

other kinds of churn in comparison with this, and the result has been uniformly favorable to this pattern.

When the butter has come, the buttermilk is drawn off, and the butter, after being thoroughly worked, is salted with from one-half to three-fourths of an ounce of salt to the pound. It is now set away for twenty-four hours, when it is again worked over thoroughly, and made into pound lumps with wooden "spatters." After standing another twenty-four hours it is sent into market.

In "working" butter we use a table over which a fluted roller is made to pass, rolling out butter into a thin sheet, and completely and entirely depriving it of buttermilk.

From many years' experience, the observation is warranted that by no other process of manufacture can the buttermilk be so completely extracted. I am aware of the truth of the objection made that the shrinkage occasioned by its use is too great, yet there is, in fact a difference in the worth of the butter made upon it, over that manufactured in the ordinary way, quite equal to the loss in weight occasioned by it.

As has been stated, my stock was divided at the beginning of the trial, into two lots of six each. The account of the product of butter is given according to this arrangement.

The entries for the premiums at your disposal, as made by me on the 23d day of April last, were one dairy of six cows and heifers, six in number, and a dairy of eleven in number.

Such a division of my stock was not deemed improper in view of their time of calving and their age.

The dairy of cows consists of

- Flora McDonald, a full blood Ayrshire, from the stock of Mr. RANDALL, of New Bedford, 6 years old.
- Wilcox, half Ayrshire, by McGregor, 5 years old.
- Shrewsbury, called native, believed to be Durham, 11 years old.
- Cherry, Devon, 6 years old.
- Lexington, Ayrshire, bred by Mr. Phinney, of Lexington, 9 years old.
- Springfield, native, from Vermont, 10 years old.
- Flora calved May 20th, and was served July 29.
- Wilcox " April 17th, " " June 5.
- Shrewsbury " Feb. 26th, " " July 2.
- Cherry " May 2d, " " June 30.
- Lexington " Jan. 28th, " " July 18.
- Springfield " May 2d, " " June 10.

It will be seen that the trial commenced with three of the six cows giving milk. The periods of churning, and the quantity of butter made at each time, is stated below:

Churned.	lbs. oz.	
May 1.....	19 2	
" 8.....	20 3	
" 15.....	32 5	
" 22.....	39 13	
" 29.....	44 9	—150
June 1.....	25 7	
" 8.....	50	
" 12.....	32 14½	
" 15.....	24 9½	
" 19.....	29 9	
" 22.....	21 13	
" 26.....	28 7	
" 29.....	21 8	—240 4
July 3.....	27 15	
" 7.....	18 11	
" 10.....	24 2	
" 13.....	16 8	
" 17.....	22 7	
" 20.....	15 8	
" 24.....	18 5	
" 27.....	14 7	
" 31.....	18 14½	—176 13½
Aug. 3.....	13 6	

Aug. 7.....	17	
" 10.....	17 5	
" 14.....	25 8	
" 17.....	18 11	
" 21.....	23 5	
" 25.....	14 9	
" 28.....	17 9	—147 5
Sept. 4.....	36 7	
" 11.....	34 9	
" 18.....	32 15	
" 23.....	30 3	—134 2
		834 8½

It will be seen that three of the cows have been milked 5 months, two 4 months and 17 days, and one 4 months and 2 days. In all there has been an average period of milking of 4 months and 21 days, and an average daily amount of little over a pound of butter to each cow, for the whole period of entire milking. The greatest amount in any one week was 57 pounds, 8 ounces—or an average yield of 9 pounds, 9½ ounces per cow for the week. This upon pasture feed alone.

The lot of young cows and heifers consists of

- Lexington, 5 years old, thorough-bred Ayrshire, bred by Mr. PHINNEY, of Lexington.
- Princess, 3 years old, with her first calf, a half-blood Ayrshire and half Devon.
- Cora, 5 years old, three-fourths Ayrshire, and one-fourth Durham.
- Red-Bird, 4 years old, one-half Devon and one-half Ayrshire.
- Flirt, 5 years old, one half Ayrshire by McGregor.
- Beauty, 2 years old, three-fourths Ayrshire.

Lexington calved Feb. 4, and was served March 15.	
Princess " March 25, " " June 10.	
Cora " May 2, " " June 5.	
Red Bird " June 19, " " Aug. 14.	
Flirt " June 26, " " July 18.	
Beauty " Aug. 2, " " Sept. 1.	

In this case the trial commenced with but two animals giving milk. The periods of churning and the product of butter of each churning is given below.

Churned.	lbs. oz.	
May 1.....	8 6	
" 8.....	9 4½	
" 15.....	12 12	
" 22.....	18 13	
" 29.....	21 11	—70 12½
June 5.....	26 13	
" 12.....	19 15	
" 15.....	9 11	
" 19.....	13 1	
" 22.....	12 4	
" 26.....	16 3	
" 29.....	13 12	—111 11
July 3.....	21 12½	
" 6.....	15 14	
" 10.....	19 7	
" 13.....	14 1	
" 17.....	18 11	
" 20.....	12 12	
" 24.....	16 5	
" 27.....	13 1	
" 31.....	16 13	—148 12½
Aug. 3.....	12 8	
" 7.....	16	
" 10.....	16 10	
" 14.....	22 3	
" 17.....	16 14	
" 21.....	19 15	
" 24.....	11 7	
" 28.....	15 14	—131 7
Sept. 4.....	31 5	
" 11.....	27 8	
" 18.....	27 11	
" 23.....	28 7	—114 15
		577 12

Of this lot two animals have given milk the whole period; one 4 months and 17 days; one 3 months and 2 days; one 2 months and 26 days; and one 1 month and 17 days; making an average period of 3 months and 20½ days, and an average daily yield of 0 lbs. 14 10-12 oz. butter to each cow for the above period. The greatest amount of butter in any