Soils and Crops

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The Grading of Wool.

The official grading of wool has had a wonderful effect in improving the quality and preparation of Canadian wool for market. It is a well-known fact that not so many years ago Canadian wool was held in poor esteem abroad owing to its coarseness and deficiency in purity. Now this is largely remedied, and wool from this country is able to compete in some measure with the best wool from New Zealand and Australia and to command as good a price. During the war the demand for wool was enormous, and prices naturally soared very high. Now they have dropped to some extent in every market, but there is abundant evidence that with the return of settled and normal conditions prices will be found remunerative and fluctuation considerably checked. The valuable work done by the official graders is testified to by the fact that the demand for Canadian wool has been greatly increased. Their task is hard and exacting. Its extent is denoted by the fact that for the year ending March 31, 1920, 3,788,138 pounds were graded for farmers' co-operative organizations. Of this amount 780,379 pounds were from Ontario, 743,562 pounds from Saskatchewan and 1,462,161 pounds from Alberta. The system has undoubtedly given stability to the wool industry and led to an increase of sheep breeding, and sheep of an improved quality. It also equalizes prices and encourages farmers to take greater care of and more pride in their flocks. Grading, after all, is only one step that has been taken to develop the wool industry. Exhibits have been made at home and abroad. In Canada displays were made at all the leading fairs. In ten western exhibitions there were shown the grades of wool, processes of manufacture of both wool and mohair, a full line of shepherd's supplies and samples of the best feeds for sheep. In the east at several of the principal exhibitions demonstrations were given in the preparation of wool for market, shearing, grading of wool and dipping. Stationary wool exhibits have been supplied to the agricultural colleges and placed on view in museums. Demonstrations have further been made by experts in the finishing of sheep and lambs for the market, in docking and dipping, in shipping, and in the care of sheep generally, both on the farm and in transit.

The Apple-Growing Industry.

One industry that suffered owing to the war was that of apple-growing. Owing to the embargo on apples placed by the British Government and the lack of exportation facilities due to the demands of the war, trans-oceanic shipping was entirely at a standstill for such commodities. As a consequence of this and because of other discouragements orchards suffered greatly. In addition, during two seasons the weather was unfavorable and scab developed to such an extent as to reduce the vitality of the trees. Vigorous efforts are now being made to remedy this state of things. Meeting are being held in the various apple-growing districts, conducted in co-operation by provincial and Dominion authorities, at which demonstrations are given in the proper methods of pruning, spraying, grading, packing and shipping. Organization and co-operation for marketing purposes are being urged. As a result of these efforts, officials feel warranted in saying that apple-growers have every reason to feel optimistic as to the future. It is also said that although prices for many agricultural products have declined, the price for the best quality of apples has not fallen, nor is it likely to do so owing to the fact that production, even under favorable conditions, is not greater to-day than it was a quarter of a century ago, and cannot be materially increased for some years to come.

Provincial Butter-Making Standing.

Ontario does not appear to stand extra well as regards butter-making compared with other provinces. During the past year or two Dominion-wide contests have been held with the objects of establishing a uniform type of creamery butter throughout the country, to create a healthy rivalry between the provinces, and to help in the standardizing of methods and practice in the butter-making industry. As a result in these contests, Ontario stood last of all the provinces for flavor in 1919 and sixth in 1920.

For workmanship, Ontario again stood last in 1919 and eighth in 1920. The standing of the provinces last year was like this:

For flavor: Alberta, Quebec, Nova Scotia, Manitoba, Saskatchewan, Ontario, British Columbia, Prince Edward Island, New Brunswick.

For workmanship: Nova Scotia, Alberta, British Columbia, Quebec, Saskatchewan, Prince Edward Island, New Brunswick, Ontario, Manitoba.

Samples from the contests are exhibited at the dairymen's conventions in every province of the Dominion, at the dairy schools, at produce merchants' conferences, at butter graders' conferences and during butter-scoring competitions.

The Children's Hour.

Some say that the ants were not always industrious. They spent their days worrying their neighbors and were always in trouble because of their idleness. They laughed at the bee because he worked so hard at making honey, at the spider because he worked so hard over his web and at the bird because he worked so hard in making his nest. They were friendly with the shiftless flies.

The laziest of all the ants was a young ant named Bill. There was a certain little fly named Jack, who was even lazier than Bill. The two were perpetually up to mischief; no one had ever known either of them to do anything worth while.

One day Jack and Bill met a bee on his way to gather honey. They stopped the bee and asked him to play hide and seek with them among the flowers.

"No," said the bee; "winter will soon be coming, and I have no time to waste."

He hurried off, and Jack and Bill went to hunt up the spider. The spider was spinning his web. The two friends were afraid to go near his house, but they stood a short distance away and made fun of him.

"Why do you not work?" the spider said. "Where will you get your dinner to-day? I know; you will steal honey from the bee."

Jack and Bill laughed and went away. At a turn in the path they met a robin who was hunting food for his little ones. The robin flew down to the ground. "Now I have caught you!" he cried. "You are so useless and harmful that I am going to feed you to my little birds. That's what I'm going to do!"

Seizing Jack and Bill he flew off to his nest. As he dropped Jack into the big mouth of a young bird Bill tumbled to the ground. He was so much frightened that he ran home as fast as his little legs could carry him.

When he reached home he cried, "O mother, Jack has been eaten up by a robin, and I was nearly eaten up, too! If we do not build us a house, the robin will catch us all. We ought to work, anyway, like the rest of the world."

Bill trembled with earnestness; he had learned a great lesson in a short time.

"Let us start right now," replied his mother. "We will build us a house and store up food for the winter."

That very moment they began to carry out their resolve. And all their ant neighbors, seeing them so busy, began to follow their example.

From that day to this ants have worked so hard that "as busy as an ant" has become a common saying in the world.

> The majority of our people are many times weaker in confidence than any other faculty. A large percentage of those who are failures could have succeeded if this one quality had been properly trained and strengthened in their youth.

Housing of Poultry.

Not all who keep chickens either in town or country know how to secure the best results from their flocks. For lack of knowledge the chicks often develop into spindle-legged, small-bodied, poor-laying creatures. And yet any amount of instructive literature is published and can be had without cost by applying to the Publications Branch of the Department of Agriculture at Ottawa. Housing shares in importance with feeding if the best results are to be gained. In this connection it is interesting to observe that a revised edition of the bulletin on Poultry House Construction by F. C. Elford, Dominion Poultry Husbandman, has just been issued by the Department of Agriculture at Ottawa, to meet the constantly increasing demand for information coming from almost every class of the community. The bulletin, which is based on trials of various kinds of poultry houses in different parts of Canada, treats of the subject clearly and comprehensively. Plans and building instructions, with illustrations and diagrams, are so given as to enable anyone to erect such a poultry house as may be desired.

Buy Canadian products.

Fair Premiums For Children

All normal boys and girls are on the alert to make money; and all men and women, who are on the alert to keep the young folks on the farms, want to help them. The fair managers in many counties offer special premiums to young people; but even where there are no special awards it is easy to let the boys and girls earn money at the fairs. Instead of entering farm produce in their own names, fathers and mothers get the children to select the articles and then collect the premiums, only stipulating that the young workers prepare everything, attend to making the entries and getting the things back home again.

Where there are both boys and girls in a family, the girls usually take the domestic and vegetable exhibits while the boys show chickens, grains, and the farm animals. But a family of girls can show the grains along with the fancy work and canned fruits, omitting only the animals. It is hard for a girl to enter and exhibit a pet calf or lamb, and boys on the other hand do not like to potter with vegetables, unless it be mammoth pumpkins or melons.

Everybody wants to succeed, of course, and there are a few simple tricks in the trade that will help success along. Several months before the fair time, get out the list of premiums offered in the previous year. Even if an item or two should be dropped, the list will serve as a first-rate guide. Look it over carefully and mark on a piece of paper every item that could possibly interest you. If you see some vegetable or grain which you can furnish, and in which there will be few entries, mark that thing down with a star, for it's your particular big chance.

Then when you have decided on your representatives for the fair, you can begin to "doll" them up. The fine pumpkin must be watered in dry weather and have all the small pumpkins and buds picked off, so that the vine will have nothing on its hands but the raising of one big vegetable. The choice potatoes can be picked out of the early ones and carefully compared to see that they are of even size and weight. The finest apples can be located and all defective fruit removed from the branch on which they grow. The tomatoes can be trimmed so that the sunlight falls on every side of the fruit, and the vines can be carefully tied to stakes to avoid discolorations or bruised spots at the last minute. Any flowers and plants to be shown should have special attention, and the pots should be made clean and attractive.

The fancy-work department always offers great inducements to the girls. Even if the premium is only $1 for first and fifty cents for second prize, it pays to hunt up every quilt and bit of needlework that has a least chance of winning. There are always the latest things, too, in the way of fancy bags, aprons, hand-embroidered towels, table-covers, camisole yokes and what-not made in leisure minutes and exhibited with pride and success.

The domestic booth with its canned fruit is profitable also, especially because the canned fruit is not made just for the occasion but must be provided for winter in every home. By taking a little extra care, and selecting jars of the same size and shape, it is possible to pick up many extra dollars in this department. In some counties fruit can be entered as single exhibits and also in groups, so that it is possible to win two separate prizes on the same display. I think nothing gives a greater thrill to a young canner than to see her beautiful fruits and vegetables securely sealed in clear glass and ornamented with the red or blue ribbon that marks the first prize.

Meanwhile, the boys will be getting the calves, colts, sheep, chickens and grains ready for exhibition. The grains should be cleaned and recleaned, as the judge will use a powerful glass to determine whether or not there is foreign matter in the exhibit. Selecting corn for the fair is an education in itself, and the boys should be encouraged to ask an agricultural student to coach them in the art of picking winning ears. With beets and pumpkins and turnips, size is about the only requirement; but in selecting corn, clover seed, and oats many other necessary qualities determine the prize-winning display.

Chickens are always interesting to exhibit, as more and more of the young people of the country are finding out. With plumage well washed and coops in good order the feathered pets attract attention everywhere. Prize winners at the big county fair usually find their way to bigger shows that offer bigger inducements, and because of these the young folks are easily led to develop a really profitable chicken business.

Hares, puppies and other pets often come in for special prizes, besides giving an opportunity to their owners to sell at a profit and have only empty coops to take home from the fair.

Exhibiting calves and sheep and pigs means more work than showing vegetables, but it pays to let the youngsters show off the best stock on the farm and enjoy the premiums. The boy who leads a prize heifer in the ring, or raises the prize colt, will have a more exalted opinion of farming than hundreds of lectures on the superiority of farm life over city existence will ever give him.

Young people sometimes earn from $10 to $25 in premiums and then have the articles left for sale or for home use. Often a public-spirited merchant will buy the prize vegetables to display in his window together with the name of the grower; or again some person who expects to exhibit at the Canadian National Fair will buy the best of the display to add to his own collection.

THE SUNDAY SCHOOL

JUNE 19.

Making the Social Order Christian. St. Luke 4: 16-21; St. Matt. 25: 34-40. Golden Text—St. Matt. 25: 40.

Connecting Links—The essence of Christianity is in the spirit, not in the forms, of life. It is possible for the Christian spirit to exist and to manifest itself in any recognized or established order of society. Even a slave and his master may live together as brothers beloved (see Philemon 16). The king, the feudal lord, the artisan, the physician, the soldier, the serf, the priest and monk, hermit and missionary, have all entered into this brotherhood. It is possible for this kindly Christian relationship to exist in the factory, the forest, the field, and the mine, between employers and employed, just as perfectly as between fellow workmen in the same craft. The Christian spirit is the spirit of love and service.

St. Luke 4: 16-21. **As His custom was.** Jesus did not despise the religion of the past. His custom was to go to the synagogue service on the sabbath day. There, too, the opportunity was offered Him of teaching the people. On this occasion He was in His old home town of Nazareth, and was invited by the chief ruler of the synagogue to read the Scripture and speak to the congregation. He chose the sixty-first chapter of Isaiah and read the great declaration of that prophet's mission to his people. Inspired by the Spirit of the Lord it was His to proclaim the coming of a great deliverance, a deliverance, it is true, which was never realized in a material way by the people of Israel, but which Jesus now declares is to be realized through His ministry.

For Jesus has come to preach the gospel (i.e., good tidings) to the poor. He has a message of healing for broken hearts, and of deliverance for those held captive by the world's greed and cruelty. He has power to open eyes that are spiritually blind, and to give freedom to those who are bruised in sin's prison houses. He, too, like the prophet of old, is sent to preach the acceptable year of the Lord, the dawning of a new era, the long-sought and long-hoped-for age of salvation. For those who would listen to His words and believe, that new era was already begun.

All bare Him witness. The words of Jesus are not reported in full, but we can imagine that He spoke of the Father in heaven and His love for men, of human love and service, of the coming age of justice and freedom and the healing of the world's sorrows. "Words of grace" fell from His lips. But among those who heard were townsfolk of cramped and narrow vision, who had no heart to understand or care for these high things. They were only disposed to criticize, and to make little of Joseph's son, the one-time carpenter. St. Matt. 25: 34-40.

Then shall the King say. In this parable Jesus sets forth the things that are above all else pleasing to God. They are to feed the hungry, give drink to the thirsty, show hospitality to the stranger, clothe the naked, visit the sick and those who are in prison.

For those who do these things the kingdom of heaven is prepared. Even though they have not known or heard of Jesus, or have not known that in this way they were serving Him, they will receive this great reward. For Jesus had so identified Himself with humanity and human need, that He could truthfully say Inasmuch as ye have done it unto one of the least of these my brethren, ye have done it unto me.

It follows that the Christian spirit will always manifest itself in this way, and that such kindly, helpful, healing ministries are the true activities of Christ's kingdom. By them, far more than by theories and experiments, is the social order being made Christian. They represent the mightiest forces of progress and of reform. The nations of the world can do without the revolutionary agitator, the preacher of class hatreds, even the clever theorist, but they cannot do without the men and the women of the kindly heart and the open hand.

The greatest evils and greatest dangers of society are those of greed and hatred, and these evils are not confined to any one class. The way of safety is the way of unselfish kindness and love. If commerce and industry cannot be carried on on a basis of unselfish kindness, then either we ought to have no commerce and organized industry or Christianity is impossible as a law of life. Either supposition is inconceivable. The Christian law of love and kindness must be the law of business as well as of home and neighborhood life. He who refuses to be governed by this law is not a true Christian.

For those who have fed the hungry and clothed the naked and ministered to the stranger and the sick and the prisoner, are the great words of invitation: Come, ye blessed of my Father. They have the greatest of all human joys, the joy of service to those who need, and they have the bright hope of an immortal inheritance in the Kingdom of God.

Application.

However ably Jesus might deal with the broad principles of the Kingdom, He never forgot that in improving the social order our dealings must finally be with individuals; not with abstract principles and relations, but with men and women and little children and the conditions in which they live. In political economy it used to be the fashion to talk about the "economic man." There is no such creature. Behind all discussion of sociology or political science, or even religion is "the throbbing mass of humanity, tempted, sinning, sorrowing, suffering, struggling and striving." The social problem is not merely intellectual, it is human. It will not suffice to cherish great ideas and noble ideals. If they are to count for anything they must be expressed in our contacts with our fellow-men. 'The enthusiasm for humanity is one thing; the enthusiasm for the individual man is quite another." But Jesus brings us all right up against the problem of our own personal dealings with our neighbors in this memorable picture of the last judgment. He says that lives are to be tested on the basis of what they have meant to other men in terms of food, drink, shelter, clothes and compassion. Many of us have not time to read and ponder as we should like. The pressure of the days upon us is so heavy that we get little chance to examine the perspective of life. But deeds of charity and kindness, words of encouragement and help, the attitude of hearty and practical goodwill, these must become the habitual characteristics of our relations to the brothers and sisters among whom God has placed us, or ours should be a "fearful looking for of judgment."

Poultry

One of the best schemes to discourage broodiness, widely used and indorsed by the foremost authorities, is to place the broody hen in a coop that is fitted with a slatted bottom. The hen is unable to squat in a comfortable position, because her feet protrude through the openings between the slats. She has no sense of privacy or security, and the sensation of currents of air under her is not to her liking. Two or three days of this harmless pillory usually disgusts her with the notion of setting, and when released she is only too anxious to rejoin her companions in the laying house.

It is understood that food and water are kept in the coop at all times, for the "clucks" should be encouraged to maintain their physical trim and not be starved. The coop should be kept in a well-ventilated place, under perfect sanitary conditions, preferably where there is strong light, because plenty of light is distracting to the sitting hen, who naturally seeks a dark, secluded spot in which to bring off her brood.

In mild, pleasant weather the "broodies" can be turned into a yard and made to sleep outdoors. Do what you will with them to distract the inclination to sit, provided they are not injured, frightened or impaired in any way. By all means feed and water them liberally.

The chief consideration is to segregate the hens as soon as they become broody, if possible on the first day. A hen removed from the nest at this time is very much easier to discourage than when she has been allowed to indulge her fancy for a week or more.

To insure getting the "broodies" at an early stage, the poultry keeper should make it a hard and fast rule to go over the nests every evening about an hour before sundown, during the spring and summer months, and to remove therefrom any hens found at this time. Very few hens lay after 4 o'clock in the afternoon, consequently one is entitled to view with suspicion any fowls found on the nests in the evening.

> Don't be afraid of thinking too highly of yourself, for if the Creator made you, you must have inherited divine, omnipotent possibilities, you must partake of His qualities.

The Dairy

Prepotency is the power which gives a bull or cow the ability to stamp its own characteristics on its offspring. The value of the pure-bred bull on the grade herd rests in this ability to mark the calves and make them both better lookers and better producers than their mothers.

The gestation period of the cow is nine and one-half months, or two hundred and eighty days. Sometimes a breeder figures it as nine months to the day, and then worries because it seems to run over a couple of weeks and the calf is not born when supposedly due. For example, a cow bred on January 1 would be due about November 8, not on November 1. The date of calving is found by counting forward the two hundred and eighty days from the date of service.

Weakness in breeding stock is often laid to inbreeding but facts prove that the greatest progress in producing fine cows has been by skilled men who have used inbreeding. But such breeders have known the blood lines of their stock and they are thus able to mate so that strong points will be made stronger instead of weak points made weaker, as is often the case when breeding methods are careless.

An argument for fall freshening of cows is the fact that summer is a busy season on the farm and it is difficult to give cows the best and most regular attention about harvest time. If the milking work is reduced when the work with crops is heaviest it is a great help on the farm. Then the cows can freshen in the fall when the weather is cooler and the field work less heavy.

Horses and Motors.

Of special interest both to farmers and horsemen is the effect that motor traction is having on the horse industry. In the United States investigation is being made on the cornbelt farms with the object of finding out to what extent the tractor has replaced the horse. Enquiry has also been made as to the disappearance of the horse in cities and towns. Nothing in this direction so far has been done in Canada, but in the estimates at Ottawa this year a small amount has been voted to meet the cost of a similar investigation. When completed the information received will undoubtedly be of considerable public interest.

Specimens of the smallest pike in the world, measuring scarcely two inches in length, have reached London from Singapore.

Preventing Soft-shelled Eggs.

When the hen lays a soft-shelled egg, one marketable egg is lost for the poultryman. The egg may be eaten by other hens or the hen that lays it and this often develops the egg-eating habit. If the egg is dropped among other eggs in the nest they are all soiled and have to be washed. And washing eggs is injurious to their keeping qualities.

An over-fat hen is apt to lay soft-shelled eggs, as the fat hinders the proper operation of the shell-forming glands. Such a hen should be isolated from the flock and fed a ration of bran, and water and oats can replace most of the corn in the ration. If the hen continues to lay soft-shelled eggs she should be marketed for table use. In many cases time is saved by marketing fat hens as soon as they are found instead of taking the trouble to reduce their weight. Sometimes the accumulation of fat seems to result when a hen has a lazy disposition and refuses to scratch and such a bird is not a profitable producer and should never be used as a breeder.

Grain and clover contain a certain amount of lime which is sometimes sufficient for a hen to make strong shells on the eggs produced. However, some hens will not seem to obtain enough shell-making material from their regular ration and for this reason oyster shells must be provided in hoppers at all times. We have never found many soft-shelled eggs in houses where the oyster shell hopper is always filled. A soft-shelled egg is a rare find in such a house. Even if the hens make fair quality shells without oyster shells, it is better to supply them and obtain the stronger and thicker shells which are better able to stand jostling during transportation.

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But if your fence was down, don't blame the cows.

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