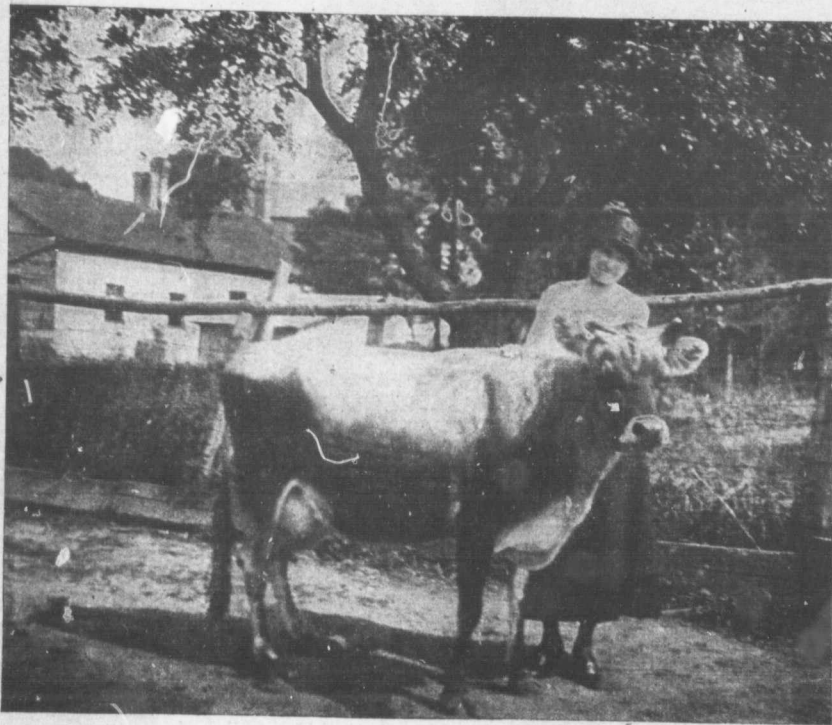


# FARM AND DAIRY

*The National Dairy Magazine*

Comm. of Conservation  
Asst. Chairman Jan 1918



THE FAMILY COW

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*Address all Correspondence to*  
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# AND LAND

## & RURAL HOME

The Recognised Exponent of Dairying in Canada

We Welcome Practical Progressives

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

VOL. XXXVII

TORONTO, ONT., DECEMBER 19, 1918.

NO. 51.

## Cooperation in Live Stock Marketing

Saskatchewan Live Stock Commission Suggests Cooperative Handling of Live Stock and Meat Products from the Farm to the Consumer—Suggested Plans for Organization and Finance

THE Royal Commission appointed to investigate the marketing of Saskatchewan live stock products has just completed an inquiry, which is probably the most thorough and exhaustive of its kind ever made in Canada. The live stock marketing situation has never been entirely satisfactory to Saskatchewan farmers. The same system is prevailing equally unsatisfactory in other provinces. The report of Saskatchewan's Commission, therefore, is of national rather than provincial importance. Aside from a few sentences dealing with a central market, the recommendations of the Commission will be read with interest everywhere and will find a general application. The suggestion that live stock marketing be linked up with the Saskatchewan Cooperative Creameries, Limited, will be read with particular interest in Ontario in view of the suggested organization of similar industry in that province. The Commission, under the Chairmanship of Hon. W. C. Sutherland, included J. D. MacGregor, Dr. W. R. Motherwell, Dr. J. G. Rutherford and Dr. O. D. Skelton, with W. A. Wilson as Secretary.

Saskatchewan is peculiar in that there is no central well-established livestock market serving the whole of the Province as Winnipeg, for example, serves Manitoba. There are, however, fairly complete plants in operation at Moose Jaw, Regina and Prince Albert, but the bulk of our stock produced in Saskatchewan is marketed outside of the Province. The Commissioners have in view the development of marketing facilities within the Province to take care of their own production of live stock. The report, contrary to custom, is not particularly severe in its criticism of the packing houses which, in spite of their faults, have rendered a wonderful service in supplying sufficient and sanitary facilities for the marketing, curing and distribution of meat products. The Commissioners' recommendations are expressed in the following terms:—

### Packing and Marketing Facilities.

1. Local Shipments. The cooperative shipping associations have proved to be the most effective and economical agency for assembling shipments at local points. It is, therefore, recommended that the policy of encouraging the organization of such associations be continued vigorously, and the practice of consigning stock to central markets through this agency be encouraged.

2. Central Market. No public central market for live stock exists within the province. The markets at Winnipeg, Calgary and Edmonton have done good service in the past and in any case will doubtless continue to draw custom from sections of the province. Yet the actual development of the livestock industry in Saskatchewan and its greater potentialities, together with the long haul to existing markets, will make it advisable to establish a public central market in Saskatchewan as soon as the financial and marketing conditions warrant.

It is recommended, therefore, that the establishment of public stockyards, furnishing all the necessary facilities for handling and trading in live stock, be given consideration in the near future by any cooperative company organized and based upon these recommendations.

3. Packing Plant. It is not sufficient to organize local shipments and to provide a central market. To give confidence and stability to the live stock industry and to secure for the producer the largest possible return for his efforts, it is desirable that the stock raisers of the province should undertake a still further step in the marketing of their product, by the operation of a packing plant. The establish-

ment of a modern packing plant, organized on a cooperative basis and operated in connection with the public stock yards, is the goal toward which, in the opinion of the Commission, the province and the live stock interests should work. As conditions warranted, and subject to the approval of the Lieutenant Governor in Council, the activities of the central organization might later be extended to other points by establishing local packing or killing plants.

4. Cold Storage and Selling Facilities. To assist in the marketing of packing house products, and in some cases, of locally killed stock, it is recommended that cold storage warehouses be established as rapidly as possible at strategic points throughout the province. Among later steps in the extension of market facilities, the establishment of a chain of retail stores throughout Saskatchewan and an endeavor to make arrangements with the Cooperative Wholesale Societies of the United Kingdom to take a substantial share of the export surplus are suggested for the consideration of the proposed cooperative company.

### Cooperative Organization.

5. Organization. The question of the organization necessary to carry on these packing-house and allied activities is of special importance. There is no doubt, in the opinion of the Commission, that a cooperative company, on much the same lines as the two existing Saskatchewan farmers' cooperative societies, the Saskatchewan Cooperative Elevator Company and the Saskatchewan Cooperative Creameries,

Limited, is the type of organization best fitted for this purpose.

There is more room for question, on general grounds, as to whether a new and distinct company should be formed, or whether the machinery and experience of one of the existing cooperative societies could be utilized. In favor of the latter course it may be urged that a multiplicity of organizations distracts interest, brings danger of overlapping and friction, and makes a heavy call on the number of men, perhaps larger in Saskatchewan than in most communities, but yet limited, who have the judgment, experience and whole-hearted interest necessary to make one more large cooperative undertaking such as this succeed. On the other hand, it may be considered that consolidation is not desirable unless the businesses in question have a wide field in common.

In view of the conditions actually existing in Saskatchewan, however, there seems little room for doubt that the best plan is to make use of existing machinery. The work of the Saskatchewan Cooperative Elevator Company, it is true, is so distinct from that of a packing company, that no material economy or increased efficiency would be likely to follow from an extension of its activities from the field in which it has scored such marked success into that of the live stock industry. The field of operations of the younger cooperative company, the Saskatchewan Cooperative Creameries, Limited, is much more closely connected with that of a packing plant. It is establishing throughout the province modern cold storage warehouses which would serve the purposes of a packing company in no small measure. The cold storage branch of its activities, in fact, bids fair to bulk larger than its creameries work. Experience elsewhere shows that a packing company almost inevitably takes up the work of collecting and selling perishable farm produce of all kinds, a work which the Creameries Company is already undertaking in this province. The marketing outlets and machinery of this organization would serve in a large degree the needs of the live stock interests as well. There is the further consideration that an existing company, already successfully established, can expand into the adjoining field with less outlay than a new organization and at such times as circumstances warrant.

### Enlarge the Creamery Company.

Taking into account, then, this close connection in the field of operations and also the more transient financial and marketing conditions arising out of the war which make it advisable to enter upon the establishment of a packing plant with the business in preparation, your Commissioners recommend that the Saskatchewan Cooperative Creameries, Limited, be utilized as the nucleus for the further development of live stock marketing in this province.

If this proposal should commend itself to the interested parties, it would be necessary eventually to reorganize and enlarge the Creameries Company, with a fresh issue of capital and due representation of live stock men. The immediate field of activity of such a company would be the rapid extension of its cold storage facilities throughout the province, and the development of its selling machinery, leading as speeding as possible to the organization and establishment of one or more central live stock markets and packing plants.

If such an arrangement should not be effected on satisfactory terms, it is recommended that a distinct organization, the Saskatchewan Cooperative Packing Company, be established, and that a demarcation

(Continued on page 6.)

### The Saskatchewan Method

THE Royal Commission, which recently reported on their investigations into live stock marketing conditions in Saskatchewan, paid high tribute to the two great cooperative companies now operating in that province, the Saskatchewan Cooperative Elevator Company and the Saskatchewan Cooperative Creameries Limited. The Commission suggests that the cattle men can do no better than handle their products on similar lines. It goes further. It suggests that the creamery company enlarge its activities to include the handling of live stock and dressed meat.

Saskatchewan has developed agricultural cooperation as have few other countries. The Saskatchewan method has proved good under the acid test of use. This latest suggestion for the enlargement of cooperative activity reveals the vastness of the field that opens itself to cooperative endeavour. Ontario and Quebec dairy interests are now asking why they, too, cannot control the marketing of their products in true cooperative fashion. Plans are already on foot. All that is needed is broad vision and faith in the ability of farmers to engage cooperatively and successfully in big business. The West seems to have proved that this can be done.



# The Ontario Provincial Winter Fair

## A Success and a Failure—Ontario's Stock Breeders and Poultrymen Made a Record Showing in Almost all Departments —Influenza Reduced Attendance to a Minimum

"It is our task to make Canada a first rate power," said E. S. Atwell, Federal Live Stock Commissioner, in an address at the Winter Fair last week. "This must be done largely through live stock. It must be done in the next five years if at all."

The exhibits in all classes of the fair would indicate that the live stock men of Ontario are fully awake to the importance of their industry. The first "peace" fair after four shows held in years of war was the greatest exhibition of the products of the breeder's art ever seen at Guelph. Every inch of accommodation was crowded to the limit; in many places the limit established by comfort and convenience. The competition has been in every department. The quality was never excelled. To illustrate the extent of this year's fair it is only necessary to state that there were 87 cows entered in the dairy test. Other exhibits were in proportion. From the exhibit standpoint all was propitious for the best fair in the history of the association.

But there were few on hand to see the great display. On some days a mere handful of people watched the placing of classes that should have been witnessed by thousands. Influenza explained the slim attendance. Word had gone out that the epidemic had broken out anew in Guelph. It had. The hospitals were full again. The winter months in the stables at the fair seemed the ideal breeding ground for the germ. From the first the exhibitors and their helpers began to drop off. On the last day it is safe to estimate that not more than 50 per cent of the original staff was left and many of them would have been better in bed. The sleeping quarters resembled a hospital. From this viewpoint perhaps it is fortunate that the crowd was not larger. The type of disease, however, was not malignant and no one was seriously ill so far as Farm and Dairy could learn. But it spoiled the educational value of some of the greatest judging in Winter Fair history.

The matter of accommodation at Guelph is touched on elsewhere in this issue. This year demonstrated the insufficiency of the accommodation even more than the fairs of the past. The larger classes of the fair, the judging of the stables as never before. Everywhere speculation was rife as to the probable destination of the fair when it leaves Guelph, as it seems it must. Probably the city will make some effort to retain the crowd, but still will have to offer great expansion of accommodation in every particular.

### The Beef Cattle.

Started originally as a fat stock show, the exhibits of beef cattle at Guelph have lost ground steadily for several years. This year, however, the beef classes came out stronger than for a half dozen years at least. The quality was never excelled. Both breeding and butcher classes were record breakers. Shorthorns and their grades still predominate in point of numbers, but a feature of this year's fair was the notable increase in both Herefords and Polled Angus. The sweepstakes for best beef animal, however, stayed with the Shorthorn. An interesting contest developed here. In addition to the best of the Hereford and Angus breeds and their grades and crosses, T. A. Russell, of Downsview, Ont., had along his pure bred steer, "Shorty," which had won the sweepstakes at the Toronto Fat Stock Show the previous week. "Shorty" won his class. A younger steer, owned by the same exhibitor, also won his class. In the final competition the younger animal, a short-legged, deep-bodied, thick-fleshed young steer, won all the say in the top. He was well named Clear the Way 2nd.

"Shorty" was defeated more than once. The champion pure bred steer was a calf exhibited by J. K. Campbell & Son, Palmerston. Jas. Douglas, of Caledonia, had the champion female in his junior calf, Jubilee Jill. J. J. Elliott, Guelph, had the first two-year-old heifer in Rose Hope 21st and first in junior yearlings. J. H. Watt, Elora, won first in senior yearlings with Belle, and John Gardhouse & Sons, Weston, had first senior calf in Queen of Weston.

In Herefords competition was keen among all the regular exhibitors and at least a couple of new ones. W. Readhead, Milton, had the champion steer, while L. O. Clifford, of Oshawa, and O'Neil Bros., of Denfield, also won red runs. In the breeding classes the reds were distributed among J. Hooper, St. Marys; John Black & Sons, Amara-

anth; O'Neil Bros.; Jas. Page, Wallacestown, and L. O. Clifford. In fact a characteristic of the judging of these classes was the generous distribution of the prize money.

In Aberdeen-Angus, John Lowe, of Elora, was unusually successful. He won first in every female class with animals of his own breeding, and the champion was his Middlebrook Pride 23rd. Jas. Bowman & Sons, Guelph, were strong in the bull calf classes, as was also Robt. McEwan, London. Other exhibitors were: J. W. Burt & Sons, Hillsburg; H. Fraleigh, Forest; Geo. Davis & Sons, Erin; John Brown & Sons, Galt; and J. D. Maitland, Elora.

### The Horses.

In spite of motor trucks, autos and tractors, the horse still holds an important place at our fairs and the classes at Guelph this year were well filled. In fact horses of draft breeding were more numerous than ever before and some classes brought out a score of entries. As was to be expected the Canadian bred classes of Clydesdales showed increased strength. Percherons were numerous and good. Shire entries totalled only nine animals by four exhibitors.

"Trade," the great old stallion and champion of previous years in the Percheron classes, was first bred stallion this year. He is owned by T. D. Elliott, Bolton. T. H. Hassard, Markham, had the champion, however, in his two-year-old Earl II. The same exhibitor won in the three-year-old class with Right Boy. Titus S. Shantz, of Kitchener, had the female champion in his "Lido" last year's winner. N. Vermilyen & Sons, Belleville, had first two-year-old mare and get of sire. John and Albert Roberts, Peterboro, also had out a nice string of Percherons.

### The Clydesdales.

Had Graham Bros., of Claremont, who exhibited at Chicago the previous week, been able to reach Guelph as they had intended, the Clydesdale exhibit would have made history. As it was the showing was a great one. In the aged stallion class there were 10 horses. The award went finally to Baron's Court, exhibited by Jas. Torrance, of Markham. This was the horse selected last season for service in the Kemptville Breeders' Club. Smith & Richardson, Co. place, T. A. Hassard, Markham, had The Count of Hillcrest, an animal that with more size might have been first. The class for mature Canadian bred stallions was almost as strong. Smith & Richardson was Glenavon's Chancellor. The several championships which were decided were as follows: The champion and grand champion Clydesdale was Black Gregor, a magnificent black horse, with white feet, the property of John A. Boag & Sons, Queenville. He was probably the finest Clydesdale stallion that has ever been shown at the Winter Fair and was greatly admired by horsemen. The champion Canadian Clydesdale stallion was Dunure Model,

a handsome brown horse, owned by Robert Cox & Sons, Todmorden. This horse was also awarded the Watson Shield, an exceedingly handsome piece of silverware donated in 1911 by Capt. G. L. Watson of Westholm Main, Vancouver, B.C., for the best Clydesdale stallion bred in Canada and raised in Canada, to be competed for yearly, and should to be won three times in succession or five times non-consecutively before becoming the property of the owner. A miniature of the trophy was presented to the winner. This same horse was also the winner of the Bridget special, a cash prize of \$25.

The champion Clydesdale mare, Blink of Fairchilds, is owned by A. G. Gormley, Unionville, which also won the grand championship for Clydesdale mares. The champion Canadian-bred Clydesdale mare was Heather Moon, H. A. Watson, Scarborough. This mare also won the Walker House Trophy to be given for the grand champion Canadian-bred heavy draught two yearling female, to be given alternately to males and females. A miniature of this cup was given to the winner.

Canadian-bred draft horses brought out nice strings. Light horses and ponies brought out the usual showing.

John Guardhouse & Sons, Weston, had the champion shire stallion in Croton Forest King. J. M. Guardhouse had the champion mare.

### In the Sheep Section.

"The showing of sheep at this fair was never equalled before in numbers or quality," remarked a well known authority on sheep mules to an editor of Farm and Dairy. "I don't believe the Oxford were ever equalled in America. Competition was keen in all classes. We have had 27 ewe lambs in one section and 25 shorthorn wethers."

This estimate of the year's showing was not too high. The well filled pens reflected the new interest that is being taken in the production of wool and mutton. The Ontario Sheep Breeders' cups for best three wethers was won by two ewes to E. Brien & Sons, Ridgeway, with Cotswolds, and in shorthorn by Chambers Bros., Woodstock, with Southdowns. Chambers Bros., by the way, are new exhibitors this year.

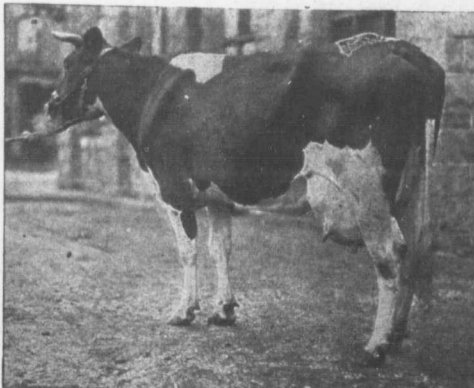
Cotswolds were exhibited by E. Brien & Sons; G. H. Mark & Son, Little Britain; S. Dolson & Son, Norval Station; Jas. A. Campbell, Theford, and Fuller Bros., Cheltenham. D. Campbell, Appleton, had the most of the Lincolns. Competition in ewesters was keen between Jas. Douglas, Caledonia; John Kelly & Son, Shakespear; Purvis Bros., Lucknow; D. R. McTavish, Shakespear, and Jno. Wright, Chesley.

E. Barbour & Sons had the best of the argument in the big Oxford display. Peter Arkell & Co., Teeswater, were also high winners. Peter Arkell & Co., Adam Armstrong, Forquih, Johnson Bros., Appleton, and others also had out considerable strings. John R. Kelsey, Woodville, and John D. Larkin, Queenston, divided the reds in Shropshires with several of the other money old time exhibitors; also in the money was W. H. Beattie, of Wilton Grove, and J. Lloyd Jones, of Burford. The money was very evenly divided in Southdowns between Chambers Bros., Hampton Bros., Robt. McEwan, J. D. Larkin, S. Dolson & Sons and others with smaller exhibits. In Dorset Horns the three old time competitors, E. Brien, Wright & Son, Galnworh; F. Robertson, Hornby, and Cecil Stobbs, Leamington, divided honors, with the latter getting the rather the best of the argument. John Kelly & Son and Telfer Bros., Paris, divided the most of the money. Suffolk were exhibited by Hastings Bros. and Geo. Henderson & Son, of Guelph.

### Swine Were Good.

The swine pens were well filled. The quality was unsurpassed. In the bacon class there were 66 competitors. No. one of which would have classed as No. 1 select on the market. The award for two bacon hogs went to J. E. Aretbour & Newns, Burford, with pure bred Yorkshires. P. W. McEwan won on dressed carcasses with a grade Yorkshires. In the breeding classes there were as high as 16 entries in a section.

Yorkshires, as usual, were most numerous. J. K. Featherston, Streetsville, had the champion sow. Other exhibitors were John D. Larkin, Port Credit; Jacob Lerch, Preston; Parry De Kay, Elmira, and others with a few entries. (Continued on page 11.)



Fayne Segis Pontiac, Sweepstakes Cow at Guelph.

In the three days of the test she produced 266.7 lb. of milk, testing 3.6 per cent fat, and scored 317.625 points. This exceeds the previous record of Sunbeam of Edgemoor, the Jersey; by just a fraction of a point. Bred and owned by Geo. Smith, Port Perry, Ont., who exhibited this year for the first time.



### Orchard and Garden

#### Winter Protection of Fruit Trees

HOW can I protect my fruit trees from being girdled by mice and rabbits and injured by sunscald? This is a question we have been asked frequently of late about winter girdling and sunscald in many orchards, and more interest is being taken, therefore, in protecting the trees this winter.

Raking away rubbish from young or old fruit trees will eliminate most of the danger from mice. Mice build nests in the straw, weeds or other rubbish that may happen to be piled around the trunk, and on warm days feed on the bark of the trees. In addition to this a tree protector of some kind may be used. Anything tied securely about the tree and pushed firmly against the ground or slightly under the surface will provide ample protection. Mice protectors will also prevent injury from rabbits. Wood veneer, coarse paper, tar paper or wire screening of small mesh are commonly used by orchardists. These protectors should be at least three feet high and tied together with a string to prevent wind or snow from dislodging them. If wood veneer or paper protectors are used they must be removed in the spring. They afford an excellent place for woolly aphids or other insects to breed. If wire screens are used, however, they may be left for a number of years without danger.

In some sections of the country much damage is done as a result of sunscald, which causes the bark to crack. Sunscald comes when the ground is covered with snow, the snow reflecting the bright sunlight. On warm days the temperature of the trees rises to a surprising degree. It often becomes as high as that in the average house. After sundown the temperature quickly falls to that of the atmosphere. The expansion and contraction results in splitting the bark, which is quite a natural consequence.

This trouble, which causes much more damage than fruit growers commonly appreciate, can be prevented to a large extent. Many fruit growers accomplish this by tying boards against the south side of the trees. Wood veneer protectors, used against injury from mice and rabbits, if long enough, will also aid in protecting trees from sunscald. Another way is to give the trunk a coating of lime sulphur, or some other white substance, which will last through the winter. The whitened bark does not absorb the heat; hence there is much less expansion and contraction. Damage from sunscald is more likely to be done in the early spring when the sun gets very warm in the middle of the day.

#### Stable Manure for Orchards

THE kinds of fertilizing applications are of two types, stable manures and concentrated or commercial plant-foods. The stable manures exercise a most important effect upon the physical features of the soil, and, in fact, this is often their chiefest value. In this respect, stable manures may answer much the same purpose as green or cover crops, particularly if they are applied in fall or early winter. When manure is not sufficient to cover the entire plantation, it should be applied to the hardest and driest spots only, and these spots should be observed and noted the previous season. Lands which are so hard and dry that even rye will not catch, may be got away for the cover crops by liberal applications of barn manures. Rotation in the use of fertilizers may be found to be as useful as it is in the case of cover crops. A soil which has had a liberal application of stable manure

one year, may profit more by some chemical fertilizer the next year.

In orchards which are thoroughly tilled, the use of barn manures should sometimes be discouraged, for the chief element of fertility in them—if they are not leached—is usually nitrogen. This advice is particularly applicable to vineyards, and all other woods. In such cases, it is better economy to apply the manures to the annual crops of the farm. The old, neglected apple orchards of the country, however, may receive barn manures with safety; yet, even here it is a question if economy would not dictate tillage and late green manures to supply the nitrogen, except, perhaps, for a season or two when an attempt is making to rejuvenate an orchard.

Mulching a sod orchard with manure often gives fairly good results in cases in which the land cannot be cultivated; but better results in the way of fertilizing and in freedom from weeds and insects can be obtained by pasturing closely with sheep or swine.—Fruit Branch Circular.

#### Deputy Minister of Agriculture

THE vacancy created by the resignation of Mr. W. R. Reek, in the Agricultural Department, New Brunswick, has again been filled. Mr. H. P. Bradt has received the appointment to the office of Deputy Minister of Agriculture for that province. For the past six years Mr. Bradt has been District Representative

of the Ontario Department of Agriculture for the counties of Dundas and West Gt. Toronto. He leaves to take up his new duties about Jan. 15th.

#### The Longest Day

THEY tell me the longest day Comes 'way along in Jun', But they are all mistaken Because it's coming soon.

For you can't make me believe, No matter what you say, That there is any longer day than that Just before-Christmas day.

—Winifred A. Hoag.



Ask the Experts

The Meal for Milk

What They Think

## About Sugar Beet Meal!

If you have any doubt as to the value of Sugar Beet Meal for feeding your beef and dairy cattle, write to the Directors of Experimental Farms, or the Professors of Animal Husbandry in the Agricultural Colleges.

They will tell you that

(1) The great value of this Meal lies in its Net energy. In this respect, it is equal to wheat four mids, and is 27% superior to standard wheat midds, and 41% better than wheat bran. It possesses approximately the same value in milk production as fresh June grass.

(2) Either fed alone, or as a part of any other ration, Sugar Beet Meal will shorten the feeding period for your Beef Steers, and increase the quantity and quality of milk from your dairy cows.

In former years, we sold a large quantity of our Sugar Beet Meal in the United States, where farmers have learned to appreciate it highly. We have been offered as high as \$45.00 per ton for it (f.o.b. Chatham), and we could easily dispose of our entire output at the price. But, in order to introduce this valuable type of feed to the farmer in this section, we have decided to fix the price at the extremely low figure of \$10.00 per ton (f.o.b. Factory), the containers to be returned to us.

We are anxious to see our Meal in Canada, to conform to the wishes of the Canada Food Board, by whom we are informed that cattle feed is badly needed by the farmers of our own country.

Write for our new booklet, which is fully descriptive of the value of Sugar Beet Meal, and which will explain how to obtain it and how to use it.

### The Dominion Sugar Company, Limited

Head Office: CHATHAM, ONTARIO

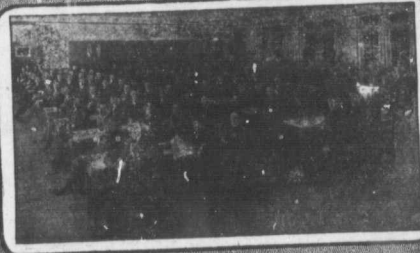
(3) Cattle really enjoy Sugar Beet Meal. It is succulent and palatable, and its laxative qualities make it a valuable aid to digestion.

(4) Henry and Morrison, in their book on "Feeds and Feeding," have this to say of Sugar Beet Meal: "Breeders of pure-bred Dairy stock recommend dried beet pulp for cows on official test, which are receiving heavy concentrate allowances, as it has a tendency to keep the bowels open, and is not apt to cause digestive disturbance."

(5) The Guaranteed Analysis of Sugar Beet Meal is:

Protein.....	Not less than 8%
Crude Fat.....	" " " 5%
Crude Fibre.....	" over 23%
Sugar and Starch.....	Carbohydrates not over 60%

# Apply now to attend one or more.



FARMERS AND FARMERS' SONS FROM EVERY COUNTY—(a) attending the live stock judging classes; (b) in the seed-judging class room. At very small expense, they acquired practical information that has added many dollars to their incomes.

## These Valuable Agricultural Short Courses Are Held for the Special Benefit of Farmers and Farmers' Sons by The Ontario Agricultural College, Guelph

They are entirely free—no fees, no books, no examinations required, while railway fare may be secured at reduced rates. Study this calendar carefully, decide which courses will be most valuable to you, then make plans to attend. You are cordially invited to be present at as many as you can, at a season when it is most convenient for you to get away for a short period.

**Factory Dairy:** January 2nd to March 21st, 3 months.

This prepares young men to become managers of these factories and creameries. The college dairy is furnished with all modern appliances and a first-class dairy herd is maintained. There is a steady demand for men, at good salaries, with the knowledge and practice this course gives.

**Stock and Seed Judging:** January 14th to 25th, 2 weeks.

For farmers engaged in mixed farming, this course is especially valuable. The best up-to-date instruction is given in the judging, feeding and management of all kinds of live stock; the purity, germination, cleaning, varieties and best cultural methods of all Ontario field crops; and the identification and eradication of weeds. The college has the finest equipment for this work, and the course is among the most popular and profitable of all.

**Poultry Raising:** January 14th to February 8th, 4 weeks.

Both men and women attend this course. All problems of the poultry raiser are considered, and the student gets practical instruction in building poultry houses, feeding laying hens, fattening and dressing, operating incubators, candling eggs, principles of breeding, judging, hatching and rearing, profitable feeding, etc. Accommodation for this class is limited, and applications should be made early.

**Bee-keeping:** January 14th to 25th, 2 weeks.

Instruction given in this course includes: Management of bees during every season, bee diseases, requeening, preparation of suppling, wax rendering, and every other possible phase of the industry. As some of the instruction cannot be given efficiently in the winter, a summer course is also held the second week in June. As bee-keeping is an especially profitable industry these courses are receiving an ever-widening recognition.

**Drainage and Drainage Surveying:** January 14th to 25th, 2 weeks.

This course trains any farmer to do his own surveying, ditching and laying of tile. An especially strong feature is the complete course of instruction given in operating the traction ditcher and other ditching machinery. As hundreds of thousands of acres of low-lying land in this province may be made immensely more productive and profitable by underdrainage, this course has attracted much attention and is well attended.

**Horticulture Courses:** January 27th to February 8th, 6 weeks.

A re-organization of this short course has now made it among the most efficient of any given on this continent. During the first two weeks, a complete course in fruit growing is given, during the second two vegetable growing is treated, and during the last two landscape gardening is given special attention. Every practical phase of each

question is thoroughly discussed. Time cannot be better spent by the young fruitgrower than at this course.

**Farm Power:** January 28th to February 8th, 2 weeks.

There is a special and urgent demand now for men who can efficiently operate farm tractors. This course is instituted to train such operators. Thorough instruction is given in farm tractors, gasoline engines, electric motors and farm machinery generally. No farmer contemplating the purchase of a tractor can afford to miss this course.

**Farm Dairying:** January 27th to February 21st, 6 weeks.

Dairying is a highly specialized branch of farming and requires special knowledge. This course treats thoroughly the science and practice of this important industry. A total of \$125 in cash is given in scholarships at the dairy short courses. As the course of instruction begins just as the stock and seed judging course ends, students may take advantage of both. Those who cannot remain the full period are invited to attend as long as they can.

**Cow-testing and Cow-feeding:** March 24th to April 4th, 10 days.

This important course gives complete instruction in the testing of cows for records, and in the scientific feeding of dairy cows. Good positions are available to those who complete the course satisfactorily.

**Ice Cream and Soft Cheese Making:** March 24th to 29th, 1 week.

These two courses, each a week in duration, qualify students as specialists in the manufacture of these dairy products. All interested are requested to write for more complete information.

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# of these excellent free College Short Courses

Feed Sprout

By G.

THE poultry yet adopted part of the specially during not only deprive that would be the most valuable in duction, but is of his best opp the cost of feed keep only sma quicker to real feeding sprouts farmers, yet th who should be a food value and reasonably be ed oats, because to the poultrym the dairyman.

A few poultry sion sprouts a having found sp excellent feed and growing st very profitably not have free ary with the f part of the year of natural greo vantage in feed that it provides when none othe sprouted form, lost or waste. tender green sp hulls. Every ad add an othe It is just anothe that is neede poultry equip means only a large returns.

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**POULTRY**



**Feed Sprouted Oats to Poultry**

By G. D. McCluskey.  
**T**HE poultry raiser who has not yet adopted sprouted oats as a part of the hen's bill of fare, especially during the winter months, is not only depriving his hens of feed that would be first to understand the food value and the results that might reasonably be expected from sprouted oats, because the oats sprouter is to the poultryman what the silo is to the dairyman.

A few poultry raisers operate their oats sprouters the year around, they having found sprouted oats to be an excellent feed for both laying hens and growing stock. This can be done very profitably when the chickens do not have free range, but is not necessary with the farm acreage during that part of the year when there is plenty of natural green feed. The real advantage in feeding sprouted oats is that it provides succulent green feed when none other is available. In the sprouted form, none of the grain is lost or wasted. The hens eat all the tender green sprouts, roots and soft hulls. Every poultry raiser should add an oats sprouter to his equipment. It is just another one of those things that is needed in order to make the poultry equipment complete. It means only a small investment, but large returns.

**Pointers That Mean Success**

**I**T is always best to breed from mature stock, especially on the female side. Nothing younger than yearlings should be used, where stamina is desired.

The great secret of success lies in the word "comfort." It begins with the chick and continues right through its life.

In setting hens, as well as in quartering broods, protection should be the order—shielding from storms and hot suns. More chicks are lost annually from exposure to driving rains, damp weather, hot burning suns, and close, poorly ventilated coops at night, than from any other cause.

One must not be led by every new breed. Stick to the original choice, providing, of course, that it meets the market requirements. Improve it. There is a lot of room for improvement in every breed. The man who sticks to a single breed is better able to get all the good out of it, more so than the man who handles a half dozen or more varieties. A man who is continually changing breeds is never satisfied, and never succeeds. There is much good in all breeds. Give the selected variety the proper care and it will pay a good profit.

That precocity and growth are antagonistic, there can be no doubt. The pullet that lays very early in life, either due to a natural disposition or by being forced with highly-stimulating food, becomes stunted in growth, and does not become the finely developed bird so desirable to either her as a stock bird, or to sell as a table fowl.

This is a matter that should be carefully considered in feeding the young. It may be a wise move to force the pullets to early and hard laying, when it is not intended to breed from those birds the following season. I have in mind a farm that buys, each year, a lot of pullets that are on the verge of laying. These are then forced for

heavy egg production. At the end of their first laying period they are dressed and shipped to market, and a new lot of pullets installed in their place.

There may be a profit in that method, but I do not approve of it, believing that better and more satisfactory business can be done by holding the birds two years, using them as breeders after they become yearlings.

It is not a wise step to stimulate layers. It is not the right road to travel in building up a hardy strain of profitable birds. Pure grains, green food, and the proper proportion of meat, is a diet that will build up the tissues and furnish material for manufacturing eggs.

While I believe in good egg records, I do not advocate phenomenal layers—at least not to breed from. Such work, sooner or later, weakens the stamina of what might otherwise be a hardy race and there is no profit in dilute stock. Some years back we had that class when the fanciers were wild to follow a standard that was made up of considerable poor judgment.

Start the strain first for its utility qualities, and then gradually branch out in meeting the requirements of the standard. That will make better poultry; and that is the true American idea.

**Clean Quarters**

**I**F you do not believe that a clean poultry house, sweet smelling and sanitary quarters, will pay handsomely, just observe two flocks, one that is kept in such a house and under such conditions and another that is kept in a house that is seldom cleaned and as a consequence is filthy and filled with foul odors. Note the difference in plumage, activity and general appearance of the two flocks and the number of eggs received. That alone will convince you of the absolute necessity of clean, comfortable quarters for hens.

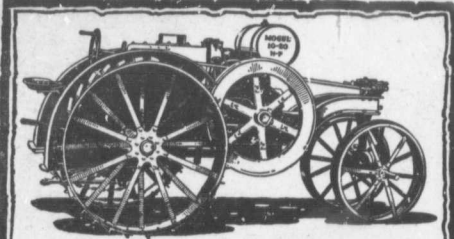
The poultry house needs a good, thorough cleansing before real cold weather. Brush down the walls and ceiling, remove the old litter from the nests and floor. Whitewash or spray walls, ceiling and fittings. Fresh, dry earth or clean, dry sand or sifted gravel makes the most comfortable floors to be had when covered with a litter of clean straw preferred. Do not put in all the straw necessary at once, as the hens cannot stir so much; add a little every day or two as long as desirable. When these requirements are fulfilled, and not until then, can the hens begin their winter's work—A. C. Smith.

**Hens Need Charcoal**

**S**HOULD charcoal be kept before the hens all the time? While not a food, charcoal is a great disinfectant and a good aid to eat. It is a blood purifier. It corrects the errors of feeding and keeps the digestive tract in a healthy state by absorbing poisonous gas.

A fresh supply of charcoal should be placed in the hoppers each day. If any quantity of it is left in the poultry house too long, it becomes unfit for feed. Charcoal absorbs odors and becomes impregnated with foul and disease-carrying air and thus becomes a menace instead of a benefit to the hens. Damp, foul, charcoal can be purified by placing it in a hot oven. The heat drives off the foul air and makes it brittle and as good as it was in the first place.

If charcoal is hard to procure, a good grade can be made by charring corn cobs or soft wood. While perhaps not as good as charcoal, coal cinders will answer the purpose. Cinders and charcoal should be reduced to the size of a pea before being placed before the hens. When it is too finely pulverized, fowl do not seem to relish it and will eat insufficient quantity. —R. A. J.



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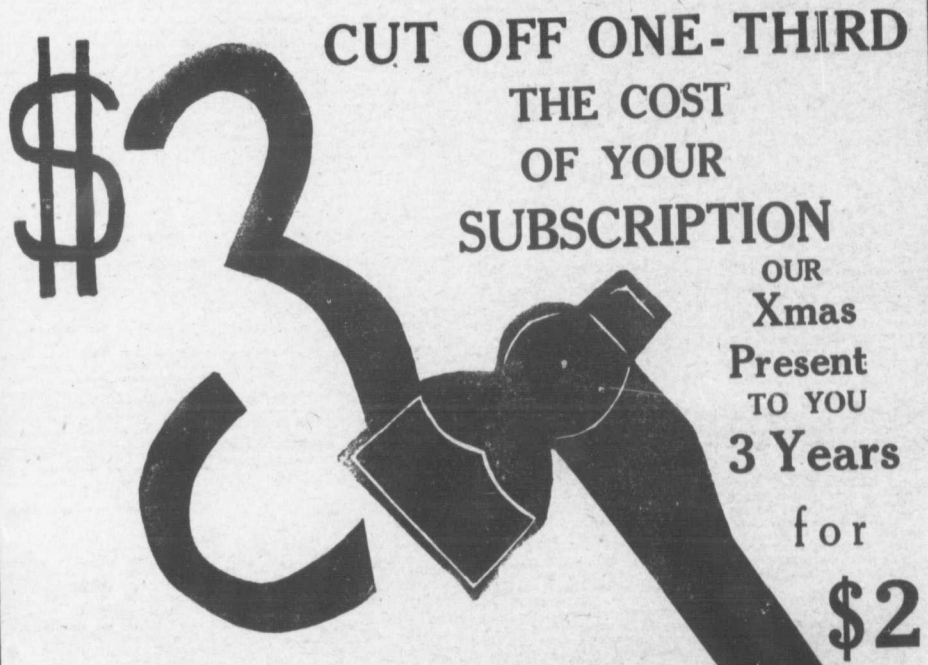
**Ottawa Winter Fair**  
 OTTAWA, ONT.

January 14, 15, 16, 17, 1919

Entries Close January 3rd.

Write the Secretary for Prize List.

WM. SMITH, M.P. President, Columbus, Ont.  
 W. D. JACKSON, Secretary, Carp, Ont.



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## The Ontario Provincial Winter Fair

(Continued from page 5.)

Blaine, and others with a few entries. W. W. Brownridge, Georgetown, had the champion Berkshire sow. Other exhibitors in the money were G. A. Dewar, Wyoming; S. Dolson & Son; Adam Thompson, Strathroy; Jno. E. Brian, Atwood; P. J. McEwan and E. Cowan & Sons, in Tamworth; D. Douglas & Son, Mitchell, had competition this year from E. Dolson & Son and Jas. Stark, Georgetown. Competition in Chester Whites was limited to Coleman, Wyoming, and W. E. Wright & Son, Hastings Bros., Guelph, had out a nice string of Hampshire, Cecil Slotta had Poland Chans and Gowan Malott, Leamington, had Duroc Jerseys.

Eighteen counties of Ontario sent teams of three men to compete in the inter-county judging competition. These teams were trained by the district representatives of these counties and competition was keen for all of the first eight places. Durham county in the seed, had the best team with a score of 2,139 out of a possible 3,000 points. The members of this team were W. E. Snowden, Bowmanville, Reginald Palfie, Millbrook and Roy Ferguson, Mississauga. The York county team, from which county came the champions of Ontario last year, were second this year with 2,095 points; Ontario third with 2,047; 4th, Essex, 1,992; 5th, Middlesex, 1,991; 6th, Norfolk, 1,973; 7th, Victoria, 1,965; 8th, Peel, 1,963. Oscar Fox, York county, was the high man in dairy cattle and heavy horses. Gladstone Shaw of Peel in beef cattle and swine, and W. E. Snowden of Durham in sheep.

## The Seed Exhibit.

The seed exhibit this year filled the lecture hall of the civic buildings to capacity. Seed places a record exhibit and all other classes were full with the exception of red and alfalfa clovers. As usual the exhibits from the prize winning fields in the Standing Field Crop Competition were a strong feature in the show. In this section H. L. Goitz, Bardonia, Ont., won first on oats, A. W. Vansickle, Conestoga, on barley and R. S. Frisbie & Son, Unionville, on spring wheat. Mr. Goitz also won on potatoes, winning over the older exhibitor, Wm. Namath, Falkenburg, in corn. P. McKinley of Tecumseh was first in dent and A. S. Maynard, Chatham, in flint.

In the open sections, where competition was unrestricted, P. J. McEwan, Wyoming, won first in white all wheat with Dawson Golden Chaff and in the section for red or amber fall wheat, W. Winer and Sons, Guelph, were first with Imperial Amber. Wm. Namath, Falkenburg, was first in spring wheat with Marquis and Jas. McEwen, Glencoe. First in strawed barley fell to R. J. Wilson, Charing Cross. All of the 17 exhibits in this section had O.A.C. No. 21. A. S. Maynard, Chatham, won the sweetest prize for flint corn with Essex's North Dakota, this constituting his fourth successive win with flint. B. R. Cobbe, South Woodside, Ont., secured the dent sweetestakes for the third time in succession with Wisconsin No. 7.

At the auction sale of the seed exhibits no sensational prices were realized. A buyer from the United States, C. R. Hamilton, of Chazy, N.Y., purchased considerable quantities and paid good prices. The two bushels of first prize spring wheat realized \$5.50. Coos who sold up to \$6.75 for a two bushel bag; Banner oats at \$5.00; O.A.C. No. 72 oats, \$4. and \$4.80. The first prize bag of barley

Alaska sold for \$3.76 and the second prize O.A.C. No. 74 for \$3.75. Six-rowed barley brought \$4.15 to 70 bushels and beans up to \$7. Red clover sold at \$29, timothy, \$19 to \$20, alfalfa, \$19 to \$36. Altogether realized \$3 in two sales. The Dent corn sold at \$3.50 to \$5 per bushel of each which is equivalent to 36 lbs. of seed. Potatoes sold at \$1.50 to \$2.35. The two bushels of sweetstakes flint peas sold for \$9.

## The Poultry Show.

Guelph this year again succeeded in staging the most extensive poultry show on the continent. Entries were well up in the thousands with every breed of every species of fowl well represented. The common utility breeds, however, took preference both in numbers and the interest that they attracted. The laying competition, inaugurated for the first time last year, was continued again this year with 11 pens entered. Barred Rocks succeeded in capturing the first three awards, the pen entered by J. R. Stork, St. Catharines, Ont., was first with 21 eggs. Another by the same exhibitor was second with 18 eggs, winning this award on weight, as the third pen, entered by Fred B. Huff, Georgetown, laid 19 eggs. Fourth place went to J. C. Evans, Guelph, with White Wyandottes and 17 eggs; fifth, A. G. Burns, Paris, Blue Orpingtons, 15 eggs; sixth, Barred Rocks, 14 eggs; seventh, White Leghorns, 13 eggs. From this the production ran down to one pen which did not lay an egg. Such awards further mention of the numerous and miscellaneous exhibits which helped to make this fair a record breaker, both from the standpoint of quality and number of entries. Such a rapid growth as was seen this year should, in a few more seasons, make the Ontario Provincial Winter Fair equal to the greatest events of its kind on the continent. In some sections, indeed, it already holds the record. The greater is the necessity, therefore, for providing adequate accommodation for exhibits, exhibitors and spectators. Just where this accommodation is to be is a question which must be decided for the fair of 1920.

## The Fat Stock Show

PURE bred Shorthorn steers, exhibited by T. A. Russell, Downsview, Ont., was grand champion at the Toronto Fat Stock Show held two weeks ago. "Shorty" is a pure bred Shorthorn. His weight is about 1,600 lbs. He was exhibited at Guelph. The sweetestakes prize for 15 horned steers, weighing from 1,000 to 1,400 lbs., was won by Jas. Roy, R.R. No. 8, Mitchell, Ont. J. D. Ferguson at auction in Coombs, Ont., were first on the carcass of steers weighing 1,300 lbs. or over. As usual Jas. Leask & Sons, Seagrave, Ont., were heavy winners with grade and crossbred steers, winning the championship in this section.

The entries shown altogether were only about half the number of last year, as exhibitors were barred from the show, due in consideration of a request of the Dominion Government, first to eliminate the slaughter of female animals. All animals shown at the Toronto Fat Stock Show must be sold Mr. Credit, in Christmas beef. The quality, however, compares well with entries on previous occasions, and this was especially true of the lambs, entries in this section eclipsing all previous exhibits at the show. C. E. Meggs, Paris, Ont., had the best carcass of 50 lambs of the long wool types, and Scott and Kyle, Drumbo, Ont., had the best car of short wools. The hog show was not numerous, but in quality would compare with the best of other years. Among winning exhibitors were John Duck, Streetsville; G. K. Featherstone, Streetsville; Oscar Gerb, Preston; J. E. Brethour and Nepean, Burford; Chas. D. Boynton, Dollar, and others well known on the Canadian show circuit.

## Live Stock Men Meet With the Commissioner

Important Points Dealing With the Future Development of the Live Stock Industry in Canada are Discussed at a Special Meeting in Toronto, Called by the Live Stock Commissioner, H. S. Arkell.

"RESOLVED that this meeting of representatives from the live stock associations of Canada strongly urge upon the Government of Canada that representative of the live stock industry should be sent immediately to Great Britain to look up avenues of trade for surplus live stock products and that the naming of such representatives and representatives be placed in the hands of the Live Stock Commissioner."

In this resolution is embodied the only definite conclusion arrived at by a representative gathering of live stock men which gathered in the Carls-Rite Hotel, Toronto, on Friday last at the request of Live Stock Commissioner H. S. Arkell. The gathering was composed of members of the executives of the various live stock associations. Ontario was most largely represented but in addition there was Dr. Tozmic of British Columbia and Mr. Neil Sanger of Quebec. The meeting was called together to discuss ways and means of furthering the interests of the Canadian live stock industry, particularly as it concerns the export trade. In opening the meeting Mr. Arkell suggested that the efforts of all the interests involved should be co-ordinated to the live stock business. He believed that the banking industry connected with the banking interests should both be working in cooperation with the live stock interests and a discussion of transportation and banking problems took up considerable time.

Just how necessary is immediate, decisive action was proven by Mr. Arkell when he stated that the ordinary rule of beef coming from the Argentine is just as good as the Christmas beef produced in Canada. United States beef also is of higher finish and quality. "Unless we feed high class stuff to a full finish, we will never be able to compete on the export market," said he. This was said on the necessity of breeding better beef cattle and to this end it was suggested that breeders set themselves to develop their best Barques for breeding stock right here in Canada. "Keep the best at home," advised Mr. Arkell. "We will never get anywhere as long as we send all of our best breeding stock out of the country."

Mr. Hamer of the Live Stock Branch told of the results of their policy of distributing pure bred sires throughout Canada. Since the inception of the distribution policy five years ago, over 2,000 pure bred sires have been placed throughout the country. As a means of encouraging the retention of the best sires in Canada, Mr. Hamer suggested that a premium policy be adopted through which premiums would be given on good sires, not at a central exhibition but on the breeding your farms. It was suggested that this question be taken up by the National Live Stock Council. A little later in the meeting friction developed on just this point when Mr. F. R. Mallory of Frankford mentioned the possible export market for pure bred cattle to the Old Country and Mr. Arkell stated emphatically that it was the policy of his department to see that this kind of cattle stayed in Canada. D. O. Bull of Brantford, immediately wanted to know if restrictions were contemplated on the export of registered animals thus limiting the market of the breeder and J. E. Brethour, Burford, also expressed his opinion, which was absolutely opposed to any such restrictions. Mr. Arkell hastened to assure the meeting that his department did not contemplate restrictive orders but merely the development of such a market at home that export would be undesirable.

## Banks and Live Stock.

"One bank in Canada has \$100,000,000 on deposit," stated Mr. Arkell. "What an opportunity for the live stock industry to get that capital behind our business!" The speaker then described the cattle banks of the United States which consider cattle pure the most valuable asset and are doing much to encourage the industry there. Dr. Tozmic stated that he would prefer to see the banking done through the present chartered banks and intimated that the cattle banks of the United States might be controlled by the packers. F. R. Mallory summed up the improvements necessary in present banking regulations as a substantial increase in the loan limit so that more of the industry, for instance, may be handled on bank credit; longer term notes so as to cover a full feeding period; and a more reasonable rate of interest. "Notes now carry discount at eight per cent discount," said Mr. Mallory, "which is equivalent to eight or nine per cent interest." A banking committee consisting of Geo. E. Day, D. O. Bull and Dr. Tozmic was appointed to draw up suggestions along this line to be submitted to the National Live Stock Council for consideration.

## European Representation.

The meeting was fully of the opinion that the live stock interests should be represented overseas. Some believed, however, that an immediate appointment should be made of a permanent overseas representative, while others favored the appointment of a man commissioned to go overseas immediately, investigate the situation and make their report, the appointment of a permanent representative being deferred until conditions had been investigated. Here, too, there was misunderstanding. A portion of the meeting believing that this representative would take care of the foreign market for registered breeding stock, which was regarded as his only in a light of a trade commissioner. This latter view was finally adopted when Wm. Dryden of Brookline, called the meeting back to its first purpose, the development of markets for live stock products. "The market for my pure bred bulls," said he, "depends on a good steer market; that is, an assured ready outlet for the carcasses produced." After considerable discussion the resolution already quoted was approved.

Transportation problems were discussed at length with Mr. Geo. Pepper along to make things interesting but no definite action was taken. The most valuable result of the meeting was the emphasis placed on the necessity of both better breeding and better feeding of live stock with the production of greater volume for export if Canadian live stock products are to hold an important place in the export market. Mr. Arkell's suggestion that the banking and transportation interests should be allied with the live stock interests in getting the necessary government action was also received with very general approval. Towards the close of the afternoon session, Jno. McKee, Norwich, asked a somewhat embarrassing question when he said: "Did we not appoint a Live Stock Council to take care of just such subjects as these?" This feeling was present in the minds of many who attended the Toronto meeting, that they were really dealing with subjects which could be properly taken up by the more representative live stock council which has authority to speak for the associations it represented.

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## The Winter Fair

THE outbreak of a second epidemic of influenza in Guelph marred the success of what promised to be the most successful fair in the thirty-five years since its establishment. The exhibits were of a high order throughout. In many sections the showing could not have been exceeded at any fair on the continent. The cattle pens were full. The horse exhibits overflowed the fair accommodations and many animals were housed in nearby stables. The number of cows entered in the dairy test was a record. Sheep were never before shown in such numbers or quality. This great showing demonstrated two points conclusively: the vigor of the live stock business in Ontario and the necessity for larger and more modern buildings to house the fair in the future.

The housing was inadequate and unsatisfactory throughout. Sanitary conditions alone were enough to cause strong dissatisfaction. The close, malarious atmosphere was ideal for the dissemination of such dangerous diseases as tuberculosis. Close crowding, particularly in the dairy area, was enough to make the slightest trace of abortion a menace to all other animals in the immediate neighborhood. There was little accommodation for judging outside the main ring and even there some of the classes were too crowded. The accommodation for spectators in the galleries is sufficient for only a fraction of the crowds that might be expected to patronize such an event as the Ontario Provincial Winter Fair.

Further additions to the present buildings are neither advisable nor possible. The lack of accommodation for visitors in the city is another handicap. Must be merged in the proposed International Live Stock and Dairy Show and located in a larger city. Farm and Dairy would dislike, in many ways, to see the show moved here from Guelph. Thirty-five years of continuous showing in that old city has given the fair and its place on the map strong historical and sentimental connections. But the good of the live stock industry must be given first consideration. The development needed. The exhibition of 1920 will be held, probably, in either Toronto or Hamilton.

## The Proposed Dairy Company

THE proposal to establish a cooperative dairy company in Ontario to take over and operate a large number of the cheese factories and possibly creameries in the province, in the same way that the grain growers and dairy farmers of Saskatchewan own and operate hundreds of the grain elevators and two-thirds of the creameries in that province, is one of the most important and timely branches of the dairy industry in Ontario and which, therefore, must be given the most careful consideration. There are factors entering into the situation in Ontario that did not exist in the west when the

western companies were organized. In the grain trade in the west the elevators were largely in the hands of big interests which were able to extort an unfair toll from the grain growers. As far as the operation of the cheese factories in Ontario is concerned this is not the case. Instead, our cheese factories are operated so economically in many instances as to be prejudicial, in the case of many factories, to the best interests of the industry. This is a condition that has an important bearing on the situation.

One great benefit that has followed the organization of the farmers' companies in western Canada is that it has led the farmers to take a greater and more intelligent interest in their work and calling as farmers. It has enabled them also to develop leaders in business affairs who rank with the ablest business men of the west. They have obtained, also, greater control over the conditions under which their products are sold and thereby have been able to eliminate many abuses which formerly were a constant source of friction and recrimination between the growers and the grain operators. Growing out of their success the farmers have taken a deep pride in their business enterprises and have established their local elevators and factories on a basis that is a credit to them and a credit to the little doubt that there are ten to 20,000 of our dairy farmers in Ontario to unite in a large cooperative company and take over some hundreds of our local factories, it would lead in time to the elimination of the weaknesses in the dairy industry that under existing conditions seemed almost unsurmountable. During the next few weeks dairy men in order that it might be frankly and fully discussed at the dairymen's conventions in January.

## Hogs and Prices

WHAT place is hog production to take in Canada during the reconstruction period? Will we be wise to breed as many sows this fall as last year be reduced or increased? These are very pertinent questions now that the breeding season is upon us and the question has to be decided within the next month or six weeks, if at all.

Farm and Dairy believes that more and more emphasis will be laid on the production of animal products. The price current of wheat and coarse grains is certain to be downward, very strongly downward, from now on. The drop in prices will reduce the demand on the production of another crop; it will start as soon as transportation facilities make possible the movement of the stored up crops of the Southern Hemisphere. During the war years the price of hogs was profitable, but in the aftermath of the war period it is live stock that will yield the greater proportionate returns.

The litters from sows bred now will be finished on the coarse grains of next season's crops. These sows will be comparatively cheap. In any case they will be marketed to better advantage in finishing hogs right on the farm than in any other way. Hogs are good business policy for the farmers of Eastern Canada who have the feed to carry the sows and then their litters until next year's crop is available. In Western Canada a partial crop failure present time, but there, too, a goodly number of hogs will ease the grain marketing problem in the fall of 1919, and as many sows as can be carried should be bred this fall. As for the hog market, we are concerned that its stability seems to be much surer than the grain market, and even 1920 may still see a good outlet for hog products. The stabilizing of this market should be the immediate concern of the Federal Department of Agriculture.

## Farm and Dairy's New Serial

NEXT week Farm and Dairy will publish the first installment of "The Homesteaders," our new serial story. We take particular pleasure in announcing our purchase of serial rights in this story, in that it is an all Canadian story by a Canadian author, Robert J. G. Stead. Mr. Stead is also known as the author of "The Cow Puncher," which, in its sales, leads all other novels published in Canada this year, and a volume of "The Old Folks" titled "Kitcheners and Other Fossils." To our folks in Ontario and the West, Mr. Stead is a contributor to Farm and Dairy on western subjects, particularly irrigation farming.

"The Homesteaders" is more than a fascinating story. It is a true picture of western life in the early days. Our readers will follow with intense interest the struggle of Frank Harris and his bride to make a home for themselves on the prairie, and the material success that crowned their efforts. "The Homesteaders" will finish it with a better appreciation of the real things of life and feel that the time spent was for their profit as well as their entertainment. "The Homesteaders" we believe that we are giving our readers one of the finest Canadian stories ever written.

## Alfalfa and Silage

THE feeding problem of the past three years has been responsible for many of the grey hairs in the heads of dairy farmers. As a rule the problem is most intensive where suitable roughage has not been grown on the farm. Recently, Hoard's Dairymen gave some excellent advice and held out an ideal for the feeder, in the following:

"Dairy farmers well supplied with alfalfa hay and corn silage can provide a most admirable ration for their cows. They are in position to utilize the alfalfa which can be purchased most reasonably. Alfalfa hay not only supplies an abundant amount of protein, from which the cow manufactures the casein milk, but also supplies mineral matter which is highly essential to proper growth and health. There are no two feeds which supplement each other more completely than alfalfa and silage. The silage furnishes the carbohydrates, the succulence, and the bulk which is so highly desirable for dairy cows. What the silage lacks, the alfalfa supplements.

"To gain the best results, some grain should be fed with these two excellent roughages. At times when the prices of feeds are relatively higher than when the prices of feeds are low, it is well to nothing but alfalfa hay and silage. At present, the prices of feeds and dairy production are in the same proportion as they have been in other years.

"Since it is well not only from a production standpoint, but from the standpoint of keeping the cows in good physical condition, sustaining their milk flows, and producing strong, healthy calves, we would advise the feeding of three kinds of feeds if they prefer to use at least three kinds of feeds if they can be obtained at reasonable prices. This provides good variety and at the same time assures the feeder of supplying the animals with a diet of nutrients necessary for the growth of the fetus, and for keeping them in good physical condition. There would be no objection to using some foods rich in protein, but a pound or two per day per animal would be a good idea, or sary to use with feeds that are termed carbonaceous feeds, in corn, which may be termed carbonaceous feeds, in order to supply the proper nourishment for a cow to do good work."

Bolled down to its essence this means that profitable feeding is now virtually impossible without good, home grown roughage. Alfalfa and corn silage are the best feeds for raising good calves. Good farming means a generous acreage of legumes for hay and lots of corn silage or roots. This is true of the times of peace as well as of war. It is well to intelligent cropping more necessary to profitable dairying.

## Wage Earners All

WITH the great problem of reconstruction looming ahead, the common people of this country must keep a firm grasp of this principle—that the mental interests in common. What is to the advantage of one will ultimately work to the advantage of the other. What is detrimental to the well being of one will be detrimental to the other. In a very real sense, we are wage earners all. This fact was made forcibly by Mr. John Kennedy of the United Grain Growers', Limited, in a recent article in the "Grain Growers' Guide." One paragraph from that article is as follows:

"We are the same people; we all work for a living. One cannot live without the other. Legislation that is good for one is good for the other. Legislation that is bad for one is bad for the other; and what is true as a class by themselves and if farmers are in another class by themselves, neither caring for the other's interests, neither will be able ever to combat the powers that be. It is not the case in the past they have been successful. It does not take much to beat us when we are divided, but no power can beat us if we are not divided. Then let us stand by our labor and stand by his brother for justice and liberty."

The case in a nutshell. Mr. Kennedy's forceful words carry us back to the last annual convention of the United Farmers of Ontario, which was held in the Toronto Labor Temple, and during the course of which the workers of the city exchanged the warmest greetings with their brethren of the country. We would that this friendly spirit might be maintained through the difficult period ahead. In the years of reconstruction, there will be much to try the patience of both rural and city workers. There will be many times when the interests of one will seem diametrically opposed to the interests of the other. This will be only when fundamentals are ignored, but conditions may develop which will call for a large measure of charity and self-control on the part of both classes of workers."

Letters to the Editor

"Daylight-Saving"

EDITOR, Farm and Dairy.—I see that Sir George Foster is highly pleased with the reception that Canadian people have given to his pet scheme of daylight saving. He recently quoted as saying that it has country over. To quote his words exactly, he said:

"In Canada, from what we can gather, nearly everybody is satisfied with the experiment just completed and will welcome its reenactment of the measure next session. The only objection appears to be limited to certain farm papers."

The farm papers have objected to daylight saving all right, but in this they merely voiced the opinion of their readers. If Sir George Foster were to get away from his street cars and cement sidewalks and mingle with the people back on the land for a day or two, he might find one or two here and there who have no objections to daylight saving, but I am prepared to guarantee that for every friend he will find for his measure, he will find 100 who are absolutely opposed to it and many for whom it has caused serious inconvenience. We ourselves belong to the class that have probably been hit harder than any other class. Practically all of us in this district are city milk shippers. In our own case we have milked the cows every morning this summer by lantern light, in order to get the milk on to the early trains, which are always early enough, but which were in our case earlier than usual this summer. Farmers who do not ship milk and who are not dependent on hired help, have probably had little cause to complain of daylight saving. The minute a farmer hires a man or even goes to town to the bank, however, he becomes more or less inconvenienced by this piece of city-made legislation.

It is a common weakness to think that the opinions expressed by those with whom we associate express the feelings of people generally. Traveling in his little circle of golf playing acquaintances Sir George has evidently been led to believe that daylight saving is acceptable. It is time that farmers, individually and through their clubs, instructed him to the contrary, and I trust that the United Farmers of Ontario at their coming convention will put themselves strongly on record as opposed to the re-enactment of this childish piece of legislation. We say, all hail to the farm papers for their sturdy opposition to daylight saving.—E. A. Halton Co., Ont.

At the International

THE Angus breed of cattle added another sweepstakes to their already long list of similar laurels won at the International Live Stock Exposition at Chicago. The champion this year was "Fyfe Knight," 21 months old, a pure bred Angus steer fed for the event at the Purdue University. The sweepstakes animal weighed 1,350 lbs. and was sold at auction for \$250 a lb., a new high record over the \$210 a lb. paid for "Merry Monarch" last year. Part of the beef from "Fyfe Knight" has been offered to President Poincare of France for his dinner to the peace delegates.

In car lots of steers the Hereford breed scored a notable triumph, a load of yearlings bred in Texas and fed in Illinois winning over car lots of Angus that would have carried championship honors in any other year.

The display in the breeding classes was never excelled. Shorthorn, Angus and Herefords all being strong. In the Shorthorn classes, Garris Bros., Elora, Ont., won first place on

yearling bulls, with Gainford Matchless. Hon. Duncan Marshall of Alberta expressed the opinion that a yearling class of similar strength had never before been seen on the continent. J. J. Elliott of Guelph got seventh place out of a class of 26 and sixth place out of a class of 25 with Newton Perfection. When it is considered that some animals costing money at all, this is a good showing. In Herefords, Frank Collicott of Calgary won fifth on his bull.

In horses, competition from Canada was limited to Graham Bros. of Claremont, Ont., with their Clydesdales. They had the junior champion stallion in their "Roselanta's Choice," and the reserve junior champion stallion with "Glennier Star." With this

latter animal they won the title of reserve champion stallion bred in America.

Canadian exhibitors are always strong in sheep, but this year transportation difficulties and the "flu" intertered with exhibits. However, the Ontario breeders were along with some fine Leicester, Southdowns and Cotswolds.

The win that pleased Canadian visitors to the fair most, however, was made by the Ontario Agricultural College in the judging competition. The O.A.C. boys succeeded in capturing the bronze bull, the gold medal for high man, blue ribbon for high man, the silver cup for high man in hogs, three bronze medals for high collars in all classes and sheep and swine, together with having the high man in

cattle, second and third man in sheep and first, second, third, sixth and eighth man in hogs.

Among prominent Canadians present were Hon. George T. Henry, Minister of Agriculture for Ontario; Hon. Duncan Marshall, Minister of Agriculture for Alberta; H. S. Arkel, Live Stock Commissioner for Canada; Deputry Minister of Agriculture, Prof. George E. Day, Wm. A. Dryden, R. W. Wade, Secy. of Ontario's Winter Fair, and Kenneth McGregor of Brandon.

"When a man has a rip in his coat and only three buttons on his vest," wrote a Western sage, "he should do one of two things: either get married or get divorced."



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### The Upward Look

The Divine Ministry of Displacement

"Instead of the thorn shall come up the fir tree, and instead of the brier shall come up the myrtle tree."—Isa. lv. 13.

THESE words unveil one of the great ways of our God. He displaces one thing by another. The fir comes up in strength and His place that was occupied by the thorn. The myrtle appears in vigour and makes its home in the bed of the brier. And so it is in the soul of man. God crowds out one thing by another and the first thing withdraws. He imparts His own spirit, and the new spirit excludes the old temper. He gives a vision and some prejudice dies. He plants a royal virtue and some miserable vice disappears. This is how the Lord makes His gardens. It is the wonderful process described in Dr. Chalmers' famous and familiar phrase, "The expulsive power of a new affection."

And so it becomes clear what a harrowingly dispossessing way it is to try to create a garden in the spirit by merely pulling up the weeds. I read this counsel in a book of devotion: "Pull up one fault a week, and what a clearance there will be in the course of the year!" It is disastrous advice, and there will be no end of heartache at the close of the year. In the first place, who knows what his faults and vices really are? There are some which the Bible describes as "presumptuous." Anybody can see them because they are so glaring. But there are others which the Bible describes as "secret," and their hiding-place is as intricate as a rabbit warren. "Who can discern his errors?" Who can tell just where they are?

And, as a second difficulty in the way of this counsel, who is to determine the order in which the vices are to be removed? Which is the more deadly, drunkenness or falsehood, and which shall go out first? Which is the more insidious influence, pride or envy? Which does the more harm, jealousy or censoriousness? What shall we first lay hold of in the work of uprooting? Shall we seize a presumptuous sin or seek for something more secret? A furtive cancer is more serious than an external rash.

And there is still another question. How may we know that a vice is really uprooted, and that the last delicate fibre of its most secret rootlet has been removed? How may we be quite sure that there is nothing left to form the beginning of a new growth? Who is to say when the soil is clean and when every bit of thorn and brier has been cast out? It is surely very bad counsel to urge us to clean our hearts by weeding.

There is nothing for it but to hand over the thorny, briery desert to the Lord. "Here is the wilderness of my life! I surrender it to Thee, most holy and gracious Lord!" And the good Lord accepts the surrendered desert. The first thing He does is to remove the soil by the mighty enriching energies of His grace. And then He plants His new growths. He plants the vigorous word of His truth, and the thorns and briars of falsity are smothered in its presence. He imparts His own peace, and there is an end of the thorns of feverish distraction. And there is an end of the briars of ill-temper and discord. And He gives His own joy, and the thorns of discontent cannot live beside it, and the briars of moroseness and bitterness pass away. That is the great secret of the transformed wilderness. It is our part to abide in the great Gardener, and He will make His own garden.—British Weekly.

If a garment has been soiled, dampen it slightly and hang out in the bright sun and the stain will disappear.

### "Putting One Over" on Biddy

SOME people claim that women haven't a sense of humor. We beg to differ with that contention. It is not necessary for a farmer in order to prove that women have not only a sense of humor, but that when a problem presents itself, they are capable of devising an original scheme for overcoming it.

While out for a visit one evening not long ago, we were quite interested in an incident which was related to us of the experience of one of our Peterboro' county farm women with a clucking hen. This hen insisted on sitting on a particular nest, although her mistress had tried all the remedies of which she knew to prevent hens from setting. Every time she went near the henhouse, that hen occupied the same nest. While the hen was persistent, our friend was equally so. In fact, she had made up her mind that the hen was going to come out second best. Finally, she conceived a plan which worked out beautifully.

An alarm clock was brought from the house and Biddy was chased out of sight long enough to bury the clock nicely in the straw of the nest. Then our friend slipped away, but remained close enough to view proceedings. Biddy came back to the nest quite serenely and settled down—but soon became uneasy. She heard the ticking of the clock and could not understand from whence the strange noise was coming. She did not get off the nest to investigate, but turned her head, first and then the other, and made a peculiar cluck, as much as to say, "What is it?" Just then the alarm went off. With an unearthly shriek the hen bounded from the nest, flew from the henhouse and out into the barnyard, squawking most ferociously. Our friend watched the hen making her exit and as far as she could be seen. Biddy was going at breakneck speed. Needless to say, she did not come back to that nest again.

And did our friend enjoy the joke? Well, rather. Who says a woman hasn't a sense of humor?—R. M. M.

### Despair

By Lydia M. Dunham O'Neill.

WHEN unexpected company comes in at an odd time. And when there's only just enough for two.

I can smile in manner pleasant—I can keep my mental poise—As almost all other matrons, too, can do.

I can put my hat on backward, and can laugh at my mistake, But there's one thing that my temper sorely tries:

It isn't earthquake shock, nor the stopping of the clock—It's simply when the bread sponge falls to rise.

I can stand it when the clothes-line takes a tumble in the mud, I can stand it when my nice new dress gets torn.

I can stand it when the baby spills the ink upon the rug, When the cow gets in the field and casts the corn.

I can even smile serenely when it rains on baseball day, And there's not a drop of moisture in my eyes.

'Cause I can't be in the grand-stand; But there's one thing that I can't stand—It's simply when the bread sponge falls to rise.

Oh, it makes me feel like weeping, and it makes me feel like creeping In a knot-hole, till the memory of it dies;

But I have to keep on trying, though I feel like sighing, crying—Though I sometimes feel like dying—When the bread sponge falls to rise.

—Farm Journal.

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A Little Christmas Message By Jewell Mayes.

DECEMBER, the 25th—and the exciting day before... Precious occasion, blessed time it is (or should be, wherever there is a home with a mother in it), a glad time, a joyful occasion, a season of happiness and peace...

Christmas eve is the one time when all (even those in a home bereft of the madonna) should fondly and joyfully welcome the link that binds the world to heavenly land... The memory of the Christ-child reminds us in unanswerable tones that but for Christmas eve those who went away were blotted out forever and for all time to come.

The birth, life, death and sacrifice of Jesus Christ, His resurrection and intercession, robs the grave of its mightiest horrors and forms a bridge of hope and faith reviving again the angelic chorus on that first Christmas eve in the land of Bethlehem! To all who personally know the taste of grace and the blessedness of the continued communion of the saddest soul's Christmas, bounteous blessing in the deepest sorrow to all who truly trust in the God of Christmas!

Christmas Eve

MEANWHILE the fog and darkness thickened so that people ran about with faring links, proffering their services to lead before horses in carriages and conduct them on their way... The ancient tower of a church, whose gruff old bell was always peeping slyly down at Scrooge from the corner of a gothic window...

The brightness of the shops, where holly sprigs and berries crackled in the lamp heat of the windows, made pale faces ruddy as they passed... Peouters' and grocers' trades brought a splendid luster to a glorious came a splendid luster to a glorious thing to do. The Lord Mayor... and butlers to keep Christmas as a and butlers to keep Christmas as a and butlers to keep Christmas as a and butlers to keep Christmas as a

A Suggestion for Christmas

By Claudius Clear. WHEN Christmas approaches we all think about presents. Many of us have not very much to give. Many do not care for presents of the ordinary kind... What every one values in a present is its fitness, the kind thought of remembrance which it embodies...

When we die, I suppose most of us will be fortunate to have cherished a few very few things. When the desk is opened the possessions that have perhaps mattered most will be discovered.

hear ices and lives of slavery for generations to come. We call to mind what the Bible teaches about loving our enemies, and we find it hard to think even kindly of the surely German soldier... However, have felt the awfulness of the war long, long ago, and our hearts ache for them in their lonely hours.

So let us pray that, although the Germans are still our enemies, we may deal with them with that freedom, justice and right spirit, for which the British Empire and all other right-thinking nations have always stood.—The Dr.'s Wife."

BOYS AND GIRLS

The Evolution of Santa Claus

IT used to be, quite long ago, Old Santa walked from door to door. He carried his pack upon his back and he went alike to rich and poor; So many asked that he would call there was no end to it, 'twould seem, His presents, therefore, he must haul each Christmas with a reindeer team.

It used to be, quite long ago, Old Santa had his good reindeer. With curling whiff and jingling bells and with the queer sleigh, so quaint and quaint, The world mofed on at such a pace;

NEW YEAR RESOLUTIONS

LAST New Year's day I made a vow, that every day from then 'till now I'd put away my sins, but now I find myself... I had to blow it out in the New Year. Two thousand years my wife has got and she's got me in the New Year. She says she'll never leave me again... I had to blow it out in the New Year. Two thousand years my wife has got and she's got me in the New Year. She says she'll never leave me again...

the dear old man watched from afar, And knew he'd one day lose the race unless he got a motor car.

It used to be, quite long ago, Old Santa thought his car quite swell. But things were changing, so you see Old Santa had to change, as well.

'Twas the best 'twas cast aside— 'twell 'n'er be used by him again, For Santa's very modern now—he travels in an aeroplane.

A Visit to Wide-Awake Land

COME, Freddie, time you were honest-to-godness' cur, or radical relief, for chilblains? I would appreciate it very much if you would put the question to 'em. We are a torious bunch had them last week and truly I thought the lad would take a goodly share of the consolation... 'What are you doing that for?' asked Fred.

"To keep awake," said the little dwarf. "You are in Wide-Awake Land and no one goes to sleep here." Fred sat up in bed and looked about. Was it really Wide-Awake Land? Needed't he ever go to bed again? Oh, I am so glad!" he said.

very unhappy. "What is the matter?" asked Fred of a little boy who was crying hard. "I'm tired and sleepy," sobbed the boy. "Why don't you go to sleep then?" asked Fred. "Humph! You haven't been in bed long ago, have you?" replied the little boy. "No, I've just come; I think it's nice."

"Wait till you get sleepy," said the boy. "I used to think Wide-Awake Land would be nicer now." "Yes," added Fred, "but why can't you go to sleep?" "Because a little man that you see every where carries pins. They prick us when we try to sleep. Oh, I wish I had not come!"

And the boy began to cry again. Fred thought he was very silly and ran off to find some other new comer. "I thought he was very silly and ran off to find some other new comer. Night came at last. Big lamps were hung on the trees and made the place as light as day."

Freddie turned over in his bed, and what did he see? He saw the middle of the room. And he saw a little man that was the shop of Santa's. And the funny people and the many lovely things he saw, there were never forgotten. All that was in his dream was telling his dream to his mamma and one of the family. And each one of them thought and said that it was truly a most wonderful adventure.

"Why, Fred! What is the trouble?" and he looked up. There was mamma and he looked up like Wide-Awake Land, cried Fred. "I will go to sleep when you want me to after this." "I think you are dreaming, Fred," replied mamma. "No, but I am awake now."

"Well, dear, you are in Sleepy Land now. So good night and pleasant dreams."

Freddie turned over in his bed, and what did he see? He saw the middle of the room. And he saw a little man that was the shop of Santa's. And the funny people and the many lovely things he saw, there were never forgotten. All that was in his dream was telling his dream to his mamma and one of the family. And each one of them thought and said that it was truly a most wonderful adventure.

Has Anyone a "Sure Cure" to Offer?

PROBABLY one of the most aggravating ailments which go along with winter weather, is that of chilblains... I would appreciate it very much if you would put the question to 'em. We are a torious bunch had them last week and truly I thought the lad would take a goodly share of the consolation... 'What are you doing that for?' asked Fred.

"Do you suppose any readers of the household department have any honest-to-godness' cur, or radical relief, for chilblains? I would appreciate it very much if you would put the question to 'em. We are a torious bunch had them last week and truly I thought the lad would take a goodly share of the consolation... 'What are you doing that for?' asked Fred.

"To keep awake," said the little dwarf. "You are in Wide-Awake Land and no one goes to sleep here." Fred sat up in bed and looked about. Was it really Wide-Awake Land? Needed't he ever go to bed again? Oh, I am so glad!" he said.

Young Conductors

The Spirit of Not what she feeds the Himsel; Me

It is just so all the young Dairy, "Merry time lies! In the 365 events have fallen, but peace has been a wonderful year nations of it... don't look back for the New Year!

"I'm very sure destination looking back backwards, you naturally keep to place where you live from step year keep our us rejoice with and keep the cheer to rule on too, of the mess of long ago.

Money Net we All make wishing away the wealth of Christmas... think if we many people we Money is not can give cost not other things Life is not a quents altogether; that because we have nothing to not care to be richer than we were known, we for which some the bustle and mas we often things which give If you have a history when so broken and only heal the wound. sympathy to some make friends and lonizing to be some every community stranger. Look you always find after many fine overcast. Turn o sunshine.

We may not sh are without some others would care share our blessing to just when to say it firmly and kin has given up in the end of the spirit of C mean to go down to store, crush news in order presents than yours and then give the fully to your friend tion of receiving it of this we of the Christ Child During Christ Ever since the war, hospitality h was, but with the should begin to hospitality in our churches.



**Young People's Forum**

Conducted by Marion Dallas.

**The Spirit of Christmas**

"NOT what we give, but what we share,  
For the gift without the giver is bare.  
Who gives himself with his aims feeds three;  
Himself, his hungry neighbor, and Me."  
—Lowell.

It is just 365 days since I wished the young people of Farm and Dairy, "Merry Christmas." My, how time flies! It seems but yesterday. In the 365 days just past great events have transpired. Nations have fallen, but Truth and righteousness have triumphed and once again peace has been declared. It has been a wonderful year in the destinies of nations. I trust it has been a year of great blessing to all our readers. It would be in vain to say that all our days have been happy ones, for "into every day some rain must fall." But don't look back! Look ahead and live for the New Year.

I'm very sure if we set out for some destination, we would not keep looking back all the time or walk backwards, would we? No. We naturally keep looking ahead in the place where we are going, and just live from step to step. Let us this year keep our eyes forward. Let us rejoice with those that rejoice, and keep the old-fashioned Christmas cheer to rule our way. Let us think, too, of the message of the Christmas of long ago.

**Money Not Everything in Life.**

We all make ourselves unhappy wishing away down in our hearts for the wealth of King Midas, when we realize Christmas is so near. We think if we could have money, how many people we could make happy. Money is not everything. Because we cannot give costly things, are there not other things which we can give? Life is not a question of dollars and cents altogether. Don't let us think that because we do not possess means we have nothing that others would not care to possess. We are all richer than we think. If the truth were known, we all have possessions, for which some one else craves. In the haste and preparation for Christmas we often forget the little things which give a sweetness to life. If you have a sympathetic nature there never was a time in the world's history when so many hearts were broken and only human sympathy can heal the wound. Give freely of your sympathy to some of these. Can you make friends easily? How many are longing to be some one's friend in every community there is some lonely stranger. Look these up. Perhaps you always find sunshine in your life; many find their sky forever overcast. Turn on the light of your sunshine.

We may not have money, but few are without some good books, which others would care to read. Let us share our blessings. Maybe you know just when to say the right word; say it firmly and kindly. Many a man has given up in despair just for the lack of the encouraging word.

The spirit of Christmas does not mean to go down to the village or town store, crush angrily through the present in order to purchase more goods, and then give these presents grudgingly to your friends, with the expectation of receiving others in return. To share this we miss the true spirit of the Christ Christmas.

During Christmas Holidays, Ever since the beginning of the war, hospitality has been on the wane, but with the war cloud lifted, we should begin to practise the art of hospitality in our homes and our churches.

Here is an idea of a Hospitality Week, which was tried out lately and proved very successful. Letters were sent to all the organizations of the church asking them to cooperate and explaining how it could be done. A prayer meeting was held and the pastor gave a talk on "True Hospitality." The members of the church were asked to go by two's to the call of old members, shut-ins and all strangers near them and take with them a greeting from the church (no financial appeal). The men called on other men at their business, or took lunch together.

Hospitality Centers were arranged for in various parts of the town where one home was opened to the group of members in that vicinity. A different center was visited each evening. No stranger succeeded in getting outside the church on Sunday without being detained by three people at least. At the different centers short musical programmes were given and the members showed a sense of sociability. "A cup of tea," made all feel at home. "Hospitality Week" pays every time. It features and cultivates kindness and goodwill. We can stand a little more of that spirit in many of our churches. Try it anyway this Christmas. Let our soldier laddies feel the warmth of the Christmas spirit when they return to their own home church.

**A Christmas Musicale.**

A Christmas Musicale is a very pleasant form of entertainment for holiday season as all of one's friends may be asked if the house is large enough. As the house will be decorated for the holidays, not much preparation will be necessary. Have the chairs arranged to face the piano. Have a short program of old-fashioned Christmas melodies, songs and readings. For one reading, why not have that piece our mothers used to hear, "Major Jones' Christmas Present." A medley of Christmas songs will be appreciated. Refreshments might also be served.

**Why We Sing Christmas Carols?**

Singing Christmas carols is so old that even the origin of the word is in doubt. Many of the carols date back to the 15th century and they have the characteristics of folk songs and preserve the curious legends. Carol singing flourished during the 16th and 17th centuries and the greatest English writers, Milton and Ben Jonsson among their producers, wrote beautiful carols. A century later, John Wesley wrote the famous, "Hark, How the Wreath Rings," better known now as, "Peace on Earth, Good Will to Men." The earliest printed collection of carols was issued in 1621. It contained the famous "Boar's Head" carol which is still sung every year at Oxford in England. The carol still exists in France and Italy. Wesley wrote the famous, "Hark, How the Wreath Rings," better known now as, "Peace on Earth, Good Will to Men." The earliest printed collection of carols was issued in 1621. It contained the famous "Boar's Head" carol which is still sung every year at Oxford in England. The carol still exists in France and Italy. Wesley wrote the famous, "Hark, How the Wreath Rings," better known now as, "Peace on Earth, Good Will to Men." Surely this year after our wonderful record of victories, the old refrain "Peace on Earth Good Will to Men" will be sung in many a rural community as never before.

**Keep Lid on Sugar Bowl**

Canada's sugar is husbanded carefully and will be enough. Restrictions have been enforced on manufacturers, candy makers, public eating places and other large users, but the Food Board again urges a more frugal use in the home. It has set a limit of two pounds per person a month, which works out at about six good-sized spoonfuls a day. Such a ration would check the second spoonful that is taken up at least one-sixth of Canada's supply. Corn syrup and glucose should replace what it is necessary to save.—Canada Food Board.

There is more heat in hickory wood than in any other kind. To fry fish properly they should be put into boiling fat.

**Sifel's Indigo Cloth**  
Standard for over 75 years

These OVERALLS will stand the roughest kind of wear and won't fade in washing. They're made of

Sifel's Indigo Cloth for men, and Miss Sifel Indigo Cloth for women.

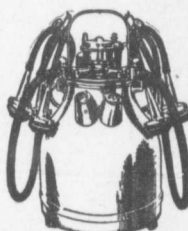
Remember, it's the CLOTH is your overalls that gets the wear.

Ask for overalls made of Sifel's Indigo and look for the BOOT back of the cloth to be the genuine.

Your dealer can supply you. We are makers of cloth only.

**I. L. STIFEL & SONS**  
Indigo Dyers & Finiers  
Whiting, W. Va.  
280 Church St., New York

**Will Your Herd Be For Sale ?**



**Burrell B-L-K Milker**

**GOOD FOR THE HERD**

**D. DERBYSHIRE CO., LTD., Brockville, Ont.**

If you milk by hand the chances are you will want to sell your herd before the year is out.

Dairymen have written that they had intended selling their herds because of labor trouble and low profits in hand-milking; but that they started using Burrell Milkers as a last resort and have since increased their herds.

If you request it we will send these dairymen's statements with the illustrated booklet showing how Burrell Milkers increase milk profits, reduce dairy troubles and do this year after year.

**New COAL OIL LIGHT FREE**  
**BEATS ELECTRIC OR GASOLINE**

Here's your opportunity to get the wonderful new **Aladdin Coal Oil** Mantle Light FREE. Write quick for particulars. This great free offer will withdraw as soon as 100,000 lanterns are mailed. In your neighborhood you only need show the Aladdin to a few friends and neighbors. They will want one. We give you your first lantern free. Take your little time, no investment. Come tonight to try the Aladdin Light.

**Burns 70 Hours on One Gallon**

Common coal oil, or kerosene, or gas, simply, on burning, gives no protection. Tests by Government and third party testing authorities show that the Aladdin burns three times as long as the best kerosene lamp. **Won Gold Medal at Panama Exposition.** Over 200,000 people already enjoying the powerful, white, steady, brilliant, clear, pleasant to the eye, and safe light. **Guaranteed.** And think of **Seven**—seven times as much light as a candle. **Get it now!** Write for your free trial offer and learn how to get one free. **AGENTS MANTLE LAMP COMPANY, 217 Adelaide Avenue, MONTREAL.**

Local Coal Oil Mantle Lamp Store in the District

**TWICE THE LIGHT ON HALF THE OIL**

**You'll Find the Advertisers in FARM AND DAIRY** are reliable. They are where you see the Ad. When writing them don't forget to tell them you saw the Ad. in FARM AND DAIRY.

## When The Factory Closes

In a few weeks scores of the Cheese and Butter Factories over Ontario and Quebec will be closing for the season. At that time hundreds of the patrons of these will desire to form new connections for the shipping of their milk or cream. The following list of firms are in a position to handle large quantities. We suggest that you patronize them.

## MILK WANTED

The Orillia Dairy will pay Toronto prices, supply cans, also pay express

R. T. HILL

ORILLIA, ONT.

## CREAM WANTED

Ship yours to us, as we must have it to supply our well-established trade with good quality butter. Therefore, we are prepared to pay you a higher price than any other creamery. We furnish cans and pay express charges. References any bank.

MUTUAL DAIRY & CREAMERY CO.

743 King St. W. Toronto, Ont.

## DAIRYMEN

We solicit shipments of Churning Cream from all points by Canadian Northern, Dominion or Canadian Express.

We supply cans, pay Express Charges and pay highest prices by Money Order every two weeks. Our books show a large increase yearly in patronage.

Write Us—It will pay you.

Cobourg City Dairy - CREAMERY SEPT. - COBOURG, Ont.

## 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.

## Canada Kept Britain in Butter Two Months

THE dairy industry throughout Canada will rejoice to learn, says a Food Board statement, that its patriotic service, rendered in the recent supply of butter for export to Great Britain to meet a pressing emergency there, has met with the most cordial appreciation from the British authorities and the people generally.

It is entirely due to Canada that the British butter ration, small though it was, was maintained in the last two months of war. The information is conveyed in a cablegram addressed to the Canada Food Board from Dr. James W. Robertson, of Ottawa, who is now in London.

It reads:

"The following minute was passed by the Imports Board of the British Ministry of Food: 'The Chairman expressed the board's appreciation of the way in which Canada and the Canada Food Board had saved the butter situation in the United Kingdom by requisitioning butter in the Dominion. This was strongly endorsed by Mr. Macdonell, Chairman of the section, on behalf of that section. He stated that it was entirely due to Canada that the weekly

one-ounce ration of butter per person had been maintained.'

The actual quantity of butter from the Dominion made available this fall for shipment under the special measures taken to meet the unexpected shortage that developed in Great Britain through having to ship troops across the Atlantic, was over six and a half million pounds. Most of this has already gone forward. The British butter ration was reduced to one ounce on October 20. So far, though almost a month has elapsed since the armistice was signed, there is no indication that British food regulations have been modified, and rigid rations in all foods still remain in force.

## Pasteurization and Foreign Markets

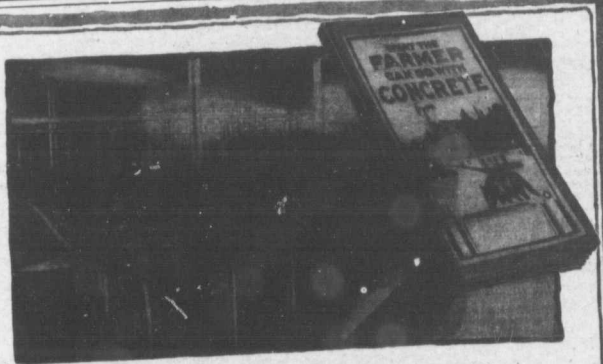
PASTERIZATION is now common in Manitoba, but not all of the creameries are yet practising creamization. The subject was thoroughly discussed at the last convention of the Manitoba Dairyman's Association. Mr. Ivo Donald, of the Russell Creamery, made a strong point for pasteurization when he talked of the coming competition for foreign markets. He said:

"When we take into consideration the fact that we were an importing province only a few years ago, and now an exporting one, then it is up to us to find out where this butter is going to and the competition that it will meet on these outside markets. We find that some of our make is finding its way to the British Columbia market, and is there being placed alongside the make of Alberta and Saskatchewan, and I understand that our sister provinces are pasteurizing the most of their make. If we hope to keep our make on the same plane as theirs, then we must pasteurize ours to give it the same keeping qualities. We must do more; we must educate our patrons to more improved methods of caring for their cream.

"We also find that some of our make is going to the western market, and from there has been shipped to the British market, and is being placed alongside the Eastern make, the make from New Zealand, and as soon as the war is over we will again find the world-famous Danish butter on the British market.

"To understand what it means to come into competition with the butter made in some of these older countries, where dairying is the staple means of farming, we must study under what conditions their butter is produced. We find that the climate is more suitable for the growing of the succulent feeds required by dairy cows, and that the growing season is much longer and consequently the cows are a shorter time stable feed. Then the sanitary laws that are in force are such that all dairy buildings have to come up to a certain standard of excellence, and the actual work of the farm is subject to sanitary inspection. We have no such laws here, and we cannot expect to have them for a long time to come, but we can at least pasteurize and make our butter a safe article of food and educate our patrons to the necessity of taking better care of their milk and cream.

"The British market is ours at the present time, and we ought to see that we use the best of care, as far as the manipulation in our creameries is concerned, to insure that nothing gets to this market that will have a detrimental effect on the sale of our Manitoba butter, and I think that the provincial dairy staff are doing their part in watching this part of the business, but they cannot do anything in the way of improving the butter after it is made and sold—they cannot prevent a firm from shipping our butter to the British market as long as it conforms to the existing laws."



## Increase Your Dairy Profits

HEALTHY cows mean good flow of milk—and you know how important it is to the health of the animals that their housing shall be warm, dry and sanitary. Concrete is the only material that fully answers these requirements. Concrete is the only material that affords proper sanitation and cleanliness.

Think, too, of the ease with which a concrete floor can be cleaned—the labor it will save.

In our book, "What the Farmer can do with Concrete," a section is devoted to floors of Concrete.

Such improvements of Concrete as you can easily make on your farm will help materially to improve the value of your property. Moreover, you will be able to "work" your farm with less effort and greater profit when your wooden buildings have given place to concrete. Get this free book and start in now to build the things of concrete which are so fully and clearly described in it.

CANADA CEMENT COMPANY LIMITED

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Winnipeg, Calgary.

CANADA CEMENT  
CONCRETE  
FOR PERMANENCE

"Canada" Cement can be secured from over 1000 dealers in nearly every city, town and village in Canada. If you cannot locate a convenient Dealer, write our nearest Sales Office.

Churning

UNDER usual conditions, the fat will be hard as readily as in the summer. The churn is stirred slightly lower at least this short best results in the winter rather than in the best guide to the temperature is in the churn. Sorenson, in a says:

"The correct is that the correct midway between the and the fat flake, and will be 35 to 45 min. It be so regulated. cream breaks up all the granules draw the butter be less than three minutes. When three minutes is the temperature, at more than eight the temperature was thin for ch prevent the big fine-shot granules churn this er higher than rich will, of course, o time than a lar somewhat low. When the c low a temperatu sary to continue from ten to th cream breaks, granules large milk can be dra THE FRICTION of the other and also and the sides acquires a sal and often holds moisture. This very difficult to being so intin fat.

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COOPERATIVE farmers advocate the construction of a whom an editor was chatting re many years," stated that the creameries should farmers. With the factories will better equipped. courage to m own their facto will allow the compensation for to that cooperat loyal to their c olden days an along, put up a would get the l for loss and gra factories the i In debt every tary and inspect produced, these that they could was hard for the situation a monetary intere ing end of the own their fact the need, increa and make all the sary. The proo that they have tively owned fa the privately o

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Churning Temperatures

UNDER usual conditions it will be found necessary to raise churning temperature slightly when it runs into colder weather. The butter-fat will be harder and will not churn as readily as the softer fats of spring and summer. If the cream is pasteurized the churning temperature will be slightly lower than with raw cream; at least this should be the case for the best results. If the cream is pasteurized by the vat method.

Churning temperatures run from 45 degrees to 54 degrees, according to circumstances, and during the fall and winter they will usually average over rather than under 50 degrees F. The best guide to the proper churning temperature is in the length of time it takes to churn. On this point James Sorenson, in a Minnesota bulletin, says:

"The correct churning temperature is that at which the butter will come midway between the hard-soft granules and the soft, slushy, irregular flake, and will run at approximately 35 to 45 min. The temperature should be so regulated that from the time the cream breaks away from the glass until the granules are large enough to draw the buttermilk readily will not be less than three nor more than eight minutes. When it takes less than three minutes it is an indication that the cream was churned at too high a temperature, and when it requires more than eight minutes the churning temperature was too low, or the cream was thin for churning. In order to prevent the butter from coming in fine-soft granules, it is necessary to churn thin cream several degrees higher than rich cream. A small load will, of course, churn in somewhat less time than a large one, and usually at a somewhat lower temperature.

"When this cream is churned at too low a temperature, it is usually necessary to continue churning processes from ten to thirty minutes after the cream breaks, in order to have the granules large enough so that buttermilk can be drained. Due to prolonged friction of the granules against each other and also against the buttermilk and the sides of the churn, the fat acquires a salty or tallowy texture and often holds 20 per cent or more moisture. This surplus moisture is very difficult to work out on account of being so intimately mixed with the fat."

Cooperative Ownership of Factories

COOPERATIVE ownership of cheese factories has strong advocates in one of the dairy instructors of Eastern Ontario with whom an editor of Farm and Dairy was chatting recently. "It is a good ten years," said he, "since I first stated that the cheese factories and creameries should be owned by the farmers. With cooperative ownership the factories will be a little larger and better equipped. Farmers will encourage too much competition if they own their factories and this in turn will allow the maker a little greater compensation for making. I believe that the cooperative patrons are more loyal to their own factories. In the olden days any maker could come along, put up a cheap factory and he would get the business if he worked the best and cheapest. The prices of the factories would run down and get more in debt every year. When the sanitary and inspection legislation was introduced, these makers were so poor that they could not improve. It was hard for farmers to appreciate the situation as they had no direct monetary interest in the manufacturing side of the business. If farmers owned their factories, as they should, the need, increase the size of factories and make all the improvements necessary. The proof of my contention is that they have done it. The cooperatively owned factories are bigger than the privately owned factories and, as

a rule, they have the best makers because they can pay more."

"Please don't misunderstand me," our instructor friend hastened to add. "I am not knocking private enterprise. What I believe is that the dairy business belongs to the farmers of this country. Dairy manufacturing is not a safe investment for private enterprise, particularly near railways and cities where milk and cream may be shipped. If the farmers' markets open up patrons will leave the factories and ship their products. If they owned their factories, they would be more loyal and at the same time the men who benefitted by the higher price realized elsewhere would be also the ones to lose if the cheese factory had to close its doors. At the present time, too, we have the spectacle of small factories forced to make both cheese and butter in order to hold business when they have not sufficient turnover to justify more than one piece of equipment. This is one of the hardships entailed by private enterprise in a business that should be cooperative."

Quebec Milkmen Losing Money

A RECENT press despatch from Quebec reads as follows: "At the first meeting of the Fair Price Committee, appointed here to look into the matter, the cost of milk from 12 to 14 cents a quart, a statement was presented by the milkmen. A number of milkmen were heard under oath and testified that at the present time, even with the price of milk at 14 cents a quart, they are losing \$125 a day, and that to meet their expenses and make a small profit they would have to sell milk at more than 23 cents a quart or at about 28 cents. They affirmed that the daily cost of operating a herd of 20 cows was \$22.28, while the daily revenue from the production of these cows was only \$19.74. It is likely that experts will be appointed to look into these figures."

Storing the Tractor

THE high cost of tractors makes it advisable to store them for the winter with care. To be sure all water is drained from the cooling system and all fuel from the fuel tanks. The last time the tractor is run, use a heavy oil so as to coat the cylinders and pistons—a little oil might be poured through the priming cocks. This will prevent rusting of the cylinders and pistons. Where the exhaust pipe is vertical, with the exhaust end up, cover to keep water out. Clean grease and dirt off engine and all moving parts, and inspect whole tractor for breaks. All new parts should be ordered at once on account of the difficulty in obtaining them. This applies to all machinery.

New Live Stock Commissioner

THE Federal Live Stock Branch, Ottawa, has been fortunate in securing the services of Mr. W. R. Hook as Assistant Live Stock Commissioner. Mr. Hook has, in the past, held some of the most prominent public positions. He resigns the office of Deputy Minister of Agriculture for New Brunswick to go to the Live Stock Branch. He is a real live stock man and has had a very valuable experience, which the Department of Agriculture will be able to use to great advantage.

Dog's Wonderful Pie.

"What has become of the greyhound you had?" "Killed himself." "Really?" "Yes, tried to catch a fly on the small of his back and miscalculated. Bit himself in two."

IN UNION THERE IS STRENGTH

The Proposed Farmers' Dairy Company

THE proposal outlined in last week's issue of Farm and Dairy to form a great cooperative dairy company among the dairy farmers of Ontario, to take over and operate many of the cheese factories and creameries in the province, is arousing much interest among the dairy farmers and dairymen of the province. Already it has been discussed at a number of local meetings where indications have not been wanting that the suggestion is likely to meet with favor among many dairy farmers. Not long since it was discussed at a meeting of the Western Farmers' Club at which officers were present from several adjacent farmers' clubs. The cheesemaker of the local factory, Mr. Foxler, was also in attendance. After quite a little discussion a show of hands was taken and it was found that the meeting was unanimously in favor of the proposal.

In Saskatchewan the provincial government has been very active in its treatment, both of the Saskatchewan Cooperative Elevator Company Ltd. and of the Saskatchewan Cooperative Creameries Ltd. The government has not made any direct loan to either company, but has made them both substantial loans. In the case of new creameries that it is desired by the company to erect, the government has been consulted first. If it approves of the proposal it advances 75 per cent of the cost of erecting the creamery and takes a mortgage on the property at a low rate of interest. The same arrangement is being made by farmers here who are organizing to do this advance in 20 annual payments. A similar arrangement has been in effect with the Saskatchewan Elevator Company in connection with the erection of a new elevator. Up to date both the elevator company and the creamery company have met every payment to the government as they have come due.

Operating Funds. In the case of the Saskatchewan Cooperative Creameries, the government also makes a loan to the company to cover its operating expenses, this loan amounting to several hundred thousand dollars. The company, in turn gives as security the products it handles and such other securities as the government requires. Thus the assistance the government has given the companies has been loans at reasonable rates of interest, these loans being guaranteed by adequate security. In Ontario, if it is decided to proceed with the organization of such a company, somewhat similar assistance will probably be asked for from the Ontario government.

Better Organization Needed. A striking example of the lack of the dairy farmers of Ontario are in their present business organization, was shown last winter when the dairymen desired to induce the government to appoint a dairy farmer to the Montreal Cheese Commission. The situation was only met by the calling of a big convention at Ottawa. This convention was composed of representatives of dairymen and of the organization in its mission. But few of these men knew each other and it was generally recognized that the dairymen needed a strong, permanent, central organization of some kind. Were there to be established in Ontario such a dairy company as is proposed, representing hundreds of cheese factories and possibly creameries, it would be able to speak with authoritative voice to the dairy farmers of the province and to watch their interests in matter of government legislation in the way no organization existing at present in Ontario is able to do.

and Dominion governments make it a point to discuss important matters relating to the grain trade with the representatives of the farmers' companies before definite action in regard to them is taken. One of the leading government dairy officials in Canada when asked recently to express his views in regard to the proposed dairy company, replied that he had often wondered what the next forward move in the dairy industry in Ontario would be, and had thought that it would probably be in the line of forming just such a big commercial company as is now proposed. Already a well known proprietor of some cheese factories in Western Ontario has written Farm and Dairy indicating his willingness to negotiate with the proposed company and the farmers in his district for the purchase of his factories. We have heard also of some joint-stock factories that are favorable to the proposal. The matter was also discussed at the annual convention of the United Farmers of Ontario.

Stock Shipping in Peterboro

INTEREST in the cooperative shipping of live stock is growing apace in Peterboro County. About a month ago Mr. Hoover, who so successfully organized the live stock shipping of the Milno Club several years ago, addressed a meeting at Keene explaining the ins and outs of cooperative live stock shipping. As a result of this meeting another meeting was held last week at Keene, composed of three representatives of the Peterboro Line Club, three from Mathers' Corners Club and three from Villiers, where a club is to be organized, who formed themselves into a Live Stock Shipping Board of U.F.O. from Keene. They engaged a salesman and arranged to cover all the territory from Keene to Campbellford, inclusive, along the Grand Trunk railway. Mr. Samuel Armstrong, who is one of the board, informs as that they are in a position to thoroughly organize in the near future. They will start live stock shipments at Keene next week and from there the movement will be expanded to other shipping points along the line.

Additional Resolutions

IN addition to the resolutions reported in last week's issue of Farm and Dairy, the following were approved by the Council of Agriculture at Wainfleet: Moved by Thos. Sales, seconded by R. W. E. Burnaby, that this Council please take on record as opposed to the Government of Canada the following in an agreement with any class of immigrants relieving them from any of the necessary duties of citizenship. \* \* \* Moved by J. L. Brown, seconded by G. F. Chitman, that this Council recognize the great importance of such an educational system as will train the rising generation in the highest ideal of citizenship, and that we cooperate with those who are promoting a national congress on education. \* \* \* Moved by C. Rice-Jones, seconded by J. Paynter, that this Council approve strongly of the work done by the laboratory at Wainfleet and urge upon the Dominion Government an elaboration and extension of the system of laboratories for making accurate milling and baking tests of Canadian wheat. It is urged to more nearly the intrinsic value of the wheat upon the market. \* \* \* Moved by G. F. Chitman, seconded by Rice Shepard, that this Council



Ayrshire News

GILBERT McMILLAN'S AYRSHIRES.

THE province of Quebec, and particularly the district south of the St. Lawrence river, produced more real choice Ayrshire cows, outside of its own district, than any other province in America...

The National Dairy Show at Columbus, Ohio, is recognized as the best dairy show in America, if not for the whole world. It is where the winners of the state, provincial and other big fairs, first come together to be judged...

Mr. McMillan had had nine head at the National Dairy Show, and his sire head was first on his senior side. He also won an American record in the Central Canada Exhibition at Ottawa...

Possibly the greatest win for the Quebec herds was in the mature cow class where McMillan's entry, Maple Leaf, was in third place...

It is a question whether in our Specimen Breeders' number of December 15th, there will be a wheeler who will be so successful as the one who was bred here which is worth following...

MR. NESS' AYRSHIRES.

It is a question whether in our Specimen Breeders' number of December 15th, there will be a wheeler who will be so successful as the one who was bred here which is worth following...

It is many years since the name of "Ness" has been familiar in live stock circles, and because of the success of the very finest quality, and highest production among Ayrshires...

Never in the show ring, he did not allow with the most superior pairs, that of production. In his breeding operations, he has made it his business to find cows in the line that must be a good, profitable producer...

Mr. Ness has been careful in the selection of his herd sire; but he is sure that they are not only show animals but that they are the heaviest producing animals available...

Reviews of Farm and Dairy will contain Mr. Ness' list of his prize winners for the home market through his Ayrshire Farmers, not only through his own sales but through the general success with dairy farmers.

THE POINTS OF AN AYRSHIRE COW.

THE points of the Ayrshire cow are briefly and accurately described in the following lines, which were chronicled in an article published in the Ayrshire Agricultural Association, New York.

Would you know how to judge good Ayrshire cows? Attend to the season you'll hear from me now. Her head should be short, and her muzzle good sized. Her nose should be fine between muzzle and eyes...

And when viewed from the side they look just as if they were in the saddle. As much of the udder as 'tween them is retained. Her legs should be short, and the bones fine and close together...

THE RIVERS' PIONEER HERD

A REPRESENTATIVE of Farm and Dairy recently paid a visit to the home of Mr. Washburn, Rivers of Holstein, Mr. Rivers is doing with his specialty of young work, but while doing so, he has not neglected his older stock...



REGISTERED HOLSTEINS

FOR SALE, Our Herd Sire King of the Tensons No. 29979. His Dam and Sire's Dam average Milk 1 day 19.48, Butter 2 days 23.14, Milk 69.30, Butter 30 days 114.75...

LYNN RIVER STOCK FARM

TYPEWRITTEN PEDIGREES 4 GENERATIONS 1 copy ..... \$1.00 (Printer's copy for sale catalogue) 5 copies ..... 1.18 5 copies ..... 1.30

LUMP JAW

For those who are interested in the pedigree of their cows, we have the following information: This is the only matter left to be done in the pedigree of their cows...

Peck, Kerr & McDillery

Barristers, Solicitors, etc. 415 Water St., Peterborough E. A. Peck, F. D. Kerr, V. J. McDillery

STORM WINDOWS FOR SALE.—Get our price list showing cost of windows glazed complete, any size. Holiday Company, Box 61, Hamilton.

MONEY TO LEND. \$500.00 to lend on farms. Reynolds, 77 Victoria St., Toronto.

270 Acres \$4900, with 12 Cows, Pr. Horses and Bull, 3 heifers, steers, poultry, 60 tons grain, long leg machinery, tools, wagon, dry cows, etc. borders enclosed, 5 1/2 miles town. Productive dark land, tractor-worked fields, brook-watered pasture, lake, estimated 150,000 timber, 1,000 cords hardwood, 2000 cords maple, 200 apples, other fruit trees: 12-room house, 2 barns, 20 x 60, 40 x 60, all new. Call on owner or write: \$4,900 takes all, easy terms. See page 1 Street's Catalogue, opp. Free.

E. A. STROUT FARM, DEPT. 9, 180 Nassau St., New York.

Mr. Rivers has through with his sire and is competing for the Ontario Country Breeders' Sale at Woodstock. He is a fine specimen of good substance and Mr. Rivers' animal of good appointment if he does not go into good hands. Besides this color, Mr. Rivers is containing one of his daughters, a yearling, in 15 lb. daughter of the former herd sire, and a few more...

Stopping an advertisement to save money is like stopping a clock to save time.

Advertising is an insurance policy against forgetfulness — it compels people to think of you







## The Problem of Winter Feeding

You are now facing the problem of winter feeding, and it is one worthy of great consideration, if you value the health of your stock and hope to keep them in proper condition until the spring.

Once the animals are tied up for the winter they are immediately deprived of exercise, green grass and various herbs, which they have been accustomed to during the spring, summer and fall while on the free range—and which act as natural tonics to the digestive organs, thus helping the animals to assimilate the food they eat. Stall feeding is entirely different, and if not properly carried out will uncondition any stock. Dry or winter feed even of the best, if not mixed with ingredients to promote digestion, soon causes stomach troubles, and your animals cease to thrive, with the result that the spring finds your herds and your profits in grave danger of being depleted. Don't risk having unfit stock.

# FEED INTERNATIONAL STOCK FOOD TONIC

TO ALL YOUR ANIMALS DURING THE WINTER

### For Your Horses.

Keeps your horses thrifty and healthy with nice, glossy coats. If you have a horse that is hide-bound, rough, off its feed, or in a run-down condition, use INTERNATIONAL STOCK FOOD TONIC. The remarkably quick results obtained will be evident in the improved all-round condition and appearance of the animal.

International Stock Food Tonic is just the thing for young Stock. It helps to promote rapid growth and makes all stock more productive. The best recommendation for International Stock Food Tonic is the number of farmers, ranchers and stockmen who use it. From all parts of the country come unsolicited testimonials, telling us about the great results that have been accomplished by the use of this tonic.

### For Your Cows.

INTERNATIONAL STOCK FOOD TONIC tones up the sluggish digestive organs of your milch cows, assisting them to extract all the milk-producing substances from the food. The cows thus give a larger flow of richer milk.

### For Your Hogs.

INTERNATIONAL STOCK FOOD TONIC increases your hog profits by giving quick growth and by keeping hogs healthy. It is not what a hog eats but what is digested and assimilated that means rapid growth and profitable feeding.

### READ THESE LETTERS:

Chauvinville, Ont., May 16th.  
Some people asked, the other day—in fact, people are asking me every day—what has made my horses' coats so nice and glossy. I think once you feed a horse with INTERNATIONAL STOCK FOOD TONIC, and get him in good shape for the Spring work, he will stay fat and have a better coat. No after using the INTERNATIONAL STOCK FOOD TONIC.  
(Signed) Edwin I. Holman.

Calumet Island, Ont.  
I have been using your INTERNATIONAL STOCK FOOD TONIC on my horses, cattle and hogs all Winter. It's certainly a great blood purifier; my stock is in as good condition as they would be in the Summer months. I would not want to be without INTERNATIONAL STOCK FOOD TONIC again.  
(Signed) W. J. Dismore.

Terra Cotta, Ont., Oct. 31st.  
I have used your INTERNATIONAL STOCK FOOD TONIC for fifteen years and am using it to-day. It expresses my opinion better than words, what I think of INTERNATIONAL STOCK FOOD TONIC. I think it is the best conditioner for horses in the world. And my experience leads me to believe it makes your horses disease proof.  
(Signed) LOREN L. PLANT.

April 12th, Listowel, Ont.  
I am a farmer and stock-raiser, and I must say this: There is no better animal tonic than your INTERNATIONAL STOCK FOOD TONIC to keep stock in good shape. I use it all the time and if all farmers would do likewise, they would do well.  
(Signed) I. J. Hendon.

Palmy, Ont., R.R. No. 3.  
Kindly ship me at once by freight twelve pairs of INTERNATIONAL STOCK FOOD TONIC. You will note this is the second twelve-pail order I have bought this season. I have used a lot of INTERNATIONAL STOCK FOOD TONIC, as you will see by your records, and find it use very profitable to me.  
(Signed) J. H. TURNER.

Arsenoid, Sask.  
I have used INTERNATIONAL STOCK FOOD TONIC for five years now and it is a FINE PREPARATION for all animals, especially for over-worked horses to build them up again, besides which, it is reasonable to purchase.  
(Signed) H. CORREAS.

South Melfort, Sask., Dec. 6th.  
I have been using your INTERNATIONAL STOCK FOOD TONIC for over seven years, and it is just as good as ever, and it is.  
(Signed) F. KENNEDY.

Waterville, Que.  
I have always found your STOCK FOOD to be a valuable TONIC on my farm, and I have now used it for the past five years and have not had a sick horse or cow for one single day in that time. My six cows are so fat and healthy now as at any time in the Summer and are always ready for their feed, and am certain they are giving more milk than other flocks—those who don't feed INTERNATIONAL STOCK FOOD TONIC, as it keeps the animals healthy and in good shape, whether horses or cows or pigs.  
(Signed) W. J. H. DAV.

That International Stock Food Tonic is a winner cannot be doubted. The best way, however, to convince yourself is to try it. For sale by dealers everywhere in convenient-sized packages. Sixty cents, \$1.20, \$1.75, or 25-pound pails for \$3.75 each. The cost to use is next to nothing—3 feeds for 1 cent.

## International Stock Food Co., Ltd.

Toronto, Canada

Also manufacturers and sole proprietors of International Poultry Food Tonic, Groat Calf Meal, International Louse Killer, Silver Fine Healing Oil, International Worm Powder, Dan Patch White Liniment, International Calcic Remedy, International Heave Remedy, International Distemper Remedy, etc.



# INTERNATIONAL

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