

bec or Toronto, were much fatigued, and unable to feed with their accustomed vigour. As was expected, there was a decided falling off in the milk yields, and in the quality of the products. It would be noticed that the winner of the sweepstakes silver medal has not appeared at any of the large shows, while the Jerseys and Mr. Drummond's Ayrshires have travelled two long and tedious railway journeys in attending recent exhibitions.

Only ten animals competed for the prizes offered.

In section 1, Shorthorns, there was no competition; the award will therefore fall to Mr. Sangster. In section 2 there were six Ayrshires. The silver medal was won by Jos. Yuill, Carleton Place, and the bronze medal by Mr. Drummond, Petite Cote, Q. In the 3d section there was no competition, as the two Jersey cows entered by Mrs. E. M. Jones, of Brockville, were the total of this section. Belle of Steuben is winner of the silver medal, and Girl of St. Lambert of the bronze. In section 4—the Holsteins—there was no competition. In the last section, grades, there were two competitors. Mr. Albert Hagar, M.P.P., Plantagenet, is winner of the silver medal, and the bronze falls to Mr. J. G. Clark. The board, having offered sweepstake prizes to the two best milch cows, of any breed, have to report that the silver medal falls to Mr. Jos. Yuill, and the bronze medal to Mrs. E. M. Jones.

The following is the order of merit:—

No.	Exhibitor.	Breed.	Milk per day lbs.	Solids per cent.	Weight of solids lbs.	Fat per cent.	Weight of fat lbs.	Days calved.	Days of lactation.	Score.
1	Jos. Yuill.....	Ayrshire..	37.75	11.99	4.535	3.3	1.315	147	125	86.85
2	Mrs. Jones.....	Jersey....	29.72	11.16	4.213	4.22	1.255	116	86	81.45
3	A. Hagar.....	Grade....	37.50	11.87	4.45	2.80	1.05	104	36	75.10
4	Mr. Drummond..	Ayrshire..	36.50	13.87	4.23	3.82	1.03	87	39	75.09
5	Mrs. Jones.....	Ayrshire..	22.25	14.83	3.96	4.96	1.103	85	30	64.85
6	W. Redden.....	Ayrshire..	27.75	13.6	3.774	3.97	.916	102	34	62.77
7	J. G. Clark.....	Grade....	27.75	12.8	3.03	3.07	.799	101	33	62.31
8	R. R. Sangster..	Shorthorn.	26.00	12.68	3.14	3.22	.339	106	43	57.76
9	Mr. Drummond..	Ayrshire..	21.25	12.08	2.75	3.50	.244	127	211	57.28
10	J. Taylor.....	Ayrshire..	24.50	11.97	2.93	2.98	.716	84	54	51.86

"I consider the JOURNAL the best stock paper in Canada, and will do all I can to assist you in this vicinity."—H. S. Green, East Bolton, Que.

"I believe the JOURNAL to be the best of its kind published in Canada, and have no hesitation in recommending it to the public."—Joseph Watson, Greenbank, Ont.

"I will endeavor to get a few more subscribers for the JOURNAL, as I consider a copy of it should be in every farm house in Ontario. The editorials are well written, and for stock-raisers it has no equal."—Jas. Sibbald, Burgoyne, Ont.

For the CANADIAN LIVE-STOCK AND FARM JOURNAL.

How to Make October Cheese.

BY JAS. W. ROBERTSON.

A few years ago "October cheese" became in England the synonyme for all that is objectionable in autumn-made goods. A flavor bitter and tallowy, a body porous and soft, a texture of the consistency of paste and putty without their solidity; an appearance mottled and doughy, and a shape indescribable, are all qualities still too often suggested to the importer's mind by the mention of October cheese.

Such impression should no longer be justified by the character of the article produced. Cheese can be made as fine in quality during October as during any part of the season, and with less work to the cheese maker, if performed in the right way. I wish the JOURNAL to carry the following instructions into every cheese factory in Canada for the benefit of the industry:

1. Let the milk be well matured by the retention or application of heat before the rennet is added.

2. If the milk is delivered to the factory in too sweet a condition, it should at once be heated to 94° and frequently stirred.

3. According to the degree of its sweetness it may be left to gradually cool down to 88° during 2 to 4 hours.

4. The addition of some whey to hasten the maturing is most objectionable and should never be resorted to.

5. Old milk, which has become well ripened, and nearly sour to the taste, may be added, but loppered or thick milk should never be used.

6. Rennet should be added in sufficient quantity to coagulate the curd fit for cutting in from 45 to 50 minutes at 88°.

7. Rennet should be diluted to the volume of at least one gallon of liquid for every vat before being added to the milk.

8. After coagulation is perfect, the curd should be cut finer than during the summer.

9. The application of heat should be delayed for fifteen minutes after the stirring is commenced.

10. The heat should be applied through the medium of water under the pans, to avoid scorching of the curd.

11. The temperature should be raised to 98° and maintained at 98° until the whey is drawn off.

12. Pains should be taken to cook the curd particles so dry, before the development of acid is perceptible, that after being pressed in the hand and released they fall apart when slightly disturbed.

13. The presence of too much moisture in the curd, while the acid is developing, is the cause of tenderness of body and pastiness in cheese.

14. When the curd, while still sweet, has been cooked, as defined in No. 12, the acid may be allowed to develop so as to show $\frac{1}{4}$ inch hairs on the hot iron before the removal of the whey.

15. When the curd is not properly "cooked" or "dried" before the presence of acid is perceptible, the whey should be drawn at the first indication of acid, after the heating up is finished.

16. After removal of the whey, the curd should be kept at a temperature above 94°.

17. If the temperature be allowed to fall below 94° the development of acid is retarded and excessive moisture is retained in the curd during its development.

18. The presence of such extra moisture in the curd at this stage will leave the cheese with a weak or pasty or tallowy body, according to the degree of acid development permitted.

19. A rack placed in the vat seems the simplest and most effective provision for keeping the curd warm without risk of scorching.

20. Just after the removal of the whey the curd should be hand-stirred till the free moisture has drained off.

21. After the curd is dry or firm enough it may be allowed to mat into one mass, but not before that stage is reached.

22. It should then be frequently turned and packed close, till the layers of curd are four or five deep.

23. Whey should never be allowed to gather in small pools on the curd at this stage.

24. The close packing in layers four or five deep with frequent turning prevents the outside of the matted pieces from becoming chilled or more deeply colored than the rest of the curd.

25. The proper degree of change has taken place when the curd feels mellow, velvety and greasy, and shows a texture passing from the flakey or leafy into the stringy and fibrous.

26. If the curd be too moist or soft, it should be cut or ground at a rather earlier stage, and hand-stirred sometime before the addition of salt.

27. Not less than $2\frac{3}{4}$ lbs. of salt per 1,000 lbs. of milk should be used; and when the curd is on the soft or moist side, 3 lbs. per 1,000 lbs. of milk should be added.

28. Immediately after the application of salt the pieces of curd become harsh and gritty on their surface; then in from 15 to 25 minutes the harshness gives place to mellowness and the salt causes the whey to separate freely.

29. At this second stage—and the temperature should not be under 88° the curd should be hooped and pressure applied.

30. Delay at this stage, or coldness of curd destroys the desirable rosy flavor and imparts to the cheese the bitter taste of the salty white whey.

31. Particular care should be taken to use only pure, warm water when turning the cheese for bandaging, before the rinds are fully formed.

32. In the curing room a temperature of from 65° to 70° should be maintained continuously.

33. Where the room is heated by a stove the following simple device will help to equalize the temperature over the whole, and save fuel:

34. A tin jacket should be so placed as to surround the stove at a distance of eight inches all around.

35. Let the jacket stand 8 inches from the floor and extend 8 or 12 inches above the stove according to its size.

36. A light rope attached to the jacket and then passing around a pulley fixed to the ceiling will provide for its being lifted out of the way when fresh fuel is being added.

37. The air between the stove and the jacket on being heated at once ascends; the colder air from below is drawn up, and a continuous movement of warm air along the upper part of the room is established away from the stove, with the complementary circulation of colder air, near the floor, towards the stove.

The plan is worth at least \$25 a year to every factory adopting it, and it is not patented.

Montreal, 19th September, 1887.

When to Milk.

From "Scientific Dairy Practice."

Regularity is of economic importance with all animals, but with none other so much as with the cow. The disposition of the cow to yield her milk, the character of milk itself, subject as it is to changes, all demand that everything be done, as much as possible like clock-work. In a well constituted dairy, each