machines. During December each milking from each individual cow was weighed, and sampled for testing. The composite sample made up of the individual daily samples, was tested at the end of the month, and the pounds of milk fat were obtained by multiplying the pounds of milk given by each cow by her test and dividing by 100, e.g., cow No. 15 gave 952 pounds of milk during December. Her composite test was 3.4, and 952 multiplied by 3.4 divided by 100 equal 32.36 pounds fat.

During January each cow's milk was weighed morning and evening and samples were taken for testing every seven days. The pounds of milk and milk fat were calculated from these weights and tests, hence are not so accurate as for December.

Table Showing Comparison of Yields of Milk and Milk Fat for December, 1905 (hand milking) and January, 1906 (machine milking).

No. of Cow.	Lbs. Milk.		Per cent. Fat.		Lbs. Milk Fat.		Increase (+) or decrease (—) of machine compared with hand milking for one month.		
	Dec. '05.	Jan. '06.	Dec. '05.	Jan. '06	Dec. '05.	Jan. '06.	Lbs of milk.	% of fat in milk.	Lbs. milk fat.
15	952	808	3.4	3.0	32.36	24.24	— 144	— 0.4	— 8.12
21	900	727	3.8	3.8	34.20	27.62	— 173	+ .00	— 6.58
28	461	406	4.5	4.7	20.74	19.08	— 55	+ 0.2	— 0.66
38	1,037	753	3.8	4.0	39.40	30.12	— 284	+ 0.2	— 9.28
44	473	418	3.6	3.4	17.02	14.21	— 55	— 0.2	— 2.81
56	1,707	1,508	3.8	3.7	64.86	55.79	— 199	— 0.1	— 9.70
65	427	416	3.8	4.0	16.22	16.64	— 11	+ 0.2	+ 0.42
66	542	483	4.1	4.3	22.22	20.76	— 59	+ 0.2	— 1.46
67	713	572	3.3	3.6	23.52	20.59	— 141	+ 0.3	+ 2.93
70	518	475	5.4	5.7	27.97	27.07	— 43	— 0.3	— 0.90
78	581	548	3.8	4.2	22.07	23.01	— 33	+ 0.4	+ 0.94
96	402	403		4.0	14.87	16.12	+ 1	+ 0.3	+ 1.25
97	503	455		4.7	23.13	21.38	— 48	+ 0.1	— 1.75
98	329	273	4.7	4.7	15.46	12.83	— 56	+ .00	— 2.52
103	431	380	3.7	3.5	15.94	13.30	— 51	— 0.2	— 2.64
Totals and Averages..	9,976	8,625	3.90	3.97	389.08	342.76	— 13.57	+ 0.07	—47.22

From the preceding table we learn that these fifteen cows gave 1,351 pounds less milk in January, 1906, than they did in December, 1905. The percentages of fat were fairly constant, though the tendency was for a slightly higher average test for January (3.97) as compared with December (3.90). The pounds of milk fat, however, decreased 47.22 pounds in January as compared with December. If we allow an increase of one-sixth on the fat for calculating the butter, the decrease in butter on the