

## THE PRODUCER'S SIDE.

The number of cows in a single herd producing certified milk varied from 25 to 500, and practically every breed is represented, according to the investigations of the author. "The breed is not considered of special importance with most of the Commissions, provided the composition of the milk produced is within the limits of the standard prescribed. The health of the animals and cleanliness of the surroundings and product are the most important elements in production."

The general practice is to remove the manure at least twice daily to the field, or to a place some distance from the stable. In the most carefully-managed dairies the whole interior of the stable is washed and scrubbed daily with water containing a washing compound. Disinfectants are used, such as bichloride of mercury, land plaster, and slacked lime. Shavings are favored for bedding.

In some dairies, not only are the cows groomed daily and soiled parts washed, but the entire body of the cow is washed. "The udder is washed in sterile water from a sterile pail, and dried with a clean towel, a separate one being provided for each cow." This is similar to the notice seen in some barber shops, where we read, "A clean towel used on each customer."

In a few dairies the cows are milked in a room separate from the stable; milkers are clad in fresh-laundered suits. They must wash hands and face, and clean their nails, before putting on the suits. One dairy requires the milker to have a shower-bath before commencing to work. A sterilized pail and stool are provided. The fore-milk is discarded. The remainder of the milk is strained through absorbent cotton and cooled at once. It is then bottled, the bottles packed in cases and covered with cracked ice, and put in cold-storage. Bottles are stamped with the date to be sold and used, by some Commissions. A rubber stamp is furnished, and has a secret mark by which all certified milk can be readily identified in the city. These secret marks are changed frequently.

Stables, coolers, pails, stools, bottles, caps, etc., are all nicely illustrated. The bulletin marks a distinct contribution to the subject of sanitary milk. This week we had an inquiry from a person for a description of a sanitary milk pail. We advised the writer to consult this bulletin, then get his local tinsmith to make one after one of the styles illustrated. This would be cheaper and more satisfactory than if ordered from abroad. The main point is to insist upon the use of good tin, and to have all seams and joints flushed with solder.

H. H. D.

## DISADVANTAGES OF SHIPPING CHEESE GREEN.

For the following comment upon the green-cheese question, a leading dairy authority in Western Ontario is responsible: Some factories in Western Ontario, he says, are shipping cheese up to the hoop, or at least some of the cheese only a few days old. This is certainly a mistake, for there is no doubt that the rinds of cheese a day or two old, or just taken from the hoop and placed in boxes, will arrive in the Old Country showing soft ends, particularly if they have been put in boxes the heads of which are the least bit green. We usually find that, as soon as the first hot weather strikes us, about the end of May or the first week in June, a lot of cheese begin to show rough texture, open and weak in body, and a tendency, if not weak in body, to be acid. There is no doubt that the practice of shipping cheese out too green has something to do with it.

When the cheese are going out quickly, it has a tendency to cause the makers to be somewhat careless in their methods of making; for instance, they want the cheese to show signs of breaking down as early after making as possible. To help this breaking down, they are inclined to leave too much moisture in the curds, and salt very much earlier than they would if they knew the cheese were to remain in the curing-room for any length of time. This will produce open, weak-bodied cheese, particularly if a hot spell should strike such cheese, with no means of controlling the temperature in the curing-room. This happens more particularly with the latter half of May or the first half of June cheese, rather than with early foddies.

Again, when cheese is going out green, the maker is inclined to be less particular in his selection of the milk at the weigh-stand, for he reasons that, since the cheese go out quickly, the defects produced by accepting a poor quality of milk do not show in the cheese until after it has left the factory, although these defects will come back on the reputation of Canadian cheese. Early shipping also prevents the factorymen and patrons from seeing the necessity of providing better curing-rooms, for they say that, when cheese go out so green, there is no reason for having a room where the temperature could be controlled and the cheese properly cured before being sent to the consumer. Putting green cheese on the market

no doubt restricts the consumption, and causes a more or less congested condition.

The makers and instructors have no chance to see these green cheese, and cannot tell whether they will turn out right or not; so that it is more difficult to say whether they are made as they should be, and there is no doubt that one of the worst features in shipping green cheese, from our standpoint as instructors, is the tendency which some makers may have in getting too close to the weak-bodied, open cheese. Acid cheese are not wanted by anyone, since they lack that smooth, firm, meaty texture, characteristic of finest cheese.

## MILK RECORDS IN SCOTLAND.

During the year 1907 there was a greater increase in the number of cows tested than in any previous year, writes John Speir, of Glasgow, in the 1908 report of the Highland and Agricultural Society of Scotland. The past year is the fifth during which the Society has carried on this work, and the results which have followed, although at first looked on with doubt, are now meeting with hearty approval, even in quarters which at first were not active in their support. The work set out in May, 1903, with three local societies, and during that season 1,342 cows were tested every fourteen days. During 1907, the yield in milk and butter-fat of 3,931 cows have been obtained. Mr. Speir gives an interesting summary of the work of the several testing societies, and, among other points, draws attention to two cows in one herd in the Cunnock Society, which headed the list of 530 cows for two successive years, 1906 and 1907. This, he adds, is scarcely in accordance with the opinion expressed by some individuals that the good-milking cows of one year are seldom those of the next.



One at a Time.

Mr. Speir concludes his paper with a few generalized observations, which we reproduce, as follows:

"The foregoing instances from the districts where the milk records have been longest carried on clearly indicate the immense improvement which may be made in our milking stock by judicious mating. The instances given, and hundreds of others, clearly prove that the ability to give a large quantity of milk is one which is transmitted to the offspring as much through the male as through the female. The same applies to a high per cent. of fat in the milk. While these characteristics are valuable, a more important one, as far as the ordinary producer of milk is concerned, is that cows producing a large quantity of milk of good quality do so at a much less cost for food per gallon of milk than those yielding half the produce. The food necessary to keep in good condition a cow which gives 1,000 gallons of milk per annum is only a trifle more than is necessary to maintain another which gives only 500 gallons.

"It is often said that the cow which gives 1,000 gallons or more milk in a year is useless by the time she is seven or eight years old. Such is not the case, as heavy-milking cows seem to live to as great ages as those giving half the quantity. Since the milk records began, there have been many instances of cows from 15 to 17 years old giving large quantities of good milk, and there are two at 20 years old, one of which had 878 gallons of an average of 3.70 per cent. of fat.

"What is wanted in the breeding of the Ayrshire is that, both on the male and female side, they should be descended from as long a line as possible of good milking animals. If this is attended to, cost of food will be reduced to a minimum, and there will be no necessity to slaughter cows at 6 or 8 years old, under the erroneous belief that they are past their best.

"This work, which has been carried on by the Highland and Agricultural Society for the past five years, has now been transferred to a body to be called the Ayrshire Cattle Milk Records Committee. This Committee is composed of five members from the Ayrshire Cattle Herdbook Society, two members from the Highland and Agricultural Society, and one member from each of the milk-record societies. For the current year, the Highland and Agricultural Society gives this Committee a grant of £200, of which the Committee have the disposal, with a very few easy conditions.

## SHIPPING CHEESE DIRECT TO BRITAIN.

Editor "The Farmer's Advocate":

Through the columns of your valuable paper, kindly furnish me with name and address of any cheese factories shipping their cheese direct to the Old Country, and not to Montreal buyers, as we are doing at present. Have been a subscriber to your valuable paper for last two years, and appreciate it very much.

D. W. H.

Ans.—I am not in possession of the names and addresses of any cheese factories from which the cheese is shipped direct to the Old Country at present.

Mr. Edward Kidd, ex-M. P. for Carleton Co., shipped some cheese a few years ago, but has, I

think, discontinued the practice. It has been tried on many occasions, but has not always proved satisfactory. There are several things in connection with direct shipment which work against the seller. In the first place, if there is anything wrong with the quality of the cheese, they are growing worse all the time, and have decreased in value by the time they reach the other side. If there is anything wrong with the quality, the seller here is completely at the mercy of the receiver in the Old Country.

It very often happens, also, that cheese sent on consignment to the Old Country do not go to the market for which they are best suited. That is where the knowledge and experience of the middleman

comes in. He studies the requirements of the different markets, because character, as well as quality, is a very important thing in supplying the markets of Great Britain. The cheese which would give satisfaction in the Manchester and Lancashire districts would be very little thought of in London, and would not bring anything like full prices; and vice versa. The producer is not in a position to cater to these different markets.

Ottawa.

J. A. RUDDICK,

Dairy and Cold-storage Commissioner.

[Note.—We shall be pleased to publish the experience of factories which have tried shipping direct to the Old Country. A few have been doing it in Eastern Ontario. Let us hear from them.—Editor.]

In British Columbia the stringent insect-pest laws are being enforced by the Provincial Board of Horticulture. Orchards infested with certain pests have been destroyed by order of this board. Should their vigilance be maintained, spraying will be practically compulsory.

Spraying in Nova Scotia is on the increase, and is growing rapidly in favor, even among some of the growers who were most skeptical, says the May Crop Report of the Fruit Division, Ottawa.