

DAIRY

Air Treatment for Caked Udder.

Dr. Peters, of the Nebraska Experiment Station, treats caked udder in cows in this way. He says:

"I have here an ordinary milk tube, with a little bibb at the end of it. I use a rubber tube something like an ordinary hand bicycle pump. Now I insert this tube carefully into the quarter that is affected and fill it up with air. I do not probe in there with darning needles and other kinds of instruments, but I fill up this spongy organ with air, and it is like filling a sponge with water. If the udder is caked, you put in as much air as you can. Then you massage or work with your hand, and work that air all through the quarter, and you will hear the bursting of these little vesicles—these little tubes. You can burst all of them in two or three applications of that kind, and you will generally restore the udder. I have treated several hundred very bad cases, and I know it works all right, and any one of you can easily do it.

"Now, where the entire udder soon after calving has become caked, we use what is known as the compress. We take a piece of heavy cloth and put it on so that it lifts up the entire udder, and tie it on top. We usually use straw with it, so that we do not chafe the back of the animal. That is to relieve the pressure. You will notice that the udder is very heavy, and that the pressure must be relieved before anything else is done. If you want to assist, take several small, five or ten pound bags and fill them with bran, keep them hot, and apply them to the udder. That is the treatment we use where there is a very great amount of congestion. Now, these are about the simplest methods of treating disease of the udder that I can explain—the massage for the diseased quarter, and the compress for the whole udder."

Dairy Research.

SWEET-CREAM BUTTERMAKING.

Bulletins Nos. 13, 14 and 15, from the Dairy and Cold-storage Commissioner's Branch of the Department of Agriculture, Ottawa, deal with "Sweet-cream Butter," "Apparatus for the Determination of Water and Fat in Butter," and "Gathered Cream for Buttermaking."

The conclusions from the investigations made by Prof. Shutt, of the Experimental Farm, Ottawa, regarding sweet-cream butter, are: (1) By the sweet-cream process there is no greater loss of butter-fat than in the ordinary method with ripened cream. (2) The keeping qualities of the butter by the sweet-cream butter are distinctly superior to those of the ripened-cream butter.

These results agree with those obtained at the Dairy Department of the O. A. C., except that we should qualify conclusion 1 by saying, "If the conditions are just right, there is no greater loss of

fat by churning sweet cream," but the tendency, as indicated by the experiments detailed in the bulletin, is for a greater loss of fat when churning the sweet cream, as compared with ripened cream, unless the buttermaker be very careful in his work.

TESTING BUTTER FOR FAT AND MOISTURE.

The tests of apparatus for fat and water determination in butter were also made by Prof. Shutt. The apparatus consisted of the Wagner butter-test bottle, and the Wagner butter hygrometer. Speaking of the test bottle, the author says: "The reliability of the results from this test bottle depends largely upon the temperature of the contents of the bottle when the fat column is read." The bottle gave results consonant with those obtained by gravimetric analysis, by using 1 c. c. acid (sulphuric), and reading the fat column after placing the bottle (direct from the machine) for ten minutes in water that had a temperature of 122 degrees F. Of the butter hygrometer, the writer speaks as follows: "After considerable experience, we cannot speak in unqualified terms as to its general satisfactoriness." In other words, he does not recommend it for practical purposes in determining the moisture in butter.

In this connection, it is interesting to note the following recent warning from Prof. G. L. McKay: "Trying to approach the 16 per cent. limit is a very dangerous practice, and should not be resorted to." This warning is one that may well be given to Ontario buttermakers. We recently heard a creamery-owner say that he was going to put all the water into his butter that the law will allow. In trying to get all the water in butter which the law will allow, some of our buttermakers are likely to get more than the law allows. Someone is likely to suffer.

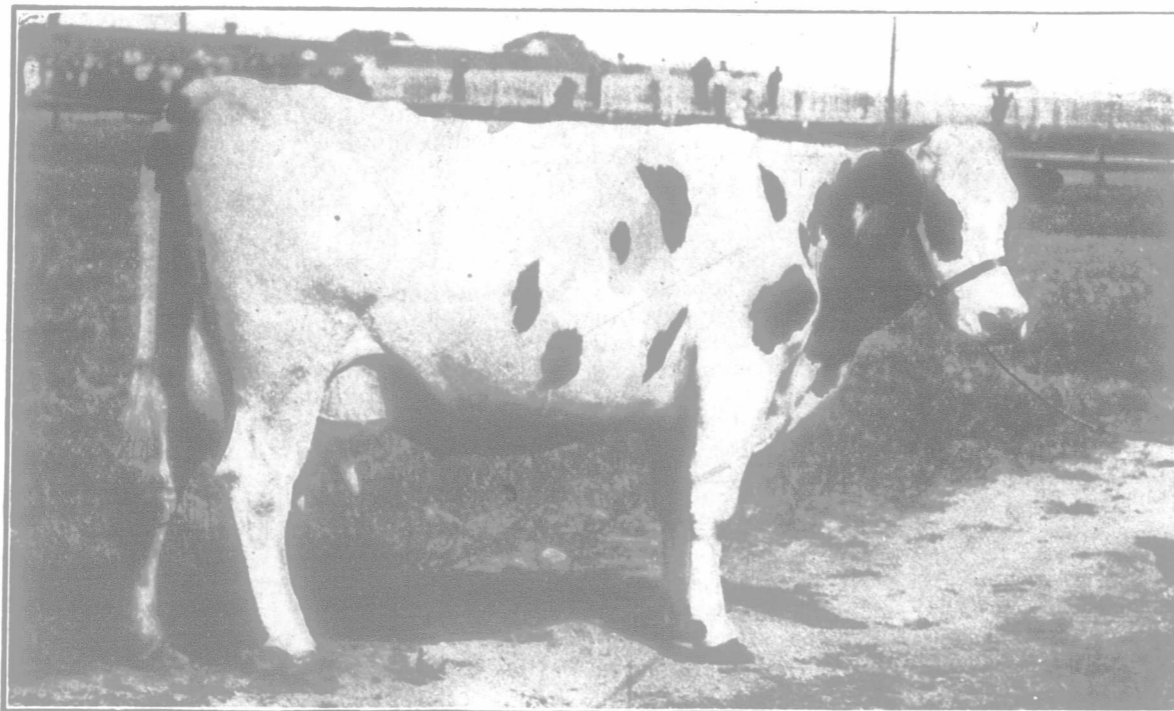
GATHERED CREAM.

The bulletin on "Gathered Cream," by Messrs. Ruddick and Barr, is full of practical suggestions for improving the results at the cream-gathering creamery. It is illustrated with plans for water tanks to hold cream cans for cooling cream from a separator or for setting milk in; to raise the cream by gravity process in deep cans.

The table on page 10, showing the relation between percentage of fat and quantity of cream, is a very good guide to the operator of a separator who has a Babcock tester or facilities elsewhere for testing milk; but he may as well have the cream tested, also, and know what percentage of fat his cream contains, thus saving the trouble of weighing milk and cream. The table is of little or no value unless the fat in milk is known. Then, too, it should have been qualified, by saying that the table is correct, assuming that there is no loss of fat in the skim milk, nor in handling the milk. As there is always some loss in both, the table, in any case, is only approximately correct.

The summary of important points includes some very good paragraphs that have been quoted last week in this department.

H. H. D.



FIRST PRIZE HOLSTEIN COW AT WINNIPEG EXHIBITION, OWNED BY MUNROE PURE MILK CO.

Dairy Products at Winnipeg Fair.

That interest in dairying in Manitoba is increasing was evidenced by the large number of entries made in the dairy section at the Winnipeg Fair, and by the crowds that visited the space in the arts building allotted to demonstrations of the various processes of butter and cheese-making. The judging of dairy products was done by Prof. Dean of Guelph Agricultural College, and we cannot do better than quote his summing-up of the features of this exhibit. He said: "It is some three years since I judged dairy products here before, and the improvement in quantity and quality is gratifying. Considering that Manitoba is not a dairy province I would say that the size of the exhibit was very creditable indeed. Taking butter first, though there were some few exhibits slightly off in favor, and mottled in appearance, the exhibit as a whole was very fine. In the creamery section the finish was good, though as usual there were a few dirty boxes. The dairy butter was excellent throughout and I really think that the section for dairy prints contained the most uniformly good butter of the show. The first prize butter with a score of 98 was almost perfect. I think that Manitoba has proved beyond a doubt that she can produce quite as good butter, both creamery and dairy, as the province of Ontario. Certainly the best of the exhibit here were equal to the best in Ontario shows, though of course the quantity is smaller.

"The cheese made a very good showing, though a few were off in flavor, rather suggesting dirty whey tanks. If I might make a criticism it would be that the finishing needs improvement. Bandages should not be left with more than three quarters of an inch to lap and then a cap cloth used. This would give the cheese a smarter appearance. Judging by the collars on some of the cheese exhibited the followers do not fit properly. These are small matters, but they bulk largely in the marketable value of cheese, especially for export. I congratulate the dairymen of Manitoba on the marked improvement in their exhibit since my last visit. I am surprised, however, that more people do not go in for dairying, as I am sure it would be in the end more profitable than wheat raising."

The prizes were awarded as follows:

Creamery Butter. Two packages for export.—A. Scott, Winnipeg, 95 points; Carse O' Gowrie Creamery, Birtle, 94½; T. C. Gerrard, Shellmouth, 94; W. B. Gilroy, Macgregor, 92. Long keeping in cold storage.—T. C. Gerrard, 94½; A. Shindler, Lunder, 91; W. B. Gilroy, 89; J. T. Baxter, 87½. Assorted creamery packages (14, 28, and 56 lbs.).—Carse O' Gowrie Co., 96; A. Scott, 95½; W. B. Gilroy, 94½; C. D. Shannon, 94½. Creamery prints.—T. C. Gerrard, 97½; A. Scott, 96½; C. D. Shannon, 96; W. B. Gilroy, 93½. The sweepstakes in the creamery section was won by T. C. Gerrard, Shellmouth.

Dairy Classes. Packages of 40 lbs. or over.—John Gorrell, Carberry, 95; Mrs. Robt. Coates, Morris, 94½; Mrs. R. Garnet, Carman, 94; G. F. Allison, Elkhorn, 93½. Packages of 10 lb. prints.—Mrs. Coates, 98; G. F. Allison, 96½; John Gorrell, 96½; Mrs. W. Lewis, Plympton, 96½. Packages of 20 lb. prints.—Mrs. Gorrell, 97; Miss A. Smith, Portage la Prairie, 94½; R. D. Lang, Stonewall, 94½; Mrs. T. Goggin, Carberry, 93½.

Cheese. Two colored cheese made before June 15th.—H. Frechette, 93½; F. W. Armstrong, 93; J. A. Belisle, 90½; J. P. O. Allaire, 90½. White cheese made before June 15th.—W. F. Armstrong, 94½; J. A. Belisle, 93; J. P. O. Allaire, 92½; H. Frechette, 92. Colored cheese made after June 15th.—J. A. Belisle, 95½; E. Dubors, 93½; D. Verille, 90½; F. W. Armstrong, 90½. White cheese made after June 15th.—J. A. Belisle, 93½; D. Verille, 92; J. A. Reghr, 91½; N. Lemieux, 90½. Twin white cheese made after June 15th.—F. W. Armstrong, 94; E. Dubois, 92½; J. A. Belisle, 92½.

Mr. J. A. Belisle won the sweepstakes in this exhibit; also the gold medal, the exhibition diploma, and, for the second time in succession, the Northern Bank silver cup.

The butter-making competition was held on Tuesday, Wednesday, Thursday, and Friday, 16th, 17th, 18th and 19th. Milk was supplied the competitors; also separators, churns, butterworkers, pails, salt, etc. The milk was separated and the cream ripened and churned out the following day. The competitors were judged according to the following points: Method of