

PREVENTING LAMB LOSS IN SPRING HINTS FOR THE STOCK FARMER

BY L. STEVENSON, V.S., B.V.Sc.

In numerous flocks each spring, losses are experienced, a few lambs may sicken and die, or half the lamb crop may pass out, one by one, a few days after birth. With lambs born out on the green grass the losses are very small, but where ewes are confined to or have access to pens and yards that have sheltered sheep for many years the losses are frequently such as to take much of the profit from sheep raising. Even if the loss is as low as one in four it puts a crimp in the profits.

This destroying disease is known by various names, "Lamb Dysentery," "Scour," "Red Scour," "Yellow Scour," "Lamb Diarrhoea," "Lamb Sickness."

The Cause. Two different organisms, working together, an evil combination, one is known as *Bacillus Coli* and the other as *Bacillus Welchii*. Harmless strains of these bacteria are found normally in the intestine of healthy lambs. But at times these invaders develop a virulence that produces disease. The virulent strains once developed may be transferred from lamb to lamb with disastrous results. The infection enters the mouth and reaches the intestine, where it causes a catarrhal inflammation of the mucous membrane. The *Bacillus Welchii* attacks the bowel wall and produces an ulceration. These ulcers make way for the *Bacillus Coli* to enter the general circulation.

The disease is spread by the ewes lying on contaminated soil or litter, infected lambs and people handling the sheep. Lambs are not born infected with lamb dysentery, but they may become infected while passing through the birth canal, due to the organisms gaining entrance to the mouth. Infection may be taken by the lamb during the first attempt to nurse, as the nipples are frequently covered with germs. The udder, the skin and the wool on the under side of the ewe's body are fertile fields from which infection may be gathered, as every time the sheep lies down on a floor or ground, that is fouled with filth from other animals, millions of bacteria will adhere, to be transferred to whatever may touch her. The disease germs are wide-spread and may be found wherever

sheep frequent. The hands and clothing of those attending sheep are usually very much contaminated.

SYMPTOMS.

The lambs may appear all right to-night, but to-morrow morning one or more may be dead. If the lamb contracts the disease during the day, it becomes dull, listless, lies about half asleep, stops nursing. If made to move it does so showing pain and stiffness, feces passed with pain and difficulty, feces may become brownish-red in color, sometimes yellow and semi-fluid, and often tinged with blood. Should the lamb live for several days as sometimes happens in less severe cases, its back is arched, its abdomen empty, and a mass of brownish or yellowish-red diarrhoeic material clings to the tail. In this condition it lies down and passes into unconsciousness.

POST MORTEM.

The following post mortem symptoms are generally noted: the entire intestinal tract is very intensely inflamed, the abdominal cavity may be filled with liquid, or the organs may be adherent, due to the presence of a sticky exudate, small ulcers cover the surface of the bowel, the bowel content is blood tinged and liquid, odor very objectionable, liver enlarged and pale in color. Medical treatment has so far not proven to be of any value.

PREVENTION.

With the bacilli hardy enough to live from season to season, distributed wherever diseased lambs have been, it is a problem to protect, by hygienic means, the new lamb crop. The first move in prevention of losses, is the cleaning up of the ewes. About two weeks before the lambs are due, the long soiled wool about the hind quarters should be removed. If the weather is warm enough or protection in clean quarters can be given, the sheep should be given a thorough dip or washing and then moved directly to fresh clean pens or pastures. Ailing lambs should be killed and buried by someone other than the man attending the sheep. Success in combating lamb dysentery depends on the thoroughness of the hygienic methods adopted and practiced. The least carelessness in disposing of dead lambs will keep the premises infected as long as sheep are kept.

Cost of Apple Thinning.

To thin or not to thin is necessarily a question of importance to growers of apples for commercial purposes. In his latest report, the Dominion Horticulturist goes somewhat exhaustively into the subject based upon experiments conducted with the Wealthy variety. Not only is the question considered as regards quantity and quality, but also in reference to cost and profit. As for the commercial grower the latter is the leading point to be considered, the following remarks from the report are quoted pretty well in full as indicating the conclusions reached by the Horticulturist (Mr. W. T. Macoun): It should be pointed out, he says, that the operation of thinning does not cost the grower any more than not thinning. The apples on the trees must be picked at harvest time. If a certain number are picked in early summer and dropped these do not have to be picked again. It is easy to see that picking and dropping the fruit on the ground is much less expensive than picking in the fall, carefully placing in a basket, handling to the packing shed, grading and packing. If a large number of these apples are three and culls and have to be discarded or sold as cider apples it is apparent that this extensive handling can come to more than the small price received for such produce. Here in the Horticulturist's opinion lies the great advantage of thinning—by reducing the number of culls the cost of handling and picking is brought down to the minimum. Growers do not always appreciate this point, holding that the cost of removing the fruit in the summer must be added to the cost of picking had the trees not been thinned. If this were the case the thinned crop would be asked

How Legumes Improve the Soil.

The legumes, or peabearers are, next to grasses, probably the most important of all orders of plants to the farmer and to mankind.

These plants are valuable not only because they furnish food for man and for his livestock, but also because they help keep up, or even increase, the fertility of the soil and make possible larger yields of practically all other cultivated plants.

The supply of nitrates in most soils is too small to allow most crops to make their greatest growth. However, certain bacteria find a congenial home on the roots of certain plants, mostly the legumes and once settled on the root of a legume, the colony of bacteria begins storing up nitrogen in little swellings or lumps on that root—"nodules" these are called. It is that much of the nitrogen in a crop of legumes has come directly from the air; and when any large part of a legume is left in the ground the crop following finds a richer soil and more food than it would have found if this legume crop had not been grown.

I Feed Hens by Wire.

Throwing a cabbage head to the hens won't work very well. They don't eat enough. Hang it up and they will clean the whole thing out except the root.

Hanging is a nuisance if you have to tie each head. I made several hooks of No. 9 wire and can easily slip the root into these and do it in a hurry. They don't come loose either.—E. R.

MUTT AND JEFF—By Bud Fisher.



Sprouting Potatoes.

Tests at the Invermere, B.C., experimental station indicate that potatoes can profitably be planted at any time between May 1st and June 15th. After the latter date the result is poor. It was also proven that sprouting forwarded the crop by seven days. Early Norther sprouted planted May 15th was ready August 3rd; non-sprouted planted the same date was ready August 10th. The yield of sprouted was 22½ tons per acre and of non-sprouted 20½ tons. With Wee Macgregor the results as regards time of readiness were the same, but the non-sprouted yielded slightly better, the record being sprouted 27½ tons, non-sprouted 25½ tons. Sprouting was effected by placing the tubers in a warm dimly-lighted building three weeks prior to planting. Strong sturdy shoots about half an inch long were the result.

Wilson Publishing Company



A SMART FROCK FOR THE JUNIOR MISS.

Smartly simple is this attractive frock for all daytime wear. The upper front panel is of contrasting material and the lower section is plaited to provide the necessary skirt fullness. The back is in one piece and a belt fastens at the side seams and ties in a chic bow. There is a becoming round collar and long sleeves gathered to wristbands. No. 1480 is in sizes 8, 10, 12 and 14 years. Size 10 requires 2½ yards 39-inch material or 1½ yards 64-inch, and ½ yard 39-inch contrasting. Price 20 cents the pattern.

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The skin of the human palm is seventy-six times as thick as that of the eyelid.

Sunday School Lesson

April 10. Peter's Lesson in Trust, Matthew 14: 22-33.

ANALYSIS.

I. IS CHRIST OUR EXAMPLE ONLY? 22-29.

II. CHRIST IS NOT ONLY OUR EXAMPLE, BUT OUR SAVIOUR, 29-33.

INTRODUCTION.—Peter, after he came a disciple, experienced the desire to act like Christ, but was frequently made sensible of his inability to do so. The desire was right, for he had been called to walk in Jesus' steps. Yes, in spite of his admiration for his Master, and in spite of a genuine desire to be like him, he was repeatedly forced to admit that his own strength was insufficient. This is the truth which is brought home to us in the incident selected for to-day's lesson. Christ is our example certainly, but he is our example only by being at the same time our Saviour. We need not only the pattern of his character, but the strength which his arm affords. Peter thought it possible to walk on the water when he saw Jesus doing it, but when he tried it he lost nerve, and had to cry, "Lord, save me!" All this is to be understood spiritually. To follow Jesus amidst fears and temptations is like walking on the stormy billows. A man needs Christ's presence and Christ's power to do it. Those who, like Peter, have followed Christ most closely have found in him not merely the pattern of ideal of the religious life, but the power of God.

I. IS CHRIST OUR EXAMPLE ONLY? 22-29.

It is important, in dealing with the miracle narratives in the Gospels, to remember that, first and foremost, they are the record of religious experiences. Those who lived near to Jesus found in him not only truth and love and righteousness, appealing to their reason, but a strange super-human quality before which they trembled, but which, nevertheless, fascinated and riveted them, and made them feel that it was an incomprehensible element in Jesus' personality which is pictured in such miracle-narratives as the Walking on the Water.

Vs. 22, 23. Jesus, after the great sacrament of the Feeding of the Multitude, commands his disciples to re-embark on the boat and to cross to the other side of the lake, while he takes farewell of the people. He felt a boundless compassion for these un-shepherded souls (Mark 6:34), from whom he was so soon going to part for ever, and he postpones his farewell to the last moment. After they are gone, the Saviour seeks solitude among the hills, and prays, continuing his vigil into the night. Meantime his disciples are battling with wind and wave on the dark waters of the Galilean lake.

Vs. 24-27. Now comes the strange experience of Peter and the other disciples, which is enshrined in the miracle-narrative of the Walking on the Water. Whatever else the narrative means, it implies a strange new manifestation of the supernatural in Jesus, by which the minds of the disciples were utterly overawed. The tradition states it in the form that the disciples beheld what they took to be an "apparition" or "spirit," that is, the spectacle of Jesus walking towards them over the waters. Clearly some experience which has no analogy in the ordinary happenings of human life is described. But from the state of supernatural terror into which the disciples are thrown by the sight of their present release, by hearing the voice of Jesus say to them, "Be of good cheer; it is I, be not afraid." This assurance creates in Peter's mind the desire to do what he now proposes, that is, to follow the example of Jesus in walking on the waters.

Vs. 28, 29. "Lord, if it be thou," says Peter, "bid me come unto thee upon the waters." Perhaps we ought to think of the whole incident as a parable of Christian life or faith: is the Christian able to walk successfully after the example of Jesus? Can he rise superior to the terrors and powers of the world as Jesus did? Will he be supported by the invincible arm of God, as Jesus was, in doing incredible things?

II. CHRIST IS NOT ONLY OUR EXAMPLE, BUT OUR SAVIOUR, 29-33.

Vs. 29, 30. Peter makes the attempt courageously enough. But appalled by the stormy element he loses nerve and beginning to sink he cries, "Lord, save me." He discovers that a Christian cannot emulate the example of Christ in the sufficiency of his own strength or confidence. He can only succeed as he keeps believing in Jesus. For to live like Christ

SPRING AT THE CHILDREN'S TABLE EMPHASIS ON FRUIT AND CEREAL

BY LETTIE GAY.

When our grandmothers as little girls paled under the rigors of March winds and rains and apathetically declined to eat their porridge and milk, they were unequivocally commanded to swallow large spoonfuls of sulphur and molasses, a mixture in whose tonic qualities great faith was maintained.

Fortunately the year-round diet of most children to-day may be such that a dosing of this sort is unnecessary. But wise mothers will take careful precautions against possible illnesses following too many hours spent in doors because of stormy weather, or as a consequence of an all-over wetting in a sudden chill spring rain. This is an especially good time for a trip to the doctor for a general physical examination, but mothers need not wait for the doctor to recommend a diet rich in eggs, milk, fresh fruits and vegetables, and all those foods containing plenty of cellulose to help regulate the body, and vitamins to fortify against contagious sicknesses.

SPRING DIETS.

These are the last few weeks in which children are most likely to catch colds, and although there must be plenty of good nourishing food, keep the menus simple and watch the sweets at this time of year. A large salad made of chopped vegetables (raw carrots, cabbage and tomatoes are palatable in such a combination), a slice or two of bran bread spread with peanut butter, a glass of milk and a dish of ripe bananas with thin cream for dessert, is an adequate luncheon for most healthy children and at the same time furnishes the body with those tonic properties and regulatory ingredients which bad weather and a period of inactivity may render advisable.

As though a man should attempt to walk on the waters. It cannot be done except through the power of him whose sovereign will even the stormy elements obey.

Vs. 31. This is the most important verse in the lesson, so far as Peter is concerned. The moment that Peter cries, "Lord, save me," Jesus stretches out his hand and holds the sinking disciple up, at the same time saying, "O thou of little faith, wherefore didst thou doubt?" Peter had shown faith in himself, a very good quality, but inadequate to support a man in venturing to follow in the steps of Jesus. What he lacked was faith in the Saviour. But the grip of the hand of Christ taught him a lesson which in a subsequent time he heeded: the lame man at the Temple gate, he made it clear to his hearers that it was not by his own power or authority that his healing was effected, but only by the work for Christ or to succeed in following his example we need to put ourselves in Christ's hands, and then the divine grace of the Son of God will operate through us.



Opening a silo? Here's a tip: The way we used to get moldy ensilage out was either to throw it down the chute and carry it out of the barn, or throw it up out of a little door in the roof. One day I thought of something better. I took a couple of hinges and four boards and framed a door in one side of the chute about six feet from the ground. The hinges must be at the bottom of the door inside, and door must be about 18 inches longer than width of chute, so that the slope will cause the waste to slide out. After the moldy ensilage is thrown out, the door can be hooked shut again.—A. H.

Rare Find.

Mrs. Smithers (on motor trip)—"This is an awfully poor road."

Smithers—"It has its compensations, my dear. We're not getting more than ten billboards to the mile."

Salt Scarce in China.

To obtain salt in inland China, wells are sometimes laboriously bored through solid rock to a depth of 3,000 feet.

Jeff's Right. Mutt Must Be a Bit Balmly in the Bean.



WHAT MAKES IT RAIN?

BY LUCY CHANDLER FULLER.

Dan, aged five, was given to asking questions. When something that he wanted to know came into his head out popped the question and the nearest adult was at his mercy. One morning in the kindergarten, when the other children were modeling, he sat watching the rain splash against the window pane. Suddenly he called to his teacher, "Miss Rutherford, what makes it rain?"

"This is quiet time," remonstrated Miss Rutherford, "I'll tell you after kindergarten."

After kindergarten Dan's big brother was in too much of a hurry to get home to lunch to wait for Dan to ask any of his questions. "Will you tell me, then, George," begged Dan as he tried to keep step with the long strides of his brother, "what makes it rain?"

"Oh, I'm too wet and hungry to answer questions," replied Dan, "or you will be soaked." "When Dan reached home he ran up to his mother's room. "Mother," he began, "what makes . . ."

"Danny!" exclaimed the child's mother, "take those wet things right down-stairs."

Dan obediently shed his wraps below. When he returned his mother was putting on her hat. In one breath he shouted, "Mother, please tell me what makes it rain?"

"I can't stop, dear, I'm late for my party now. Run down to Pearl and she will give you your lunch."

Dan found Pearl dishing up his soup. "Say, Pearl," he begged, "do you know what makes it rain?"

"The Lord, I suppose, honey. Now come get yo' lunch." And that was all Dan could get out of Pearl.

All the afternoon it rained, and Dan wandered from the nursery to the kitchen and back again. At the sound of the door bell he peeped over the banisters and spying the visitor rushed down-stairs with a joyous cry, "Aunt Grace!" He patted the wet mackintosh. "Auntie," he began before his aunt had time to drop her wet things, "what makes it rain?"

His aunt laughed, knowing that Dan knew that she was an easy victim. "Well, Dan," she replied, "let's see if we can find out." Leading an excited child over to the bookcase, she took down the Century Dictionary and turning to "rain" began reading aloud.

"Tell me," interrupted Dan. "I'll tell you, dear, but I just wanted to show you where we have to go to find out things that we don't know." And letting the little fellow climb up into her lap, Aunt Grace began a laborious explanation in child language, interspersed with many questions, about evaporation, atmospheric saturation, condensation and so forth. In the midst of it, Dan's mother came home. "Poor Grace!" she exclaimed, "has he cornered you again?"

"Yes," laughed the aunt, "but we've had a fine time, haven't we, Dan?" she asked, giving the child a hug.

"You bet," said Dan, returning the hug; and jumping to the floor he began to tell his mother what makes it rain.

"Why, he really understands it," commented the boy's mother.

"Of course he understands it," replied the aunt. "If we grown people would only take the trouble to inform ourselves first and then answer a child's difficult questions in his own language, we could not only give him some background information but could also excite his desire for further knowledge. Don't you think so? It seems to me the more we encourage a child's natural desire to know things of this nature the more we are going to help that child to grow into a well informed man or woman."

"As usual, Grace, you're right but it does take so much time and energy," replied Dan's mother.

An Ingenious Device.

I had tried every way I knew to water baby chicks to keep them from getting more or less wet. Finally I took a syrup bucket (gallon size) and made a hole about one-half inch from the top, put a pie pan on it and turned it upside down. Chicks can get the water easily and do not get wet.

—S. A.

A soft cushion for the seats on tractors, disks or other hard-riding machines, can be made by doubling a small-size inner tube into a horseshoe shape and tying it in a grain sack. The tube can then be inflated to the amount desired. The valve-stem should protrude through the sack to allow easy inflation. This makes the softest and best cushion that I have ever tried.—L. H.

Soap for belt dressing is no good—it is slippery if it gets wet. Here is something that beats soap: Paint the belt with old crank-oil and sprinkle on fine ashes (wood ashes preferred). The ashes are sprinkled on while the belt is running; the pulleys will then grind the ashes into the oil. This will make a real clinging belt and a dressing that will last much longer than soap. I use it in an emergency.—D. M.

Wheat's First Ho

A strange experiment, which the amazing vitality of wheat just been carried out. A "mummy" wheat—that is, buried by the ancient Egyptians the embalmed body of a farmer, New South Wales, Australia, over 4,000 years old, has been obtained.

The crop was of seven-cent quality of good quality, though not able for milling purposes as wheat. It grew to an average height.

Wheat older than this "mummy" grain has, however, been found, and it is now definitely listed that it was one of the cereals grown by early man. The result of a discovery of an excavation site near Kish, Mesopotamia, a red-and-black jar as the course of the research. This was stored a quantity of wheat. That was last of nothing was said about the wheat at the time. Professor S. who made it, wished to wheat examined by experts made any announcement.

Now, however, the expert report and the find has been public. According to the report, the historical botanist, who is the author of the cereal. Other experts, say that it is common club wheat, as is often a most highly developed of all and the finest forward one.

It is estimated that this wheat dates back to 3,500 years. It is now roughly 50 years old. Its discovery is proving that the original bread-making wheat was not made any reference to the fact that this was not but they could advance no definite proof until this Professor Langdon.

Canada's Share

Auckland Weekly News points out that the British Empire's share of the world's population is 25 per cent. The British Empire's share of the world's population is 25 per cent. The British Empire's share of the world's population is 25 per cent.

Mr. Bruce particularly in an interest for others. He, because they have ventured what they think about Canada among others, of responsibility. They have turned to dictate what precise part, Canada, should do. In the eyes of this Ministry seeking occasion of offence have made any reference to the fact that this was not but they could advance no definite proof until this Professor Langdon.

Canada's share of the world's population is 25 per cent. The British Empire's share of the world's population is 25 per cent. The British Empire's share of the world's population is 25 per cent.

Mr. Lapointe's point of view is that the sort of justice which it has "should ever be close-coursed, that is, to bear speak much."

Making Snakes Clo

It seems probable that long a woman may be well herself almost entirely hidden from the skirts of her boots, shoes, slippers, handbags, fashionably tanned hides of serpents recently been added maniacs and other things which are finding for fashionable women.

But in another way a factory produces a good market in serpens to coats suits made of snake skins he says, be remarkable flexibility and will be so used and design that their wearers to be the centre wherever they go.

The opportunity to make bear a large part of the clothing womankind sees limited, for its skin can infinite variety of wondrous as well as hues. There is a snake skin suit every purpose to which ordinary kinds of leather the ingenious manufacturer finally devising ways of that were formerly thought for commercial purposes.

Naturalists have long the skins of certain snakes the most exquisitely beautiful in all nature. Their interest in the clothing of women offers chance to appreciate it than we have had before.

Candlesticks, "Shogunen"—"Christians madam? Something unusual?" Shopper—"No, neither thing present I want."

An enormous volcanic middle of a great glacier discovered in Iceland.