

# Efficient Farming

## NOTES ON EXPORT CATTLE SHIPMENTS.

During the past three years the Dominion Experimental Farms have been making experimental shipments of store and fat cattle and chilled beef to Great Britain.

In a shipment made in May, 1924, consisting of 140 head of store cattle of different ages and weights, from the Experimental Stations at Lethbridge, Alta., Scott and Rosthern, Sask., and Lennoxville, Que., some interesting facts are shown.

Total cost of shipment to Manchester, per steer:

From Lethbridge	\$42.60
From Scott	39.96
From Rosthern	42.13
From Lennoxville	28.95
Shrinkage in rail and ocean shipment	

Fat or short keep (average 1,309 lbs.) from Lethbridge, Alta., shrunk 7.5 per cent.

Steers not so well finished (average 1,255 lbs.) from the same Farm, lost at the rate of 5.8 per cent.

Cattle from Scott, Sask., shrunk 8.1 per cent; in the case of yearlings (average 990 lbs.), and with two-year-olds (average 1,268 lbs.), 8.8 per cent. While 1,148 lb. Angus feeders from Rosthern lost 7.7 per cent, and 1,322 lb. butcher steers shrunk 9.0 per cent.

### DEDUCTIONS.

1. It was apparent that care in rail shipping from the West had much to do with minimizing shrink. Overcrowding is responsible for heavy loss and cattle arrive at port of loading in a more or less exhausted, shrunken condition. Several hours rest is advisable at feeding points where the exercise and opportunity to relax is possibly more important than the feeding.

2. Fat cattle lose more than those in a less forward condition.

3. Ocean shrinkage is comparatively light (under fair conditions as to weather and attendance).

### WHICH PAYS BETTER—SALE IN CANADA OR EXPORT?

It is frequently stated that it pays just as well to sell in Canada as to export. In a general way this is true. It should be remembered distinctly, however, that for the classes of cattle required by Great Britain, the export trade has established or stabilized Canadian prices. In other words the British market has pulled up Canadian prices to the same level, costs of shipping considered. This has been proven in two shipments made by the Dominion Experimental Farms during this season. In a lot sent from Maritime Farms local prices were increased through the fact that steers were exported from the locality. In shipments from Saskatchewan and Alberta maximum appraised values at point of shipment, were, with the exception of one lot of yearlings, increased by from 2 to 52 cents per cwt. Quebec cattle of rather indifferent quality on export exactly equalled prices received at the Farm for cattle of like quality. If the price of cattle in Canada is equal to net export prices, this benefit is directly due to the removal of the embargo.

### BRIEF DEDUCTIONS FROM THIS EXPERIMENT.

1. Uniformity of groups is a most important factor in successful sale. The man who can breed or buy for export steers of uniform color gets the proverbial benefit of the buyers' first impressions. The low set, blocky type of steer gets the feeder's eye.

2. The British feeder likes best a bullock that is young enough and spare enough to grow and fatten at the same time. The yearling or two-

year-old steer that has been wintered economically on home grown feeds and with cheap housing, and that is shipped off grass in the fall, is a good proposition for both buyer and seller. For the former he grows and fattens, for the latter he represents a sale of a strictly home produced article.

3. The lighter spring shipped feeder steer may go forward from February to April, to finish off grass as fat in August and September. During April, May and June the "short keeps" or cattle forward in condition will find a market provided they will develop not more than an 800-pound carcass when subject to a "short keep" following period. It must be remembered that the short keep, fat, or choice butcher steer, when exported, represents a heavier investment (greater feed cost) to the shipper and is frequently a riskier proposition. Shipping the feeder steer that has been developed largely on grass and home grown roughage with little concentrates, involves minimum risk on the part of the shipper and allows the British feeder to do the gambling.

4. The time of shipment, therefore, has much to do with the weight and age of steer to ship. The young lightweight steer, if well selected, is very popular, as indicated by this experiment. Unless prices are markedly advanced for the 900-pound steer, however, the economy of shipping him is doubtful. Speaking generally, the butcher or retail type of steer commands the highest price when fat. The British dealers like the handy weight butcher steer, just as in Canada. Shippers would do well, therefore, in selecting steers that would land in England weighing not greatly in excess of 1,250 pounds.

5. Horned cattle are at a distinct disadvantage.

6. Branding on the ribs is decidedly objectionable.

7. Finally, it may once more be pointed out that Great Britain need not be considered as a profitable outlet for the common butcher steer, of which there is too great a percentage on our markets. Breeding herds of beef cattle in Canada cannot be allowed to deteriorate, if we are to cater to and make a name for ourselves on the British market.

Further particulars regarding these shipments may be obtained from the Central Experimental Farm, Ottawa.

### Fertilizing for Potatoes.

Two experiments out of three that are to be conducted with complete fertilizers for the potato crop at Nappan, N.S., Experimental Farm, have shown:

First—That commercial fertilizer has a distinct value in potato production. The average yield from all plots receiving an application of fertilizer was 247.6 bushels, while the average of all unfertilized check plots was 107.5 bushels.

Second—That so far as the authorities at the Farm can judge from two years' results, a 3-8-6 mixture of 4-8-10 or 4-8-8 mixture under average conditions will give good results.

Third—That under average conditions the most economical quantity to use is from 1,000 to 1,200 pounds per acre.

This experiment is being continued this year. Another, which is in its second year, is with basic slag. The Superintendent, Mr. W. W. Baird, in his report for 1923, states that the average yield of grain from all of the slag plots was 55.48 bushels against 52.56 bushels from the check plots. More definite results are expected in the second and third year.

Where the clouds lift, showing blue sky after a long storm, there the wind will be on the morrow.



Who says apples? The doctors will be out of a job if the apple-eating habit takes hold of every gang of girls like it did this one.

# What Makes a Home

BY BONABETH G. BRICKELL.

When I was a bride, with more dreams and hopes than could befall a person outside of a fairy tale, I read a perfectly written, soulless article, which told how farm women could make rural houses into homes. It dealt carefully with every modern convenience that was known to lighten women's labors.

The years have come and gone, and I have added as many of these conveniences as we have had profitable years—about two out of eight, I believe. But have I given up my idea of a "home" home because I do not have all the things that writer would have me believe absolutely necessary? Indeed, no! I will try all the harder, in spite of the handicaps. I am helping to establish a real home, and I have decided that a house can be a home, though it lack many things, if there is an ever-present, home-making spirit. Edgar Guest, in a recent article says that "It takes a heap of loving to make a house a home." Yes, if it is the right kind of living. It need not be all joyful, but there must be the spirit of love, patience and sympathy.

### A REAL PARTNERSHIP.

The woman on the farm has a chance to lead in the most wonderful family companionship there is. It is the very nature of the farming business, a wife must be a real partner, if the enterprise is to succeed. Her interest is usually more vital than is shown in a husband's business in a city office building many blocks away. With their mother and father acting as partners, the children catch the spirit, and the family is co-operating, not because of any teaching, but because of their very nature.

Co-operation also applies to play, and here again, parents must be wise and patient. If you plan to enrich home life by enjoying leisure times together, allow the children to share in deciding what is enjoyable. The changing years bring a change in taste.

THINGS THE CHILDREN LIKE.

Recently, at a small resort nearby, our children found nothing so interesting as the efforts of some boys and girls, with inflated inner tubes about their chests, trying to learn to swim. The performance did not appeal to grown folks, but I realized that twenty years ago, I would have found it quite an attraction, so we watched them for a long time.

Our talking-machine has helped to make many enjoyable evenings for us all. The money which paid for it might have been used towards installing a water system, but we can help each other carry water, while I can not sing "A Perfect Day" as does Alma Gluck, nor can my husband play "Souvenir" as does Mischa Elman. Long cold winter evenings mean staying at home for rural folks, and music makes the evenings pleasanter. Even in buying records, the children should be considered, and if "Turkey in the Straw" delights them, there is no harm in owning this rollicking record.

Many parents object to paying children for their services, contending that they should learn to do their share, without being hired. But I am not so sure, for after all, we work for pay, or we soon quit work, and pay is usually money, which we exchange for pleasures or necessities. If children work regularly and more or less willingly (grown folks also run low on pep, once in a while) they can receive pay in proportion and be taught to share the burden of buying their needs. Thus the family makes and spends together, and if the workers catch the right spirit, a happy condition results.

A home should be attractive, and while it is primarily the mother's duty to make it so, each member of the family should help to keep it so. Although well kept, it should be livable. Far better an oak table, filled with children's books, magazines, papers and other well-chosen reading material, than a mahogany table, with a fancy scarf and two volumes of unfathomable poetry.

KEEPING FAMILY MATTERS AT HOME. In a real home—it may be ever so

# The Sunday School Lesson

AUGUST 31.

Jesus Talks With a Samaritan Woman, John 4: 4-42. Golden Text—God is a Spirit: and they that worship him must worship in spirit and truth.—John 4: 24.

ANALYSIS.  
I. LIVING WATER, 7-14.  
II. SPIRITUAL WORSHIP, 15-26.  
III. THE HARVEST OF THE WORLD, 31-35.

INTRODUCTION—Not only did Christ insist on the necessity of a new life for the Jews, as we saw in the case of Nicodemus, but he offered the same new life to others outside of the Jewish fold. He proclaimed the doctrine of one access to God for the Jew and for Samaritan. This is the theme of the conversation with the Samaritan woman, which took place at the ancient well of Jacob, near the town of Sychar. It was near this spot, on the slopes of Mount Ebal and Mount Gerizim, that the worship of Jehovah was first proclaimed in Palestine, at the entrance of Israel into the land. And therefore it is fitting that here Jesus should proclaim the dawn of the Christian era, in which God is to be worshipped, not by Jews only at Jerusalem, and not by Samaritans only on Mount Gerizim, but by all men everywhere "in spirit and in truth." The interest of the present lesson is intensely missionary. Jesus sees in the redemption of this woman of Samaria, the promise of the ingathering of the heathen world.

I. LIVING WATER, 7-14.  
Vs. 7-9. The Samaritan woman expresses surprise that Jesus, a Jew, should ask a cup of water from one of a hated race. The Samaritans had the Law of Moses, they observed the Sabbath, and other ordinances, and their form of worship was not very different from the Jewish, but they were schismatics, they retained some pagan customs, and the Jews avoided all contact with them.

Vs. 10. The woman comes to Jacob's well perhaps for superstitious reasons. She has no true religion or experience of God, for her life has been wrong, and she has given up the hope of any new life for her. If Jesus is weary with his journey, she is still more weary of a life of sin, and Jesus, knowing this, says, "If thou knewest the gift of God, and who it is that saith to thee, Give me to drink; thou wouldst have asked of him, and he would have given thee living water." That is, refreshment for the soul.

Vs. 11-14. The woman has a sense of what is meant, but she pretends not to understand, for she does not wish to speak of religion. She has all these years avoided the subject, and now she pretends not to know what "living water" means. But Jesus answers that water from earthly springs cannot satisfy the thirst of the soul. She herself is not happy, or satisfied, or at peace with God. On the other hand, Jesus can give that which will prove a never-fading spring of personal joy and peace. He has God's gift of new life at his command.

II. SPIRITUAL WORSHIP, 15-26.  
Vs. 15-20. Jesus had indicated to the woman that she is not happy. He now draws from her the confession that her life is not what it should be. The revelation leads her to admit that he is a "prophet." But to escape from further conversation on the subject of personal religion, she drags in the Jerusalem controversy, Jews, she says, have their ideas of religion, and Samaritans have theirs, and who is to decide which is right?

Vs. 21-24. Jesus' answer is that true religion, the true worship of God, is little to do with the questions which are in dispute between Jews and Samaritans. It is a matter of the heart's sincerity before God. The hour has now come for all men, Jews and Samaritans alike, to think no more of Jerusalem or Gerizim, but to yield their souls to the pure worship of God "in spirit and in truth." God seeks "spiritual" worship, that is purity and love of the heart. True religion is "in spirit" that is, it requires a surrender of the soul; it is "in truth," because it depends on a right conception of God the Father. We must think what God is, and yield ourselves to him in sincere trust and surrender.

Vs. 25, 26. The woman makes a last effort to escape by saying that the Messiah, when he comes, will make things plain, and that she can wait till then. Then Jesus reveals that the Messiah is himself.

III. THE HARVEST OF THE WORLD, 31-35.  
Vs. 31-34. The incident at the well has profoundly stirred the soul of Jesus, and so absorbed is he in the thought of saving this woman that when his disciples return he does not seem to notice. Then, as if to excuse inattention, he says, "I have food of which you do not know anything." How intense was Jesus' longing for the redemption of the lost! It made him forget food and every natural want. But the disciples cannot enter into his thought, for they do not realize how near the redemption is. Then Jesus speaks.

Vs. 35. The spiritual harvest of the world is only waiting to be reaped. We must not think of it as far distant. Jesus draws attention to the Samaritans who are now seen crossing over the fields on their way from the village. They are coming to see him and to speak with him. "Look," he says to his disciples, "see how the fields are already white for harvesting." But God needs workers.

APPLICATION.  
By the Wayside. An Englishman has recently said that it is a depressing sight to see a British congregation emerging from Sunday services on their way to Sunday dinner. "They have done with religion for the week." If this is true they need to study the methods and habits of Jesus. He was always finding ways and means of applying religion to life. Last week we studied his way with a man—a Jew, a ruler and teacher of the people. To-day we have an interview with a woman, a Samaritan, of dull mind and

bad character. Contrast the good man with the bad woman. He came by night, she by day. She confessed Christ at once. He was a secret disciple for years. She brought a whole city to Christ. He brought—well, who knows whom he did bring? In each case Jesus led the conversation, with tact and understanding, from an everyday theme of individual interest, to a personal discussion of divine relationships and eternal issues. The external differences between the two types are very wide, but Jesus reveals the truth that there is no essential difference in heart hunger and spiritual need. And he meets the need, by a natural chat about the things uppermost in their minds. He that wincheth souls is wise. He has need to be wise in discerning unnoticed possibilities of good, wise in finding contact points with even indifferent or hostile people, and wise above all else in the conviction and practice of the truth that religion needs to be let out among the people. It is decadent in the dim cloister, but warm and vital in the intimate and active relationships of home and street, farm and factory, shop and market and train and bunkhouse and mind. But let the Christian deliberately dominate the conversation, leading it to those things every human soul yearns for and needs to know.

Widening the Circle. There is an Oriental legend of a fountain, each drop of which starts a similar fountain. Carrying a drop of this, the wayfarer could safely cross any barren plain. No matter how wide or dry the desert, he had with him the secret of unfailing springs. Where a drop fell there gushes a new fountain. The woman in the story "left her waterpot." Would that every missionary interview were similarly effective. She hastened to share with her people, not the water of Jacob's well for their bodies, but the water of life for their thirty souls. A revival followed, and the disciples were challenged to lift their eyes to see from the seed sowing of Jesus, in unpromising soil, "the harvests of the future grow." Talk about the romance of missions. Can any fiction equal this tale of a dull-minded alien woman, without reputation or social standing, through whom "many of the Samaritans of that city believed on him." This was the first foreign mission, and its line has gone out to all the earth.

Why Sheep Dipping Pays.

Fall dipping for sheep is just as important as spring dipping, but owing to the fact that ticks are not as easily distinguishable late in the season as at the beginning the second operation is often neglected. In a leaflet just issued by the Dominion Live Stock Branch, of which Mr. A. A. MacMillan, Chief of the Sheep and Swine Division, is the author, the following reasons are given as to why it pays to dip:

1. Sheep that are free from ticks and lice grow more and better wool.

2. A clean flock requires less feed and is more easily kept in good condition.

3. The lamb crop is stronger, ewes milk better, and lambs grow more rapidly.

4. Parasites are a source of serious discomfort to sheep. The good shepherd is mindful of the comfort of his flock.

While the cost of dipping need not exceed three cents per head, from fifty cents to a dollar and a half may easily be saved. September and October are the best months for fall dipping. If the weather be cold, the flock should be housed for a day or two, to give the fleece a chance to dry out. Mr. MacMillan advises community dipping where possible, as thereby both cost and labor are lessened. Also the arrangement of annual or semi-annual dipping days, so that the treatment of all flocks in the district may be practically assured.

Main Causes of Calf Troubles.

Cold milk to-day—warm milk to-morrow.

Sour milk to-day—sweet milk to-morrow.

Sour, dirty feed pails and troughs. Dirty pens, flies, no protection from heat or sun.

Feeding too much or too little.

No drinking water supply.

Sour whey and sour skim milk from the factory.

Vermine.

It is a good practice to leave the calf with its dam for the first two or three days, even though it is planned to rear the calf by hand.

Autumn-born calves usually escape digestion troubles, due to cold weather being an aid in preventing the souring of food.

A grass lot adjoining the stable is very useful to calves over three months of age. Young calves thrive best in a clean, well ventilated, cool, dry stable.

If the horns are not desired, treat with caustic potash before the calf is more than ten days old.

The slop barrel—dirty, stinking and fly attracting—is still found on too many farms. Not only is it an eyesore but it is unhealthy for the cows. The slop, all of which is never removed, sours and brews, especially in summer time, until it is almost as bad as bootleg whiskey. It loses its food value and becomes unfit for consumption. Slop should be fed fresh or not at all.

# TRAINING OUR CHILDREN

WHICH KIND OF SPOTS DO YOU PREFER?

BY MAUDE FREEMAN OSBORNE.

In reprimanding children, one should be very careful not to antagonize them, otherwise the harm done may be greater than the offence which called forth the reprimand.

Warren, in his eagerness to help Mother—for he really was a very warm-hearted little boy—had spilled paint on the floor of the new porch of their cabin in the woods. He had been commanded—yes, that is the right word—to keep Teddy, the dog, off the porch till the paint could dry.

Now it happened, just after this, that some friends called to take Warren, his little sister and their mother on a picnic. Mother, however, could not go, as she was expecting company. So the children went without her.

Warren was fascinated with the little paper forks with which they ate their lunch as he had never seen any before. He begged for one to take home to Mother. He even saved his piece of cake for her. Seeing this, his hostess gave him a piece of each kind of cake, and one of each variety of sandwich. These he wrapped in paper napkins.

When the party stopped once more at the cabin, Warren rushed in, and dumping the bundles in his mother's lap, he cried, "See, Mother, what I brought you!"

In his great joy at giving Mother a present, he did not notice that he had left the screen door ajar, and that Teddy, eager to see his little master, had slipped in.

His mother was sitting right by the spot of paint, and so Teddy jumped into it and tracked it all over the porch. She could have said, "Yes, that's lovely, dear, but now let's get Teddy out, for just see what he's doing," and later, very soon perhaps, could have said something to remind Warren that he was not to let Teddy on the porch.

Instead, what?

She took not the least notice of the lovely little present, but scolded Warren vociferously for letting Teddy in. In fact, she shouted at him, "Take that dog out of here just as fast as you can!"

Warren paused to say reproachfully, "Gee! Mother! I thought I was bringing you something nice, and see how you treat me."

Then he put the dog out. He also grabbed the bundles he had put in his mother's lap and emptied the pieces of cake, the sandwiches and even the little paper fork on the ground in front of Teddy. As he did so, his face was not a pretty thing to see, so distorted it was with resentment and rage.

Again his mother spoke, still angrily, "Warren Farnsworth, did you give all those nice things to that dog?"

Warren went and huddled himself over on a log, his elbows on his knees, and sobbed, not with repentance but with hurt feelings and anger.

The spots on the porch could soon be cleaned up, but what of the spots caused by the fires of resentment?

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