

# FARM AND DAIRY & RURAL HOME

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



Peterboro, Ont., Nov. 25, 1916



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### The Mat Around the Picture

H. Percy Blanchard, Hunts Co., N.S.  
IT is possible that the gentle reader's first conception of the above title is a vision of poor Dog Tray done in cammie, or a vividly great horse, or even "Welcome" or "Wipe Your Feet" set in broad face shaded type hooked into some gorgeous mat before the parlor stove or at the front door entry.

But I will explain to Little Johnnie that the "mat" is that border more or less wide of white or some plain color as a margin between the picture and its frame. Some artist discovered that by so mounting a water-color or other drawing or print, the effect was greater, and a higher art value was added to the picture. True, it takes more frame and more glass to mount a picture post card with a four inch or more of "mat" all round it; but then, if the picture is worth while at all, what does that signify? In fact, in some of the galleries you may see some valuable little sketch not much larger than a postage stamp mounted on a mat the size of a double sheet of foolscap, and around it a dainty little frame of gold or white enamel.

The "mat" idea Applied  
A few years ago was conferred on me the honor (and burden) of secretary and general manager of a new cemetery company. Our two acres of land was forest. First, a complete plan of the lot was made, showing the central avenue and each smaller walk. This plan was then pegged off on the ground, and after chopping out all but the trees that had been planned to remain, the portion of roads immediately necessary were graded. The cemetery was a bit out of the way, and it seemed so easy to fence in part of the road limits; and besides, nobody needed a 66 feet wide road away out there!

When people saw us stumping, and then plowing, harrowing and seeding the ground right to the wheel tracks, some thought that was our idea. Presently, a high wire fence, painted posts and ornamental iron gates went up; but they were 33 feet back from the centre of the road. What a waste! We had thrown out enough smooth lawn, the pick of the cemetery, because close to the highway, if sold as burial lots, to more than pay for the fences and gates. But then, just think how that clean, smooth, green lawn had improved the whole property in appearance. It was the "mat" around the picture.

Just outside a village I know, are two dwellings. Both houses are fairly alike, and equally distant from the street. But the first man put his fence the full limit back from the highway, and the other man crowded the road almost to the drain. Now, while as a fact that latter man is considered generous and open-handed in general, his fence looks mean. It looks as if he wanted to grab all there was. Perhaps he merely thought that as the public did not need that road strip it would be a sin to waste it, so he gathered it in. The use of that appropriated strip does not add two

dollars to his revenue; while it detracts from the appearance of his property two hundred dollars. His premises look like a picture with no mat; a dress coat with no cuffs nor collar.

Adding the "mat"

Some day the old road fence in front of the farm must be replaced. How nice to remove it absolutely; then plow the whole strip right to the drain; harrow and seed it with a good lawn grass mixture; and put the new fence up, not where the old one was, but full 33 feet back from the centre of the road.

Several things are accomplished. The weeds and scrub bushes are destroyed. If cows meander along the highways, they keep your lawn trim and any weeds cropped short. You can view the road limits with a clear conscience; and truly say, "I have my hundred acres inside my line fence, and nothing more." And finally, that little strip of land belonging to the public, and which you have as generously surrendered, has, like the mat around the picture, added more to the tidy appearance and looks and value of your beautiful big farm than 10 times the revenue that would accrue from that strip's use and possession.

But, someone says, "I have already given the road its full limits." Well, has it been plowed and levelled and in as smooth and neat a sod as inside the front fence? There was a man who had a white collar; and he wore it all summer; and in the fall it got caught up in the rain and became paralyzed and corrugated, and lost its pristine whiteness. And through the winter, at functions, the man continued to wear his linen collar because collars were style. Then in the spring friends hinted that he ought to get the collar washed and laundered; but he could not afford that, and yet he wanted to keep up the style. So he let his back hair go long and grew whiskers.

### Coming Events

ONTARIO Beekeepers' Convention, Toronto, Nov. 23-25, 1915.  
Provincial Winter Fair, Guelph, Dec. 6-9.  
Maritime Winter Fair, Amherst, N.S., Dec. 8-9.  
Toronto Fat Stock Show, Union Stock Yards, Toronto, Dec. 10-11.  
Alberta Winter Fair, Calgary, Dec. 14-17.  
W.O.D.A. Convention, St. Mary's, Jan. 12-14, 1916.  
Ottawa Winter Fair, Ottawa, Jan. 18-20, 1916.

### Wintering the Automobile

By L. Montgomery

TYRES cost so much money that we do not like to wear them out during the winter when they are no giving us service in return. As soon as the automobile season is over we run our car into winter quarters, set it up on blocks, so that no pressure comes on the tyres, and then deflate the tyres. Then we charge them freshly with air, pumping in just enough to round out the tyres. The air is changed once a month all through the winter. We do not believe in leaving the tyres flat, as many people do.

The main requirements for the winter storage are that it be dark and dry. Tyres that get moist in storage and are exposed at frequent intervals to hard frost will soon go to pieces.

The comfortable modern stable is not necessarily extravagant, but insures healthy stock, greatest satisfaction, and maximum profits to the owner.



We Welcome  
Trade Increases

Vol. XXXIV

## How What the B

IN last week's issue a brief outline is given of the work of the Winnipeg Convention in presenting the latest news and views of the west and farmers of Ontario, Manitoba, and Saskatchewan. Fuller particulars are given of the work of the convention, and of the who now are beginning to be interested in national affairs. The United Farmers of Canada are again with the Convention. As stated in last week's issue, the best of the convention understood the business men and wanted and intended that they were not able and, therefore, the more confidence.

The business men presenting the farmers' meeting banks, institutions, trust companies, similar organizations, loaning money to farmers usually come to the convention, that farmer constantly in need of interests. They think that there are about the four provinces dependent upon anything more, these farmers have launched and enterprises of the coming to be recognized last year, for the Grain Co., of Ontario and the Wheat Growers' Association, the Grain Growers' Association, led millions of dollars of profits over the Cooperative Extension Act of \$133,745. This, in such men as the Growers' Grain Co., Saskatchewan Cooperative, J. J. Musselman, Growers' Association, holding their own in the country. Other farmers include the Union of Saskatchewan, of the leading members of the Provincial Cabinet; J.



# FARM AND DAIRY



## & RURAL HOME

*We Welcome Practical Progressive Ideas.*  
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.  
*The Recognized Exporter of Dairymen in Canada.*

Vol. XXXIV

PETERBORO, ONT., NOVEMBER 25, 1915

No. 47

## How the Farmers Met the Business Interests

What the Business Men Proposed and What the Farmers Did—A Full Report of the Recent Conference in Winnipeg.

H. BRONSON COWAN, MANAGING DIRECTOR, THE RURAL PUBLISHING COMPANY, LIMITED

IN last week's issue of Farm and Dairy I gave a brief outline of the meeting which was held in Winnipeg on November 10th between men representing the leading business interests of the west and farmers representing the four provinces of Ontario, Manitoba, Saskatchewan and Alberta. Fuller particulars of this meeting should prove interesting to the farmers of Ontario and the east who now are beginning to play an important part in national affairs through their connection with The United Farmers of Ontario, and through it again with the Canadian Council of Agriculture.

As stated in last week's issue, the farmers had the best of the conference. This was because they understood the situation better than did the business men and because they knew what they wanted and intended to get it. They felt also, that they were not asking for anything unreasonable and, therefore, pressed their case with all the more confidence.

The business men made the mistake of underestimating the farmers. For the most part they represented banks, loan and mortgage associations, trust companies, implement dealers and similar organizations that are in the habit of loaning money to farmers. Thus they have naturally come to the conclusion, at least many of them, that farmers as a class are hard up and constantly in need of assistance from the business interests. They appeared to fail to recognize that there are thousands of well-to-do farmers in the four provinces mentioned who are not dependent upon anybody but themselves. Furthermore, these farmers, during the past few years, have launched and developed extensive business enterprises of their own which already are becoming to be recognized as being amongst the largest business undertakings in the country. Last year, for instance, the Grain Growers' Grain Co., of Winnipeg, through its own operations and the operations of a subsidiary company, the Grain Growers' Export Company handled millions of dollars worth of goods and showed profits of over \$600,000, while The Saskatchewan Cooperative Elevator Company showed profits of \$133,745. These enterprises have developed, in such men as T. A. Crerar, of The Grain Growers' Grain Co.; C. A. Dunning, of The Saskatchewan Cooperative Elevator Company and J. J. Musselman, of The Saskatchewan Grain Growers' Association, men who are capable of holding their own with the best business men of the country. Other leaders produced by the farmers include such men as Hon. George Langley, of Saskatchewan, a farmer who is now one of the leading members of the Saskatchewan Provincial Cabinet; James Speakman, the President

of The United Farmers of Alberta, who has a wide knowledge of public matters in Europe as well as in this country; J. A. Maharg, of Moose Jaw, Sask.; R. C. Henders, of Culroff, Man.; R. McKenzie, secretary of The Manitoba Grain Growers' Association; J. J. Morrison, secretary of The United Farmers of Ontario and others whose long experience in public matters have qualified them admirably to lead the farmers' movement which is now taking such deep root in this country.

### Discoveries by the Farmers

Since the farmers of the west, and now in Ontario as well, have commenced to buy and sell their own supplies to the extent, in the aggregate, of millions of dollars a year, they have begun to make some important discoveries. They have found for instance, the heavy burdens that are laid on farmers by means of protective tariffs. This they have discovered through having to pay the tariff duties on goods they have imported. They have found also what it costs to handle and ship their grain, and therefore have learned something of the profits the milling interests and the transportation interests have been making out of the handling of their products and supplies. Thus a free trade tendency has sprung up in the west among the farmers, who are now demanding many reforms which the business interests view with more or less alarm.

### A Conference Desired.

The change that thus has been brought about in conditions in the west is beginning to be felt, even if not fully recognized, by the business interests. Of late a growing desire has been evident on their part to get in closer touch with the farmers. Not understanding this new type of farmer and being familiar for the most part only with that class of farmers who come to them seeking for financial assistance, it has been natural for them to conclude that the best way for them to get in touch with the farmer was by offering to help him in such ways as might lie within their power.

Several months ago the business men of Winnipeg and the west, largely under the leadership of Mr. Vere C. Brown, inspector in western Canada for the Canadian Bank of Commerce, which conducts the banking operations of the Canadian Northern Railway, began to hold meetings to discuss what was to be done to assist the farming interests in the west. Growing out of these meetings a long memorandum was prepared, suggesting ways in which they thought the business and farming interests might cooperate for the advancement of agriculture. Considering that they did not understand the class of men

they were dealing with, the business men were really very tactful and sincere in all their proposals. Feeling sure that they could not agree on tariff matters, transportation problems and similar issues, they suggested that all such questions should be held in abeyance. They proposed, however, that a committee of one hundred should be formed, to be composed half of business men and half of farmers, and empowered to deal with other matters which they considered of importance.

### What the Business Interests Proposed

Among the matters which the business men proposed should be discussed were, first, subjects relating to increased production and the marketing of the farmers' products and second, interest and freight rates and the cost of the goods and services which the farmer has to buy. It was suggested that as these latter matters were likely to be controversial in character, it was probable that they could not be discussed with advantage at such a conference. In other words, while it was not so stated, it was intimated that as many of the goods the farmer has to buy are protected by high tariff walls, thereby increasing their cost to the farmer, and as the business interests do not want to see the tariff walls interfered with, it would be just as well if the farmers would agree not to discuss such matters in order that it would be possible for those present to agree on other matters. In the same way it was intimated that because the milling interests in Canada want to have the right to grind the grain of the western farmers without having to meet the competition of the milling interests of the States, therefore the advisability of opening the American markets to Canadian wheat (which the farmers of the west estimate would mean \$10,000,000 this year alone to them), could not be discussed. For the same reason because the railway companies of Canada want to carry the grain and other products and supplies of the western farmers without competition from the railways of the States freight rates and such matters should be deferred from consideration.

### Suggested Reforms

The subjects which it was suggested might be discussed were the following:

1st. That implement concerns and country retailers should be discouraged from extending "excessive and indiscriminate credit" to farmers and instead induced to offer greater inducements for cash payments. It was further suggested that the banks might be induced to arrange with the farmers to give them whatever credit they might

(Continued on page 6.)

### The Feeding of the Herd

THE best proof of the ability of a dairy farmer is found right on his own farm. Unless he has been able to make his cows give him a good living, improve his farm, and pay a reasonable dividend on the investment, he is in no position to advise his fellow-dairymen as to how they should conduct their own herds. Jas. Hotson, of Oxford Co., Ont., the development of whose splendid herd of pure-bred and grade Holsteins was described in a recent issue of Farm and Dairy, answers the test for dairy ability, and his feeding methods will, therefore, commend themselves to his fellow-dairymen.

"There is no time when a cow should be fed more carefully than just before and for a few days after freshening," remarked Mr. Hotson to an editor of Farm and Dairy. "More than half the udder troubles come at this time, and in almost all cases bad udders are due to bad feeding.

Six years or more ago I had a heifer with a badly swollen udder, but that is the only case with which I have had to contend in many years. Before the cow calves, I am careful not to feed heavily, and for the first week after calving I feed lightly and then increase gradually. I hold back particularly in grain feeding. I would rather be under feeding a cow at this time than over feeding. Another point in management I would mention is this: Do not milk the cow out dry for at least two or three days after freshening. The time-honored practice is to strip the cow out clean. We used to do it, but we have quit. It is much better for the cow to milk out only partially at first.

#### Corn a Great Standby

Practically all of the feed grown on Mr. Hotson's 156-acre farm is fed to the live stock on the farm, most of it going to the dairy cattle. Corn is one of the great standbys. The silo, built many years ago, is one of the old-fashioned rectangular kind, 12x15 feet and 30 feet high. This silo is built of concrete. The hay is a mixture of clover and timothy, the timothy being added more as an insurance of a crop than because of the esteem in which it is held as a cow feed. Mangels and turnips are also grown and are valued chiefly as conditioners. In addition to feeding all of the products of his own farm, Mr. Hotson buys concentrates.

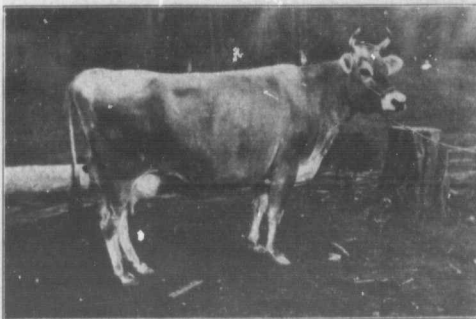
"If one is going to keep well-bred dairy cows, he might as well plan to feed them," is the way in which Mr. Hotson states the case. "Our older cows and heavier milkers get six to seven pounds of chop and two pounds of oil cake each day. The heifers and poor milkers are fed a little less grain.

#### Order of Feeding

"We first feed the ensilage and then feed the chop on the ensilage. Then comes milking. This is followed up with what hay the cows will eat and mangels. The milch cows get hay at noon and at night the feeding practice is the same as in the morning. If the oats run out, we buy bran. I like to have oil cake to feed, however, whether we have oats or not. I have been feed-

ing it for several years, and oil cake has always given good results.

"In feeding our calves we are up against a same problem as all other farmers who send milk to the cheese factory—lack of skim milk. In recent years, however, our factory has been making butter during the winter, thus being a market for our milk all the year. During part of the year, therefore, we now have skim milk, and for this reason I prefer to have the cows freshen in



Another British Columbia Cup Winner in the R.O.P. Test.

Buff's Lassie captured for her owner, A. H. Menzies, of Pender Island, the cup going to the highest place for a British Columbia Jersey in R.O.P. work. Her year's record was 10,777 lbs. of milk, and 573 lbs. of fat.

the fall or early winter. We are then able to give the calves a good start on skim milk. In any case, they are fed whole milk for six weeks, during a part of which time they are gradually changed over to skim milk or whey, as the case may be. As soon as the calves are old enough, they are fed grain, but we do not ask them to depend much on grain feed until a few months old."

### Calf Rearing Without Milk

By "Herdsman"

STRICTLY speaking, I have raised only one calf without milk. More strictly speaking, I did not raise it; the poor little creature died when a few months old. In this article, however, I am using the phrase in its generally accepted meaning; that is, from the standpoint of the farmer who sells whole milk and does not wish to feed milk at all after the first few weeks. I prefer to raise calves on skim milk until they are five or six months old, but in several cases I have had to do without skim milk, and although at a disadvantage, have succeeded in raising good calves. Such feeding, however, calls for exceptional care and good judgment. It must be regarded altogether as an artificial method and much more difficult of success than when Nature's own food—milk—is available.

The plan that I have always followed is to wean almost immediate-

ly and start the calf drinking its mother's milk from a pail. At two weeks old, or three weeks if the calf is not perfectly strong and healthy, I would withdraw one to two pints of its mother's milk and substitute gruel, which I made from the patent calf feeds and carefully followed the directions sent out by the manufacturer. These manufacturers have made a special study of this method of feeding calves, and as they wish their meals to give good results, their instructions are worth following. At six to seven weeks old, the new milk is dispensed with altogether. The change from new milk to gruel must be made very gradually or the calf will be upset. At seven weeks old, in addition to its supply of gruel, the calf should have been taught to eat a little mixture of oil cake and ground oats, but mostly oil cake. From this age it should have good hay available. Let me emphasize again the value of the cake. The unnatural food that the calf is getting puts a great strain on its digestion, and nothing will alleviate it so well as oil cake. At the end of four to six months, the gruel may be omitted, depending on the strength of the calf. In the meantime the supply of grain has been increased, oats and bran occupying an increasingly important place, the quantity of oil cake practically remaining stationary. At six months the calf will be eating a good quantity of hay, also of silage and roots.

#### Avoid Digestion

"While all along the calf must be given almost an unrestricted diet (I mean unrestricted in quantity), the attendant must take care not to overdo him, so that his digestion becomes impaired, as nothing is more unsightly to a trained eye than a calf suffering from indigestion, easily diagnosed by the blown-out appearance, thin back and pinched expression in the face. The gruel should be continued until the calf is at least four or five months old, and longer if possible. Besides care being taken in feeding, there are a few other points to be attended to.

"For one, the pens must be kept thoroughly clean and an ample bed of wheat straw gives the calves. Also the calves should be allowed a little exercise daily, either in a yard or meadow, and if it is autumn or winter they should be let out when the sun is strongest, while in the heat of the summer the late afternoon or early morning is the best time to choose.

"Perhaps the most important thing of all is to keep the pails and utensils with which the calves are fed scrupulously clean. They should be scalded daily. A lump of rock salt in the milk.

(Concluded on page 6.)



A British Columbia Cup Winner in Record of Performance Work.

Beauty of Willow 2nd, produced under R.O.P. supervision, 9,885 lbs. of milk and 46 lb. of fat in the year. This entitled her owner, W. M. Beardon, of Chilliwack, to the silver cup offered by the B. C. Dairymen's Association for the best Guernsey in the province completing her record last year.—Data courtesy B. C. Dairymen's Association.

Most of us waste enough time for self-education. By the use of our spare moments we can shape our destiny.—Selver

### KNOWLEDGE

human energy

who have a brood of the work in as a thorough. Did you ever bear upon it, bearing upon it, the fund of information in order to propose other great business of a mander of an army must be! Not a might spell disaster, and of men unawake to take even ready to meet an each case knowing to do it. Other while another is resourcefulness of

The same is true leaders in agriculture and are making rural pursuits ardent men bring power most who carry out prohibitions are those and progressive Saskatchewan the world's champion Wheeler leaves thorough knowledge cultivation of the nation and scientific leading throughout the production

Our leading live examples of the agricultural branch of Elora, who carried Toronto exhibition before by one because of his Jimmy Watt a structure field and he will be in the show samples could be given to the men who are the lines of agriculture have always been students of those most excellent.

### The Position

The normal farmer keen desire to take are taking a leading. In the past his him away from wonders he has line of urban education. In legislative directorates of the institutions, at the every position of find men who have frosty autumn month. The success the city has dazzled until recently it still thought to be

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# Farmers of To-morrow

Don't thou value  
life? Then do not  
wasteful time for  
that is the stuff  
life is made of.  
—Benjamin Franklin

## A Department for Ambitious Farmers' Sons

**K**NOWLEDGE is power. The world is governed by men of ideas. In every line of human endeavor the men who lead are men who have a broad and comprehensive knowledge of the work in which they are engaged, as well as a thorough mastery of a vast fund of its detail. Did you ever hear a good lawyer arguing a case? What a grasp he has of every line of thought bearing upon it. Did you ever stop to think of the fund of information a business man must have in order to properly conduct one of our banks or other great business institutions? And the commander of an army at the front. How alert he must be! Not a detail must be overlooked or it might spell disaster to the hundreds of thousands of men under his command. He must be awake to take every advantage that offers and be ready to meet any contingency that may arise, in each case knowing just what to do and how best to do it. Otherwise he will have to step back while another is appointed whose knowledge and resourcefulness exceeds his own.

The same is true in no less a degree of the leaders in agriculture. The men who have made and are making the greatest success in agricultural pursuits are those who have brought the most brain power to bear upon their work. The men who carry off the prizes at our fairs and exhibitions are those who have made a systematic and progressive study of their speciality. In Saskatchewan there is a man named Seager Wheeler, who has three times in succession won the world's championship for wheat. Seager Wheeler leaves nothing to chance. He has a thorough knowledge of grain growing, from the cultivation of the land to systematic seed selection and scientific plant breeding. He is recognized throughout the prairie provinces as one of the leading authorities on every detail of grain production.

Our leading live stock breeders furnish good examples of the application of brain to their particular branch of agriculture. James Watt, of Elora, who carried off more prize money from Toronto exhibition this year than was ever won before by one breeder in a single year, did so because of his knowledge of Shorthorns. Show Jimmy Watt a Shorthorn calf running in the pasture field and he will tell you what its prospects will be in the show ring as a three-year-old. Examples could be quoted to any length proving that the men who are winning the most distinction in the lines of agricultural activity are those who have always been painstaking and thoughtful students of those branches in which they have most excelled.

### The Position of the Average Farm Boy

The normal farm boy is ambitious. He has a keen desire to take his place amongst those who are taking a leading part in the world's business. In the past his ambition has too frequently led him away from the farm to the city, but what wonders he has accomplished there? In every line of urban endeavor he has achieved distinction. In legislative halls, on the bench, on the directorates of the largest banks and financial institutions, at the head of departmental stores; in every position of distinction and power you will find men who have warmed their bare feet on frosty autumn mornings when the cows laid over night. The success the farm boy has achieved in the city has dazzled the eyes of a great many. Until recently it was commonly thought, and is still thought to too great an extent, that only in

the city can a young man of ambition and action find a full outlet for his activity.

Of late years, however, and especially since the collapse of our last industrial boom, the opportunities which the farm offers to a young man of ambition are being more appreciated. It is now recognized that no matter how great his ability may be, he can find scope for its application in the business of farming. Should he have an aptitude for public life and a desire to win distinction in that line, he will find that the movements by which the organized farmers are endeavoring to win for themselves economic justice offers him a field for public service as alluring in its possibilities as any that ever existed.

### The "Big Boy" Problem

But how is the average farm boy to acquire the knowledge that will equip him to take a leading part amongst his fellow-farmers later in life? In the majority of cases he has only a public school education, and not only are our rural schools very far from being above criticism in the preparation

### Notice to Ambitious Farmers' Sons

**W**ITH this issue we launch our correspondence course in agriculture.

This course is intended principally for farmers' sons over school age, who have not an opportunity for attending college, but who wish to continue their self-development. The article adjoining explains the course and how it can be obtained. Read it. It may start you on the road to success. If interested, write for Farm and Dairy, Peterborough, Ont.

Dear Sirs,—Please send me full information regarding your Correspondence Course in Agriculture.

Name .....

Address .....

which they give a boy for making a success of life in the country, but they also have this defect, that they usually drop him at fourteen or sixteen years of age without a clue as to how he may proceed in completing his education by his own efforts. As a result the very period which should be productive of the greatest results in self-development and character building is the most barren of such desirable results. The small amount of progress that is being made by the average "big boy" in the matter of self-development is little less than tragic.

But the big boys are not to blame. Although many of them would not openly say so, in the secret hearts of most of them there is a deep-seated longing to make a mark in life. No healthy, normal, country boy is devoid of ambition. He is sport enough and man enough to have a desire to excel. He knows that he can achieve success only by great personal effort, but he is willing to make the effort. He has spare time—busy though he is—which could be utilized in self-improvement. Why then does he not make more progress?

### Directed Effort vs. Drifting

The reason that he does not make more progress is that he has no direction. Such efforts as he puts forth are without supervision. Although he may do considerable reading it is of a hit and miss, miscellaneous character and does not seem to get him anywhere. Systematic, progressive, intellectual development can never result from haphazard reading. It is truly aston-

ishing the tremendous amount of general reading which can be done without obtaining any genuine or lasting benefit. On the other hand it is quite as astonishing the great good that can be accomplished by even a small amount of reading, if it is systematic, thorough and directed with a definite end in view. Even with the small amount of time which the average farm boy has to spare for study, he can simply work wonders if his work is efficiently supervised. His greatest problem then is to secure such supervision in the use of his spare time that he will be able to dispose of it to the best possible advantage in making real progress in self-development.

### A New Departure

Farm and Dairy realizes that every week this paper reaches thousands of ambitious big boys and young men who are anxious to improve their spare moments. It may be that some of them contemplated attending the Agricultural College this winter, but owing to the unsettled conditions resulting from the war, they have met with disappointment. Others again are so placed that an attendance at a college would be out of the question. In order to bring the advantages of a college course within the reach of every one of its readers, the editors have determined upon the establishment in connection with Farm and Dairy of a Correspondence Course in Agriculture.

The object of this course will be to give our "big boy" readers, the farmers of to-morrow, direction in the disposal of their spare time so that it may all be utilized for systematic and progressive self-development. It is assumed that they are determined to stay with the farming game and to make the most they can out of it. The course has, therefore, been designed to give practical and systematic instruction in the more important subjects relating to agriculture. It will also include a study of the great economic aspects of farming. In it will be offered the cream of a regular agricultural college course.

The details of the course will be more fully dealt with in subsequent issues of Farm and Dairy. We will, however, here state that the general divisions of agriculture with which it is proposed to deal are:

Field Husbandry—Soils—Cultivation, Drainage, Fertilizers, etc. Field Crops—Cereals, Grasses and Clovers, Roods.  
Animal Husbandry—Feed, Care, Management of Horses, Cattle, Sheep, Swine and Poultry.  
Orchard and Garden—Fruits, Vegetables and Farm Forestry.  
Farm Pests—Weeds, Insects, Smuts, Rusts, etc.  
Agricultural Economics—Farm Management; Farm Credits; Cooperation.

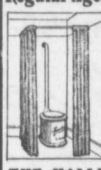
### How to Obtain the Course

In order to bring the course within the reach of every "farmer of to-morrow," arrangements have been made by which it can be procured without any cash outlay whatever, except for the one small item of postage. There are no tuition fees, and the course can be won by the expenditure of only a few hours' time by any energetic and intelligent farm boy. It will be given as a premium for a club of ten new subscribers to Farm and Dairy at \$1.00 each. As soon as the club is received the one securing it will be enrolled as a regular student in the Correspondence Course, and his first lesson will be immediately sent to him. His progress will then depend on the time and energy he will devote to the work and his aptitude as a student. Each student will receive individual attention and instruction, and will not be held back by others who are slower or more indifferent than himself.

## How the Farmers Met the Business Interests

(Continued from page 3)

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require (nothing being said as to the security which would have to be provided) throughout the year.

5th. The memorandum said "it is a fair statement that in the three prairie provinces" (the same thing has been said about Ontario and our other eastern provinces) "there are thousands of uneducated and well-intentioned farmers who want a little guidance in the mere fundamentals of tillage." To remedy this condition it was suggested that an effort be made to build up an adequate system of agricultural education." In this connection it was proposed that county agents (such as our district representatives in Ontario) should be appointed to advise with the farmers on their farms.

6th. It was proposed to investigate the systems of agricultural education prevailing in other countries in order to formulate a system for introducing into our rural schools, and in this connection probably extending the school garden system in rural schools.

7th. That as each of the provincial departments of agriculture, while trying to do their best, were working independently that an effort might be made to coordinate their efforts and to create public opinion which would favor the expenditure of larger sums by governments for agricultural purposes.

8th. That as many farmers have been unable to acquire live stock because of a lack of capital, that live stock loan companies be formed to assist them in such matters.

9th. Owing to lack of capital western farmers are often forced to market their grain in the fall of the year, thus creating gluts. To improve this condition it was proposed that farmers should be encouraged to store their grain after cutting or stack it on the farm immediately after threshing in order that they might get to work on their land.

10th. That a council composed of business men be appointed to press for needed legislation affecting farmers.

11th. That efforts be made to bring about closer social and business relations between the citizens of towns and the surrounding country.

### Method of Organization

In order that the foregoing suggestions might be carried out to the best advantage it was proposed that a voluntary association be appointed to be composed of fifty farmers and fifty men representing the principal business interests, namely the railways, banks, mortgage loan companies, manufacturers, wholesalers, packing houses and retail merchants. It was further suggested that the headquarters should be in Winnipeg, but that meetings might be held at other central points, at least a minimum of \$10,000 a year be raised to carry on the work and that an executive be formed, to be composed of twelve farmers and twelve business men, nine to compose a quorum.

### What the Farmers Thought of It

A memorandum setting forth the foregoing recommendations was sent to the farmers in order that they might consider them before meeting with the business interests. The memorandum was discussed by the farmers at a meeting of The Canadian Council of Agriculture. Farmers were present from each of the provincial farmers' organizations of the three prairie provinces. The farmers' organizations of Ontario were represented by J. Morrison, secretary of the United Farmers of Ontario; C. W. Geifery, of Paris, Vice-President of the Ontario Co-

operative Apple Growers' Association; F. M. Chapman, of The Farmers' Magazine, Toronto, and H. B. Cowan, of Farm and Dairy, Peterboro.

It did not take the farmers long to decide what their line of action should be. It was the unanimous opinion that they were to consent not to discuss what they considered to be the more important issues, such as wider markets, railway rates, and the cost of manufacturing the goods which the farmer must buy and were they to agree to discuss less important subjects, such as those outlined in the memorandum, the effect probably would be to give undue importance in the mind of the public to the less important issues and thereby to crowd the more important matters into the background. It was pointed out also that while increased production on the farm would be sure to benefit the business interests—past experience

most part, they looked like men who had been eminently successful in business, the business characteristics of keenness, self-confidence, aggressiveness and possibly a trifle of selfishness being manifest. They were all well dressed and looked like men who owned their own automobiles and lived in comfort. The farmers on the other hand were more simply dressed, were intelligent but rather more kindly in the expression on their faces and looked like men acquainted with hard work, proud of their occupations and confident in the strength of the position they intended to take at the meeting. Among the people present was Prof. J. B. Reynolds, corresponding secretary of the Guelph Agricultural College, but now the president of the Manitoba Agricultural College.

Chairman Helliwell, in true business style, wasted little time in his

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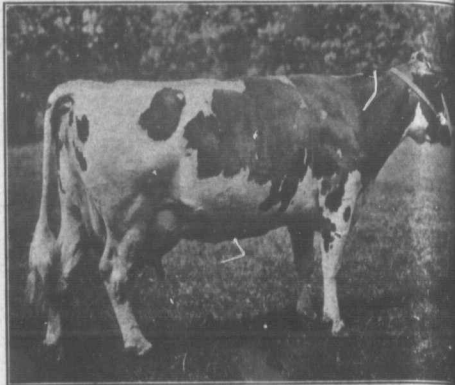
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Duesch Skylark Ormsby, a Champion and a Beauty.

Here we present a good likeness of the new champion butter maker of the west. Her name is Duesch Skylark Ormsby, her owner is Mrs. B. Irwin of Minneapolis, Minnesota, and her record for one year is 236.36 lbs. of butter (90 per cent. test) and 27,761.07 lbs. of milk, testing 4.54 per cent. fat. In seven days she produced 40 lbs. of butter. With her producing capacity she also carries conformations desirable enough to win her recognition in any show ring.

had shown that it might not benefit the farmer in the same proportion as large crops generally are attended by low prices. Therefore it was necessary that wider markets should be obtained for the products of the farm and that the cost of transporting and handling these products should be greatly reduced. It was felt also, that everything considered, the total number of incompetent farmers was no greater than the proportion of incompetent business men. Many proofs of this were submitted. It was decided, however, to meet the business interests fairly and squarely and to consent to cooperate with them in every way possible that was likely to be of real benefit to the farmer.

### The Conference

The conference between the business men and the farmers took place in the Industrial Bureau, Winnipeg. Possibly seventy-five to one hundred men were present, including about thirty farmers. The chairman, W. L. Helliwell, President of The Canadian Credit Men's Association, which seems to be an important organization in the west, said that the business men present represented "the cream of the business men of the west." It was interesting to compare these business men, as they sat around the room, with the farmers. For the

ductory remarks. He soon called Mr. Vere C. Brown, inspector in Western Canada for the Canadian Bankers' Commerce, to explain the objects of the meeting on behalf of the business interests. Mr. Brown did so very nicely. He set forth the objects enumerated in the memorandum and stated that it was the desire of the business men to meet with the farmers in order that both might obtain the viewpoint of the other and it would be possible for them to cooperate and thereby advance the common cause along all lines on which it was found they could agree. He assured the farmers that the business interests realized that their own methods fell considerably short of perfection, and in this connection points

(Concluded on page 3)

### Calf Rearing Without Milk

(Continued from page 1)

ger, too, is beneficial to health and should not be forgotten. "Many calves will be raised with small shares of milk, and there is no reason why quite successful youngsters should not be reared if care is taken all along. I omitted to mention that the calves should be given three meals a day for the first two months, after which two will suffice.

# How the United Farmers' Cooperative Co., Ltd., Does Business

"WOULD you kindly advise me how the United Farmers' Cooperative Company, Ltd., do business with the Farmers' Clubs?" writes a Peterborough county subscriber to Farm and Dairy. "A couple of knackers of their way of doing business and myself had an argument about the clubs and the company, but as I didn't understand how they did business I was shut out. They, of course claimed the men at the head of the company had a rake off at the head man or village merchant would otherwise get. I thought different, but wasn't sure as to how they did it. One of these men is a merchant, who also sells carloads of mill feeds, and the other a drover. They naturally would try to make out it was no good to the farmers."

"A few members of a local club don't understand anything about how the buying and selling is done, as they don't attend the meetings. Any time I have asked them to explain things they would say, 'Oh, I guess it's no good.' Fellow like them are good advertisers for the merchant."

**Farm and Dairy's Reply**  
 "The United Farmers' Cooperative Co., Limited, is, as the name implies, a cooperative company. If your branch owns any stock in the company it gives your branch a full right to have a say with the other branches as to how the company shall be managed, the prices regulated and its profits adjusted. It is hardly necessary to point out that your branch has no means of knowing what the profits are of other concerns which you do business or how their prices are set. Each year the cooperative company holds a meeting in Toronto, to which the branches are invited to send delegates, where they are furnished with a full statement of its operations and where its policy is determined."

"The by-laws of The United Farmers' Cooperative Co., Limited, stipulate that the profits shall not exceed seven per cent. Should they exceed seven per cent the excess is to be divided among the clubs in such a way as may be determined, either by vote or by a lowering in the price of goods. Thus you will see that the Cooperative Company has no power to hold up the clubs or to take advantage of them in the matter of prices charged. The Cooperative Company charges a small commission on the goods handled. Part of this commission at present is turned over to the secretaries of the local organizations, but this arrangement may not be continued."

"It is necessary that the company should charge a small commission or it could not exist. Its object, however, is not to obtain a large commission as is the object of most retailers, dealers and middlemen, but to reduce the cost of handling these goods to its members. In some lines of goods where combines have gained control, the price charged give the middlemen upwards of 100 per cent or more of profit. The commission charged by The United Farmers' Cooperative Co., Limited, is less than five per cent. We trust this answers your question, but if you would like further information we will be pleased to furnish it."

## One of Canada's Makers

By J. J. Morrison.

IN the death of John Ramsay of Eden Mills, the Dominion Grange has lost one more of its faithful band who have stood test time and

adversity in their adherence to the principles of rural organization. The late Bro. Ramsay, though in his 82nd year, maintained his standing as a Granger to the last, and passed away as a member in good standing. Even in sickness he did not forget the Grange, and less than one year ago, although not fully recovered from a severe operation (the amputation of his leg) he had his yearly dues forwarded to the secretary of the Dominion Grange.

He was the last surviving member of the Farmers' Home Grange, Ermosa Township, Wellington county, organized forty years ago. It is sad that such men as he are forced to leave us. They are the men that made this province what it is. Strong in body and in mind they transformed, in less than a generation, the wilderness into homes as we see them to-day. Privation and discomfort were unheeded by these pioneer home builders, the true nation builders, so lightly spoken of by men less able than they. Disappearing from among us one by one, they rest in yonder cemetery, leaving behind the impress of sterling worth. Yet no tribute to them is voiced by our Press or pulpit, which are ever ready to laud men who have left little behind except military prowess and commercial cupidity.

These are our heroes, John Ramsay and such as he, yet our agricultural colleges call for agricultural leaders. Will they not consider these conditions? Would they know them if they appeared? The true type is passing from among us, while those of the objectionable class are lauded to the skies.

The Grange mourns with the relatives of the faithful one gone to rest.

## Central Brant Farmers' Club

The Central Brant Farmers' Club was organized in the winter of 1913-14. Organization, however, was as far as its activities went that season. In the fall of 1914 a committee was appointed to draw up a program for the winter season. Two meetings a month were arranged for and the attendance throughout the winter of 1914-15 was always good. The discussions were altogether of an educational nature and much interest was taken.

Commercial activities have not yet assumed a place of much importance. Last spring, clover seed and seed corn were bought cooperatively. The seed was shipped C.O.D. and most of it is paid in advance. Clover purchases totalled \$700 or \$800. Business was done largely through the secretary, E. S. Sorden.

Coal and cottonteed meal were bought in conjunction with other clubs and to the financial benefit of the members. On the seed orders also, a discount of from five to 10 per cent. was received on account of the size of the order.

The winter's activities wound up with a banquet at the schoolhouse. W. O. Good, who is a member of this club, spoke of the banquet as follows: "It was one of the best things I ever attended, both in culinary lines and in the food for thought afforded. Delegates were present from other clubs and we had a most enjoyable time." The meetings of the winter were held alternately at the agricultural nature and the other of a general character in combination with the Women's Institute.

An acceptable Christmas present—Farm and Dairy for one year.

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Monton Farm and Dairy when writing.



## Potatoes at a Premium

POTATOES have already reached a high figure compared with the low prices of last year, and chances are that quotations will go still higher. In Ontario, the usual acreage was planted last spring, and at the opening of the marketing, season prices promised to be low. Since then prices have greatly reduced the crop. Reports now being received from both east and west indicate a greatly reduced crop in those sections. The United States crop also is short, and it was probably this shortage that hastened the removal of the embargo on Canadian potatoes.

From present indications we would not be surprised if farmers would realize more from this year's short crop than they did from last year's long one. It will be a great potato year for the man who sprays carefully, as in spite of the rain, good crops and clean tubers have been harvested from the majority of well-sprayed fields. The man who sprays also has some advantage in that he can store his potatoes with a greater assurance that they will not rot in his cellar.

## Vegetable Seed Situation

THE following extract of an article from a newspaper of Gothenburg, Sweden, will be of interest to growers of vegetable seeds. The article refers to the Board of Directors of the Agricultural College of Alnarp, Sweden, asking for a Government grant for the encouragement of vegetable seed production.

"The Board points out that the war has most clearly emphasized the importance, for the country, of home production of vegetable seed. Owing to the most important vegetable seed-producing countries having prohibited the export of such seed, the prices of a great number of important vegetable seeds have risen enormously. And, still worse, some seeds can hardly be obtained at any price. It is reported, from a well-informed source, that vegetable seed growing in the countries engaged in the war has been largely neglected during the past summer, and that for this reason further advances in prices can be expected. Reports from Germany state that the supply of seed of spinach, carrots, most kinds of cabbage, onions, cucumbers and peas is utterly small. Furthermore, Germany has prohibited the export of vegetable seeds to the end of the war. There is, therefore, every reason to fear that we have to face the possibility of a very serious shortage of certain vegetable seeds." — Seed Branch, Ottawa.

## Demonstration Orchard Results

MR. Elliott and myself visited our demonstration orchard at St. George, where we had been spraying for the San Jose Sale. We could find scarcely any trace of the Scale on the fruit, and Bobb tells me that the output of his little orchard (about 100 half-grown trees) will amount to \$350 this year, which is practically an entire gain to him. In last year his fruit was marked with the Scale that they could not sell them all. He is delighted with the results, and gave me a nice bag of sweet apples as a souvenir, but has

not yet sent me a statement as to exact yield. This, I hope, however, to have in my report. The orchard ran considerably over ninety per cent. No. 1's, he informs me.—R. Schuyler, Brant Co., Ont.

"The crop of the demonstration orchard this year was rather light, and we were unfortunate enough to have a severe windstorm about a week before it was time to pick the fruit. In spite of this combination of adverse conditions, we were still able to show a respectable profit of \$53.58 per acre with an average for the two years of \$127.77. The fruit this year was of good quality and remarkably free from scab, considering the season and the fact that the McIntosh Red are the most susceptible of any apple to this fungus."—E. P. Bradt, Dundas Co., Ont.



## Use of Water-Glass

I WOULD like to know through the columns of Farm and Dairy if water-glass which was used this year, can be used next year.—A. B. E. New Westminster, B. C.

We believe it would be more satisfactory to preserve the eggs in a freshly made solution of water-glass. There is generally a considerable amount of decomposition of the solution with precipitation of silica in the course of the season, and this must affect the efficiency of the preparation. We have, therefore, always advised against a second use of water-glass solution.—Frank T. Shutt, Dominion Chemist.

## How an Expert Feeds

RECENTLY I fell in with J. W. Clark of Cainsville, Ont. As usual, our conversation turned to chickens. I told him of some feeding methods I had recently seen in practice, and he in turn told me of feeding methods which have been given him extra good results in the production of winter eggs.

"I believe in a mash to force winter egg production," remarked Mr. Clark. "My mash consists of bran and shorts and oat and barley chop. With this I mix 15 per cent. of beef scrap when feeding without milk and five per cent. of beef scrap when feeding with milk. I feed this mash in troughs once a day. In winter when the birds cannot eat, I mix pulped roots with the mash, as I find they do not eat enough green feed if they get only whole mangels to pick at. This winter I am planning a change and will boil turnips and mangels, and feed in troughs at noon. In no case will the birds get more of the mash than they will eat up clean.

In a wire sack against the wall the birds have a supply of alfalfa hay. It is wonderful how much they will eat. One hundred pullets will clean up half a bushel in a day, and I notice that they eat more when laying heavily. In addition, they get crushed oats in a hopper, which is before them at all times, wheat in the litter in the morning and corn at night; four quarts of wheat and five to six quarts of corn for 100 hens, but of

course this quantity must be varied according to the appetites of the pullets. I don't believe in giving them all the wheat they will eat, but leave them a little hungry so they will clean up the mash and eat some of the crushed oats. There is no better hen feed than oats."

Mr. Clark explained to me that instead of feeding beef scrap he is now feeding beef meal. He would prefer to feed milk for animal food at all times if he could get it, but that is as the times are. The best place where the pinch comes is at the end of the season.

I am always glad to hear the methods followed by practical men, and Mr. Clark is an expert.—F. E. E.

## Ducks and Ducklings

IN selecting ducks for breeding, size of frame, length of body, and general activity should be looked for. Without size of body we cannot expect to obtain large ducklings.

In Iceland the elder duck is a great source of wealth as a producer of the famous elder down. They are large and easily handled, having been domesticated thoroughly. The color of the duck is a grey and brown mottled, while the drake is black and white.

The Vale of Aylesbury is the great centre of duck rearing in England. None of the duck farms are large—probably from half an acre to an acre. This is utterly devoid of vegetation on the surface, the grass being worn away by the dabbling of countless feet. The ducks that are confined to orchards are, as a rule, much more healthy-looking than those which are kept in the open. Doubtless the trash taken up as a food much of the material foulness of the soil.

## A Large Egg

A. R. Ellis, Vancouver, B. C.

THE illustration herewith shows an exceptionally large egg laid by one of our White Wyandotte pullets. She is, at time of writing, five months and three weeks old, being hatched on March 19th. The egg was about two inches through and three



## A Really Large Egg.

and one-quarter inches long, being also six inches around the centre, and showed nine inches on the tape around the ends. It was indeed peculiar that inside the first egg was another egg, the shell of the latter being fairly soft. Between the first and second shell was a sauciful of white, while the second was a fully formed egg.

We have a fine lot of pullets hatched in March and April. The March birds started laying right along. We feed wheat and corn in the morning with mash at noon, and wheat and corn again at night, with dry mash before them at all times; lots of beef scrap goes into our mash, and it certainly does pay.

Eggs should be placed in a rack set down, so that the air can strike them, and they should be turned every other day. They keep best in a room or cellar where the temperature ranges between 40 and 60 degrees.

## How to

out that we compete will eat, but leave capable of only result ing business manufacture pens and all the same grain another it articles sold that the scale of agriculture city and since ers would ing patroni suggested through efficiency of phasized this matters, such as the discussed. Mr. Brown, sides of a each other's and a show. The claim they would suggested should first include including A. Coleman, senting the tion; G. N. Beard of T the Mortgat C. Coleman, J. Milner, et al. All express heavy ac- likely to pu culture, that the should be c operate with stead. This is on the tact presented the interests, sa senting a m than it was done, which By this be dum discou fundamen- the action- which really satisfactorily had been d and reacted The failure recognize th their considerably m "You have "put down convegnia discussed. It is most wou are sincere cooperate, it to discuss the would result Business me feeling that to help us have some e are dispose ther farmen



# How the Farmers Met the Business Interests

(Continued from page 6).

out that where three retail merchants compete with one another in a village capable of supporting only one, the only result is to add to the cost of doing business. In the same way when manufacturing concerns maintain extensive sales forces which travel over the same ground, competition between one another it all adds to the cost of the articles sold. He assured the farmers that the business men were in earnest in the realization that the prosperity of agriculture means their prosperity and said that he hoped the farmers would not feel that they were being patronized when the business men suggested that it might be possible, through cooperation, to increase the efficiency of many farmers. He emphasized the point that controversial matters, such as the tariff were in a class of themselves and should not be discussed. "We have been," said Mr. Brown, "like a lot of boys on two sides of a fence, throwing stones at each other's back yards. It's foolish as you should suit it."

The chairman asked the farmers if they would like to speak, but they suggested that other business men should first be heard from. Different business men were then called upon, including Mr. W. R. Ingram, representing the Manufacturers' Association; G. N. Jackson, President of the Board of Trade; A. L. Crossin, of the Mortgage Loans Association; D. C. Coleman, for the C. P. R.; and F. J. Milner, for the Grain Exchange. All expressed themselves as being in hearty accord with any proposals likely to promote the cause of agriculture. The chairman suggested that the help of the farmer should be cut out and the words "cooperate with the farmers" be used instead. This tactful suggestion caused some of the farmers to smile. Mr. Weed, of the Wholesale Implement Dealers' Association, favored such action as was proposed, and concluded his remarks by saying, "if we are in wrong with the farmers we would like to know it."

### What the Farmers Said

Mr. J. A. Speakman, of Calgary, the President of The United Farmers of Alberta, was the first to speak for the farmers. He did so to perfection. He assured those present that the farmers would take pleasure in cooperating with the business interests if it could be done on an advantageous basis. He complimented Mr. Brown on his tactful way in which he had presented the case for the business interests, saying that it had been presented more gracefully by Mr. Brown than it was set forth in the memorandum, which was very "poppy-turvy." By this he meant that the memorandum discouraged discussion of the fundamental issues, while encouraging action on less important matters which really could not be dealt with satisfactorily until the larger matters had been disposed of as they acted and reacted the one upon the other. The failure of the business men to recognize this fact naturally resulted in their recommendations being considerably mixed.

"You have," said Mr. Speakman, "put down one issue, the tariff, as controversial and, therefore, not to be discussed. This is the one issue that is most worth discussing, and if we are sincere in our expressed desire to cooperate, it should be possible for us to discuss this in an unselfish way that would result to the benefit of all. Business men still have too much the feeling that we farmers need some one to help us improve our methods. We have some backward farmers, but we are disposed to think that their brother farmers are best able to help

them as we are experts along this line, or at least should be, and we are determined to do it."

"The fact is, we feel that as you would if we suggested that a committee be appointed, to be composed one-half of farmers, to teach the manufacturers and business how to run their business. When you exclude from discussion, topics that create a ranking in the farmer's mind, you miss the point you aim to accomplish. You express the desire to give the farmer legislative power. 'We don't want protection, but fair play, and when we get fair play we will protect ourselves (applause from the farmers). We want the right to sell our wheat where we can get the best price for it.'" At this point, Mr. Speakman said he did not hear much applause from the business men. This rally created loud laughter. "The issues," continued Mr. Speakman, "which business men and farmer can discuss are those where their interests merge, such as banking, railway rates, and marketing methods. They express the desire to have produced all that could be expected from us. The problem which now confronts us is how are we to market our crops to the best advantage? If you business men desire to cooperate with us, you can do so better than by assisting us to obtain better markets and free wheat."

Mr. J. A. Maharg, of Moose Jaw, claimed that farmers had more to gain through improving methods of marketing their products than they have along the lines of increased production. When the Manufacturers' Association met with the farmers, the chairman of the meeting had taken the same ground as Mr. Brown, that the tariff should not be discussed. The manufacturers, however, claim the right to obtain their raw material free of duty. Why should not the farmers be given the right to purchase agricultural implements, which form a part of their raw material, also free of duty. Unless such subjects were to be discussed, Mr. Maharg did not see how a council such as was proposed could be of much value.

### A Hard Question

Mr. J. J. Morrison, of Ontario, pointed out that the memorandum laid special emphasis on the importance of increased production. What was the matter with production? The farmers were not complaining about it. The complaint was coming from another direction. "We farmers," said Mr. Morrison, "are not calling for help. The fact is we do not seem to need help as much as some other classes in the community. We market our products in the markets of the world and we have to open our markets to the products of other countries. This shows that we are confident of our ability to hold our own with the producers of other countries. When, however, we propose that our markets should be opened to other lines, the manufacturing interests shout that they cannot hold their own with their foreign competitors. We submit to you, therefore, the question if it is not the manufacturers and similar industries that need assistance more than the farmer? This memorandum emphasizes the importance of live stock, and seems to want you to believe that if the farmers of the west keep more live stock they would become more prosperous. We keep live stock on the farms of Ontario, but nevertheless over 100,000 of our farmers have left the farms of Ontario within the past ten years. It is evident, therefore, that we must look elsewhere for the solution of our difficulties."

Mr. R. C. Henders, of Manitoba, said that for the farmers and the business men to agree to discuss these important subjects would have the effect of playing on the surface of the real issues involved, and therefore little headway could be made.

### Effect of the Speeches

These speeches, as well as those made by other representatives of the farmers, including Mr. C. W. Gurney, of Paris, Ont., and R. McKenzie, of Manitoba, showed all present that nothing could be accomplished unless the business interests were willing to extend the powers of the proposed committee. Mr. Vere Brown was asked to speak again for the business interests. He said that for himself he would be glad to see other matters discussed that those mentioned in the memorandum, but he had been afraid that to include them would lead to dissention. He admitted that he had sometimes been led to wonder if a tariff, instead of encouraging infant industries, had not reached the point where it was assisting the established industries to reap undue profits. He seemed fearful what the results might be were these subjects to be included for discussion, but did not care to say that they should not be considered.

### Organization Formed

The final result was that a resolution was passed approving of closer cooperation between the farmers and the business interests. A committee was appointed to give the matter further consideration and authorized to present a report at a meeting to be held on Friday of the same week. On Friday the committee presented the report, which was adopted. The report recommended friendly consultation between the agricultural and business interests on questions of joint interest to agriculture and commerce. For this purpose it suggested the appointment of a committee of forty members, one-half of which was to be composed of the members of the Canadian Council of Agriculture. This

committee would have power to discuss all questions in which agriculture and commerce are jointly involved.

The work of this committee will be to gather and diffuse, and to discuss and eventually formulate resolutions recommending certain lines of action, both for the farming as well as the commercial interests. It was decided to call the new body "The Joint Committee of Commerce and Agriculture." A committee of five from each of the two interests will prepare working plans and arrange for future meetings. The farmers' representatives are: James Speakman, Alberta; J. A. Maharg and I. B. Musselman, of Saskatchewan; R. C. Henders and R. McKenzie, of Manitoba. The business men have not yet named their representatives. While the farming interests are somewhat skeptical as to what real reforms can be accomplished through this committee, they are willing to test the proposal thoroughly and to give all the cooperation within their power.

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"Read not to contradict and to confute, nor to believe and take for granted, but to weigh and consider."—Bacon.

## Free Wheat

HON. Robert Rogers has declared his sympathy for the cause of free wheat. He has gone further. He has stated that the Government is sympathetically considering the question. If the prospect of opening the United States market to our wheat is as good as the Minister of Public Works would lead us to believe, we would almost expect free wheat before this issue of Farm and Dairy reaches our readers. But we have our doubts. The influence of the milling and transportation interests is still strong in the land and their entrenchments at Ottawa seem almost impregnable.

We can readily understand just why these two powerful groups of interests should oppose free wheat. The true reason of their opposition, and the last one that they would admit, is that just in proportion as a tariff on wheat means less money to the farmer, it means more money to them. Just why anyone else should oppose the lowering of our wheat tariff and thus automatically open the United States market, we do not profess to understand. We have no extravagant ideas of the greatly enhanced prices that would be realized for Canadian wheat on the United States market. The chances are that were wheat made free, the United States markets would come down somewhat and the Canadian markets would go up to meet their quotations. Also we are perfectly confident of this—that it would create a steadier and more stable market and one less easily manipulated by wheat speculators. It would also afford Western farmers a more profitable market for their inferior grain.

The biggest reason for free wheat, however, is that the people of the West, in city and country alike and almost to a man, want it. And what right has any group of interests or any class of the community to dictate to the prairie farmers

just where they shall market their crop and where they shall not? Such a course is not democratic, to say the least.

## Profitable Cooperation

THE farmer is an independent man. Certainly! But we shouldn't be so proud of our independence that our individualism keeps us from working in cooperation with our neighbors. Such individualism is short-sighted. It robs both our neighbors and ourselves of profits that might easily be ours through business cooperation.

Cooperation as a business system for farmers is fundamentally correct. It is a rule of all business that goods are more easily sold where large quantities are available and the choice wide, than where the supply is small and uncertain. Apply this to agriculture. One farmer in the neighborhood might have good pure-bred animals for sale, but his output would necessarily be limited and the buyers range of choice small. Few buyers would go out of their way to inspect his stock. Suppose, however, that there were ten farmers in the immediate neighborhood with the same breed of cattle, horses or sheep. There would then be ten times as many herds to choose from, ten times as many animals to sell, and buyers would find it profitable to travel long distances to reach that community, as they would come with the certainty of finding something to meet their needs.

One habit of thought would dictate that each farmer select the breed he likes. Even if such a plan would result in ten different breeds in one neighborhood. This is individualism. Another habit of thought would lead farmers to adopt the breed most common or best suited to their community. This is cooperation. Likewise it is good business. It has made the Chateaufort district of Quebec famous for its Ayrshires, Ontario county for its Clydesdales, and Oxford county for its Holsteins. It will work for the upbuilding of a permanent prosperity wherever it is applied.

## New Zealand's Cheap Money

NEW Zealand, the country where poverty is unknown, is successfully stimulating agriculture by extending credits to farmers. The government in 18 years has loaned \$65,000,000, and has cleared \$1,500,000. It borrows the money at 3% per cent and lends it through an independent commission to the farmers at 4% per cent. By simply repaying a sum equal to six per cent of the principal the farmer, after 31 years, finds his land cleared and the entire debt paid off.

The foregoing, from a city daily, is the prelude to a lengthy argument in favor of cheap Government loans to farmers in Canada. While Farm and Dairy agrees that our banking system might well be changed so as to afford greater credit facilities to Canadian farmers, we doubt if cheap money for the purchase of farm land, such as farmers have in New Zealand, would be of any permanent benefit. Cheap loans for the purchase of land repayable on exactly the same basis as is followed in New Zealand, have already been experimented with in Denmark, Germany, Belgium, and several other European countries, and always with the same result—an increase in the selling price of land.

We have mentioned before in these columns the effect of cheap loans on the price of Danish land. Where it was found that when the rate of interest on mortgages was reduced by Government loans from six per cent. to three per cent., the price of land doubled. The result has already been the same in New Zealand. And of what greater advantage is six per cent. money and \$100 land, than three per cent. money and \$200 land? What is needed to assist men to the

ownership of farms of their own, is not cheap money, but a system of taxation that will make it possible to hold good agricultural land out of use, or in partial use only, in anticipation of a rise in price. Such an end can be attained only by the taxation of land values as recommended by the organized farmers of Canada.

## Drag the Roads

THE most tiresome, nerve-racking, bone-shaking road over which one can drive is the road that has been allowed to freeze in the rough. The ruts and the huddles, as solid as rock, make poor footing for the horse, and are hard on the rigs. The worst point about the frozen earth road is that its roughness could have been so easily avoided had proper precautions been taken before the road froze up.

Last fall in a Western Ontario county, an editor of Farm and Dairy, after jolting over several miles of frozen huddles, had the pleasure of completing the drive on one-half mile of comparatively smooth hard road. Both sections of the road were built of the same materials at the same time. The first portion, however, had been neglected. The second had been dragged regularly until frozen hard. Hence its comparative smoothness. There is no more important time to drag the roads than in the fall.

## An Educational Danger

IN these days when leading Canadian educationists are so strongly advocating instruction in agriculture in all rural schools, the following paragraph from The Nebraska Farmer, comes as a timely warning of a very real danger. Our contemporary says:

"That farmers may be fitted to take their proper place in the government is one reason why the rural schools should continue to give instruction in the rudiments of a broad education, rather than to be turned into corn and hog schools. Farmers must not permit fad-chasing educators and schoolmen, by introducing too much vocational training, to destroy the usefulness of the rural schools in training for citizenship."

This warning applies not only to agricultural instruction, but to all phases of industrial education in public schools. Industrial education may easily be carried so far that it will endanger the value of our schools as developers of broad minded, intelligent citizens and in their place produce efficient, industrial slaves but little more. Germany is an example of a country that has made industrial efficiency the root and branch of her educational system; and many there are who would gladly Prussianize our Canadian schools.

Let us not forget that the first object of education is to train our children to think. Up to a certain point, elementary instruction in agriculture or industrial science, will help to attain this object. Carried too far, it will tend to dull the intellect. It is to the interests of the farmers and working men of Canada to see that industrial education is never allowed to become anything more than a very secondary subject on the curriculum of our schools.

As a result of the war, we are told, the financial centre of the world will be moved from Europe to America. It would seem also that the world's stock breeding centre may also be found after the war on this side of the Atlantic. Thus does militarism punish its devotees.

Canadian farmers would have no objection to accepting low prices for their products if they believed their loss would be gain to the struggling people of Europe. What worries us is that a large part of the difference in prices of crops between this fall and last, goes to swell the fortunes of the shipping combine and not to make cheaper food for the masses of Europe.

## Would Not Plow

J. A. Jackson  
MY experience on corn or grain next to a better crop of better catch of spring plowing. In and in a root next spring I would land with the roughly pulverized inches deep, then in harrows. If little lumber I would a roller before so this method much than plowing the crop will stand as (where the the plowed).

On account of very wet, then of corn and root if possible to get all of these fields with thistles or felled shallow. Each would be to cultivate after enough to bring the frost to the top of the ground and wind would not plow because the top was being cultivating better shape of to next summer's below it is that so much.

## Much Fall

J. A. R. Phillips  
HOW much will profit from this? This is a depends considerably for instance, whether the soil is dry. First take condition of feed free from weeds, get the land stirred up after the frost to stop the capillary soil moisture coming only, to start with. There are differences may be accomplished with cultivator, plow. In land of does excel in first operation but overdone. Later work will be better not left to the weather is well decomposed immediately, which is a bit later derived from the of which the earth same. In stiff of with cough grass cut and cover of works effectively course, this, like requires a certain judgment mixed.

In speaking of plowing to work land on which a of cultivation has past years; for generally found in. The writer farms worked of to-day are growing more than locally just recent times after a spring. And it is stating that not ship gets all the profitably spent that which is cal

## All Around the Farm

### Would Not Plow Corn Ground

J. A. Jackson, Elgin Co., Ont.

MY experience has been that clean corn or root ground intended for grain next spring will produce a better crop of grain and give a better catch of clover without fall or spring plowing. When the land gets dry and in a wood shape for working next spring I would go on corn or root land with the disk harrow and thoroughly pulverize it up to about three inches deep, then harrow with the wide iron harrows. If the ground is still a little lumpy I would go over it with a roller before sowing. I have found this method much cheaper and quicker than plowing the land and that the crop will stand a drought much better than where the ground had been plowed.

On account of last summer being very wet, there were a great many corn and root fields that it was impossible to get on and keep clean. All of these fields that are very dirty with thistles or foul grasses should be plowed shallow this fall, and if the weather would permit it will pay well to cultivate after plowing this fall enough to bring the roots of the foul stuff to the top of the ground so the frost and wind can get at them. I would not plow this ground very deep, because the top soil that you have been cultivating last summer is in better shape to feed the young plants of next summer's crop than the earth below it is that has not been worked so much.

### Much Fall Work on Land

Jan. R. Phillip, Grey Co., Ont.

HOW much work can be expended with profit on land in the fall? This is a broad subject and depends considerably on conditions; for instance, whether the field be such as soil, root or top land, or very dirty. First take stubble land in fair condition of fertility and reasonably free from weeds. It is advisable to let the land stirred as quickly as possible after the removal of crop, first to stop capillary action and retain as much moisture as possible and, secondly, to start weed seeds sprouting. There are different ways in which this may be accomplished, with the spring tooth cultivator, disc harrow or gang plow. In land of not too stiff clay the disc does excellent work. After this first operation harrowing cannot be overdone. Later in the season, when weeds are well sprouted it may be plowed, and, in my estimation, it is better not left too late. If one while the weather is warm and the soil also, decomposition of all refuse starts immediately, which benefits the future crop. If left late the only benefit is derived from the action of the frost, of which the early plowed benefits the same. In stiff clay or land infested with couch grass this is a good idea to cut and cover or drill. The frost works effectively on such land. Of course, this, like everything else, requires a certain amount of good judgment mixed with it.

In speaking of taking reasonably clean stubble to work on, in my case it is land on which a reflection on this kind of cultivation has been followed in past years; for land so cultivated is generally found in fairly clean condition. The writer could take you to farms worked after this outline that to-day are growing from 25 to 50 per cent more than farms in the same locality just receiving one plowing, sometimes after snow is falling or in spring. And I have no hesitancy in stating that not one farm in a township gets all the work that could be profitably spent on it. We are told that what is called worn-out land,

contains fertility enough to grow 100 crops. But this fertility must be liberated and got into a soluble condition.

To give sod land more than one plowing, generally speaking, it would be required to give the first not later than August 15. If this can be done the following crop will pay very large wages for the extra work as the sod has been thoroughly rotted and incorporated into the soil. If only receiving one plowing it is a good plan to work the surface with harrow and cultivator, which keeps grass also growing up between furrows also retaining moisture and leaving the soil in first-class condition for spring seeding.

I believe that the land would pay for more work than I have here outlined, but this is about as far as my experience will bear me out. You all know conditions on the farm in fall—work enough for all it we had three pairs of hands each and still work left undone.

### A Series of Opinions

Simson Tomlinson, York Co., Ont.

I WILL endeavor to give my opinions on all three of the questions asked by Farm and Dairy of Nov. 1st. The first question is "Do you favor fall or spring plowing of land intended for corn next spring? Why?" I favor spring plowing of land for corn, whether the land was plowed in the fall or not. I prefer to have the sod plowed in the spring, as it loosens up the soil and corn I believe, requires a loose seed bed.

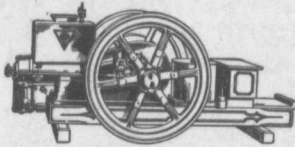
Would I plow corn or root land intended for grain next spring, or merely disk? For wheat and oats I merely disk if the land is clean. If not clean I plow in the fall and disk in the spring, as these grains require a hard solid bottom for the seed. For barley and peas I gang after harvest and plow and disk in the spring.

How much work can be expended with profit on land in the fall? I would answer that too much work can hardly be expended on the land in the fall, as greater preparation is certain to be followed by greater yields. These answers are based on my own experience.

### Eradicating Quack Grass

I HAVE a two acre village lot which is practically unfit for farming because of witch grass. I would like to know how to get rid of this weed.—J.P. Que.  
This witch grass is variously known as Couch, Quack, Quitch or Quick grass. It is particularly difficult to eradicate because of the root stocks which are carried around by implements and the area affected to some extent. The method of eradication recommended by the Ontario Department of Agriculture is as follows:

As soon as the crop is harvested plow lightly, then harrow with the ordinary harrow, and, if necessary, cultivate with the spring-tooth cultivator. This shakes the roots free from the soil and makes it possible to gather them up with the horse rake. Burn as soon as they have dried sufficiently. Repeat this process two or three times. If the weather at the time should happen to be dry and hot so much the better. Late in the fall rib up the land into drills, and allow to stand over winter. The frost, in all probability, will render material assistance in the eradication. The following spring, plow about the end of May, cultivate well, and put in some hoed crop, or summer fallow, sowing buckwheat, the crop to be plowed in. A carefully cultivated crop of rape is recommended as being particularly effective in destroying this pest.



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## Old Hickory—A Story of the War\*

(Continued from last week.)

MARY Jane brightened up and returned to her work. In the afternoon she baked squashes and made doughnuts. "I—I'd like real wafers, Pa," she began, at supper time, "to take 'Lizabeth over a mess' of doughnuts." She propounded her wish half fearfully. Larry always grew wrathful at signs of weakening on her part in the matter of the Hargrave and Deane feud. This time, however, he said nothing, merely shrugging his shoulders indifferently.

Mary Jane stole out a few moments later and took her wafers over the pastures and through the orchard where the late Famous apples hung weighted on their branches toward the line-fence. Then she halted, undecided as to her next move. Under her arm she carried a large plate covered with a snowy napkin. The cakes were her very best frying, and she was pardonably proud of their combined lightness and richness.

Suddenly a remembrance of Elizabeth's coldness and aloofness struck her. With a foot on the lower rail of the fence, she paused again. "No!" "Twon't!" she said, half aloud. "No! 'Twon't! be that'll make the first advance!"

Turning, she walked rapidly back to the house. Winter came and went, and spring arrived. From time to time during this period the boys had written home. Neither of them had as yet distinguished himself by any great feat of arms, but they spoke cheerfully of "a few scratches," and longed, they said, "for more real fighting and less watchful waiting."

Then, after two months of silence, a short letter from Larry Deane came to hand, telling of a strong movement forward and a probable "fight" that would take place in the course of a day or two. "If I don't write again, Mother o' mine," he said, in closing, "tell Dad to chop down Old Hickory. This Jimmy's wish also. (He'd drop a line to his folks, only his right arm is out of commission.) I have a feeling that when you have laid the old tree low there'll be an end of all this family strife. I tell you Jimmy's been showing the stuff he's made of, and we're all proud of him. All honor to the parents of such a lad! The heart of me is sore to think my folks and his are not on speaking terms. Down with Old Hickory! If he even bore me to justify her assistance! But there she stands a monument to a petty quarrel, useless, unproductive, and a subject for witticism of the country over."

Larry Deane the elder, upon receipt of his soldier-son's last letter, armed himself with a saw and an

\*From "Easter Farm and Home."

axe and set forth to the line-fence. It would be hard work and risky, too, for one man to perform, but he was determined to achieve it. Henry Hargrave was a semi-invalid and could give little or no help, even if he could be induced to agree to the felling of Old Hickory; and Larry Deane did not intend to ask his permission. The tree was as much his as Henry's! But when he had reached the picket fence surrounding the giant, Larry stopped. From the topmost twig to the lowest branch Old Hickory was



The Small Home on the Small Farm May Be Very Attractive.

The home here illustrated is on the 50-acre farm of E. A. Miles, near Burford, in Grant Co., Ont. The illustration does not do justice to this neat, attractive little place, with its well-kept lawn shaded on either side with evergreens.

covered with blossom from three generations of sterility!

"Sure 'twould be a crime," said Larry to his wife, "to cut her nuts an' her with the biggest crop o' downs comin' that ever I saw on a hickory tree!"

"An' charity needs all it can get this year," agreed Mary Jane. "Yes, 'twill be best to leave her be till fall. I think the lad would say so if he knew."

June passed, and July with its great heat came in. Up at Sunnybrae, Elizabeth Hargrave labored early and late, for the hay and grain were large crops, and she was single-handed. Hired men were harder to secure than ever before. Henry, with his weak back, could do little. He walked daily to the village, two miles away, for the mail and also for the exercise. He could not wait for the rural route delivery. He must needs be at the little post office to snatch the very first crumbs of news that came in.

Thus it was that he heard the news first. A kind neighbor who had no sons to send to the Front, but could

symmetrize out of the largeness of his heart, drove Henry Hargrave home, that sorrowful afternoon. "Mother," he faltered, as Elizabeth turned from her work in the garden. "Mother, the whole battalion's been wiped out!"

Elizabeth paled and clutched at a tree trunk for support. "Not—not the Eighth Battalion—our Jimmy's?"

Henry nodded. "Are there—any particulars? How did—he die? Was he—?" "It was a bayonet charge, the papers say. The boys covered themselves with glory. They—hey—why 'Lizabeth—!" he sprang forward in time to catch her before she fell. Hard work and much secret worrying had undermined the woman's splendid constitution. Her reserve strength was gone.

It was a dark evening—dark in more ways than one. Henry shut himself up with his sorrow and mourned alone. Elizabeth, rallying, could not bear the stifling atmosphere of the house. Restlessly she paced the garden. Jimmy's little sisters had wept themselves to sleep. Everything was still. Not a grass-blade stirred. The air was heavy and sultry, with now and then a restless, vagrant wind that rushed along high overhead in the tree-tops and ceased up there somewhere. That betokened a storm, Elizabeth knew. She passed through the lower orchard and reached the river-bank, and then turning, began to climb the little rise leading to the line-fence. Under Old Hickory she stopped. She could not analyze the impulse that had led her here, nor

"I would never a-done sech a thing," Mary Jane said, "but how—how'd poor Henry take the news, 'Lizabeth?"

"I can't rightly tell. 'Twill go hard with him. He's layin' down jest now an' when I go back I'll see him up a bit of supper. He ain't at nothin' sense—serco—"

A crash of thunder broke in upon them. Rain began to fall. "The storm's breakin' right over us. Come to house—quick, 'Lizabeth!" cried Mary Jane.

The women ran at the speed across the fields to Maple Hollow. On the verandah stood Larry Deane the elder. He grasped Elizabeth Hargrave by hand and shook it, then he put his two big hands on his wife's shoulders. "I—I got somethin' to tell you, girls," he said, in a muffled tone. "What—what that you'd sayin', Pa?" demanded Mary Jane trembling. Just once before had she heard her husband speak with that voice. It was when small Larry had passed the crisis in his fever and the doctor announced the danger-point over. Lightning swift and blinding clef the sky before the elder Larry could reply, then came a tremendous clap of thunder, and a splitting, tearing sound, which held the women when rooted. Lightning continually streaked the heavens and by its aid they saw a strange sight.

Split from top to base with a long, gaping, yellow sound, Old Hickory wavered a moment in the surge and fret of the storm and then fell with a sound rivaling the thunder overhead.

A cry of dismay broke from the two women. "The nut! Such a fine crop the would a' been!" Elizabeth said widely.

"The place that knew it shall know it no more!" quoted Larry, softly. "Sure it's ungrateful enough we'll be to mourn for a few nuts now when we've got somethin' better to think of, an' it's pleased the lad'll be when he comes home to find the work done an' never an axe laid to its scraggy old trunk."

Mary Jane clutched at him sobbingly. For a moment she thought him out of his head.

"Pa—don't!" she cried. "Don't you remember? I carry an' Jimmy, 'Lizabeth's lad—why, they're bad gone."

"The boys—our boys—are safe!"

There was a husky ring in the old man's voice. "Yes," he continued. "Safe! I've jest telephoned over Henry Hargrave — not ten minutes ago—an' he'll be here when his storm lifts a bit. We're to smoke a pipe of peace together this night."

"Yes, yes," cried the women together, Mary Jane adding, "Is it mad you are, Larry Deane, speak this way?"

"No, but 'tis soakin' wet I say after huntin' over the hills for a week, an' less than a quarter of an hour ago the 'phone rang. 'Twas the voice of Dinny Baxter at the station answered me. 'Let me read you a cable-telegram, Larry,' he says. 'I've headed Dinny,' I replied. 'Sure you can't have no worse in store for me than what I've got already,' he says: 'Oh, but this is something you may like real well to hear. It interests you, I think.' So he read an' I made him read it five times."

"Twas from Larry. It said: 'We're coming home, honorably discharged. Only five of the battalion left. I've lost just an arm and part of my leg. I'm bashed in. Not a match on me. We are going to do Old Hickory.'"

"EACHER, somebody hit me the head with a horse-shoe." "Well, now, Tommy, did what I call hard luck."

# The Upward Look

## Travel Thoughts—No. 10

### The Wonder of God's Handiwork

"HE sendeth the springs into the valleys, which run among the hills."—Psalm 104, 10.

It was with almost a feeling of fear that I entered Yellowstone Park. I am disappointed in all the wonders of which I had heard, and to which I had looked forward so long. But all this vanished once I was in the Park, as we drove along in the coach and watched the wonderful panorama unfolding, ever changing; green forests and running streams, so welcome after the desert, with a background of distant blue ridges of snow-capped mountains.

Late in the afternoon, we had our first sight of the springs and the geysers. The former are full of interest and variety, some of a dainty rosy mist over them, some of an unwitting, muddy aspect. Others are exquisite blue or dainty lavender or rich green, but all bubbling, boiling, spraying. The greatest care has to be taken when one walks on the formations, as the crust is often very thin, and a step off the walk into those hot depths would be fatal. One smites with a constant roaring sound, which may be heard two miles off, that it is terrifying even to go near it. The Mammoth Springs are a series of waterfalls of every color, all blending into a beautiful harmony and falling over terraces for a great distance. This coloring is all caused by minute life called Algi, which die once removed from their natural surroundings.

Great and over again as I gazed with a great welling of the heart at these wonders, before then to me unimagined and unknown, the marvel of God's creations was borne in upon me as I became so accustomed to the beauties of the world around us. Often, alas, we take neither time nor thought to enjoy and appreciate them. But if we do, there must come a sense of closer communion with Nature's Creator. The beauty of the sunset, moonlight, clouds, valleys, and mountains are ours if we will make them so. We do not need to travel miles to find this, but everywhere are manifestations of God's love and power.—L.H.N.

## The Brown Thrasher

The brown thrasher breeds throughout the United States, east of the Great Plains, and winters in the South Atlantic and Gulf States. It occasionally visits the garden or orchard, but nests in sunny places standing upon low ground. The thrasher's favorite time for singing is in the early morning, when, perched on the top of a tall bush or low tree, it gives an exhibition of its powers which would do credit to a mocking bird. Indeed, in the South, where the latter bird is abundant, the thrasher is known as the sandy mocker.

The food of the brown thrasher consists of both plants and insects. An examination of 636 stomachs showed 36 per cent. of vegetable and 64 of animal food, practically all insects, and mostly taken in spring before fruit was ripe. Half the insects were beetles, and the remainder chiefly grasshoppers, caterpillars, bugs, and spiders. A few predacious beetles were eaten, but on the whole the work of the species as an insect destroyer may be considered beneficial. Eight per cent. of its food is made up of fruits like raspberries and cur-

rants which are or may be cultivated, but the raspberries at least are as likely to belong to wild as to cultivated varieties. Grain, made up mostly of scattered kernels of oats and corn, is merely a trifle, amounting to only three per cent. Though some of the corn may be taken from newly planted fields, it is amply paid for by the destruction of fly, beetles, which are eaten at the same time. The rest of the food consists of wild fruit and seeds. Taken all in all, the brown thrasher is a useful bird, and probably does us good work in its secluded retreats as it would about the garden, for the swamps and groves



are no doubt the breeding grounds of many insects that migrate thence to attack the crops of the farmer.

## A Permanent Home for the Institute

Geo. A. Putnam, Sup't. of Women's Institutes

A FAMILY has a keener interest in home life and a deeper concern with community affairs when the father owns the home in which they live—the farm on which they are working. So the members of a society which has a permanent home—a hall or a room which is known as the Institute rallying place from month to month, take a keener interest in the organization. Have an eye to a permanent organization, and nothing will be a stronger factor towards permanency than a permanent home. The same content is there in a possibility of cooperating with the Council, the School Board, or it may be some private individual in securing permanent quarters for the Institute. When the new school is about to be built, and that provision is made for a ball room in which the Institute may hold their regular meetings, and may be used as a rest room and library, social centre for the boys and girls, men and women of the community. The fact of having a home gives the organization a standing in the community and commands attention.

Since all sects and interests have wide-spread sympathy and effectiveness through the Institute, may we not expect to exert an influence in preventing unwarranted duplication in the erection of places of worship.

Principles and programmes. A home lends status to your plans and work. The officers and members at once set about to make definite plans to be carried out in that Institute home. The result is usually printed programmes; and whether we have a permanent home or not, it is well to have definite programmes for months in advance, or still better, a year in advance. This plan need not provide for a full programme at each meeting, but should leave a few blanks to be filled in by some of the good things discovered by wide-awake officers and committees from time to time throughout the year.

The extent and strength of the Institute is due largely to the fact that local talent has been unearthed, developed and used in the local organization. If it were not for the capable, experienced, talented women in all

\*Extract from an address delivered at the last annual Women's Institute Convention.

sections of the province, we would not have permanent organizations, the value of which to the people depends largely upon the service of the individual members in making the programmes of such interest and practical worth as it were, and quite possible to secure without talent, but to depend to any considerable extent, even in the early existence of an organization upon such assistance, is not conducive to beneficial work and permanency.

Interest in Educational Matters. The Institutes continue to take a deep interest in the welfare of the school children of the community, both from an educational, social and health standpoint. May this continue. We trust that provision may be made so that school committees appointed by the Women's Institutes will be recognized and their cooperation sought in making for more healthful and efficient rural schools. The Department of Education looks upon the Institute as one of the strongest forces for the improvement of rural schools. You are familiar with what has been done to demonstrate the practicability and need of medical school inspection in

the rural districts. If you have a good teacher, use your influence in retaining her on her services. As an educational factor, our Demonstration-Lecture courses promise well, but in war years, few of our good women are ready to devote time to systematic instruction. Since we met last year, a number of most successful courses have been given, the most popular and helpful course being that in Food Values and Cooking, and the addition of four or five afternoons devoted to dairying and poultry raising. Home Nursing and First Aid to the Injured are gaining in popularity, a natural result in war time, and you will be pleased to know that the St. John's Ambulance Association is prepared to grant to those who take the course under a lady lecturer approved by their Society, a form "B" certificate.

We believe that Mothercraft should be added to our Demonstration-Lecture course, for there is no topic of greater interest to the women, and none in which service of greater value to the nation can be rendered.

The woman in the home is always (Concluded on page 15.)

# For Christmas

An organ would make a beautiful Christmas gift. Of that there can be no doubt. The price question has been, in many cases, the only difficulty. This difficulty is now removed. Read over the list below and you will agree with us. Who could not afford \$22.00, payable on very easy monthly payments? This is only a few of the Christmas bargains we are offering. Secure one of our complete lists to write us to-day for more complete lists. Every instrument guaranteed to be in perfect condition. If you would prefer a square or upright piano or player-piano, we have some great snags for you. Mail the coupon to-day.

Ye Olde Firme

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- KARN five octave organ, walnut case, semi-high top, sliding fallboard, lamp shade, 4 stops including Viola, Forte, mezzo, etc. Knee swell only. Has been carefully re-built by our own organ expert and is just as good as new. A special bargain at ..... \$31
- BELL five octave organ at high school, polished rosewood case, folding fallboard, lamp stands, has 10 stops including Vox Humana, Bass, Cello, Sliding Couplers, Forte, Viola, etc. Grand organ and knee swell. This is a well known make with a lovely tone and very suitable for any parlor. Special bargain at ..... \$39
- DOMTOS five octave organ, walnut case, extension gables, nicely painted in Burgundy, upright fallboard, lamp shade, has 6 stops including Vox Humana, Coupler, Forte, Sul-Bass, etc. Grand organ and knee swell. The tone is very rich and this organ would be very suitable for a home. Has small church. Price ..... \$44
- DOHERTY six octave walnut piano case organ, folding fallboard, low music desk, grand organ and knee swell. This instrument has no stops but a coupler which are controlled by the grand organ and knee swell. The tone is so elegant and the instrument is just as good as new. Price ..... \$50
- UXBRIDGE six octave piano case organ, polished rosewood case, folding fallboard, 3 plain panels in top door with centre swing music desk. This organ is another instrument which has no stops but is equipped with the open sets of reeds which are controlled by the grand organ and knee swell. The tone is so elegant and the instrument is just as good as new. Price ..... \$59
- CONLEY Church six octave walnut piano case organ, sliding fallboard, automatic music desk with piano covered top, has 11 stops including Melodia, Bass and Treble Couplers, Viola, Grand Organ and knee swell. Home proof pedals. This organ has been put into our own workshop, and is just as good as new. A bargain at ..... \$68
- TROMAS six octave piano case organ, handsome mahogany case, roll top with mirror, sliding fallboard, full length music desk, lamp stands, 11 stops, including Bass and Treble Couplers, Forte, Sul-Bass, etc. Grand organ and knee swell. Home proof pedals. This instrument is new but has been slightly top worn. Regular price \$150. Special Bargain Price ..... \$99

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## Christmas—A Time for Music

CHRISTMAS with its resonance of good cheer and rejoicing will soon be here. Make this Christmas Children's Day. Their happiness depends upon you. Give them a gift that will add to their lives a new joy, love and life, and cultivate their fine qualities. Make this Christmas memorable in your family through the gift of a

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## AMUSEMENTS

Conducted by MARION DALLAS

### Fun for the Long Fall Evenings

IN the woods squirrels chatter, nuts rattle to the ground, the dry leaves rustle beneath our feet, and the chill November wind sighs through the bare branches. They are telling us it is fall. How, then, we are to give up our outdoor pleasures. Why not have "An Indoor Nut Party?" This will help us to prolong the spirit at least for a while. Decorate the house with evergreen branches, cut out squirrels and leaves from brown and red paper, and pin these on the branches.

#### Illustrated Nuts

The guests are invited to go "Gathering Nuts" when they all have Britannia. This means to find the names of the nuts and fruit which are represented upon cards placed around the room. The names may be illustrated by pictures cut from magazines and mounted on cards. For instance, Scashed (Bechnut), stone wall (Walnut), woman churning (Butternut), two persons (Pear), girl serving cocoa (Cocoanut), figures 1816 (Dates), pine tree and an apple (Pineapple), the letter P and a can (Pecan), plumb-line (Plum), a straw hat and a berry (Strawberry).  
Matching Partners

Partners may be secured by placing two large branches in the front of the room, one decorated with yellow leaves, the other with red. The man picks a yellow leaf and the girl a red one. They should be numbered to correspond.

#### Nut Contest

Pass acorn-shaped booklets with the following questions (the answer is the name of a nut):

1. Its first syllable is a spring vegetable?—Peanut.
2. The penalty of tight shoes?—Acorn.
3. A souvenir of South America?—Brazil nut.
4. A barrier of stone?—Walnut.
5. Makes our daily bread acceptable?—Butter nut.
6. Its first half is a beverage?—Cocoa.
7. Part of the human body forms first syllable?—Chestnut.
8. A letter of the alphabet and a tin?—Pecan.
10. First syllable is a color of the eye?—Hazel nut.

After this contest there might be a Peanut Hunt. The hunter who finds the most nuts might be given a copy of "Opening of a Chestnut Burr."  
Refreshments

Nut ice-cream, nut cakes, nut candies, and salted nuts served with cocoa would be very suitable.

#### Word Building

This is a game capable of endless variation, and is splendidly adapted for a small gathering in the home. Each person is given a sheet of paper and pencil, on the top of which is written the word or motto from which the letters for building are to be obtained. In making words, no letters must be used twice, unless it is written twice in the motto.

The contest is to see who shall make the longest list of words from the given motto. Suppose the motto was "Memories of Childhood." Write all the words beginning with M—moose, moor, me, maid, and so on. Then the words with E, until there are over a hundred words. As the list grows, the interest will grow.

#### A Spontiful of Fun

In this game the players form a circle while one of the number is blindfolded and stands in the middle of the ring. He is given a large spoon as a wand. The players take hands and go round in a circle to music. As the music stops they stop. The player

then gropes with his spoon until he touches one of the other players. The blindfolded one tries by deftly touching here and there to discover who is caught. If he guesses correctly, that one takes his place. All try to disguise themselves, for it is easier than you imagine to discover a person's identity by this spoon touching, and it is lots of sport.

#### An Evening of National Songs in Costume

This is a novel and delightful entertainment, and if properly conducted should greatly enrich the treasury of the songsters. The idea is to have an evening of readings and songs in costume from every nationality possible. Drape the hall with flags of every nation represented. If you have an orchestra, that will help greatly. Have the different national anthems played. Several of these will be found in the "March of the Allies."

The first number might be "Rule Britannia," sung by a jolly sailor and carrying a "Jack." A lassie in Scottish tartan and Tam o' Shanter next sings "Annie Laurie" or "Loch Lomond." Readings from "The Bonnie Briar Bush" could also be given. As a heaven singer follows with "A Little Bit of Heaven Shure They Call it," "Ireland," or the old song "The Wearin' o' the Green." The "Marseillaise" might be sung by a quartette of girls in peasant dress and wearing red caps. Following this comes "O Canada," "The Maple Leaf," or any of the very popular war songs which have been written lately. "Do Your Bit" or "We'll Never Let the Old Flag Fall." Interspersed with the songs could be a reading or two from Drummond or Service or Pauline Johnson. "Il Trovatore" may be sung or rather selections from it, to represent Sunny Italy. It will represent Italy as nothing else can.

The Armenian national song is so strongly accented that even if sung in an unknown tongue, it stirs the blood in the hearing. In many of our communities there are Armenians who would be pleased to be invited to help with any entertainment. Spain may be represented by a senorita with lace mantilla, playing the guitar or mandolin, or the Spanish Cavalier. A large picture frame could be erected and the singers stand in the frame, the rest of the room being dark.

"Say Something Good!" Social Did an act of "Our Readers" ever hear the story of the Irishman who one morning met a friend, and exclaimed, "Is that you, Mike? I thought you was dead." "Shure an' I'm nadead," Mike replied. "Well, I'll mude you that," he answered. "Everybody I met this mornin' said 'something' good about you."

This little story suggests a social I heard of, which was very amusing and also very helpful to the social life of a community. Each person was requested to write something good about the one whose name was on the sheet of paper given to him. After they were all finished, the papers were passed on to be read out loud. Will some of "Our Readers" try one this fall, and write and tell us about it?

#### In Close Companionship

LITTLE Mary had been sent to the store to get some fly paper. She was a long time in returning, and her mother began to feel anxious. Going to the door she noticed the little girl coming up the street, and called: "Mary, have you got the fly paper?" "No, mother," replied Mary, "it got me, but we are coming together."

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## THE COOK'S CORNER

Conducted by LILLIAN CRUMMY

### Planning the Christmas Menu

EVEN now we are confronted with thoughts of Christmas, and we find ourselves making plans for this great day of the year. Nor is it too early to plan our Christmas menu. In this latter, perchance, the following tested recipes may prove useful:

#### (Good) Fruit Cake

Two pounds raisins, stoned; two pounds currants; one pound butter; one pound sugar; one and one-quarter pounds flour; 10 eggs; one tablespoon cloves; one wine glass grape wine; one tablespoon allspice; two tablespoons cinnamon; one nutmeg; one teaspoon sweet almond mints, cut in slices; two ounces candied lemon; two ounces citron; a teacup molasses; one-half teacupful soda or one teacupful baking powder. Flour the fruit, bake slowly for three hours.

#### White Cookies

One cup butter; two cups sugar; one cup of milk; four eggs; one tablespoon caraway seed; one teacupful soda; two teacupfuls cream of tartar. Add flour enough to roll and cut out.

#### Doughnuts

Two eggs; one cup sugar; one teacupful soda; one cup milk; one teacupful melted butter; two cups flour; two teacupfuls cream of tartar; one-half a grated nutmeg. Care should be taken not to have dough too stiff. It may require slightly more or less flour than the amount given. If baking powder is used put in three teacupfuls. This makes about two and a half dozen cakes.

#### Lemon Biscuit

One cup sweet milk; one cup white sugar; one tablespoon oil of lemon; pinch of salt; butter half size of an egg; one-half ounce of baking ammonia and one teacupful cream of tartar.

#### Marble Cake (White Part)

One and one-half cups white sugar; one cup butter; one-half cup sweet milk; one-half teacupful soda; one teacupful cream of tartar; whites of four eggs.

#### Marble Cake (Dark Part)

One cup brown sugar; one-half cup molasses; one-half cup butter; one-half cup sour milk; one-half teacupful soda; one teacupful cream of tartar; yolks of four eggs; cloves; allspice; cinnamon; nutmeg; of each one teacupful. Beat well.

#### Christmas Plum Pudding

One pound raisins; chopped fine; one pound currants; three-quarter pound bread crumbs; half pound flour; three-quarters pound beef suet; three eggs; one-half pound citron and lemon peel; half a nutmeg; one teacupful ground ginger; two teacupfuls baking powder, or one spoon soda; two teacupfuls cream of tartar; sweet milk enough to wet all. Tie in a cloth and boil three hours.

### "Utility Contest" Attracts Attention

Mrs. H. E. Burnett, Renfrew Co., Ont. THAT "Utility Contest" announcement in this week's issue of Farm and Dairy has attracted my attention. I picked up our paper just a few minutes ago and, of course, turned to the household pages first. Reading about the contest, it occurred to me, "Why couldn't I take part in this competition?" (You know how these sudden inspirations come to one sometimes.) I had planned to do some sewing this afternoon, but as

I don't have literary inclinations every day, I guess it won't hurt the sewing very much to wait until another time. It might hurt the progress of this letter materially, though, if I were not to act on the present impulse.

The convenience in my home that is of untold value to me, the suitable height of my stove, work table, sink and ironing board. As I am quite over a low stove or table. When we were having our sink installed, I knew by the manoeuvring of the plumber that it was going to be very low, too. Then I remembered of having seen a sink in the house in the town, being placed just so she could work without stooping. I ventured to make a remark to the plumber to this effect, and as I expected, he became rather indignant, as he thought he knew his business better than I, and told me that a sink should be placed a certain height from the floor. After some controversy, however, he placed it at the height I requested, and what a difference that little improvement has made!

Since finding out just what it means to have articles placed at a suitable height, I have had my kitchen table

### Keeping the Girl on the Farm

GIVE her a chance for her life! Let her know that she has a place, and a good one, too, in all that is going on at the farm. Let her know she has something in it, so that it does not look as if it had been run through a clothes-wringer. Help her to know everything the boys know about the farm work, and give her some of that work to do once in a while. Love her so that she never can get away from the farm without feeling that something in her heart has been torn up by it. Be the best friends she ever will find in all this world. Then she won't want to go away from the farm. It will be so dear to her that she never will be just as happy anywhere else.—Farm Journal.

and stove raised on blocks so that when rolling out pastry, preserving, preparing the meals, and many other duties, I can do so without stooping, and I do not have an aching back and weary shoulders when the day's work is done. We invested in a new ironing board recently, and its top, is just the right height for me. I consider these conveniences well worth while, and if any other reader considers them worthy of a trial, I shall be pleased indeed.

### Short Course at Macdonald Institute

THERE has grown up in Ontario a demand for a short course in domestic science for farm and village girls patterned somewhat after the short courses in agriculture which are held in some of the towns and villages in Ontario by the District Representative of the Government. In demand, and also because we wished to extend the usefulness of Macdonald Institute, we decided to try an experiment in college extension work, and accordingly this fall we opened at Ayr, Ontario, a short course in domestic science to be known as Macdonald Institute, Branch No. 1.

We secured the use of a room in the school house, about 24 feet square. In it we have kitchen equipment sufficient for the instruction of about 24

\*Report of an address by Miss Watson of Macdonald Institute, given at the recent Women's Institute Convention, at Toronto.

students. We also have laundry and sewing-room equipment for the same number. The same outfit would be housed in three rooms at Macdonald Institute, but we have found that by using the room for one purpose at a time that we can get along very nicely. The teaching, which is done by a graduate of the Institute, is just as good as that given at Guelph.

From the first the experiment has been a decided success. The course has now been in operation for over seven weeks. In it are registered 22 girls, 17 of whom are farmers' daughters who walk or drive from two to five miles to attend lectures. Since the first of June, the cost of the course is very much less than it would be if taken at the Institute at Guelph.

The students of the course are considered to be students of the Macdonald Institute. They pay the same tuition fees and receive the same instruction in every particular as if registered in a short course at Guelph. Two elective subjects are offered, namely, millinery and embroidery. Those passing the examinations are entitled to enter the second term of the home-maker course given in Guelph.

We are prepared to extend the work wherever the people want it. We agree to provide the necessary classrooms, to equip them with stoves, tables, sewing machines, etc., and to provide and pay a satisfactory teacher who will be a member of the regular Macdonald Institute staff. The course is planned for those who cannot spend more than one term at the Institute. It does not aim to cover the ground of the long courses, but provides training in practical work and is thorough as far as it goes. The following are the subjects prescribed:

- Plain Cookery ..... 10 periods weekly
- Plain Sewing ..... 4 " "
- Laundry ..... 3 " "
- Foods ..... 1 " "
- Sanitation ..... 1 " "
- Home Management ..... 3 " "
- Care of the House ..... 3 " "
- English ..... 2 " "
- Elective ..... 4 " "

The tuition fee is \$15, payable on the opening day. The students are to provide themselves with necessary wearing apparel for practical work, and to provide their own material for the sewing classes. The garments made will be their own property. The regular Macdonald Institute regulations for students boarding at home will be enforced. Those interested should write Miss M. U. Watson, Macdonald Institute, Guelph, for fuller information.

### Permanent Home for the Institute

(Continued from page 13.)

looked to direct and lead in social affairs, so the Women's Institute will be expected to become the leader in introducing and leading social activities in which all in the community may take a part. If there is a Farmers' Club or Men's Literary Society, or other organization of men, join forces with them occasionally and give the old members of the community occasional opportunities for social gatherings, entertainments, educational advantages which can be so well directed and encouraged by the Institute.

Everyone knows how hard it is to turn a narrow and perfectly even hem on a table napkin. Put the hemmer attachment on the sewing machine, but do not use the treader run the napkins through the hemmer without sewing them and they are creased as narrow as desired, and they are all ready for hand sewing.



**Kitchen Sink Outfit** White Enamelled Cast Iron  
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**1000 WASHER COMPANY**  
 357 Yonge Street, Toronto

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## The Value of Tile Drainage

Nova Scotia Farmers Give Their Experience

FROM Atlantic to Pacific tile drains are paying dividends, and everywhere farmers are willing to testify to their efficiency as crop increasers and crop insurers. The latest and best testimony comes from Nova Scotia in the form of a bulletin on drainage by B. H. Landels, B.S.A. The very best part of the bulletin is the extracts from letters received from Nova Scotia farmers, most of whom have tile drains on their farms. The following letters speak for themselves and are only a few of the many received. They show conclusively what farmers who have tried it, think of under drainage.

"The land that I have drained has more than paid me in increased crop for the outlay of draining. I can get on the undrained land from 10 days to two weeks earlier in the spring and find that underdrainage has almost doubled the yield of both grain and hay crops. As to the cost of drainage per acre, I cannot exactly say, but should think \$2.50 per rod."

—Robert G. Grant, Antigonish Co.  
The following is an extract giving the other side of the question: "Underdrainage is looked on in this section as too expensive an investment. Joseph Cunningham, Bayhead, Col. Co., is the only farmer I know

of within a great many miles of here who has done anything in that line as yet and if it cost him what I understand it did, he will be arrey enough before he gets his money back. I understand that it cost him \$9,000 to drain about 50 acres. However, if you can give us any information that will prove a little more encouraging than this, please do so."

Note.—This letter is given here not to make light of the opinion of any man but to point out what the men, who discredit the value of the investment, really know about the matter. The cost, if as acre quoted above, it will be noticed, would be \$40. Here is Mr. Cunningham's own version of the story:

"I do not consider that my experience would be doing underdrainage

justice as it has been in only one season. This I may say, that where drains were put in 33 feet apart, the 16½ feet over and near the drainage pro- feet midway between the drains save. The crop was barley. The soil a clay loam with very hard clay subsoil. As to 'arfulness' in spring, I think that I have seen so very far I should say about two weeks earlier. The cost per acre would vary with the distance apart. Yes, I consider that I will be in a better position and will be pleased to give you all the information I can."

This letter was written in April, 1913. In a letter received from him in 1915, Mr. Cunningham stated that he finds the well drained area over and near the drains to be spreading and says, "In a few years I will be a new believer that a more economical would have given me a more economical result. His extra return he now puts at \$5 per acre per year. His drains will continue to give him better service each succeeding year as the soil opens up."

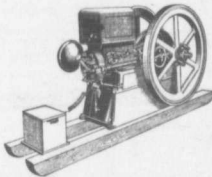
### Ten Days Earlier

"I have 30 acres of clay land underdrained. Can work my land about 10 days earlier on the average and it stands drought better than it did before. I estimate about 25 per cent more crop on the land. I consider that underdrainage pays. Am unable to estimate the cost very closely as the time of digging the drains could not have been used otherwise to good advantage."—John E. Bonvman, Colchester Co.

"Have seven or eight acres drained with tile beside stone and wooden drains. Tile gives best satisfaction. Have been in the ground 28 years and work as well as ever. Soil is light loam with clay subsoil. In an average year I get nearly an acre more crop. I think underdrainage is as good an investment as the farmer can make on the average farm. The cost of digging has been about \$30 per acre, tile \$20, saving \$10 in filling about \$10. When the work is done by hand the nature of the soil affects the cost. It is almost impossible to get help to drain land. I would like to see a few more ditching machines for the use of the farmers."—A. A. Archibald, Halifax Co.

"I have one field with black muck soil and marl subsoil in the centre. I could not vet the drains in deeply and was obliged to board the bottom of the drain in order to get a solid bottom for the tile. The land before draining was too wet even for mowing and animals would sink to their knees. Now a team can take two tons over it in haying season and the crop is fine. I have put in only single drains in other places to dry out wet spots but they all pay better than any stocks or bonds I know of. You can tell in the crops just where the drains are in any season be it wet or dry. I think a rain of 50 per cent. I believe in draining and believe it pays. My field lies along the highway and the job is worth five times the cost in the value of the farm. I believe that in drainage you have one of the best lines in which to improve agriculture in Nova Scotia."—W. B. Burbridge, Kings Co.

"About one-third of my drained could not vet the drains with clay subsoil. The rest is sandy and clay loam but all has hard clay subsoil. Can work land about 10 days earlier. On the average I think I can get about one-third more crop but in some land I get double the crop. There is no question about the fact that underdrainage pays. As to cost, when I could work the horses, digging would cost about 30 cents a rod. It is hard to estimate the cost of material as I have used stone. I would estimate the cost of drains to be about \$20 an acre on the average."



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As to the proof about the Page Engine in particular, there is a simple way to get at that—let us send you one to use for 30 days on our special free trial offer.

Write to our Information Bureau, explaining what size farm you have, what class of farming you do, and stating whether you've ever had any experience with a gas engine. Promptly we'll write you, explaining what an engine will do for you—what size engine you should have—and how to use it for the greatest profit.

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## "Nearly knocked him off his balance"

A man named Trainer, at Rockcroft, Ontario, has just written us this letter:—

"Dear Sirs:—

I enclose draft in payment for Engine. I think it will prove itself a success.

I had an agent looking at it. He praised it every way until he asked the price—that nearly knocked him off his balance. I notice in your directions for running engine, you mention Kerosene. Will this engine run on Kerosene?"

Note that the amazement of our competitor's agent over the low price of the Page, came AFTER he had noted the superiorities of the Page. It is not price alone on which these engines sell, but high quality PLUS low price.

All Page engines make good. They are so simple that there's nothing to get out of or

### Sediment

THESE excellent... into improved... under which... is to pour... weighing con... The dirt—that... from one pi... is necessary... cessity of... cheese fac... Ontario, w... test, has a... patrons," "I... dirt did you... "My land... can?" excl... patrons sta... disk he dro... the waggon... bringing cl... rons, where... are coming... cheese can... shows a cl... to the adv...

### Guarant

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Theoretic... be for the... for all lo... workmansh... producers... the losses... raw mater... difficulty a... can tell wh... ther the c... caused by... milk was... cause by... There are... which a m... same defec... of the chee... of workma... ly traced to... and re... this might... proper sal... facts obser... it is impos... bility wher...



### 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.

#### Sediment Test in Operation

THE sediment test is proving an excellent method of enlightening some men as to the real quality of their milk and of showing others into improving the sanitary conditions under which they produce milk for the cheese factory. The method, briefly, is to pour one pint of milk from the weighing can through a disk of cotton. The amount of sediment—just dirt—that appears on the cotton disk from one pint of milk is often all that is necessary to show a patron the necessity of changing his ways. One cheese factory manager in Eastern Ontario, who is using the sediment test, has a habit of asking some of his patrons, "Now, how many pounds of dirt did you have in that can?"

"My land, did that come out of my can?" exclaimed one disgusted patron. Then before any of the other patrons standing round could see the disk he dropped it into the dirt beside the wagon. That patron has been bringing cleaner milk ever since. Patrons, where the sediment test is used, are coming to realize that better cheese can be made from milk that shows a clean disk, and that this is to the advantage of their factory.

#### Guaranteeing Cheese Quality

THE question as to who should bear the burden of the guaranteeing of the quality of cheese is one that is of interest to every patron of the factory as well as to the maker. Under the usual individualistic plan of running cheese factories it has for a long time past been the custom to let the cheesemaker guarantee the entire product. That is, no matter what the milk received may be, the maker must pay for it as good milk, and as for cheese of first-class quality. With this understanding the farmers have generally been willing to pay the cheesemaker a little more than just a working wage, considering that there might be some losses and the maker would have to stand. In addition, they have also given the maker the privilege to reject all milk that was not of first-class quality. But the maker cannot always use the latter privilege, since he cannot afford to antagonize the patrons, and the arrangement has often proved to be a hardship on the maker.

Theoretically, the proper way would be for the maker to stand responsible for all losses resulting from poor workmanship or neglect, and for the producers to stand responsible for the losses occurring from defective raw material. But right here the difficulty arises again. Who is it that can tell when scoring a cheese whether the defects noticed are those caused by the condition in which the milk was received, or whether it was caused by the neglect of the maker? There are a dozen different ways in which a maker can neglect his product that will give it practically the same defects that unfit milk will give the cheese. In fact, the only defect of workmanship that can be positively traced to the maker is the appearance and make-up of the cheese. To this might be added the defect of improper salting. Otherwise the defects observed are so nearly akin that it is impossible to place the responsibility where it belongs.

The logical conclusion of the above would seem to be that the method of paying the maker a liberal commission and holding him responsible for all defects of quality is the best one after all. But there are many cases on record where a maker lost so heavily that he was unable to pay the losses out of the salary or commission given him, and under the conditions the poor maker was practically forced into juggling his figures in order to remain solvent. One experienced maker informed the writer some time ago that on a certain summer not so many years ago he stood a loss of \$100 a week for several weeks on account of flavors which he could not overcome. His payments naturally had to drop below normal. This is surely a condition which patrons would like to avoid, and most fair-minded patrons would rather share the losses openly than to have the maker suffer so heavily.

In some of the cooperative factories in this section the patrons have taken a stand that a defect of quality caused by the maker's neglect would only mean a small loss. And so they hold the maker responsible for losses up to one-half the cost of the milk. Whatever the loss exceeds this one-half cent the producers will lose themselves. This is a very generous method, but every maker knows that it is not just. Light quality losses may be caused by poor milk, and heavy quality losses by poor workmanship and neglect.—Chicago Dairy Produce.

#### Making a Dairyman of the Boy

"TEDDY is a real boy," said his father, "and it won't take long for him to prove it to you." Teddy took the hint and hurried into the barn which his father explained was his very own. Soon he emerged with a riding pony weighing about 800 pounds, and following close behind was a colt.

Teddy is ten months old and you would scarcely expect that he could saddle his own pony for a ride, but in about a minute after he had disappeared around the house he came galloping toward us with his cap, pony saddled and bridled. We learned later that he leads the pony up to the porch and in this way is able to put on the saddle and bridle.

"I think my system is about the only one to keep a boy on a dairy farm," the father boasted. "Teddy has this barn all to himself. I help him haul the hay, but he takes care of the two horses and colt, hauls out the manure and does all the necessary work about the barn. That one horse wagon there is his, and he never has any assistance in hitching the horse to it. Some of the neighbors tell me that Teddy will surely be killed if I allow him to ride as much as he does, but I believe that it is making a man out of him."

A short time before this conversation I visited the same farm and Teddy was the only "man" to show me around. The intelligent answers he gave to my questions and the knowledge he displayed regarding the farm operations show that there is no danger of his ever wishing to leave his father's dairy farm. He is a real boy, and a real dairyman. The success his father has had with him serves as a splendid object-lesson for other dairymen who need the help of their sons at home.—Ex.

#### NOW!

Now, that the long winter evenings are here, and Farm and Dairy will prove doubly welcome to your neighbor, who now perhaps does not know about this paper, better see him and some others about joining in right away for a club of new subscribers to Farm and Dairy.

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Magic Baking Powder costs no more than the ordinary kinds. For economy, buy the one pound tins.

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Learn what experimental and agricultural colleges have discovered about salt feeding—and of the profits from  
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Large Sifter Can, with Full Directions, 10c

When writing to advertisers say you saw their advertisement in Farm and Dairy.



art accountable stocks in the hands of  
 sales in Canada, low are light. Army  
 promise to clear up the market.  
 [Quoted from Nov. 24] were offered by 25  
 bids. Price bid on board, 16 5/8; no sales.  
 bid on curb, 17; all sold at that  
 price. The corresponding price for  
 cheese boarded; price 14 1/2.  
 Victoria, Que., Nov. 19-40 boxes  
 at \$1 5/8.  
 St. Hyacinthe, Que., Nov. 20-100 packages  
 of butter sold at 35; 75 cheese sold at  
 30.

Ottawa, Que., Nov. 20-49 packages  
 butter, all sold except one factory at  
 35.  
 Belleville, Nov. 20-975 cheese sold at 37 1/2  
 and 38.  
 Cornwall, Nov. 19-107 boxes sold at  
 the LIVE STOCK.

Shipments of live stock to the Toronto  
 markets this last week have been heavy,  
 the excess was greatest in cattle which  
 is now ahead over the week previous  
 about the same over the same week  
 of year. Prices remain steady with  
 one cent advance for extra quality  
 a common and medium stuff, especially  
 butlers the supply was fully up to the  
 demand and here there was a tendency  
 to weaken. Canners and cutters were  
 in. Local distilleries created some  
 demand for stockers and feeders and  
 several car loads were sold on outside  
 account well. Quotations follow:  
 Heavy choice steers, \$7.75 to \$8.60; han-  
 dy choice steers, \$7.50 to \$7.85; good,  
 \$7 to \$7.50; good, \$6.50 to \$7; choice  
 \$6.50 to \$7.25; med. to good, \$6.50 to  
 \$6.90; butcher bulls, \$4.25 to \$5.50; heifers,  
 \$3 to \$5.50; stockers, \$4.25 to \$5.50; can-  
 ners and cutters, \$3.25 to \$4.75.  
 Milch cows were in fair demand. Choice  
 \$3 to \$10; med. to good, \$2 to \$7; com-  
 \$1 to \$3.00; springers, \$3 to \$10. Re-  
 spects of calves were about normal, the  
 price running from \$4 to \$10.  
 Sheep and lambs were steady. Yearling  
 ewe, \$5 to \$6.50; spring lambs, cwt.,  
 \$10 to \$12.50; cull lambs, \$5.50 to \$7.50;  
 ewe, light, \$3 to \$5.50; heavy sheep and  
 wethers, \$4.50 to \$5.50; culls, \$3.50 to \$5.50.  
 Hogs were in fair demand. The  
 market was not large enough to supply  
 the demand and the price went up about  
 during the week. They are now quoted,  
 head and watered, \$9.40 to \$9.50, and light  
 head, \$7.75 to \$9.45.  
 As Montreal the demand for cattle has  
 been maintained steadily. Choice steers  
 are selling for \$7.75; inferior quality, \$6  
 to \$9; com. and inferior grades, \$4 to \$5.50;  
 to steers, \$4.50 to \$6; and cutters, \$3.15 to \$4.20.  
 Small steers there was an active de-  
 mand, and in part by American  
 for lamb, creating a market at \$9 to  
 \$5 and Quebec lambs, \$6.50 to \$8.75.  
 As for Ontario stock sold at \$9 to  
 \$5 and Quebec lambs, \$6.50 to \$8.75.  
 The demand for sheep, were in  
 good for shipment to the United States  
 to be in a fair for gross fat, while milk  
 as for consumption brought to \$6  
 as at Toronto, the market for hogs  
 has been stronger, prices were made at  
 \$15 to \$19.50, weighed off cars.

of the Ohio State University.—American Jer-  
 sey Cattle Club.

SALE DATES CLAIMED.  
 Dispersion Sale of Holsteins at Maple  
 Grove Stock Farm, Tavistock, Ont., Dec.  
 8-11, Bollert.  
 The Brantford District Holstein Breed-  
 ers' Club have selected Jan. 26 next for  
 their second annual sale. Sixty head will  
 be offered.—N. P. Sager, St. George, is the  
 secretary.

A TWO-YEAR-OLD RECORD.  
 I AM pleased to be able to report that  
 the Holstein-Friesian heifer, Eva May  
 Ella 5th 25008, has broken the record  
 for fat production in the senior two-year  
 class of the T-day division, by producing,  
 in seven consecutive days, 25.12 lbs. fat  
 from 507.5 lbs. milk. She freshened at the

age of 2 years, 8 months, 23 days. Her sire  
 was Sir Peter's Beldine 3054; her dam is  
 Eva Ella 7267. Eva was bred by S. D.  
 18488, whose record for 7 days is 24.68  
 Michals. The fat from 600 lbs. milk in  
 Alamyouth Farms, Alamyouth, N.J. in the  
 Gardner, Sept. A.B.

senior two-year class of the T-day division  
 she displaces Molly Johanna Kornzky  
 Eva Ella 7267. Eva was bred by S. D.  
 18488, whose record for 7 days is 24.68  
 Michals. The fat from 600 lbs. milk in  
 Alamyouth Farms, Alamyouth, N.J. in the  
 Gardner, Sept. A.B.

**A CORRECTION**

In our issue of last week the date of the big Dispersion Sale of the Holstein head of H. Bollert, Tavistock, Ont., was stated as Nov. 24. This was in error. The correct date is Dec. 8 as per the reading columns of last issue and our Sales Dates Declared of several issues past. Holstein breeders and others, kindly make note of this. The entire herd is being sold. Drop a card for a catalogue and note the records and blood offered.



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 Cleaning the barn with a wheelbarrow is the dirtiest, most disagreeable and wasteful work on the farm. It's a job that's shirked by hired men, boys and canners as often as possible. It's a job that takes "time's waste." It's a task that does the production of farming down to the gutter where it's next to impossible to keep good help and almost a task to keep legs in time. And yet, with our new, powerful sifter and sprayer, the work is done rapidly and thoroughly. It's costly, wasteful, disagreeable, behind the times, and unnecessary. Stop it!  
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**GOSPIR.**  
 A REVIEW STOCK FARM in Ontario a change of management, which to date, owing to the increased demand for many sales made during the past summer and Fall that they will not hold annual sale this winter as usual but will continue to sell choice stock of both for cash or on time.

Practically the whole foundation of this sale is tuberculin tested and composed of milk in one day and from 23 to 26.30 lbs. butter in 4 days.  
 There is need of a good cow or herd. Don't overlook this herd. Correspondence solicited. Visitors always welcome. Trains met by appointments.

**SINGLE RATES TO WINTER FAIR**  
 Round trip tickets will be issued from Toronto to Kingston, Harrow, Stratford, Chatham, Leam, Hart, and West, and west of Ashtab, for one way or return first class fare, good to December 31 inclusive; return limit December 31, 1915.  
 Agents and Exhibitors who hold standard certificates signed by R. W. Wade, secretary, may secure Round Trip Tickets at one way ordinary first class fare, good to December 31, inclusive; return limit December 31, 1915.  
 Tickets will be sold at less fare than agents except where the ordinary round trip fare is less, in which case one month and a fare will apply.

**JERSEY RECORD BROKEN.**  
 The Jersey cow, Lady's Lady Birtmore Irene 27715, owned by Mr. W. W. Wade, of Ohio, has broken the Jersey record of milk and buttered record of her two-year-old class.  
 "Irene" produced 3,379.8 lbs. of milk containing 60.81 lbs. of fat, or 77.7 lbs. of 10 per cent. milk.  
 "Irene" was the best of Lane 73rd of Hood Farm, former leader in this class, by but 1 lb. of fat.  
 "Irene" was the Lady Birtmore Irene's year's work conducted under the supervision of

\*\*\*\*\*  
 Write to Dillon—return it if you are not completely satisfied in every way. Send coupon or postal now—before you forget—for our book and money saving price. Please mention number of cows you keep. Put your own name, don't turn this page before you write us. Do it now.  
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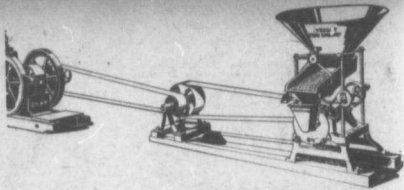
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