

into the pail and along with it millions of harmful bacteria. I sometimes wish that these harmful bacteria were as large and visible as ants or spiders. That might convince people of their presence. How often, too, is the separator kept right in the cow stable? Just think of it! Surely farmers are aware of the dangers they are running by continuing to keep such unclean stables and unclean methods.

I think I have said enough now on this subject. I could say plenty more on what I have seen and the filthy stables that I have been in.

There is an old saying "Cleanliness comes next to Godliness," and it surely does. Try it. It pays.

A SCOTCH CANADIAN.

Waterloo Co., Ont.

LIVE STOCK.

Causes of, and Cures for Bloating.

Many stockmen have had experiences with bloated stock, caused by turning them on sappy alfalfa or young clover growth. This is particularly common in the fall when the nights become cool, and the fall of dew profuse or frosts occur. The after growth of clover or alfalfa is always tender and watery, and, if the stock are not looked after carefully, there is a great danger of bloating. Coburn, in his 'Book on Alfalfa', gives some rules for pasturing which are worthy of consideration, and which, if followed closely, should aid in avoiding bloating. He advises:

At the beginning of the pasturing season give animals a heavy feeding in the morning before turning upon the alfalfa.

Have water in pasture all the time.

Keep the animals in the pasture night and day, after they have become accustomed to it, until removed permanently.

Use uplands in preference to bottom fields for pasture.

Watch the stock closely the first few days, and remove permanently animals that show symptoms of bloot.

Sow blue-grass, brome grass, or meadow fescue with alfalfa in fields intended for permanent pasture.

The following valuable information upon bloat (typanitis) and its treatment he quotes from Nelson S. Mayo, formerly professor of veterinary science at the Kansas Agricultural College:

'Bloating, in all cases, is accumulation of gas in the stomach or intestines, or both, but more particularly in the paunch (rumen). This gas is produced by a fermentation, similar to that observed when cider is working' and the gas escapes in bubbles. There is usually a small quantity of gas given off from the food during normal, healthy digestion, but so small that it causes no trouble, and passes off readily through the intestines, though sometimes from the stomach, up the esophagus, and out of the nose or mouth—'belched up,' as it is commonly expressed. These gases which cause an animal to bloat are generated in considerable quantities if a large amount of juicy, green food is eaten. Alfalfa, clover and frozen roots are very liable to produce bloating.

'It is well known that only part of the animals in the herd pasturing upon clover or alfalfa bloat; so the blame cannot be laid entirely upon the food, but is probably the result of a slight derangement of the digestive organs, not ordinarily noticed, but easily aggravated by certain foods which ferment easily. Animals that are ailing are very liable to bloat when turned on alfalfa pastures. Alfalfa and clover are much more liable to produce bloating if wet with rain or dew, and especially hoar frost, and animals are more apt to bloat if turned into the pastures when very hungry, as they gorge themselves, and the food is not properly masticated. Hence, cattle should not be allowed to go hungry to the pastures.

'It is generally believed by those who have had considerable experience in pasturing clover or alfalfa, that cattle and sheep are less liable to bloat if they have free access to dry food, such as hay or straw. Common bloating, or hoove, occurs in animals having a compound stomach and that chew the cud—ruminants, as they are called. Of our common domestic animals, cattle and sheep belong to this order.

'One of the first symptoms noticed is that the animal stops feeding, and remains lagging behind or stands by itself. Rumination, or chewing the cud, is suspended; the animal appears dull and listless, the back slightly arched; the whole abdomen or belly is distended with a prominent swelling on the left side just forward of the point of the hip. If this swelling is tapped lightly with the fingers there is a hollow, drum-like sound; hence the technical name, tympanitis.

'The rumen being distended with gas not only makes the animal appear much fuller than usual, but it presses forward on the diaphragm, or 'midriff,' and this presses against the lungs, and interferes seriously with the animal's breathing. The breath is short and rapid. The animal often

grunts, or moans, with each breath. The animal's nose protrudes, and there is a driving of saliva from the mouth. Sometimes there are quite severe colicky pains, shown by the animal's kicking at its belly and stepping about uneasily. Sometimes, also, the pressure is so great as to cause eversion or bulging out of the rectum. The symptoms of bloating are so prominent, especially when the history of the case is taken into account, as to make the disease very easy to recognize, even by an ordinary observer.

'When animals die from bloating, death usually takes place in the following manner: The diaphragm is pressed against the lungs so hard that the animal cannot breathe, and it dies of suffocation. Animals usually remain standing until near the end, when they gradually lose consciousness, stagger, and fall, and in falling rupture some of the vital organs.

'Treatment must depend somewhat upon the condition of the animal. If the animal is badly bloated, with labored breathing and staggering gait, energetic measures must be resorted to at once. The best and most satisfactory treatment for bad cases is tapping. This consists in making a hole through the skin and muscles, over the prominent swelling on the left side, into the rumen or 'paunch,' thus allowing the gas to escape at once, relieving the animal.

'The best method of tapping is by means of an instrument called a trocar and cannula. A trocar is a sharp-pointed instrument, five or six inches long, and about the size of a lead pencil, with a handle at one end. Over the point of the trocar slips a tube, called a cannula, not quite as large as the trocar, with a wide flange around the upper end of the tube.

'To use a trocar and cannula, proceed as follows: Tie the animal so it cannot get away. With a sharp knife, make a small incision through the skin over the prominent part of the swelling on the left side. This incision should be made about half way between the point of the hip and the last rib, and should be large enough to admit the trocar and cannula readily. The incision should be made quickly; then the animal

they can at home on the farm. Of course the boys get their food and clothing, but what ambitious, capable boy is satisfied with that? The average boy wants to save money, he wants a bank account, and who can blame him. He wants encouragement, he wants to be paid for his work. If he finds that he cannot get enough money to satisfy him, he leaves the farm. If the father would offer him wages and board, this proposition might induce him to stay. Wouldn't it be far more satisfactory to give him wages than pay an incompetent outsider? The way to keep the boy on the farm is to give him a chance to make good, or to save up some money. The father should take him into his confidence, and occasionally ask his advice in matters pertaining to farming. He should trust him and praise him when he is trying to do his best. This will encourage the boy and make him feel better contented. Some fathers are 'bossy,' and will not give up the reins. They find fault, and grumble, look on the dark side of life, and expect the boys to work year in and year out without having a holiday. Whose fault is it when these boys leave the farm? We learn that some farms are left untilled because of the scarcity of hired help in this province. And, on some farms, the crops are not up to the average, simply because the hired help have slighted their work, or failed to cultivate the land in a proper manner. Farmers, try to keep your good, industrious boys at home. No hireling can take their place. Encourage them in every way possible. Give them money or money's worth freely and willingly. Practice the teaching of the golden rule and you will never regret it.

P. E. I.

A. R.

THE DAIRY.

Tring Dairy Trials.

English live stock papers to hand contain details of the famous annual milking trials at

Tring, in which sixty-five cows were entered. Of these three arrived too late. In the butter test for cows 900 lbs. and under: 1st prize went to J. H. Smith-Barry's Jersey Marionette; 2nd, H. J. Grange's Jersey Lily Grove; 3rd, H. W. Fowler's Jersey, Rocksey, and 4th, J. Carson's Jersey Pamela 2nd. Cows exceeding 900 lbs., live weight: 1st, Dr. Woollerton's cross-bred Dalcie; 2nd, J. H. Smith's Jersey, Malmsey; 3rd, Mrs. Bradich-Ellames' Bixia, Jersey, and 4th, J. H. Smith-Barry's Promise, Jersey. In the milk yield

trial for cows 900 lbs. and under, J. H. Smith-Barry's Promise, Jersey. In the milk yield trial for cows 900 lbs. and under, J. H. Smith-Barry's Marionette again scored 1st; 2nd, Hon. Mrs. Murray-Smith's Miss Violette; 3rd, J. Carson's Pamela 2nd; 4th, J. Carson's Lulah 3rd, all Jerseys. For cows exceeding 900 lbs. live weight: 1st, F. W. Lester's cross-bred, The Merry Widow; 2nd, J. L. Shirley's Mildred (Shorthorn); 3rd, H. Nessham's Cherry 2nd, (Lincoln Red); 4th, Nessham's Canmilk Milkers (Lincoln Red).

The following tables give the average results of all the cattle tested in their respective class.

COWS 900 LBS. LIVE WEIGHT AND UNDER.									
No.	Breed.	Weight, lb.	Live Days		Yields.		Ratio.	Points.	
			Milk, lb.	Milk, oz.	Butter, lb.	Butter, oz.		Butter, lb.	Milk, lb.
1	Shorthorn	863	80	50	4	1 0-4	4.97	27.25	54.25
1	Ayrshire	900	54	37	8	1 5-4	2.75	25.15	38.99
20	Jerseys	814	112	35	9	1 14-9-10	18.34	37.89	41.49
3	Dexters	755	54	37	14 1/2	1 4-11-15	2.32	22.75	41.78
COWS EXCEEDING 900 LBS. LIVE WEIGHT.									
13	Shorthorns	1,300	59	53	0-8-13	14-4-13	25.0	32.42	55.15
5	Lincoln Red								
	Shorthorn's	1,383	101	59	2-2-5	2 4-1-5	23.14	41.70	64.64
2	Holsteins	1,265	45	56	9	1 9-8	35.30	25.37	57.06
1	S. Devons	1,475	39	33	0	1 6-4	23.73	22.25	33.00
1	Ayrshires	1,116	49	54	2	1 1-2	30.92	28.90	55.02
9	Jerseys	962	154	41	12-1-9-2	1 17-18	19.65	44.05	51.87
2	G'n'sys	1,091	160	45	2	2 3-2	2.65	40.75	56.37
4	Crossbreds	1,222	85	44	14 1/2	2 1-3-4	21.28	38.32	49.47

There was a noticeable lack of interest at the ringside at the Toronto Exhibition this year, while the dairy breeds were being judged. Some said it was due to the fact that the buildings having been moved people did not know where to find the judging, but this was scarcely sufficient excuse. Others ventured to say it was an indication that the beef breeds are again growing in favor. Whatever the cause, there was nothing like the enthusiasm manifested by the ringside talent, as is generally the case. Some excellent classes were out in the different breeds, but fewer people saw them placed than one would expect.



Southdown Shearlings.
Champion pen at the Royal.

will not notice it. After the incision is made the trocar and cannula are pushed quickly in and directed downward, inward, and forward; push the trocar in until the flange of the cannula rests against the skin. Withdraw the trocar and the gas will rush out; that is, it usually does so; occasionally, however, the end of the cannula is plugged up with green food. This can usually be remedied by pulling out the cannula part way, or pushing the trocar in again and withdrawing it. If this doesn't work, tap the stomach again in another place, using the same hole through the skin. The escape of gas is usually accompanied by a small quantity of green food.

'If a trocar and cannula are not available in an urgent case, a knife can be used very successfully—a good sized pocket knife blade, pushed quickly through the skin and muscles, in the same manner as described for the trocar and cannula. Care must be taken that the sharp edge of the blade is not turned towards the animal's tail, as it sometimes jumps forward, and a much larger hole is cut than was originally intended.

-(To be Continued.)

THE FARM.

Golden Rule on the Farm.

Editor 'The Farmer's Advocate':

Our P. E. Island farmers find it very hard to hire competent help. Some farm laborers charge \$1.50 per day, and, in busy seasons of the year, it is hard to get them even for love or money. Consequently farmers whose sons have left them, find it necessary to advertise their farms for sale. It is very hard indeed to find a hired man who will take the place of the trustworthy, industrious boys. How the parents miss them when they are gone, perhaps never to return. Generally they find they can save more money abroad than