

DAIRY.

Farmers, Beware!

"A NEW BOGUS BUTTER."

"In Illinois, where they have no end of fine dairy cattle and abundance of pasture, they have recently been reviving an old scheme of making a sort of cheese-butter or butter-cheese, by subjecting the milk to a high temperature and taking from it both the cream and the curds, so making nearly four times the amount of 'butter' than could be made by the old process. Of course, it is not butter, but neither is it a sophistication of 'butter and other substances' not the product of pure butter or milk." The Commissioner of Internal Revenue has been appealed to in vain, he deciding that the new compound was not a violation of the law. Many of the manufacturers of the Fox River and other dairy districts are said to have engaged extensively in the new process, and their product has been put upon the Chicago market, where it competes with oleo and the lower grades of dairy butter. When quite fresh, it is not particularly objectionable, but it is said to require a certain doctoring to give it any keeping quality. Certainly dairy butter is low enough now without being compelled to suffer the competition of such a vile 'bosh' as this. A State law should be secured in the interests of the purchasing public, classing the new compound with adulterations and forbidding its sale."—Country Gentleman.

We would caution dairy farmers, or those about to embark in that line of farming, to be on their guard against bogus butter in any shape or form. Thanks to persistent exposure, "black pepsin" seems to have been squelched, but the trouble is these things do not stay squelched. They are constantly cropping out in new forms, designed to catch the unwary. A scheme whereby it is claimed that two or three times the quantity of butter can be got out of milk is a glittering bait compared with the returns from orthodox buttermaking; and the above paragraph indicates that some who are either not very well informed or not very scrupulous may imagine that there are "millions in it." Dearly bought experience will teach them their mistake. It is the duty of dairymen to guard against the inroads of all such projects. Sooner or later, somebody is deceived and wronged by them. The private consumer pays for what he thinks is butter, but which is something else. Severe penalties are being meted out in the United States to restaurant-keepers and others who serve their guests with "oleo," etc., instead of butter, without having placards publicly exposed to that effect, as the law requires. That these schemes are detrimental to legitimate dairying is obvious, and to our readers everywhere we say, give them a wide berth, no matter under what name or guise they may make their appearance.

An Experiment in Cheesemaking.

Mr. W. W. Hall gives the following account of an experiment in cheesemaking at the Cornell University Dairy School last winter, the results of which in the main correspond with those ascertained by Mr. J. A. Ruddick, of Prof. Robertson's staff, in this country:—

"I placed in vat No. 1, on Saturday, March 3rd, 300 pounds of milk that contained 3.4% fat; in vat No. 2, I put 300 pounds of milk that contained 4.3% fat; in vat No. 3 was put 260 pounds of milk that contained 5.2% fat, and we proceeded to make the whole into cheese, following the most approved scientific methods to the letter.

RESULTS.

"The 300 pounds of 3.4% milk made 26.10 pounds of cheese, requiring 11.48 pounds of milk for one pound of cheese, and produced 2.56 pounds of cheese for every one pound of fat the milk contained.

"The 300 pounds of 4.3% milk made 33 pounds of cheese, requiring 9.09 pounds of milk for one of cheese, and made 2.56 pounds of cheese for each pound of fat in the milk.

"The 260 pounds of 5.2% milk made 32.80 pounds of cheese, requiring 7.90 pounds of milk for one of cheese, and made 2.43 pounds of cheese for every pound of fat.

"Here was disclosed a difference of 3.58 pounds of milk required for one of cheese; also that the solids, not fat, increase as the fat increases and decrease in the same proportion that the fat decreases.

"The 300 pounds of milk containing 4.3% fat made 6.90 pounds more cheese than did the 300 pounds of the 3.4% milk; yet, for every pound of fat in the milk, we made 2.56 pounds of cheese in both cases.

"The 260 pounds of 5.2% milk fell short .13 pounds of cheese for one pound of fat, showing that there is a limit beyond which the other solids do not follow the fat in the same ratio as in that below, and that that limit is at about 5% fat.

"The results, reduced to a monetary basis, give the following:

33 pounds of cheese, at 10 cts.....	\$3 30
26.10 pounds of cheese, at 10 cts.....	2 61
Difference.....	\$0 69

"Dividing this by three—the number of hundreds of pounds of milk used—we have 23 cents per 100 pounds of milk more for the 4.3% than the 3.4% milk. The value of 100 pounds of the 3.4% milk was 87 cents; that of the 5.2% milk, \$1.27—a difference between the two grades of 40 cents."

FARM.

Harvesting Peas.

The pea crop, although a remunerative one at the present day, has a tendency to be too small in acreage, owing to the amount of work, and barn room necessary in the harvesting. In localities of Ontario, where this crop is one of the most extensively grown, the plan adopted is to allow the peas to ripen quite hard, pull them with the old revolving horse-rake, although some use the sulky rake and others the regular pea harvester. In a couple of days the crop is ready to thresh, which is done in the field, barn or barnyard, as the case may be, according to where the straw stack is to be. We will give what we consider the advantages in this plan:—

1. The tedious and tiring job of stacking or hauling into a barn by few hands is done away with.

2. The rapidity with which they can be threshed when not allowed to mat or settle together in a stack or mow.

3. The short time it requires to clear a large field by the 3, 4 or 5 teams hauling to the machine, and therefore little risk in getting wet several times, which necessitates continued turning, and therefore shelling.

4. Early threshing, so as to be ready for the early market, which is very often as good or better than later.

5. The threshing, although much more rapid, is easier on the men than when taken from a stack or mow.

The objection may be raised by some that the whole neighborhood cannot get men and machines to thresh all at the same time, but to this we would answer that peas may remain ripe unpolled for a considerable time without injury to the grain.

Farmers having ten acres or more of peas will do well to try it this year, which will convince doubting ones that it is by far the better plan.

English Farm Prospects.

According to late reports, the agricultural outlook at the present time is not particularly bright. The prospect in the early part of May was very good, but a severe frost a few weeks ago has done considerable damage. Potatoes have, in some localities, been so badly cut down that they cannot recover sufficiently to produce a crop. Bean and pea blossom has also been ruined in many places. The hay crop, although fairly heavy, has been seriously damaged by rain after being cut. In some parts continued rain has hindered all hay cutting, and has done considerable damage to low-lying and undrained lands.

QUESTIONS AND ANSWERS.

[In order to make this department as useful as possible, parties enclosing stamped envelopes will receive answers by mail, in cases where early replies appear to us advisable; all enquiries, when of general interest, will be published in next succeeding issue, if received at this office in sufficient time. Enquirers must in all cases attach their name and address in full, though not necessarily for publication.]

Veterinary.

RUSTY OATS.

R. G. DRYDEN, St. Agathe:—"Will rusted oats affect the health of the horse? My horses are down in condition; I do not know the cause; I feed five quarts of oats three times a day to each horse, and good fresh green prairie hay twice a week; I give cut hay and chopped oats, twelve quarts, mixed, at night. My oats were considerably rusted when harvested last fall."

[Rust is a vegetable fungus or mushroom, of the same family as ergot, mould and mildew; and though not in a high degree poisonous, as some of those fungoid plants are, we have had ample opportunity of observing that it, in a large measure, depreciates the value of oats as food for the horse. It makes grain less digestible and less nutritive. It may be better to feed rusty oats than no oats at all, but, if possible, the feeding of such oats should be alternated with rations of other grain, such as chopped barley, boiled wheat, bran mash, etc.]

W. A. DUNBAR, V. S., Winnipeg.

OBSTRUCTED TEATS.

J. A. M., Springbank:—"In July of '93 I bought a valuable registered Shorthorn cow. The man I bought her from told me that she only gave milk from three teats. She calved a few days ago, and the quarter of her udder that was blind seemed gorged and full of milk. I at once concluded that some slight obstruction in the teat or udder was the cause. Unfortunately, I had no milking tube, and instead I picked up a small hen's feather, which I oiled and put in the teat; I put it up quite a ways, and after a time the milk came quite freely. I put my

hand on her teat twice, and, to my dismay, the feather went up her teat entirely, and there it remains. Will you please inform me what I shall do; do you think it will injure her, or how am I to get it out?"

[Throw the cow down, so that the teat containing the feather is uppermost; draw the upper hind leg well forward by a rope attached first above the hoof, while the other end is made fast by a hitch taken through between the forelegs and around the neck just in front of the shoulders. Have the head held down by an assistant; provide yourself with a small dissecting forceps and a very narrow bladed, sharp knife; endeavor, by external manipulation, to bring the feather as near as possible to the end of the teat; grasp the teat firmly with your hand; introduce the forceps, and by exercising a little patience, care and skill, you may be able to seize the offending body and draw it out. If you cannot reach the feather in the way mentioned, it will be necessary either to enlarge the passage or make an incision in the side of the teat. I was going to describe the manner of further operating, but I think, as your cow is valuable, if you are within a reasonable distance of a veterinary surgeon, you should by all means secure his services.]

W. A. DUNBAR, V. S.

INDIGESTION IN LAMBS.

P. B. McLAREN, Clearwater, Man.:—"There is a disease among my lambs; I have lost quite a number. When they take it first they appear dull, and stop nursing. As the disease increases they pant for a while, and then give a long breath; they hang the head when standing; live four or five days. Please let me know what is the trouble?"

[The few symptoms you have mentioned would indicate a form of indigestion. In the lamb and other young ruminants the abomasum, "rennet," frequently becomes overloaded with a mass of curd. This occurs in certain states of the stomach when the digestive juices become overcharged with acid, or when the milk taken into the stomach contains too much acid. If you notice the ailment at its earliest stage, try the following drench, every six hours, until three or four doses have been given: Epsom salts, half-an-ounce; bicarbonate of soda, one drachm; carbonate of ammonia, thirty grains; dissolve in a small teacupful of warm water, and add a tablespoonful of treacle.] W. A. DUNBAR, V. S.

Miscellaneous.

APPLE TREE BARK LOUSE.

H. W. CHICK, Dunville, Ont.:—"Would you please inform me whether there is a remedy for bark lice on apple trees? Can they be destroyed without injury to the trees?"

[To understand the destruction of the bark louse, it is necessary to know something of its life history. If the little scales are examined in the spring up till about the first of June, they will be seen to contain a great many very small eggs. About the first week in June the eggs hatch out very small lice, which can be seen with the naked eye by close observation. These move about for a few days till a suitable place is found to insert their little bills, and anchor themselves for life. In a short time a scale forms over them, which is commonly called the louse. Here the female lives and sucks a living till the following spring, when she lays from 30 to 100 eggs, dies and dries up, leaving the eggs to hatch in the early part of June. This year the little fellows were active on June 10th in the Agricultural College orchard at Guelph, and on June 11 the trees were thoroughly sprayed with kerosene emulsion, and in from one to two weeks sprayed again. Professor Pantton expressed himself as being satisfied that this method would prove successful in exterminating the trouble. Kerosene emulsion is prepared as follows:—Hard soap, 1 pound; boiling water, 1 gallon; kerosene, 2 gallons. Dissolve the soap in hot water or by boiling, add the kerosene, and churn with a pump for five to ten minutes. Dilute with water ten to fifteen times before spraying.]

CANKER WORM.

HENRY WILLS, Winger, Ont.:—"I send you a sample of some worms that have attacked an orchard. I would like to know what they are, and the best method of destroying them? The orchard has about 200 trees, large enough to bear from six to nine barrels of apples per year. The worms have spread all over it since spring, destroying the entire foliage. The leaves have the same appearance as if a flame of fire had passed through the trees. Will the trees come out in leaf again next year?"

[The insects are caterpillars, known as canker worms. The proper remedy is to spray the trees promptly with Paris green—1 lb. to 200 gallons of water, in which two pounds of fresh lime have been mixed. The trees are not likely to die, although stripping them of their leaves must injure them considerably.]

JAS. FLETCHER, Dominion Entomologist.

To attack an enemy with success, it is essential that we know his vulnerable points. In this instance the female is without wings, and can, therefore, be overcome by attaching an appliance to the trunk of the tree to hinder her ascent to lay her eggs. The best device that we have seen for this purpose is a sort of inverted, funnel-shaped collar, manufactured by McGill Bros., 355 Richmond street, London, whose advertisement appears in this paper. For canker worms, the 'Protectors' should be put on the trees about October 1st, to hinder next year's trouble.