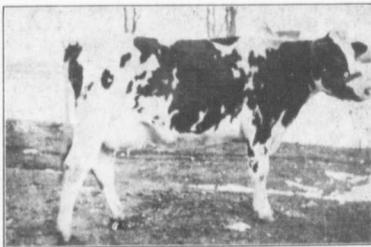
This is Trixie Belle 2nd. She has 22 lbs. to her credit. Her dam gave over 100 lbs. milk in a day. She is a grand-daughter of Sir Pieterje Vosh and Verhella 4th, the latter the winner at the Pan American.

summer. It is in the form of a T to the big bank barn. In this addition 55 cows are stabled, tail to tail, with a passage wide enough to admit wagon or sleigh in removing manure. It is particularly well lighted, very sanitary and insures healthy cattle.

### NUCLEUS OF PURE BRED HERD

It is Mr. Hamilton's intention to dispose of all the grade cattle immediately, which by the way is a great opportunity for those who are looking for something real good in test grade cows and heifers. If you are anxious to buy it would pay you to get in touch with them at once, as they intend clearing them out and developing the pure bred Holsteins entirely, of which there is a beautiful herd of 60 head at the present time. These

stein breeding, being the King of the Pontiacs. He had just arrived at Hamilton Farms from Manor Farm, a half interest in him having been secured from Mr. Gordon H. Gooderham. The excellent breeding, producing ancestry and popularity of this sire should combine with Hamilton Farms' 50 females that are the choice of many herds in United States and Canada in producing off-



A Daughter of Prince Ormsby Boy

Max. one of the choice three-year-olds, comes from a line of heavy milkers. She is a grand-daughter of Sir Admiral Ormsby, and has a big future ahead as she combines both heavy production with high butter fat test.



The Desirable Kind of Foundation Stock

Tyrina (Netherland 3rd, a six-year-old, has not only the finest of conformation, but productive capacity. Her record is 27.38 of butter and 549.03 of milk. In 30 days she gave 112.67 butter and 2,770 of milk. Her lowest record was 21.5 lbs. butter per week. With Hengerveld of the Pontiacs she should throw offspring that will be at the front in production and reproduction.

Trixie Bell 2nd, a 22 pound cow from the Wilbur Prouse herd, is another grand individual of the herd. Her sire Centreview Pieterie, already with six A. R. O. daughters, was by one of the best sons of the famous Sir Pieterje Posh and Verhella 4th, a Pan-American prize winner. Her dam, an imported cow, has a record of over 100 lbs. milk a day.

SOME OF THE CHOICE BREEDING

Bonnie Wayne Hesselje, a beautiful 2 year old, is by a son of Pontiac Hesselje De Kol, a great producing son of Hengerveld De Kol and Hesselje 4th, and a brother of Pontiac Ascalon, 28.18 lbs. This heifer has a jr. 2 year old record of 13.50 lbs. in 7 days, 50.24 lbs. in 30 days. She and her four-year-old half-sister, Gracie, Lady Wayne's 2nd Bonnie 2nd, the latter as good an individual as her younger sister, and now springing to calves, were imported from Ohio. In

daughters of a son of Chanjeing Butler Boy, 50 A.R. daughters, whose sire, Pontiac Butler Boy, 57 A.R.O. daughters, is a brother to the great trio of bulls Hengerveld De Kol, Pieterje Hengerveld's Count De Kol and De Kol Burke. The dam of the sire of these heifers has just completed a record of 30.21 lbs. in 7 days, a daughter of Tidy Abhekri Prince, 35 A.R. O. daughters. The dams of some of these are Eldmade Maid, 90 lbs. at three years; Springbrook Queen Canary 2nd, 24.39 lbs.; Lady Netherland Queen, 29.18 lbs.; Prince Faa De Kol, 16.51 lbs. at 3 years old. This bunch for breeding and individuality are hard to beat.

Other good heifers are Elmdale Floss, Dutchess Colantha, Sir Abhekri, a son of Colantha Johanna and a 28 lb. daughter of Tidy Abbe (Concluded on page 55)

WESTERN ONTARIO DAIRYMEN TAKE AN OPTIMISTIC VIEW OF FUTURE

Trade Conditions Make Record Prices for Dairy Products Inevitable in Canada. Also Much Plain Talk Regarding the Quality of Butter and Cheese at the Convention of Western Ontario

DAIRYMEN of Western Ontario are fully alive to the advantages that changing conditions are bringing to their industry. Optimism was the prevailing tone of every session of the 47th Annual Convention of the Western Ontario Dairymen's Association, held at Stratford last week. Optimism was reflected in the addresses from the platform and in the discussions in the corridors. President Facey voiced the feeling of the meeting in his opening address. "The outlook is bright for those engaged in the dairy business," said he. "The increased market for cattle and dairy products have produced a demand for cattle in Ontario that has advanced the price at least 25 per cent. in the past year. The quantity of milk and cream required for our cities has made a good market for our products."

The directors' report was equally optimistic. "Present indications," the report read, "point to a strong future demand for all the dairy products that can be produced in Canada, and we believe that milk producers will in the next few years reap large profits in dairying. The outlook for good prices was never better."

**RECORD CREAMS PREDICTED**  
These clean-cut statements indicate the tone of the Convention. The very conditions that are causing the city householder of moderate means such anxious thought are playing directly into the hands of the dairy farmer. The situation was well summarized by R. M. Ballantyne of Montreal in the closing hours of the Convention. Mr. Ballantyne traced the decline of the export business and then proceeded to the subject of United States markets. "Over a very large territory," said he, "even so far north as the Lake St. John district in Quebec, a tremendous number of cattle have been shipped out of the country. Many of these were old cows. A tremendous number, however, were calves. It will not be possible to replenish our herds for five years at least, and for all that time there will be a beef famine. This famine will take more calves; and dairy herds will be more slowly replenished than any. I predict that our exports of cheese will fall off several hundred thousand boxes, and that next year you will see the highest prices ever paid for cheese in this country."

"Butter prices," continued Mr. Ballantyne, "cannot go higher than the world's markets. Cheese prices, however, depend on the Canadian and New Zealand supply. No other countries are prepared to make cheese. The New Zealand market is increasing wonderfully, but not so fast as we are declining. In the last 10 years, for instance, our exports have declined 1,900,000 boxes, but their's has increased only 8,000,000 boxes. In the high prices that are coming is the opportunity of the dairy farmer."

**PLAIN TALK FOR MAKERS**  
Dairymen have much for which to congratulate themselves. Everything at Stratford, however, did not go as pleasantly as a marriage feast. Much plain talk was delivered in, particularly on the second day of the convention, the cheese and butter makers being the victims. Mr. Robert Johnson of Woodstock criticized severely the boxing of cheese. In many cases 35 per cent. of the boxes reaching his factory were broken, and this breakage was due in large measure to carelessness in stowing them in the cars. Mr. Johnson opined that the factory should be responsible for this breakage. He also noted carelessness in

boxing, some boxes being two inches short of the size of the cheese and other two inches long. "Why," he asked, should the buyer be expected to trim boxes?

As at the E. O. D. A. Convention, the question of cheese boxes proved a stickler. Many are green and poorly made. Green heads are a fertile source of "wet ends" in cheese. Speaking from the maker's standpoint, Mr. J. N. Paquet said that manufacturers were very independent and that makers had to take what the manufacturer would give them, or do without. The advisability of giving the New Zealand crate a trial was discussed and viewed favorably by many makers and dealers.

**WESTERN ONTARIO BUTTER CRITICIZED**  
If these makers heard plain talk regarding their findings, they must have considered that they had got off easily when Mr. I. W. Steinhoff was through with his candid criticisms of Western Ontario butter. Poor flavor and coarseness were mentioned as the most common defects. Poor boxes and practically no finish were almost equally common. For proof that Western Ontario butter is just as good as it should be, Mr. Steinhoff referred regretfully to the winnings of Eastern buttermakers, particularly from Quebec province, and of buttermakers from Alberta, in the large fairs year after year. "Why," he said, "are makers so self-satisfied in view of these conditions?" The trouble, he said, started at the farm in poor handling and infrequent hauling.

Both Mr. Steinhoff and Mr. Ballantyne directed particular attention for the growing preference of consumers for a butter mildly salted; not over three per cent. "British Columbia consumers," said Mr. Ballantyne, "will pay two cents more for New Zealand butter because of its mildness and uniform quality. The best trade in our own cities wants two per cent. butter, as does also the best Eastern trade."

**RESULTS FROM CREAM GRADING**  
The discussion was not altogether destructive. Mr. Geo. H. Barr showed the way to improve quality in his discussion on "Grading Cream at Cream Gathering Creameries." Ontario butter, he admitted, is not popular in the West, where they are steadily improving the quality of their own make by paying for cream on its merits. Mr. Barr made special reference to one creamery, "in a Mormon settlement at that," where in the four weeks prior to adopting the grading system the butter from the factory graded 4.2 per cent. specials, 34.9 per cent. firsts, 26.2 per cent. seconds, and 4.7 per cent. off-grade. Cream grading was adopted the first week in July and in the next seven weeks 61.7 per cent. of the output was graded special, 25.5 per cent. firsts, 1.7 per cent. second, and 1.1 per cent. off-grade.

In his annual report, secretary Frank Hems was particular to comment on the impression that dairy factories in Western Ontario are doing in number. He noted a change from cheese to butter in numerous instances, but the total number of factories is still the same. One hundred and fifty-three cheese factories supplied by 10,331 patrons were in operation last year. Although Mr. Hems had no definite figures for the whole province, it is known that 100 of these factories made less cheese in 1913 than in 1912. He noted with pleasure a decrease of 39 in the num-

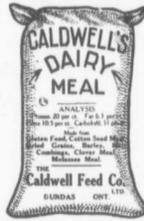
(Continued on page 11)

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JAMES MOORE, Queensboro.

WRITE FOR CATALOGUE TO-DAY. Y 72

THE STEEL TROUGH & MACHINE CO., LTD., 135 James St., TWEED, ONT.



## Mistakes in Cherry Growing\*

C. K. Seon, Ontario Co., N.Y.

When I began planting sour cherries 26 years ago there were no commercial orchards in this locality. It was to be expected that those who led in this, as in every new enterprise, would make many mistakes, and I have fulfilled expectations. My mistakes may keep others who are now setting large orchards of this fruit from learning in the expensive school of experience.

My first plantings were made 15 feet apart both ways. No sooner had the trees attained good bearing capacity than the lower limbs began dying and the tops to go skyward. This made picking the fruit a new proposition. While the trees were small women did nearly all the picking, and they were the best help ever had; but with the advent of the longer ladders they soon gave up the business, or went to younger orchards. Boys and girls and Italians took their places, and a change was made from day wages to piece work.

A MISTAKE IN PRUNING. To prevent the trees from growing too tall I tried heading back, the same as with peaches and plums. This proved to be only multiplying mistakes. Let me warn everyone against cutting back cherry trees. He will only spoil the tree without improving the bearing capacity of the lower limbs. After seeing my oldest trees failing every year I cut out every other tree in diagonal rows, and was rewarded by seeing the remaining trees make new growth on the lowest branches, set buds and bear fruit again. Of course, they will never be what they would have been if they had had room to spread naturally. Thirty feet apart is too far for sour cherries, but my trees at this distance are still a lot better than no trees.

I renewed the top of a block of English Morello trees that were fast dying out by deboring the entire trees, and the crop of fruit they gave last summer was the wonder of those who saw it.

### VERY SEVERE CUTTING BACK

Emboldened by this I took a block of old Montmorency, and instead of cutting out every other tree cut the limbs back to within 12 or 14 inches of the stump, leaving one limb in the centre to keep the tree alive. Much to my surprise, they are all making a new growth, giving promise of a limb is also cut back. The recuperative power of a sour cherry tree is greater than anyone would believe before he has tried it.

The object in shaping trees is to give them spreading tops, as near to the ground as possible. To do this the trees should not be planted closer than 18 feet. My latest plantings are 10 by 15 feet, intending to remove every other tree in the 10-foot row as soon as they begin to crowd. Before that time they will bear enough fruit to more than pay the cost of the trees.

### BEST STOCKS FOR CHERRIES

For years there has been a standing dispute as to the best stock for cherries, the nurserymen growing the Mahaleb and orchardists demanding the Mazzard as being a much longer lived and more profitable tree. I was

thoroughly instructed in this belief when I began, and went to considerable trouble and expense to secure trees on the Mazzard stock. But 15 years ago I decided to make a test for my own satisfaction, and planted a block of 18 rows, 20 trees to the row, six rows on Mahaleb and seven rows on Mazzard, and have treated both kinds exactly alike ever since.

When they first began to bear the Mahaleb trees bore far too heavily and the fruit was much smaller than on the Mazzard. In a few years the trees showed signs of weakness; 10 died and several others were saved only by severe pruning, while only one tree is missing today from the Mazzards. I added my condemnation of the Mahaleb trees and the nurserymen who sold them.

Five years ago I began an annual fertilization of my orchards with heavy applications of stable manure, when, to my surprise, the Mahaleb trees responded much more freely than the others, making a longer wood growth, foliage retaining brighter, and leaning on much better and having decidedly heavier crops of fruit.

## Rules for Windbreaks

1. Place the windbreak at right angles to the direction of injurious prevailing winds.
2. Devote from one-eighth to one-fifth of the farm to timber. Its productive value more than pays for the ground it occupies, to say nothing of the timber yield.
3. Plant only species suited to windbreak use, to the region and to the locality.
4. Plant rapid growers for quick results; but underplant with slower growing species, which are usually longer lived and more valuable.
5. Supplement a deciduous windbreak with evergreen, to afford protection in winter.
6. Separate trees by the spacing proper to the species used. The trees should be close enough to produce a dense windbreak and to yield good poles, but should not be so crowded as to produce spindling growth.
7. Make the windbreak thick from the bottom up, especially on the side facing the farm. This may be done by using species which branch near the ground, by planting outside rows of low-growing trees, by encouraging natural reproduction, and by underplanting.
8. Cultivate the plantation thoroughly while it is young.
9. Do not allow excessive grazing where reproduction is desired.
10. Do not thin your wood lot too heavily, or take out the best trees for minor uses. Remember that a timber tract should be improved by use, and that each clearing should leave it in better condition than before.—F. S. Dept. of Agriculture.

The following conventions will be held in the Canadian Foresters' Hall College, Street, Toronto: Fairs and Exhibitions, Feb. 5 and 6, 1914; Ontario Plowmen's Association, Feb. 8, 1914.

In sending in his renewal subscription Mr. E. W. Neel, Vancouver, B.C., writes: "I consider Farm and Dairy's stand against questionable and objectionable advertisements worthy of every support."

# SEEDS

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Further particulars, samples and prices on application.

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And yet that very spot may prove barren. Plants have to take up their food in solution, in the "sap of the soil." All this food may be locked up so tightly by nature that the plants can't get at it fast enough for the commercial farmer, and he has to put in the same food in the soluble form of fertilizer.

Just so, a fertilizer may, by analysis, have all the necessary elements and yet not give the plant full value because these elements are not ready soluble.

Put into your ground a fertilizer that will feed not your already overstocked soil but your hungry crops with food which is available and easily absorbed.

## Bowker's Fertilizers

have chemically correct elements—there is a brand to fit every need. More than that, these chemicals are blended and mixed so that they are rendered water-soluble and go into your ground in the most available form. Most crops do most of their feeding in 60 days.

Write for our illustrated catalogue, based on forty years of experience. In writing, state what your crops are.

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\*Excerpts from address read before the Western New York Horticultural Society.

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and diseases for 1914 has 228 pages with many colored plates of fowls true to life. It tells all about chickens, their prices, their care, diseases and venereal. All about hatching, their growth and their reproduction. All about poultry pests, of chickens, etc. You must have it. C. S. SHOEMAKER, Box 1805, Prepress, Ill.

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## POULTRY



### Goose or Gander?

How can I tell a goose from a gander?—"Housewife." N. C.

It is difficult to detect from appearances a young goose from a young gander; in the old bird it is comparatively easy. But in birds under a year even experts are often deceived. There is usually a longer neck to the gander and a somewhat coarser head, but other than this the appearances are pretty much the same.—F. C. Elford, Dominion Poultry Husbandman.

### Tuberculosis?

I have lost about 40 hens. They get lame, have white diarrhoea and just gradually become weaker and weaker until they die. They seem to eat though they get so weak they cannot get to the food. I have destroyed a number of them.—T. W. D. Hastings Co., Ont.

The symptoms point very much to tuberculosis, and I would suggest that your correspondent send a sick hen, by express, to Dr. Higgins, Bacteriological Dept., Experimental Farm, Ottawa. This can be sent collect. In the meantime isolate all sick birds; clean out the hen houses and disinfect thoroughly, and those that are not bad enough to kill, give in the drinking water muriatic acid at the rate of one spoonful to a quart of water. Let them have nothing else to drink except what contains the acid.—F. C. Elford, Dominion Poultry Husbandman.

### Poultry Diseases

Tuberculosis has wiped out a large number of flocks. It affects the liver and intestinal tract in the majority of cases.

Sick birds should be removed from the flock and dead ones burned, in an outbreak of any disease.

White diarrhoea of chicks is caused by a germ which is often passed from the hen to the chick through the egg.

It is a wise precaution to fumigate your incubator with formaldehyde gas before placing the eggs in it for hatching.

Be careful in introducing new birds into your flock to see that they are perfectly healthy, and not likely to bring disease with them.

The disease called "scaly legs" is caused by a mite belonging to the same family of parasites that cause mange in sheep, cattle and other farm animals.

A dusting powder for ridding birds of lice may be prepared by mixing equal parts pyrethrum (insect powder) and flowers of sulphur. Apply it with a power gun.

Poultry diseases, just like other diseases, are favored by unsanitary surroundings, spoiled food, stale and dirty drinking water and poorly ventilated and insufficiently lighted coops.

Many good chickens are spoiled by being packed before they are thoroughly cooled. Care should be taken that all the animal heat is out of the body before the fowls are packed.—Prof. W. R. Graham, O. A. C., Guelph.

A glass front poultry house causes extremes in temperature, warming up in the day time and then turning cold with the setting of the sun. This is also apt to cause disease and make the fowls' coats fall out, making them more sensitive to frosts. The open muslin front is by far the best and at the same time the least expensive. Some glass may be used, but not alone.

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We made our goods good, our customers made them famous. We manufacture what our customers say, to be the best Kerosene and Gasoline Engines, Wind Mills, Feed Grinders, Saws, Pumps, Scales, Tanks, Water Basins, Stanchions, Well Drills and Pressure Tanks, and we believe they know.

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The first cost of the Chapman Engine is no more than others. The cost of fuel for the Chapman Kerosene Engine is one-half that of any other gasoline engine, delivering the same power.

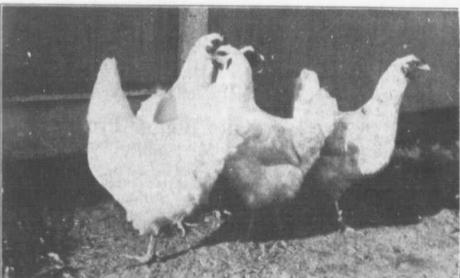
The cost of experting and adjusting is minimized. The new 12-inch diameter cam box containing every adjustable part, can be taken off in a moment, sent to us for repairs and returned, saving experts' time, railroad fare, or the freight on the entire machine.

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### GET IN ON THIS

## February Poultry Special

WHY DIDN'T YOU eat more eggs and chicken got pit last winter? Because eggs were 4c and 5c each, and chicken equally out of reach.

"OUR PEOPLE" have already recognized the value of poultry on their farms. Ninety-nine per cent of them are poultrymen. It's no longer a mere sideline of farming. It's one of the branches of the farm that furnishes an excellent income. Ask the housewives about it.

THE FEBRUARY 5 SPECIAL POULTRY NUMBER OF Farm and Dairy will give our advertisers one of the best sales privileges of 1914. It will go to over 36,000 of our thrifty, progressive farmers.

THIS BIG NUMBER will contain a wealth of spay information from our practical and leading authorities.

"OUR PEOPLE" appreciate these Specials. Our dairy breeders were pleased with our big Breeders' Magazine Number. Since it had an added value to them, and our December 4th issue carried 50 times as much live stock as our previous issue.

OUR POULTRYMEN are anticipating our February 5th Special. So it's up to you to come along right away for the good service this number will give you. Reserve it now. Don't come too late. Better drop us a line to-day.

ADVERTISING DEPARTMENT

Farm and Dairy - Peterboro, Ont.

# Farm and Dairy's Referendum

Farm and Dairy believes that the will of the people should decide all questions of public policy. We believe that the Referendum is the best way to find out exactly what the people think. Accordingly we will hold a Referendum in the issue of Farm and Dairy for January 29, by which readers, men and women alike, are invited to express their opinion upon eight questions of pressing national importance.

What do the people of Canada think upon these vital questions? That is what our Referendum is being conducted to find out. This is almost the only opportunity any part of the Canadian people have of pronouncing upon these progressive measures, and we trust every man and woman entitled to vote will mark their ballot, to be published in the issue of next January 29. These questions concern the whole Dominion, so we want Our Folks to combine to make the Referendum a full expression of their opinions, no matter where they live. Canadian public opinion must deal one way or another with the Taxation of Land Values, the system of Protection, the danger of Militarism, and the various other problems mentioned. By addressing themselves to these up-to-date issues, Our Folks will not only stamp themselves as the true Progressives in this country, but will also do something of a lasting benefit.

## THE QUESTIONS

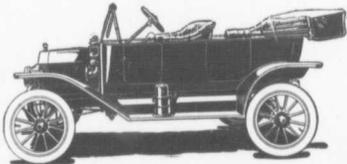
- Are you in favor of Dominion Legislation providing for the incorporation of cooperative societies? .....
- Are you in favor of having the Government own and operate all
  - Express Companies? .....
  - Telegraph and Telephone Companies? .....
  - All Railways? .....
- Are you in favor of extending the franchise to women on equal terms with men? .....
- Which would you prefer—
  - Sending \$35,000,000 to the Imperial Government as a temporary gift, to be expended for naval defence? .....
  - Expending \$35,000,000 to start a Canadian Navy? .....
  - Not spending any money for either purpose, but spending hundreds of thousands of dollars, if necessary, towards the establishment of universal peace and disarmament, and the settlement of international disputes by arbitration? .....
- Are you in favor:
  - Of increasing the British Preference to 50 per cent.? .....
  - Of increasing the British Preference year by year until within from five to ten years we shall have complete free trade with the Mother Land? .....
- Are you in favor of raising by a tax on land values only,
  - All school and municipal taxes? .....
  - All Customs taxes, thereby making the adoption of complete free trade ultimately possible? .....
  - If not in favor of having all Customs taxes abolished, do you favor the removal of the duties on agricultural implements and having the Dominion Government raise the necessary revenue by a direct tax on land values instead? .....
- Are you in favor:
  - Of the Dominion Government granting money for the improvement of highways, and designating, in consultation with the Provincial Governments, where and how such money shall be expended? .....
  - Would you prefer the money so granted should be expended under the control of the County Councils? .....
- Are you in favor:
  - Of the Referendum? .....
  - The Initiative? .....
  - The Right of Recall? .....

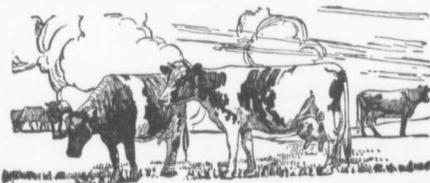


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- Pratts Healing Powder, 25c.-50c.
- Pratts Heave, Cough and Cold Cure, 50c.-\$1.00.
- Pratts Fly Chaser, 50c.-\$1.00.

### RULES

- The official ballot will be published in Farm and Dairy only once, on January 9, 1914. Extra copies of the issue cannot be secured, since this Referendum is for Farm and Dairy readers only.
- There will be a woman's ballot and a man's ballot, both exactly alike, so that the wives, mothers and any woman 21 years of age may vote as well as the men 21 years of age.
- Each question should be answered simply by writing "Yes" or "No" after the question.
- The ballot will be absolutely secret. Voters must sign the ballot, otherwise it will be rejected as a spoiled ballot. No name, however, will be published, but only the total numbers voting "Yes" or "No" on the questions.
- The ballot should be mailed to "Referendum Editor, Farm and Dairy, Peterboro, Ont.," as soon after January 29 as possible.

6. Letters to Farm and Dairy are invited dealing with any of the questions in the referendum. Letters opposed to Farm and Dairy's policy are just as welcome and will be published just as freely as those in favor, but all letters should be as short as possible.

### AN EDUCATIONAL CAMPAIGN

While we are anxious for as large a response as possible, the educational effect of the Referendum is still more important than the actual voting. Our Folks will be able to study all these questions at their leisure, discuss the doubtful points through the columns of Farm and Dairy during the next few weeks, and make up their minds calmly and deliberately, outside influences, such as party leanings or the personality of political candidates. No one knows everything about these eight national questions. Here is a splendid chance for us to learn more about them from each other.



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**T. EATON CO.** is now paying 34c. per lb. for Butter Fat. We buy cream, sweet or sour, of good flavor. We furnish the cans and pay the express charges within a radius of 250 miles of Toronto.

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## AT THE EASTERN ONTARIO DAIRYMENS' CONVENTION

There was no subject dealt with of more importance than the keeping of young people on the farm, interested and happy.

We all realize this to be a problem that is defying many farmers as the present time. The result is, the boys and girls are all too fast removing to the cities.

That boy or girl must have something that is of special interest to himself or herself, something they can call their own and that they take a pride in.

We want to give him or her a pure bred pig of any of the popular breeds.

### PARENTS

You should use your influence on your boys and girls to have them win one of these pigs. It may mean the keeping of your son or daughter at home. It may be the starting of his breeding pure bred stock in all lines.

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Please send me sample copies, circulars and literature that I may win a pure bred pig for nine new subscribers.

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### BUILD A SILO THAT WILL LAST FOR GENERATIONS

A silo must have an airtight and moistureproof wall to keep ensilage fresh, sweet, succulent and palatable. Don't put up a silo that will never need repairs, and, even while new, does not prevent your ensilage from souring or rotting. Build a

#### NATCO EVERLASTING SILO

The silo that's made of vitrified clay hollow blocks, each layer reinforced by continuous steel bands, and that keeps ensilage in perfect condition right down to the last forkful. Build a silo that will last all your lifetime and for several generations after you - a silo that never needs repairs or painting and that stands a monument to your good judgment.

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A Natco Everlasting Silo will never swell or shrink, never warps or cracks. There are no holes to tighten, no continual cutting for repairs—no loss from wind or weather—it's proof against them all. Any man can erect a Natco Everlasting Silo and when the job's completed you are through with silo troubles forever.

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We have an attractively illustrated book full of valuable information about ensilage and silos. It also gives a complete description of the Natco Everlasting Silo. May we send you yours? Ask for Book 6 NATIONAL FIRE PROOFING COMPANY, Toronto, Ont.

### Best Calf Dehorner

Instead of dehorning calves by the painful method of sawing or clipping, caustic potash should be applied as soon as the "button-like" horns can be felt, after the calf is three days old. There is no danger that the calves will suffer from blood poisoning or other infection of the wound. The College of Agriculture of the University of Wisconsin has used this treatment for the past few years, with greatest success.

The application of the caustic potash should not be postponed, or it may give unsatisfactory results. To apply the potash, the hair is removed from about the horns close to the skin. The potash is moistened slightly and rubbed over the skin which covers the point of the horns, until the skin is white.

It is not necessary to rub the skin until blood comes as this will cause unnecessary soreness. One such treatment is usually sufficient to prevent the growth of the horns.

The following precautions should be taken. The caustic should be wrapped in heavy paper to protect the hands of the operator. It should not be moistened too much, or else the liquid will run down the side of the calf's head and cause unnecessary pain. The calf must be securely fastened so that the head may be held still to avoid applying the caustic anywhere except over the horns. One stick of caustic potash, if preserved in a tightly corked bottle, will serve to dehorn many calves.

### Mr. A's Profitless Job

C. F. Whitley, in Charge of Records, Ottawa.

Two patrons of a noted Ontario creamery, both members of a cow testing association, at the end of last year had these records to study. Mr. A. milking eight cows sent a total of only 1,360 pounds of fat. Mr. B. with only five cows sent 1,777 pounds.

Patrimen in other sections are invited to consider what this means. A. had three cows more than B. to milk and feed all year, but received a smaller amount than B. by quite \$80. Nor is that all. The three extra cows consumed feed worth at least \$80 more, taking another \$80 that he was "out."

But one step further: A. worked hard milking those three extra cows, spending probably 200 hours more than B. on a thankless and profitless job. The cows were worth something as an investment, but it is doubtful if they return any interest on it; some allowance should be made for depreciation even of this wonderfully inefficient cow "plant"; then stable accommodation had to be provided for them; but the general care of the herd called for some

### Opportunity for Young Man

Are you a farmer's son? Have you a good English education? Would you like to be a writer in agricultural journalism? If so write Farm and Dairy. For the next few months at least we will have an opening in our Editorial Department that offers splendid training for the young man capable of taking advantage of it. One with a couple of years at agricultural college is preferred. Address all communications to Editor, Farm and Dairy, Peterboro, Ont.



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expenditure of thought and skill on the part of A. as general manager of his establishment.

The deductions are plain; however comforting a "guess" may be as to whether a cow, or a herd, "pays," there is nothing to take the place of actual dairy records. Further, whatever the production of a herd may be, comparisons with other annual records should be made in order to see if improvement is possible.

### Western Dairy Herd Competition

The Dairy Herd Competition conducted by the Western Ontario Dairymen's Association, did not attract as many competitors this year as last. The methods followed by one of the prize winners in the management of their herds are given elsewhere in this issue:

#### THE WINNERS

Cheese factory patrons, 8 to 14 cows: First, John Van Slyke, Dunborne, Dunborne Cheese Factory, 100 cows farm, 10 Holstein grade cows, 73,170 total lbs. milk, 7,811 lbs. of milk a cow; second, F. E. Hald, Lambton, North Street Cheese Factory, 105 cows in farm, eight high grade Holstein cows, 44,428 total lbs. milk, 5,553 lbs. of milk a cow; third, W. Johnston, Listowel, Elma and Mornington Factories, 15 cows, 47,161 lbs. total milk, 5,560 lbs. milk a cow.

Cheese factory patrons, 15 cows or over: First, W. Jinkins, Listowel, Elm Bank Factory, 18 cows, 109,833 total lbs. milk, 6,101 lbs. milk a cow.

Creamery patrons, 8 to 14 cows: First, A. Van Bieck, Onondaga, Brant Creamery, 230 cows in farm, eight grade Shorthorn cows, 1,751 total lbs. milk fat, 22 lbs. milk fat a cow.

Creamery patrons, 15 cows or over: First, H. F. Patterson, Paris, Brant Creamery, 160 acres, pure bred Holstein cows, 2,590 total lbs. milk fat, 141 lbs. milk fat a cow.

Special medals: John Van Slyke, Dunborne, and A. W. Van Sickle, Onondaga.

Silver trophy: John Van Slyke, Dunborne.

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With every rod of Page Fence goes this guarantee:

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STYLE		PAGE HEAVY FENCE		PRICES		
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<b>Spacing of Horizontals in Inches</b>						
4	30	22	10, 10, 10	\$0.16	\$0.18	\$0.19
6	37	22	8, 9, 10, 10	.18	.20	.21
6	40	22	6½, 7, 8½, 9, 9	.21	.23	.24
7	40	22	5, 5½, 7, 7, 7½, 8	.23	.25	.26
7	48	22	5, 6½, 7½, 9, 10, 10	.23	.25	.26
8	42	22	6, 6, 6, 6, 6, 6, 6	.26	.28	.29
8	42	16½	6, 6, 6, 6, 6, 6, 6	.26	.28	.29
8	47	22	4, 5, 5½, 7, 8½, 9, 9	.28	.30	.31
8	47	16½	4, 5, 5½, 7, 8½, 9, 9	.28	.28	.29
9	48	22	6, 6, 6, 6, 6, 6, 6	.29	.31	.32
9	48	16½	6, 6, 6, 6, 6, 6, 6	.29	.31	.32
9	51	22	4, 4, 5, 5½, 7, 8½, 9, 9	.31	.33	.34
9	51	16½	4, 4, 5, 5½, 7, 8½, 9, 9	.29	.31	.31
10	48	22	3, 3, 3, 4, 5½, 7, 7, 7½, 8	.31	.33	.34
10	48	16½	3, 3, 3, 4, 5½, 7, 7, 7½, 8	.31	.33	.34
10	51	16½	3, 3, 3, 4, 5½, 7, 8½, 9, 9	.33	.35	.36
10	51	22	3, 3, 3, 4, 5½, 7, 8½, 9, 9	.31	.33	.34
11	55	16½	3, 3, 3, 4, 5½, 7, 8½, 9, 9	.36	.38	.39
<b>MEDIUM WEIGHT FENCE</b>						
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<small>No. 9 Top and Bottom, and No. 12 High Carbon Horizontals between; No. 12 Uprights; No. 11 Locks.</small>						
5	36	16½	8, 8, 10, 10	.18	.19	.22
6	36	16½	6, 7, 7, 8, 8	.20	.21	.24
6	42	16½	7, 7, 8, 10, 10	.20	.21	.24
7	42	16½	6, 6, 7, 7, 8, 8	.22	.24	.27
7	26	8	3, 3, 4, 5, 5, 6	.22	.24	.27
8	48	16½	4, 5, 6, 7, 8, 9, 9	.26	.28	.31
9	36	12	3, 3, 3, 4, 5, 6, 6, 6	.26	.28	.31
9	50	16½	3, 4, 5, 6, 7, 8, 9, 9	.28	.29	.32
10	54	16½	3, 3, 4, 5½, 7, 8½, 9, 9	.28	.30	.33
<b>SPECIAL POULTRY FENCING</b>						
<small>No. 9 Top and Bottom. Intermediates, No. 12. Uprights 4 inches apart.</small>						
18	48	8	Close bars	.42	.44	.46
20	60	8	Close bars	.47	.49	.52
<b>PAGE "RAILROAD" GATES</b>						
48			10-ft. opening	3.80	4.00	
48			12-ft. opening	4.00	4.20	
48			13-ft. opening	4.25	4.45	
48			14-ft. opening	4.50	4.75	
STAPLES, 25-lb. box, freight paid				.75	.80	.85
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## CIRCULATION STATEMENT

The paid subscriptions to Farm and Dairy exceed 16,000. The actual circulation of each issue, including copies of the paper sent subscribers who are but slightly in arrears, and sample copies, varies from 17,000 to 18,000 copies. No subscriptions are accepted at less than the full subscription rate.  
We have detailed statements of circulation of the paper, showing its distribution by counties and provinces, will be mailed free on request.

## OUR GUARANTEE

We guarantee that every advertisement in this paper is reliable. We are able to do this because the advertising columns of Farm and Dairy are as carefully edited as the reading columns, and because to protect our readers, we turn away all unscrupulous advertisers. Should any advertiser herein deal dishonestly with you as one of our paid-in-advance subscribers, we will make good the amount of your loss, provided such transaction occurs within one month from date of this issue, that it is reported to us within a week of its occurrence, and that we find the facts to be as stated. It is a condition of this contract that in writing to advertisers you state: "I saw your advertisement in Farm and Dairy."

Agents shall not ply their trade at the expense of our subscribers, who are our friends, through the medium of these columns; but we shall not attempt to adjust trifling disputes between subscribers and honorable business men who advertise, nor pay the debts of honest bankrupts.

**The Rural Publishing Company, Limited**  
PETERBORO, ONT.

## Grasp This Opportunity

We hope that Our Folks will take advantage of the opportunity we will give them, next week to make their views known or the questions that will be submitted to them in the form of our Referendum. One reason we farmers have not wielded the influence in the community that we might, has been the fact that we have been divided on party lines and because, owing to the difficulties we experience in meeting together and discussing public issues, we find it hard to make our views known.

The Referendum in Farm and Dairy will give the 17,000 subscribers of Farm and Dairy an opportunity to let the public know what representative farmers think on the subjects under discussion. As soon as the ballots can be counted and the results announced, these results will be communicated to Premier Borden and the members of his Cabinet, and also to Sir Wilfrid Laurier and his chief lieutenants. No political party will dare treat such a verdict lightly if Our Folks respond in the manner that we hope they will. Remember, that the women also are to have a chance to make their views known. We venture to say that most of the women readers of Farm and Dairy are quite as capable of discussing and voting on these subjects intelligently as are the men. It will be interesting to see whether the men or the women cast the more ballots.

It is our intention to hold a Referendum of this character each year. This year, being our first attempt, we do not anticipate the response will be as large as it will be next year. Nevertheless, we hope Our Folks will seize this opportunity and thereby help us to make the views of farmers known. Remember every vote—that means your vote—will have its influence. The ballots will be printed in next week's issue. They will appear only in that issue. These questions you are to vote on appear in this number. Look them over, if you have not already done so, and decide how your votes will be cast. We anticipate receiving your support.

## True Self Government

The successful business in at least nine cases out of ten, is the one that is directly under the management of the proprietor. Whoever heard of a successful business man selecting a manager every four or five years and delegating to him the management of his entire business! Whoever heard of that manager being given such power that his employer could not question his actions, but must submit to every mistake and extravagance? True the proprietor would have the privilege of discharging an incompetent manager at the end of his period; but that would be a small satisfaction.

Of course this hypothesis is absurd. No business man could be persuaded to enter into such an unbusinesslike arrangement. He may delegate the management of various departments to various managers, but he will always reserve to himself the right to decide on important matters. And yet it is under this absurd system that our country is governed. Every few years we elect a party to power and for the next period of years we have absolutely no check on their government, except their fear of not being returned to power. That this fear is not sufficient to ensure economical expenditure, is well proved by the fact that we in Canada are to-day the most heavily taxed people in the world. Our expenditures for federal taxation alone amount to over twenty dollars a head of the population.

Is this growing expenditure unnatural? Have we any more right to expect good management when we delegate all of the powers of government to a few representatives than the business man who delegates his powers to a manager? Would not some system that retains for the people the executive power all of the time be preferable? We have such a system in the Initiative, Referendum and Recall, the subjects of the last question asked in Farm and Dairy's Referendum published on page 10 of this issue.

## Initiative, Referendum and Recall

The Referendum is already in operation in many of the cities of Canada. Local option in temperance matters is an application of the Referendum. In most cities important money by-laws have to be submitted to the people for their approval. For instance, the citizens of Toronto will themselves decide ere long through a Referendum, whether or not they will purchase their street railway system.

The Initiative enables citizens to make their own laws, when the legislators hesitate to give them what they want. Where the Initiative is in operation it is provided that when a petition signed by a small percentage of the people, usually five per cent., is presented to a government, requesting that certain legislation be submitted to the vote of the people, the government is forced to comply. Had we the Initiative in Canada, for instance, the farmers, who are in large measure opposed to increased military expenditure, could by presenting their petition force the government to submit the question of military expenditures directly to the people in the form of a Referendum, and if the people so decided neither of the policies advocated by the political parties could be persisted in, and expenditures would stay where they are. In short, these two measures, the Initiative and Referendum, give the people true self-government. They enable citizens to keep that check on their representatives that every good business man would keep on his manager.

To refer again to the analogy of the business man and his manager; the proprietor always reserves the privilege of discharging his manager when he fails to carry out his demands. The Recall would give the people the same privilege with their representatives in Parliament. A peti-

tion sufficiently signed would make it necessary for any member who had displeased his constituents to come back to his constituency and stand for re-election.

All three of these measures, the Initiative, the Referendum and the Recall, are already in operation in Switzerland, to a limited extent in other countries, and in many cities all over the world. In all cases they are meeting with the approval of the people. Would you like to have a similar check on your representatives in the municipal, provincial and federal governments in Canada? Our Folks will have an opportunity to express their opinion in the ballots that will be published next week in connection with Farm and Dairy's Referendum. We trust that many of Our Folks will take advantage of this, your first opportunity, of expressing your opinions on the great public questions of the day.

## To Prevent Abuses

The confidence of the people is the only sure and sound basis on which any great business can be established and long endure. This is as true in the pure bred live stock trade as in any other branch of industry. For the most part Canadian breeders of live stock have lived up to both the letter and the spirit of the command, "Be just to all men." Hence they have established the confidence of the public; not otherwise could the pure bred industry in Canada have attained the dimensions that it has.

It is regrettable, but true, that abuses have begun to creep into the pure bred business. Breeders of dairy cattle perhaps have less to answer for than breeders of any other line of live stock. Even here, however, such evils as—by-bidding at sales, the exhibiting of cattle at fairs that are not really owned by the exhibitors, and the selling of cattle that are known to be diseased, have become more or less prevalent, but hardly as yet to an extent to impair public confidence.

Now is the time for the breed associations to see that such practices are not persisted in. The members of the Holstein-Friesian Association will have an opportunity to show their disapproval of such practices when at the next annual meeting Mr. J. E. K. Herrick will propose to amend Article II of the constitution of the Holstein-Friesian Association of Canada, by adding a new section to read as follows:

"To prevent by-bidding at public sales; to 'punish the sellers of diseased cattle; to prohibit the fraudulent entry at fairs, or the exhibition of cattle not properly transferred. 'Any breeder found guilty of the violation of the letter and spirit of this section shall forfeit his privileges and membership.'"

Mr. Herrick's amendment is in accord with the spirit of honesty and fair play. It is also in accord with the best business precepts. Sooner or later such amendments to the constitutions of all the breed associations will be necessary if public confidence is to be retained. If eventually, why not now?

Rule of the thumb farming is drudgery. A farm run on up-to-date principles by a man who understands both the theory and practice of his lars and cents, but a college course enables

**How About Mary?** conception of the dignity and utility of his calling, is a never-ending source of satisfaction. That is one reason why boys go to agricultural college. True, it may enable them to earn more in dollars and cents, but a college course also enables them to get more out of life. Hence we plan to send John to college. But how about Mary? Housework is drudgery, unless like farming it is accompanied by knowledge. It is the function of such colleges as Macdonald Hall at Guelph and the Ladies' Department of Macdonald College at Ste. Anne de Bellevue to impart the knowledge that drives the monotony from woman's work, even as knowledge makes the work of a man a pleasure. Is John going to college? Then send Mary, too.

INFORMATION GLEANED AT THE E.O.D.A. CONVENTION

GOOD cattle is the safe and sure foundation of successful dairying, according to Henry Glendinning, Manilla, Ont., who was one of the first speakers of the Eastern Ontario Dairy Convention. "Let the Ontario dairy farmer confine himself to one of the well recognized dairy breeds," said he. "I do not mean by this that the cows should be pure bred and registered. Having made a selection on the breed use a pure bred, well bred sire of that breed." The following of this simple rule, Mr. Glendinning said, had made many a farmer prosperous. When the right stock is secured Mr. Glendinning advised against weakening constitution by

too early breeding. He set 30 months as a minimum age for the first freshening. Alfalfa and corn ensilage were advocated as the cheapest and best combination for the economical production of milk.

As was quite fitting, C. F. Whitley, Mr. Glendinning and told how the cows that won't respond to even such treatment as the former speaker had advocated could be detected and culled out. In one herd in Ontario that is tested under the Whitley plan, it was found that the difference between the production of the poorest and best cow was 5,000 pounds of milk. This was exceptional, but differences of 4,000 to 6,000 pounds are common. Above even the financial returns the renewed respect for his occupation and interest gives the farmer. Both of these addresses will be given more fully in future issues.

MR. GRISDALE SPEAKS  
"Common sense in cow feeding is the growing of the crops best adapted to our farms and feeding them to our cows in such a way as to get the greatest possible amount of milk." This is the definition of J. H. Grisdale, always a popular speaker at dairy conventions. To secure this desirable result he first advised that the feed be fed till she is brim full of food that is of high nutritive value and palatable and then keep her that way. Nutritive value, usually placed first as an attribute of a feed, Mr. Grisdale placed second to palatability. A cow will fill up only on what she likes.

Succulence is the first requirement of a palatable ration. Mr. Grisdale placed corn first on the list of succulent crops for the farmer, as a desirable pound for pound, but an expensive to grow and the crop is not so certain. Corn is a sure crop every year. Mr. Grisdale himself has not had a corn crop failure in 36 years. Where both of these feeds are lacking succulence may be obtained by cutting straw and hay and damping with water and 30 per cent. of feed molasses. This molasses, obtainable for 30 cents a gallon, is a valuable food that has been too long neglected; it has a food value equal to its cost quite apart from its value for succulence. The speaker advised against feeding of pure ensilage; "better mix it with a little cut hay," he said. "It makes it more palatable."

Variety in the ration, Mr. Grisdale said, can be gained best by giving a mixture of feeds each day rather than changing the ration from day to day. He advised feeding the most palatable and nutritious foods in the morning when the cow is hungriest and serving the less acceptable feeds at night; this in pursuance of the filling up plan.

Flavor, also conducive to milk production, may be had by buying the best grain feeds and harvesting the forages carefully. "Cut your clover," said Mr. Grisdale, "before you can see one dead blossom. Cut the timothy when it is in bloom." If all these things are observed, the speaker was confident that we would soon find it unnecessary to go to other lands for improved stock.

WEDNESDAY EVENING  
The evening meetings at Cornwall were perhaps the most successful in the history of the E. O. D. A. conventions. In addition to a high standard of addresses, the proceedings were brightened by splendid entertainments provided by the citizens of the town. And the citizens showed their interest by turning out in such strength as to fill the large Town Hall, gallery and all.

(Concluded on page 87)

AD. TALK  
COXXV

A story is told that in a city of ancient days the people wondered if the man in the moon were real. They wondered how they should find out, but one after the other the plans suggested to ascertain this were dropped as unfeasible. At last one suggested that at a certain time the whole city should raise a great shout and the sound would attract the attention of the man in the moon.

And so the time was set. But one by one each citizen (like so many of us to-day) said to himself: "Well, my small voice won't add much at all. It won't matter if I don't shout." And when on the day, in the hour and at the proper minute, a noise? No, so great a silence came upon the city that the old man in the moon smiled the smile he wears to-day.

Isn't the incident typical of present human nature? Aren't we much the same inclined, especially we people on the farms, just to leave it all to the other fellow. And to a great extent we lose the value of our combined energies. What sweeping measures we could effect? What vital changes in our life, if only we stood together to bring them about? The farmers of Western Canada have lived down the belief that we cannot, by acting in unison, accomplish great and needed reforms. They have proved it to us. From its very inception the movement of the Grain Growers was branded by many as a complete failure, simply because it was conceived in the minds of farmers and arose out of their combined energies. Has it been a failure? Ask the people of the West. Today, shoulder to shoulder, they hold in their mighty grip the power which for years had been gnawing at the vitals of their agricultural life.

Yes, our Western brother farmers have shown us the way. We need their fearlessness, their aggressiveness. This "Can and I Will" spirit that stamps them as different? They are pushed. They have made themselves heard in no uncertain voice—they have spoken as 'ones'. It's up to us.

Individually, it's the same. It's the man with this aggressiveness—the fellow that is pushing—that is leading the way. The man who is getting most out of his year's work in the fields—the man who lets as many people as possible have a chance to buy his goods. Here and there, all over Ontario you can pick out these men. You know some right in your own district. He gets higher prices than his neighbours. He raises choice stuff and then "let's people know about it." In other words—he

Did you read in January 8th issue the note of Mr. Forster, of Markham, in regard to advertising seed grain? Look it up in—Farm and Dairy.

"A Paper Farmers Swear By"

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DE LAVAL  
CREAM SEPARATOR

THERE is no reason why any cow owner who sells cream or makes butter should be without a separator and there can be no excuse for his not having the BEST separator.

ANY creameryman or experienced dairyman will tell you that a good cream separator will give you a great deal more and a great deal better cream or butter than you can produce with any gravity setting system.

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YOU Cannot make the excuse that you can't afford to buy a De Laval, because it not only will save its cost over any gravity setting in six months and any other separator in a year but is sold either for cash or on such liberal terms that it will actually pay for itself.

WHY not start 1914 right in dairying? SEE and TRY a DE LAVAL NOW when you have plenty of time to investigate thoroughly. The nearest DE LAVAL agent will be glad to set up a machine for you and give you a free trial.

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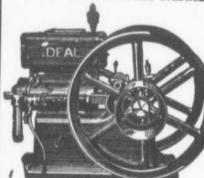
It's cheaper to raise colts than to buy horses. But it's costly if you lose the colts. Keep a bottle of Kendall's Spavin Cure handy. For thirty-five years has proved it the safe, reliable remedy for spavin, splint, cur, ringbone, bony growths and lameness from many causes.

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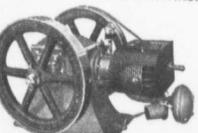
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**AN EFFORT** made for the happiness of others lifts us above ourselves.—L. M. Child.

## The Washerwoman's Son

By DEBORAH DREW  
Copyright, The Frank A. Munsey Co.  
(Continued from last week)

**B**UT Mr. Haines had begun to look broken. There were rumors about of the wild doings of Albert, his son; and lately the rumors had been banded about in whispers of a husband-forgery that would send the father to the wall. And the chief uncertainty was of Albert's whereabouts.

Fifteen years!—and to-day Mr. Haines was entering the Avery Bank. The tall man in the president's office saw him through the glass partition, noted the heaviness about him, the haggard face; and there flashed before him a succession of instantaneous pictures of other days—the denouncement of himself as the "washerwoman's son," the refusal of credit by Mr. Haines, the little girl under the oak tree, with her proffered assistance.

Mr. Haines was ushered in, and Dan gave him a chair.

The older man looked wearily upon the president's desk.

"Mr. Black, I am going to the wall; no need to tell you why; you know why. Unless I can borrow money I am ruined."

Dan's face looked singularly hard. "How much money?" he asked. "Twenty thousand dollars would save me, and my investment are such that in a year's time I know I could pay it back. It is only for the present moment that I must have money, or go down and out!"

A curious expression came into Dan's face.

"Mr. Haines, do you remember my coming to you fifteen years ago and asking you to trust me for a straw hat?"

There was a sudden weariness upon the older man.

Dan arose and went to the window. Mr. Haines spoke:

"Yes, I remember it; and I don't blame you for remembering it now."

Dan turned from the window.

"I am afraid I cannot oblige you." He was repeating, with singular accuracy, the words that had sent such bitterness into his soul fifteen years before.

The other man arose, saying only: "I cannot blame you."

He went out.

Dan watched him go, with his heavy, old tread, out through the front door.

Then, with rapid strides, he went to the cashier's desk.

"Look here, Williams, catch up with Haines immediately. Tell him you'll loan him twenty thousand dollars at once. And not on any account do you let him know that that money comes from me! This is your loan, d'ye hear?"

Williams suppressed a smile as he picked up his hat.

It was easy to understand why animals had loved this man and obeyed him.

The early evening of the same day

played upon her black; how broad her brow was.

Margaret walked steadily to within a few yards of where Dan was standing and stopped.

For one wavering second she twirled the end of her parasol into the ground and looked down. Then she looked up.

"Dan, I came to thank you for what you did for papa to-day—but I can't do it—anything I could say seems so thin and poor."

"Oh, what little matter of the loan with Williams? You must thank him." Margaret flung her parasol down and stopped impulsively up to Dan. She gripped a white hand upon each of his arms, just above the elbow, and looked up at him imperatively.

"It wasn't Mr. Williams, Dan; you can't deceive me—I know it wasn't. It was you, Dan, Black, who saved papa. And how could you do it!"

Dan had lifted a hand to each elbow belonging to the arms that pinioned his, and stood looking tenderly down into the steadfast eyes that were lifted to him. He spoke slowly.

"I remembered a little girl standing under a chestnut-oak offering all the money she had to a seedy, heart-sore boy who was starting out alone to test the world."

Margaret's face quivered. Her eyes brimmed, and she looked very like the little girl who had stood un-

## The Greatest Work of Mother and Home

**A** GOOD character is a precious thing above rubies, crowns or kingdoms. The work of making it the noblest labor on earth. Home influence may be estimated as the immense force in character building. Our habits are formed under the moulding power of home; the spirit is shaped, principles are implanted and the whole character is formed until it becomes a habit. Goodness or evil are here resolved into necessity. The greatest statesmen and warriors, the most eloquent ministers and greatest benefactors of human kind, owe their greatness to the influence of home.

Science has tried to teach us that a pebble cast into the sea, on any shore, its effects are felt over the whole ocean. If this be true it furnishes an example of the immense power of a mother's power, effects which stretch into Eternity. In what Christian country can we deny the influence which a mother exerts over her children? So intense is her power that the mere remembrance of a praying mother's hand laid on the head in infancy, has held back a son from guilt.—*Jessette Creaser, Haron Co., Ont.*

"Yes, mother; I have long known der the oak-tree fifteen years ago.

And then down came Margaret's head, with a sob, on one of the spans made by the interlaced arms.

Moll D. nestled around the house to the front veranda with the awnings and the wicker chairs.

THE END.

## Makes Home Happy

"A man may work from sun to sun but woman's work is never done." This little proverb may have been true when it was written. Probably the writer believed that the woman had little cause to complain because of her long hours. We have a different idea nowadays. We are finding that the merry voice and happy smile of the girl we marry remains—if she doesn't have to work too hard. Consequently a few farmers here and there have been working some method of reducing household work. A writer in the Indiana Farmer tells us how he has succeeded shifting the burden from his wife's shoulders on to an under-feeding gasoline engine, and incidentally saving himself a lot of work as well. He describes his plan as follows:

"We have a gasoline engine in our summer kitchen, on milk house. This room is 14 feet by 16 feet, giving us ample room for all the necessary machines to be used on a farm. I have a 16 foot shaft made from a one-inch galvanized gas pipe. This is heavy enough for the work I have for my engine. This shaft runs across the building with enough on each end outside the building to have a pulley.

"On one of these pulleys I have a belt that goes to the pump and by the aid of a home-made jack I pump all the water needed on a 600 acre farm with a good deal of stock. This water is pumped into the house into a storage tank and the overflow goes to the stock tank. In this way we have fresh water in the house most of the time, making it very convenient for my wife and myself.

"On the other outside pulley I run the grindstone which is quite a saving of strength and time besides keeping my tools in better condition. I also have it fixed to run in a small circle.

"On the inside I have three pulleys. One is for the cream separator, which is a piece of machinery every farmer ought to have, but it takes a good deal of time to crank it and if you have much milk it takes an extra man to remove the separated milk and pour in more to be separated. But if you have an engine you can start it going, run down an extra wheel which does the work, or if you feed part of the separated milk to calves you can go and feed them while it is separating the balance.

## SELF OPERATING CHURN

"Another pulley runs the churn. Churning is considered the work of the woman folk on most farms. But at our house we get the churn ready while separating, and let the engine do the churning. My wife goes about her general housework keeping watch on the butter as it comes out. She has taught her about how long it takes to churn, so she does not have to stay with it.

"The third pulley runs the washing machine and wringer, thus taking away the drudgery of the wash day. Instead of coming in at noon and finding my wife tired and bent over and holding her back as though it was broken, she is now up and ready to smile, and informs us dinner is ready. If you should ask the reason of the smile, or how she got dinner ready so soon on wash day, she would say the reason is this: I did it. I don't see how I got along without it.

## STEADY SEED CLEANING

"This is not all we use our engine for. When we want to clean our seed oats we move the engine to the granary and attach it to the fanning mill. It is no more trouble than cleaning bushels a day with two men, one to put the grain in the hopper and the other to take it away.

"The engine will take care of itself. We have had our engine five years at a very little expense. It takes about 1½ gallons of gasoline a week to do the amount of work we have to do, and we run it some every day. I can assure you that it saves me time as much to run one as it does, I would have one, or if it saves my wife hiring a girl, or me keeping an extra man so that I can go out and do my part in the field instead of being tied in the water and carrying it in, to relieve my wife of some of her hard work.

## GREATEST GOOD OF ALL

"With the help of a gasoline engine she can make a household affair keep in good spirits, keep the law and flowers sprinkled so they look beautiful, and make home happy.

"Some homes are bright as a spirit. A rich place in this world to dwell. But home is just what we make it.

"We can make it a heaven or hell." "But we need not expect to have our home a paradise if our wives have to work hard all the time."

I have used a vacuum cleaner nearly a year and it has given splendid satisfaction. It cleans carpets, mattresses, upholstered furniture, etc. I consider it a great help in housekeeping.—Mrs. J. M. Percin Leeds Co., Ont.

# The Upward Look

## Our Ideal

How sad, hopeless and aimless seems a life without the great motive power of an ideal; one of the most discouraging, but at the same time most encouraging forces in our lives!

To have an ideal is discouraging because no matter how long or how hard we may strive we can never really attain it.

The encouraging part is that by constant prayer, earnest thought and persistent endeavor, we will always become more and more like what we determine to be. Have you ever noticed how much elderly couples often look alike, though in the far away days of courtship, they may have been totally unlike?

An ideal is such a power in our lives that it will lead us to accomplish what often seems impossible. Many lives of the longago famous, the modern great and the unknown heroes of every-day life give us many an illustration.

Of course this ideal, this vision, often varies as the years go by. What a change in the boy of five, who declared he was going to hunt lions and tigers through the week and be a missionary on Sunday to the earnest Christian man, spending all his life for the benefit of his fellow-men.

Just as every minute part of ma-

chinery must be absolutely exact, in like manner we can never over-look any minor points in our life-education, but must constantly aim at being as well equipped as we possibly can to be ready for the realization of our dreams.

No ideal can be a vision beautiful unless it includes in it that thought of helping others to lead a life beautiful.—I. H. N.



## Grown Old Together

By Thomas Drier

They had grown old together, just he and she.

"How was business to-day?" she asked, as he stood washing his hands at the sink.

"Pretty good," the old man answered — "pretty good to-day, but will be the same without you. I'm sorry you're not strong and well as you used to be. I miss you very much."

There was a faint flush of a young-wives life for the finer sentiment in life, and years only increase the in-terest.

For years he and she had kept a little store in the middle of the block on Centre Street. Then she was taken sick and sent to the hospital, and could come to the store no more.

One day she started to visit him at the old store; but it was a long, tedious, hard walk. On the sidewalk, not far from the old store, he stood, with a tray fastened to his shoulders,

on which were a collection of collar buttons, braids and papers of pins. He had sold the store to pay the hospital bills. An Italian occupied it as a fruit stand.

It was a long, a much longer walk back for the old wife.

When he arrived, she, in her usual cheerful manner, said: "How was business to-day, William?"

"Business is pickin' up, Jane," was his optimistic reply.

That night they both harbored a secret from each other—the brand of a secret that spells sacrifice and deep regret.



## Maggots on House Plants

For the past year I have had trouble with my house plants harboring maggots which eat the fine roots off and kill the plants. They are small, clear looking worms about the size of a pin and about one-quarter of an inch long, with a black head and black spot on the body. I notice small flies on top of pots and think the maggots develop into them. I have tried soap suds, tobacco, carbolic acid in water and several other things, but without effect. Have tried repotting several times and brought earth from the woods, but in a short time they are as bad as ever, and eat the roots so that the plants can be lifted right off the top of the pot. I have some beautiful ferns that I find are dying off, and would like to save them—"Rose Floral."

The small insects or grubs mentioned as infesting the soil of pot plants are induced by a sour, badly drained soil, and originate often from the barn yard manure used in potting soils. The plants had best be repotted at once, removing as much of the old soil as possible without injur-

ing the plants. Re-pot them into some fresh potting soil composed of about six parts of loamy potting soil made from well rotted sod, or from loamy soil taken from just underneath soil. Add to this one part of fine, clean sand, and one part leaf soil (black soil) from the bush. For a fertilizer use one-third part of the whole of these of dry cow manure from the pasture field. Mix these all well together. Use nearly an inch of broken flower pot for drainage, over this sprinkle a thin layer of fine charcoal, or lump charcoal may be used entirely for drainage.

The soil is doubtless the cause of the trouble. Try and kill the adult flies with tobacco smoke or use sticky paper for this purpose. Baking the soil in a hot oven, so as not to burn it, will often kill off any insect life or fungus there may be in potting soils. A tea cup full of clear lime water to each large plant will often eradicate worms and grubs from the soil of pot plants. Repeat the application in two weeks if necessary. One pound of fresh lime slaked with two quarts of hot water in a two-gallon pail and then filled up with cold water, or made in this proportion, will make the lime solution mentioned.—W. Hunt, Guelph.

To soften paint-brushes which have become dry and hard, heat as point, immerse the brushes, and allow them to simmer for 10 minutes; then wash in strong soapuds.



**Add water to milk—  
You weaken the milk.  
Add soft wheat to flour—  
You weaken your flour.  
Cheapens it too.  
Soft wheat costs less—worth less.  
Soft wheat flour has less gluten less nutriment.  
Your bread is less nutritious, sustaining, economical.  
Soft flour has less strength, less quality gluten.  
Giving less good things for your money and things less good.  
Use Manitoba Flour—Manitoba Hard wheat flour.  
Having everything the soft stuff lacks.  
Five Roses is all Manitoba.  
Without a grain of cheaper wheat.  
Strengthen your food values.  
Use FIVE ROSES.**

# Five Roses Flour

Not Bleached



Not Blended



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### FARM HELP

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your copy and instructions covering the space you will want in Farm and Dairy's GREAT POULTRY ANNUAL, out February 5th. First Forms Close Jan. 29th Last Forms Feb. 2nd

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The first remedy to cure Lumbago was Fleming's Lumbago Cure

It remains today the standard treatment. Will give relief in a few minutes. Don't experiment with anything else. Don't let the case or other else you may have tried—your money back if Fleming's Lumbago Cure fails. Our full plain of self-treatment with extensive information on Lumbago and its treatment, is given in Fleming's Vest-Book. Veterinary Advice Most common veterinary book ever printed to be given away. Invaluable to all horse owners. FLEMING BROS., Chemists, 83 Church Street, Toronto, Ont.

## Approval of An Interested Reader

By "Aunt Fanny," Peterboro Co., Ont.

I have been much interested in following the Referendum idea which has been appearing in recent issues of Farm and Dairy and in reading the editorials in explanation of the various questions contained therein.

While it was interesting to note the expressions of opinion from our readers, and the results are published, I am really curious to learn how my sister subscribers are going to mark their ballots. We who are in favor of granting women the franchise have an splendid opportunity to voice our sentiments, as will also those who do not look upon this question with favor. Then too we will have a chance to air our views on several other vital and progressive measures. I hope my sisters will treat this matter seriously so that when the ballots are published in next week's issue of Farm and Dairy, we will all be prepared to cast our vote.

I certainly congratulate Farm and Dairy in allowing its women readers to express their opinions on these important subjects, but I trust these results will be all that they desire.

## An Enclosed Porch for Winter Comfort

ON almost every house nowadays there is a screened porch. The joy and comfort to be derived from this cool, bug proof addition to the house is so great that, whenever it is within the means of a householder, it is now a part of the home. Everyone knows what a difference is made in the family life by the screened porch, but comparatively few of us have become equally conscious of the pleasure to be gotten by enclosing the screened porch in glass for the winter.

First, there arises the thought of cost. It is an expensive luxury but it well worth the amount put into it. As to heating the enclosed porch, the best way is to use the same heat as all over the house. If you have a hot air furnace, an extra pipe can be run through the porch floor. If steam or hot water is used, a radiator can be placed on the porch. The piping is not expensive and the same boiler that is in use, can stand the addition of one heater.

A CHARMING HEATER The most charming way to heat an enclosed porch is with an open fire. If a chimney runs up in the wall against which the porch is placed, it is not very difficult or very expensive to cut into it and have a brick or stone mantle built over the fire place. The most expensive part of this way of heating an enclosed porch is the maintenance of the fire. In most places wood is far from cheap, and the fire requires constant attention to keep cheerful flames. There should be good reading lamp on the table in case the porch is used for an evening sitting room.

A swinging canvas couch with some comfortable, soft sofa cushions in it and a wicker blanket on one end is a great addition.

FLOWERS AN IMPORTANT FEATURE There should always be flowers growing on an enclosed porch. It should have a little of the appearance of a conservatory where people as well as flowers are allowed to flourish in warmth and sunshine even when it is

bitterly cold outside. Ivy grows well on such a porch. It will climb up the posts and can be trained to meet the arches. Geraniums are good grown on an enclosed porch. They are hardy and willing and can stand an extraordinary amount of cold.

A bird seems naturally to be part of an enclosed porch. A canary or a parrot, and there is on the market now the loveliest bird cage made of wicker with a little pointed roof. This

## Are You Ready To Vote?

Have you noticed that "Our Women Folk" are being given an opportunity to vote in our Referendum? Since the government has not as yet given us the franchise, Farm and Dairy is taking a step forward by giving its women readers the privilege next week of casting their ballots with their fathers, husbands and brothers. Our Women Folk are capable of dealing on these questions just as intelligently as the men. We would like you to prove that our contention is just one of our many of yourself of this opportunity? We are looking for a hearty response from all our women readers. Write to "Aunt Fanny" on this page. She is just one of our many interested readers. Remember, an enclosed porch will be published in our next week's issue, Jan. 29th. Be sure to mark your ballot for the Referendum. Farm and Dairy.

would be very desirable if you used wicker furniture. Wherever is clean, whatever is bright, whatever is homelike, belongs on an enclosed porch.

## Head-Cheese

Put a hog's head into four pieces. Remove the brain, ears, skin, snout and eyes, cut off the fattest parts of the head. Put the lean and bony parts to soak overnight in cold water in order to extract the blood and dirt. Wash the head is cleaned put it over the fire to boil, using water enough to cover it. Boil until the meat separates readily from the bone. Then remove it from the fire and pick out all of the bones.

Drain off the liquor, saving a part of it for future use. Chop the meat up finely with a chopping knife. Return it to the kettle and pour enough of the liquor to cover the meat. Let it boil slowly for 15 minutes to half hour. Season to taste with salt and pepper just before removing from the fire. Turn it into a shallow pan or dish. Cover with a piece of cheese cloth and put on a board with a weight to make it solid. We could it should be sliced thinly and served without further cooking.

## A Vegetable Table.

A vegetable table can be made like an ordinary kitchen table with two bins. It can be put together in about three hours out of material found at home. The outside appearance makes it like a garden table having bins for salt and sugar, the sides of wood and perforated to allow a free passage of air. The bottom is to be made of tin painted. One bin is for potatoes, the other for root vegetables. They will hold a week's supply for an ordinary family. A small boy or girl fill the bins as a Saturday chore, thus the daily trip to the cellar have been done for root vegetables at cheap labor saving device.—U. S. Agricultural College.

Always add a small piece of butter to milk puddings when cooking the milk, but prevents the pudding from turning over.

WHEN WE SAY GOOD-BYE TO WASH DAY

What One Community is Doing and What Many Others Could Do to Relieve Farm Women of the Weekly Washing. Some Suggestions that are Practical for the Smallest District.

GOOD-BYE to wash day! With what joy would the average farmer's wife welcome the opportunity of bidding the wash tub adieu! She would feel that she was saying good-bye to the Monday backache and to the weary days of scrubbing and tiring that makes the first day of the workaday week the hardest.

The husbands, too! Jokes about slack wash day dinners have become too common to be funny. Even the Weary Willies of the road would rather go hungry on Monday than tackle the overworked housewife for a free dinner. They tell you that even the most amiable women are apt to be "short in the grain" from a bending over a hot steaming wash tub.

One need not be a dreamer or a prophet to predict that the day is not far distant when the farmer's wife will say good-bye to wash day. Several hundred women have already done so. Chatsworth, Grey Co., Ont., has started out with a name for itself as a cooperative centre. It has a long way to go, however, before it will catch up with Chatsfield, Minn. In the latter place there is a cooperative bank, a cooperative elevator, a cooperative store, a cooperative creamery and latest and best of all, they have a cooperative laundry. It is around Chatsfield that hundreds of farmers' wives have recently considered the advisability of calling a combination auction sale for their no longer necessary wash tubs.

This new laundry at Chatsfield was built out of funds provided cooperatively by the farmers of the district. It has now been in active operation for some time, and although it represents a fairly large investment, it is giving great satisfaction, particularly to the women folks. It is run in connection with the cooperative creamery. Washing is done practically at cost for the members, and so the reasonable are the charges that the poorest farmer's wife could hardly afford to do her own washing when the cost of fuel, soap, starch, and so forth is taken into consideration with a moderate value put on the time of the women.

Those Chatsfield cooperators make a rather claim for their cooperative laundry, aside from the mere dollars and cents value. They tell us that their wives have plenty of work to do without the family washing. The town wives said good-bye to the wash tub long ago. Every town now has a well patronized laundry. And if the town housewife needed relief from the washing, how about the country housewife with her multitudinous duties? Chatsfield farmers have given their answer.

CAN WE DO IT IN CANADA?

The method applied at Chatsfield for saying good-bye to wash day is not capable of wide application at the present time. Farmers are not well enough organized. Where, however, there is a cooperative creamery or cheese factory, the shareholders might well figure on the advisability of adding a laundry. Any Canadian dairy factory has the same opportunities for the successfully operating of such a laundry as they have at Chatsfield. Steam and power would be generated anyway to make the cheese or butter, and in every section there are scores of farm women who would be only too glad to patronize the laundry were charges reasonable. Laundries might even be installed in connection with privately owned cheese factories and creameries to the benefit of both proprietor and neighboring housewives.

Such an extensive investment as has been made at Chatsfield is not necessary. Down in the state of Kansas, Miss Francis L. Brown, who is employed by the Extension Division of the Agricultural College there, is the originator of a community laundry that is worth while. She states plans for the women of her cost only \$125 and the other \$450. Both of these laundries are designed for the community in which there is no creamery with which to cooperate. Here are the figures that Miss Brown gives for the small laundry that meet the needs of the women of a small community.

Gasoline engine, exhaust to three-quarters horse power	850 00
Power washer with wringer	30 00
Wash boiler, copper	38 75
Stationary tub, three burners	2 50
Stationary tub, two compartments	7 37
<b>Total cost</b>	<b>\$123 62</b>

Such a modest equipment might not appeal to other communities. Where there is more money available for the equipment, Miss Brown has the following to suggest, and this she considers the ideal small laundry:

Steam engine, two horse power	574 00
Steam boiler	50 00
Steam power washer, 24 x 34	40 00
Manila line, 1/2 inch	2 50
Drying rack, two racks and 810	100 00
Stationary tub, three compartments	22 00
<b>Total cost</b>	<b>\$846 00</b>

It will be noted that these prices do not include building. A very modest building would meet all requirements, and as for the land on which to build it—well, if all the women in the community were interested in the laundry and anxious that it was going to be of benefit to all of them, they could surely persuade some of the landowners to allow them the small space necessary, rent free.

Where, however, there is a cooperative creamery, Miss Brown advises the building of a laundry in connection therewith. The equipment of a laundry such as that at Chatsfield would cost \$1,068. Here is the outfit:

Two 36 x 54 No. 3 wood washers with one partition in each	\$310 00
One 36 x 36 No. 3 wood washer, plain 110 00	
One 52 inch solid curb strainer with angle counter-shaft	18 00
One spotted iron strainer with three coils, three all metal tracks, fan	25 00
One 18-gallon counter-shaft with 12-gallon copper-lined	32 00
One 100 lb. hand mangle with counter-shaft	35 00
One 24" x 36" steam trap	150 00
One 16 horse power boiler with stack and fittings	350 00
<b>Total cost</b>	<b>\$1286 00</b>

A laundry of this size will serve 200 families; or more if run to full capacity. The total weekly expense of running the laundry at Chatsfield does not cost \$75, and charged at the usual rates it could turn over \$300 worth of washing for the families of shareholders every week. If the holders were done free, the surplus capacity of such a laundry put to use in doing the washing of non-members at commercial rates, would leave sufficient to represent a good return on the investment.

This cooperative laundry idea is a good one. It is gaining ground rapidly nowadays, and plans are under way for trying it out in numerous parts of the United States. Who will have the honor of giving the cooperative laundry its first trial in Canada? He or she who does will be followed by the blessings of every farm woman who now does her own washing.



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You just try it. Ask your grocer. Tell him you're to get your money back if it fails you on a fair, square trial. Tell him the Campbell Milling Company, Limited, say so. He can charge it to us.

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We want to make "Cream of the West" flour better known in every locality in Ontario. And with this end in view we offer the following special prices to-day on flour and feed direct to the farmers:

<b>FLOURS</b>	
Cream of the West Flour (for bread)	Per 56-lb. Bag \$1 20
Queen City Flour (blended for all purposes)	\$2 20
Monarch Flour (makes delicious pastry)	\$1 40
<b>FEEDS</b>	
"Bulrush" Bran	Per 100-lb. Bag \$1 20
Extra White Middlings	1 30
Lower Feed Flour	1 40
"Beau" Feed Flour	1 55
"Bulrush" Crushed Oats	1 70
Barley Meal	1 45
Oiled Corn	1 55
Cracked Corn	1 45
Orl Cake Meal	1 55
Prices on whole oats, whole corn, and other grains supplied upon request.	1 65

TERMS: Cash with order. Orders may be assorted as desired. Members over 5 bags will prepay freight on any station in Ontario, east of Sudbury and south of North Bay. West of Sudbury add to cents per bag to cover extra freight charges. Make remittances by express or post office money order, payable at par at Toronto. Prices subject to market change.

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With every purchase from us of not less than three (3) bags of Campbell's Flour (any brand) you will get a Household Book Free. But be in mind that if you order up to five (5) bags you will pay the freight to any station in Ontario, East of Sudbury and South of North Bay (see terms above). To get the book at least 5 bags must be sent. The two bags may be flour or any other product mentioned in the list printed above. Send the list and make up an order to-day. Add 10 cents to your remittance to cover postage and wrapping of book. Address all letters to:

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When it comes to quick, easy cleaning of milk cans, pans, pails, cream separators and churns,  
**NOTHING DOES THE WORK SO THOROUGHLY**

as Old Dutch Cleanser. Wooden benches, tables and shelves are quickly freed of milk stains, grease and cream clots.  
**MAKES EVERYTHING SWEET AND SANITARY**

No hard rubbing nor tedious scrubbing.

Many Other Uses and Directions on Large Sifter Can—10c

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## HOW SWEEPING DAY IS MADE EASY BY SOME OF "OUR FOLKS"

The Broom has Given Place to the Vacuum Cleaner in Many Homes of "Farm and Dairy" Readers. A Few Experiences as Told by Satisfied Users.

I CAN recommend the vacuum cleaner as a thorough and sanitary way of cleaning house furnishings, particularly rugs and carpets with a thick pile, upholstered furniture, and mattresses. I like my cleaner because it is so dustless when in use. It sucks up fine dust in a manner superior to any other method. Though rather tedious, the hand-pumped cleaners silently and thoroughly do their work and make the next best substitute to the power cleaner.

The vacuum cleaners that are run by electricity or some other power of that kind are of course very much better. And the day is coming when every farmer's wife will have a gasoline engine or hydro-electric power to which she may attach her vacuum cleaner.—Irene Guest, Middlesex Co., Ont.

### Institute Buys a Cleaner

Mrs. W. J. Johnston, Stormont Co., Ont.

In the year 1912 a Women's Institute was organized, having a membership of 120. It was not long until the members decided to hold a lawn social, the proceeds to be used in purchasing a vacuum cleaner. The social was a success, and the cleaner a realization of our hopes, for it proved a thorough success.

One afternoon the Institute met at Mrs. G.'s to test the merits of the machine, which we had on trial. Two ladies who had considerable mechanical ability undertook to put the machine together. It was soon in working order and the trial began. Some fell in love with it at once. Others declared they would never use it, but would take up their carpets as they were in the habit of doing.

One way we tested it was by sprinkling flour on the floor, placing a piece of carpet over it and applying the machine. The flour was instantly taken up. The majority decided to keep the machine, and within a few months I think every member used it. Each would now like to have one of their own, as they could use it often, which would be more satisfactory.

On receiving the cleaner the second time, I found it wouldn't work. I began to examine it, thinking surely it was not worn out already. Something was wrong; there was no suction. I soon found that the nozzle was completely filled with lint and dust, but with the removal of this obstruction the machine was again in working order. It means hard work to operate it. But it is also hard work taking up carpets.

### Cleaner a Good Investment

Mrs. W. Brown, Haldimand Co., Ont.

I have had my vacuum cleaner for two years. I think it was a good investment, and would not like to be without it. It takes me about 30 minutes to clean a room that is in use every day with the cleaner I have. Of course, one can do the bedrooms more quickly as there is not so much dust to take out of the carpets. When a carpet is cleaned with the vacuum cleaner it looks much nicer than if I had taken it up and given it a good beating. As a matter of fact, no woman can take up a 25 yard carpet and clean it without assistance. And my experience with help from the men has been that they are tired out before the carpet is half cleaned.

Another good feature about the vacuum cleaner is that it takes up the moths around the edge of the carpet.

I find the vacuum cleaner rather hard for one to operate alone, but I have better results when I do the work alone, as the one who does the

pumping seems to be under the impression that you are trying to see how much time you can spend in cleaning the carpet.

I find it most satisfactory to use the vacuum cleaner every two weeks, as my carpets get pretty dusty in the length of time. I use the carpet sweeper and broom in between times and find much more dust on the furniture when I use the sweeper. If the cleaner works properly, very little dust is raised.

### Four Years of Satisfaction

Mrs. W. W. Bollandyne, Perth Co., Ont.

I have been using a vacuum cleaner for the past four years and I am very well satisfied with it. It is excellent for cleaning carpets, furniture, pillows, and mattresses. I find that everything is thoroughly cleaned, and when it is used frequently the house-cleaning is not so hard as before. Vacuum cleaning is more sanitary and healthy than the ordinary sweeping, as there is no dust at all from the cleaner.

The only drawback I find in connection with it is the power. I have one electric power it takes an extra amount though even then it isn't difficult to work.

### Rent Pays for Machine

Mrs. Albert Luicks, Hastings Co., Ont.

I simply would not think of doing without a vacuum cleaner. I rented a machine one year and cleaned my carpets with it. I was so pleased that I bought the machine and have used it for three years, during which time it has done fine work. The first year that I had this cleaner I rented it out and made enough money to pay for the machine, besides doing my own cleaning with it.

The vacuum cleaner operates without causing any dust. Hence one can do all the other cleaning before the carpet and still leave the furniture spotless. It is one of the very best labor saving devices that I know of and certainly takes dust and dirt out of the carpets; dust which you cannot extract by any other method. I know this from experience, and believe every home should have a vacuum cleaner. I can recommend them.

### Water for the Laundry

By Junilda L. Shepperd

Where there is not running water in the house, a barrel with a faucet placed about one-third of the distance up from the bottom may stand in the shed within easy reach of the boiler and tubs. This should be filled with water the day before the washing is to be done. If the men can't do this filling with the aid of a siphon the barrel may rest on a platform raised high enough to allow the water to run by gravity through the faucet and be carried through the length of rubber hose directly into the tubs or boiler.

Those who do not have a pump very near the shed may use this same rubber tubing to fill the barrel without the aid of a ladder or men. A home-made device consisting of a long lead pipe, one end of which is fastened to the house and well, and emptying where the water will be carried off and the ground kept aerated by sunlight, will very much lessen the heavy labor of emptying tubs besides protecting the well from exposure to winter cold.

Soft water is preferable for use in all laundry work, but if not available hard water should be softened on the day previous to washing and allowed to settle.

## TEA SETS MOST POPULAR



PHOTO OF SET

### Another List of Forty who Have Received Sets

- |  |  |
|--|--|
| 1. Miss Violet Gray, R. R. 6, Cobourg.         | 19. Miss Chas. O'Reilly, Scotland.                   |
| 2. Miss B. M. Ford, Mountain, Ont.             | 20. Mrs. Fletcher, Elsworth, Port Colborne.          |
| 3. Mrs. John Beatty, Nogies Creek, Ont.        | 21. Mrs. S. B. Copland, Harrison.                    |
| 4. Mrs. Robert McDougal, Hexham, N. B.         | 22. Ont.   |
| 5. Miss Ethel Procter, Box 102, Boland, Man.   | 23. Miss Ada M. Towle Milner, Ont.                   |
| 6. Norman H. A. Walker, R. R. 3, Port Hope.    | 24. Mrs. C. E. Patterson, Black Beach, Ont.          |
| 7. Miss Carolla Weese, R. F. D., Andoverville. | 25. Miss Olive E. South, Smithfield, Ont.            |
| 8. Gilbert McMillan, Trout River, Que.         | 26. Mrs. E. D. Drew, West Bromo, Ont.                |
| 9. Miss Myrtle Smith, R. R. 2, Norwich.        | 27. Mrs. Wm. Crawford, R. R. 2, Brigham, Que.        |
| 10. Mr. W. O. Gardner, Kempville, Ont.         | 28. John Marshall, Simcoe, Ont.                      |
| 11. Mrs. Edmund McPherson, St. Anna, Ont.      | 29. Alfred Morrow, Russell, Ont.                     |
| 12. Mrs. Morris Dufos, R. F. D., Wellington.   | 30. Mr. Lemann Moore, R. R. 1, Camanche, Ont.        |
| 13. Miss Hila Leeming Kingsville, Ont.         | 31. Mrs. John E. Henderson, Winchester Springs, Ont. |
| 14. Mrs. James Devine, Ottawa, Ont.            | 32. Mrs. A. T. Hamilton, Brampton.                   |
| 15. Mrs. Blake Sharpe, R. M. D., Harold, Ont.  | 33. Mrs. Wm. Watson, Bellamy's.                      |
| 16. Mrs. James Veale, R. R. 1, Sardinia, B. C. | 34. Mrs. H. Sharpe, R. R. 1, Lynden.                 |
| 17. Miss Annie Leeming, Kingsville, Ont.       | 35. Mrs. Geo. Storms, R. M. D., Glenora, Ont.        |
| 18. Elias S. Trim, Darlington, Ont.            | 36. Mrs. T. Fitzpatrick, Cordova, Minn.              |
|  | 37. Mrs. Samuel Talbot, R. R. 5, St. Mary's.         |
|  | 38. Miss Estia Farrow, Brockville, Ont.              |
|  | 39. Miss Ida Farrow, Stockville, Ont.                |

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**FARM AND DAIRY, PETERBORO, ONT.**

FARM AND DAIRY

OUR FOLKS" of "Farm and Dairies."

The Makers' Corner

Butter and Cheese Makers are invited to send contributions to this department, to ask questions on matters relating to cheese making and to suggest subjects for discussion.

Dairy Exhibits at Stratford

Butter makers found the dairy exhibit of the Western Ontario Dairyman's Association this year particularly interesting. They had an opportunity of comparing their make with butter from Alberta, butter from New Zealand, butter from the United States, and, better still, a keg of the world-famous Danish butter. This exhibit was a result of the efforts of Secretary Horns and was appreciated by all the members who attended the convention.

Western Ontario is first and foremost a creamery country and ever becoming more so. Hence the butter exhibit was a much greater proportion of the entire exhibit than it was at the Eastern Exhibit at Cornwall the

October white cheese: 1. Mrs. O. Cuckow, 95.35; 2. J. K. Brown, Ethel, 96; 3. Wm. Morse, Stratford, 96.35; won on Scotchville, 95.66.

October colored cheese: 1. J. K. Brown, 96.24; 2. L. H. Schneider, Gad's Hill, 96.25; 3. Geo. Empey, 95.65; 4. & 5. Mrs. O. Cuckow and H. Youn, 95.69.

Butter Awards

Winter, 55 lb. box creamery butter: 1. E. M. Johnston, Inverkip, 95.23; 2 and 3. Klockman, Stratford, Sebringville, and C. Hugh W. Patrick, 95.46; 4. T. A. Milman, Silverdale, 95.49; won on flavor: 5. 20 One-pound creamery prints: 1. Jno. C. Guthrie, 96.15; 2. H. C. Borshwell, 95.99; 4. J. E. Wilson, Forest, 95.85; 5. Jno. Almont, Silverdale, 95.85; won on flavor.

55 lb. box creamery butter: 1. Jno. H. Scott, Exeter, 95.99; 2 and 3. James E. Wilson, Forested, and Hugh W. Patrick, St. Thomas, 95.45; 4. J. A. Muxand, Corbett, 94.33.

September-Blilton cheese (16 lbs.): 1. H. John Cuthbertson and Geo. Empey, 94.99; 5. H. Donnelly.

Two September flat cheese: 1. C. J. Donnelly, 95.24; 2. Donnelly, 95.85; won on flavor: 3. Mrs. O. Cuckow, 95.14; 4. Ed. Wm. Phelps, Birnam, 95.50; 5. J. Cuthbertson, 95.17; won on flavor.

Special Prizes

Jno. Cuthbertson, Sebringville, \$10; Alderney Butter Color.

Better Butter - Bigger Profits!



If you wish your butter to be smooth and uniform, use the

"BRITISH" Butter Worker

Adopted by the best dairies in Gt. Britain and Canada. Makes the butter firm-even-consistent all through. Results in better butter and bigger profits!

Dept. Sold by dealers everywhere. 1. Three sizes - 14 in., 17 in. and 20 in. wide.

DAVID MAXWELL & SONS - St. Mary's, Ont. 4

95 AND UP ON TRAIL

AMERICAN CREAM SEPARATOR



A SOLID PROPOSITION, in any fully equipped, 3-separator, easy running, perfect looking separator, for \$15.00 less easy to milk, make-fully light cream.

AMERICAN SEPARATOR CO. BAINBRIDGE, N. Y.

try to use the two weeks, as dusty in the carpet between times on the fireplace.

vacuum cleaner and I am very tired. It is excellent furniture, picture, I find that cleaned, and the house as before, more sanitary dairy sweep at all from

find in cow-pow. Unless it takes an then it isn't

Machine Hastings Co.,

think of doing. I rented cleaned up pleased that which time the first year rented it out to pay for

operates with Hence on having been furnished the furnace of the water that I know dust and dirt, other method, and could have a recommendation.

laundry Heppner running waste with a faucet the distance stand in the must be kept low could be filled over the wash men can't the aid of any rest on enough to allow activity through and directly in

near the shower tubing 2 1/2 in. aid of steam-made dirty well, at water will be kept steady much less water, emptying worker from

able for not available on and above



One Source of Canada's Supply of Foreign Butter

The Canadian export butter trade is now a matter of history. We are now listed among the importers of the British Columbia market, and also in Alberta. This New Zealand factory of reinforced concrete is one of the finest factories in New Zealand, and is owned cooperatively by its farmer proprietors.

Guelpch Creamery Co. Guelpch, 85. Alderney Butter Color. Jno. Cuthbertson, Sebringville, \$10. Alderney Butter Color. Guelpch Creamery Co. Guelpch, 85. Alderney Butter Color. Newry, one case Hansen's L. H. Extract. Hansen's Cheese Color. Mrs. O. Cuckow, Mt. Elgin, one case Hansen's Cheese Color. C. J. Donnelly, Scottsville, camera from J. B. Ford & Co. Jno. Cuthbertson, Sebringville, camera from J. B. Ford & Co. Geo. Empey, Newry, \$15. Canadian Salt Co. Geo. Empey, Newry, and D. Menzies, Listowel, to pay \$10 from Canadian Salt Co. Jno. Cuthbertson, Sebringville, \$15. Canadian Salt Co. Guelpch Creamery Co., 810. Canadian Salt Co. Geo. Empey, Newry, and J. K. Brown, Eldora, one barrel Purity Cheese Salt. W. H. Scott, Exeter, and Jno. Cuthbertson, Sebringville, one barrel Purity Dairy Salt. D. Menzies, Listowel, gold watch. Marshall H. Scott, Exeter, silver cup. De Laval Dairy Supply Co. Jno. H. Scott, \$10. W. A. Drummond & Co. Mrs. O. Cuckow, Mt. Elgin, silver cup, three times, or twice in succession. Geo. Empey, Newry, \$15 challenge cup, to be won three times, or twice in succession.

Skim milk cools quickly on a cold winter's day. Make the calf feeding the next operation after milking.

The future progress of the cheese industry will not depend on improvement of making, but on the quantity and purity of the milk delivered by the patrons. Cheese makers should convince their patrons of the necessity of delivering first-class milk - G. G. Publow, Chief Dairy Inst., Eastern Ontario.

CREAM WANTED

Both separator spouts will yield big profits if you feed your skim milk the best foreign butter. We supply cans and pay express charges from any express office within 150 miles of Ottawa. Write for particulars.

Valley Creamery of Ottawa Limited (Formerly Ottawa Creamery)

WE Make Butter WE Furnish Cans WE Want Cream WE Pay Express WE Pay Every Two Weeks Write us BELLEVILLE CREAMERY, LTD. Belleville, Ontario

FOR SALE AND WANT ADVERTISING

THREE CENTS A WORD, CASH WITH ORDER WANTED-In live agricultural town in Southern Alberta, Practical Creamery and farm of district. Splendid opening for live man-Board of Trade, Camanga, Alberta.

CHEESE MAKER WANTED

Tenders will be received by the undersigned up till Jan. 30, 1914, for the manufacture of cheese for the season of 1914 in Morganston. Facilities for modern equipment. Male last season, 16,000 lbs. None but first-class man need apply. References required.

H. MOORE, President. Morganston Cheese Co. MORGANSTON, ONT.

CREAM WANTED

Toronto consumes daily the milk and cream from over 14,000 cows and the butter from over 70,000 cows. We need your cream.

Toronto Creamery Co., Ltd. 15 Church St., TORONTO

BOOKS at lowest prices you can get through Farm and Dairy, including all the latest books on agricultural subjects. Write for our Book Catalogue.

CREAM WANTED

Cheese Factories are Closing for the Season How about your Cream? We will buy your Cream all the year through Returns are made every week Ship your New Laid Eggs to us We pay highest prices for both Cream and Eggs

THE BOWES COMPANY LIMITED 74-76 FRONT STREET E., TORONTO, ONT.

Say "I saw your ad. in Farm and Dairy" when you write Advertisers. Then you get full benefit of our absolute Guarantee.

SHIP US YOUR CREAM

WE Supply Cans and Pay All Express Charges within a radius of 100 miles of Berlin. Send a Statement of Each Shipment. Pay Every Two Weeks.

WRITE FOR FULL PARTICULARS THE BERLIN CREAMERY CO. BERLIN, CANADA





## VALUABLE LESSONS FROM EXPERIMENTAL UNION DELIBERATIONS

Practical Information Such as Every Farmer is asking for Summarized from Many Addresses and over 5,000 Experiments Conducted all over Ontario. Other Notes on the Experimental Union Meeting at Guelph

THE first session of the 35th annual meeting of the Ontario Experimental Union convened under more than usual circumstances. The occasion was the formal opening on Monday evening, January 12, of the new Field Husbandry building.

This building, 146 by 63 feet, and erected and equipped at a cost of \$85,000, is the first building to be paid for with part of the Dominion agricultural aid grant. It was fitting to the occasion that the Hon. Martin Burrell, Federal Minister of Agriculture, on behalf of his Government, presented the keys to the Hon. James Duff, Minister of Agriculture for Ontario.

The president of the Union, Lewis Toole, Mount Albert, Ont., who 35 years ago was one of its founders, remarked in the course of his opening address that about that time he had a 10-acre field of clover that he winter-killed. He did not plow it down, however, but let it stand, and from the 10 acres saved two bushels of seed. That seed he sowed, and the clover which it produced was so strong and proved hardy, that he then presented a sample to Prof. Zavitz to be tested with other varieties.

"There has been a tendency on the part of some," said the Hon. Nelson Monteith in his reply to the president's address, "to doubt if it is in the best interests of agriculture that so many of the young men who come to the Ontario Agricultural College to engage in teaching rather than practice. I think it is a wholesome condition. It is not well that all should return to the farm; some should return lines that have to do with the diffusion that is so necessary."

## NEARLY 5,000 EXPERIMENTS

The report of the secretary, Prof. Zavitz, showed that the number of experimenters is nearing the 5,000 mark. In 1913, a larger percentage of satisfactory reports were received than in any other year. It has been the endeavor to give the cream of the results of experiments conducted at the College to the experimenters throughout the province to be further tested. The number of district experimenters now numbers 25.

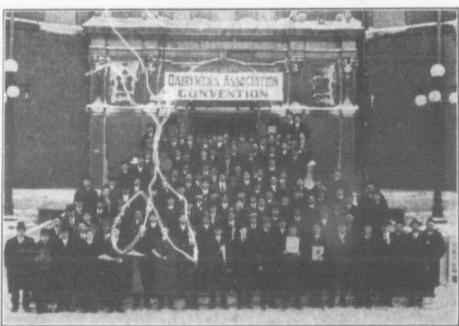
That the work of the College is appreciated is evidenced by the fact that in barley, for instance, 94 per cent. of the grain grown in the province is from seed distributed from the O. A. C. The O. A. C. No. 21 barley is still proving the best yielder.

Although \$37,000 worth of oats are grown in this province each year, not much study has been given to this crop. There are far too many "best" varieties. The result is lack of uniformity and therefore a poor market. An endeavor to find a variety that would fill all requirements has resulted in the selection of the O. A. C. No. 72 oat. For two years it has now proved the highest yielder in 187 experiments. It is also an oat of fine quality. Another selection, O. A. C. No. 3, has proved a heavier yielder than Alaskan and Doubeney, two early varieties, and is also the thinnest in hull of 300 varieties.

Marquis spring wheat, supposed to be best suited to western Canada, has proved to be the highest yielder in experiments conducted.

A spring rye, O. A. C. No. 61, selected from German seed, surpasses all other varieties by at least three bushels an acre. Of all mixtures of grains tested, oats and barley, sown one bushel each, gave the highest yield. The addition of other grains to this mixture decreased the total yield.

Canadian Beauty and Early Britain



Representatives of a Great Industry in Convention at Stratford

Well over 300 dairymen, cheese makers, butter makers and farmers from all sections of Western Ontario gathered at the delegates seen in the illustration are only a few of those who attended.

are the best varieties of peas; Pierce's improved true bean, an English variety, yielded 3½ bushels an acre more than the next best variety.

The Yellow Leviathan leads all mangels with an average yield over Ontario of 32½ tons a year.

## WHICH IS BEST CORN?

There has been some controversy as to the relative merits of White Cap, Yellow Dent corn and Wisconsin No. 7. It now appears that there is more difference among strains of W. C. Y. D. than between the varieties. The late W. C. Y. D. comes first, then Wisconsin No. 7 and the early W. C. Y. D.

"In planning a rotation of crops," said Prof. Morgan, of Knoxville, Tennessee, "there are many points to which nature furnishes a clue if we will but take advantage of the suggestions. In the first place, she provides for us deep and shallow rooted crops; we have two sources of nitrogen, the air and the soil; there are winter crops that take advantage of the late fall and early spring growing seasons. Then, too, we must learn to protect the soil from heavy rains by keeping it covered as much as possible with crops. With the right crops we can largely control weeds and keep more live stock."

"One man in Tennessee picked up \$2,000 by using a proper rotation. He was obliged to plant cover crops to

protect his soil from winter rains. The cover crops grew so well that he bought in sheep to pasture. He now turns off 300 lambs, from a 200-acre farm at 85¢ a-piece."

"When the manure pile is small," said Prof. W. J. Squirrel, "we must resort to clover. An experiment with wheat on clover sod showed an increase of 21 per cent. over wheat on grass sod."

"My report deals with the most important crop of this country—the boys and the girls," stated Prof. S. B. McCready. "The schools division of the Union is endeavoring, by extending the course in nature study, to better fit the 180,000 pupils in the rural schools of Ontario for country life. By giving agricultural instruction and conducting experiments with

to 34 tons, the increase of roots costing two cents a bushel. When the application was increased to 200 lbs., the yield was 38.7 tons, the increase costing less than one cent a bushel. Various manure treatments.

On one college field, that was poor in phosphoric acid, phosphatic and nitrogenous fertilizers gave the best results with turnips, although the soil was comparatively rich in nitrogen. That many Ontario soils need lime was shown by one particular case in which one ton of lime to the acre increase the yield of fodder corn from three tons an acre to one ton an acre, no fertilizer being used in the first case. An application of basic slag alone gave six tons.

The cooperative forestry work was reviewed by Prof. E. J. Zavitz. Full advantage is not being taken of the free distribution of trees that is made. Last year 200,000 were sent out to 29 counties. These were planted mostly on sandy wastes and hills. This year 500,000 are ready to go out.

While the woodlands of Ontario are not decreasing in area, the percentage area being constant at about nine per cent., the quality is decreasing rapidly.

## CONSERVATION SURVEY WORK

F. C. Numuck, of the Commission of Conservation, told of the farm survey work in the province. 200 farms in five counties were visited. The survey indicates large room for improvement in methods. Of the farmers interviewed, 93 per cent. are making no special effort to prevent manure waste; 50 per cent. followed a systematic rotation of crops; only two per cent. made special selection of seed, such as advocated by the C. S. C. A.; little attention was given to the selection of the best varieties of grain.

Splendid results have been obtained with the experiments in weed eradication. In the case of quack grass and perennial ryegrass, the yield was about nine lbs., following thorough spring cultivation, will eradicate these weeds. The rape was sown in drills, 1½ lbs. to the acre, and cultivated long and close. Bladder campion was successfully eradicated by fall and spring cultivation followed by a crop of buckwheat. The next year the land was put in hoed crops.

## WEED ERADICATION BY SPRAYING

The spraying of mustard in grain with iron sulphate proved efficient in every case. It was applied at the rate of 1½ to two lbs. an acre, 50 lbs. of sulphate to 40 galls. water. In one case the grain from unsprayed and sprayed plots was 100 lbs. and nine bushels of barley an acre was the resultant increase.

## BROODCALF OFFERING

The bull calf we are offering on our page is about half black and half white, with a good marking. His dam is Jeannette Aris, with an offspring of 15 lbs. butter in seven days. Jeannette's first calf was officially tested at 18.51 lbs. butter in seven days; Ayleidit De Kol Burke, dam of the bull, 24.39 lbs. butter, dam of the bull, 21.56 lbs. seven days. The four named cows were sired by Sir W. de Kol Burke, who is only removed two generations away from three of the greatest foundation cows that ever lived in Canada—Jeannette Aris, Jeannette and Helena Burke, by such sires as Kol de Bunter Bay De Kol de Netherland and Mutual Pioneer. The sire of calf is Fairview De Kol Burke, who is descended from the blood of his sire, Pontiac Korolyd, greatest bull of the breed. Fairview's dam was sired by a bull with record two years old of milk 36.5 lbs. but 13.62 lbs. in seven days. We have one of his daughters in our herd at present which will be tested as they reach the age of five, promising to give great quantities of milk at very low prices. Nappane.

For further information apply to J. Joyce and Son, Hay Bay P. O., Ont., Nappane.

## Percheron, Clydesdale and Shire

Stallions, Mares and Fillies

We have a better selection of stallions and mares in our barns at present than ever before, and are in a position to sell cheaper than any others in the business. We raise our own feed, do our own buying and selling. No commission agents to share profits with. We have many fine English blooded gray, straight, true action. Every stallion guaranteed a fat getter. Every mare a breeder. 4 of our prize winners have won 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

J. E. ARNOLD, Grenville, Que.

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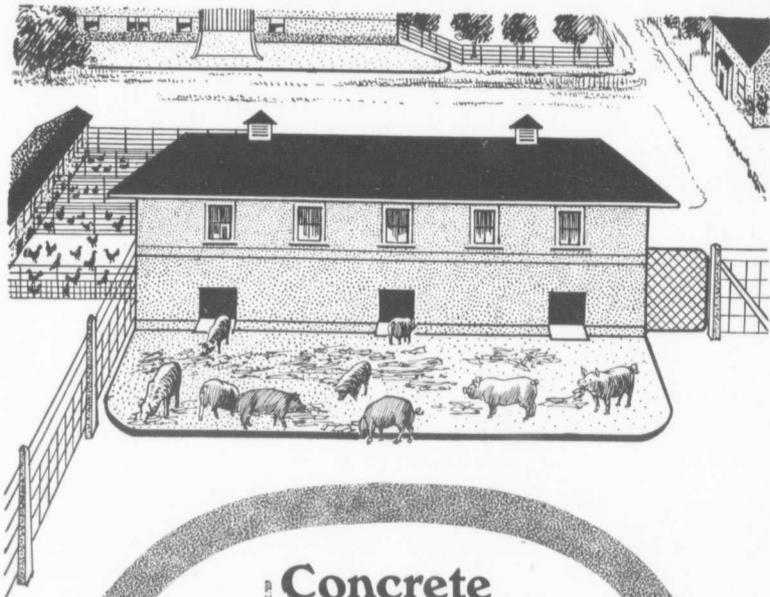
Cowish Stallions

We have a better selection of stallions and mares in our barns at present than ever before, and are in a position to sell cheaper than any others in the business. We raise our own feed, do our own buying and selling. No commission agents to share profits with. We have many fine English blooded gray, straight, true action. Every stallion guaranteed a fat getter. Every mare a breeder. 4 of our prize winners have won 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685,









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Enable you to raise bigger hogs and better pork without heavier feeding. A concrete feeding floor permits the animals to clean up *all* the feed without waste, and eliminates the possibility of your hogs contracting disease. To you they

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Hog houses of concrete are sanitary, easily cleaned, maintain an even temperature and give plenty of light and air, which tend to better the quality of pork. Concrete will not rust or rot. Never needs repairs or painting. It will outwear any other material for farm structures. Write for this beautifully illustrated free book "What the Farmer can do with Concrete." It shows how to build Hog Houses, Feeding Floors and many other things the farmer needs.

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