

under which system will the cow give the greater yield and profit in the whole year?

My own experience is emphatically that a cow calving in October will give more milk in the year than if she calves in the spring. When a cow has given milk for six months and is pregnant, there is the natural tendency to dry which is accelerated and aided by the cool weather and drier pasture in the fall of the year in the case of the spring-calving cow. On the contrary, the one that has milked during six months of winter comes out of the barn on to the succulent grass of the spring, which is the most milk-producing food possible to be found, and with the warm weather she is maintained in her flow for some time longer, only drying up in the hot, dry days of midsummer, when she can take her yearly rest from milk to the best advantage.

These considerations put a different complexion on the question of summer and winter dairying than would appear from the bold statement made by Mr. Chapman as to the relative cost of butter in summer and winter. The prices obtained for the butter are a further consideration which varies much according to the circumstances of situation and market, and into which I will not now enter.

SIDNEY FISHER.

Alva Farm, Knowlton, P. Q.

(R. N. Yorker.)

#### BUTTER-MAKING.

I have seen scores of churnings at dairy schools and conferences in nearly every county in this State, of cream of all dairy breeds, raised in all the deep setting creamers, shallow pans and from the separators; churned and worked by experts, amateurs and hired girls; the cows being in all stages of lactation, and fed on all varieties of rations, or nearly starved to death. Ninety-nine of every one hundred pounds of milk drawn from healthy, properly fed and cared for cows, will make butter that will "stand up and possess good body, flavor and texture," if the conductor of the train is an artist. If he is a "daub," as many of them are, he'll spoil it. That's about all there is of it and the attempt to make the dairymen of this country, or the world, believe that all this depends on the cow and that no other cow than the Jersey can do it, will fail.

There are a great many men in this big country of ours, who own cows but have not gone to Chicago, and not a few of them have sat in their shirt sleeves in the shade, while their cows were chewing their cuds, and read the newspapers, and done some thinking for themselves. Some of them own Jerseys, some own cows of three or four breeds, while some seem contented while milking and feeding scrubs, and some of these men can tell what each and every one of their herd has and can do; therefore, neither the partisan cackle of the organ, the clamor of the breeders, nor the big head lines of their "spread eagle" ads, are going to turn them from "the tenor of their way." One thing the World's Fair contest has proved beyond cavil, and that is, that even the Jersey cannot put sufficient color into the butter, when fed on winter rations, to suit the market standard. I am glad of this for it spikes the little pop gun of the Jersey Bulletin in its senseless howl about "painted butter." There will be no wiping that record out.

#### DEVONSHIRE CREAM.

Persons on their return from their travels abroad, express surprise that they can never get at home, such delicious cream as they have in England and Scotland. It is known as Devonshire cream, and not many people, in this country especially, know what it is, but suppose it to be the particular rich cream of the country in question, whereas, every American housekeeper may have Devonshire cream on her own table, if she will take the trouble to prepare it. Rich, new milk is put in a very shallow (1) vessel, with an extended surface, and is then set on the range, where the milk will be warmed, but on no account must it boil, or even scald. The heat will cause all the cream to rise to the surface in a very short time, and the pan is then taken off and placed in the ice box, or in a cool place. When thoroughly chilled, the cream may be taken off, and will be nearly of the consistency of newly made butter. This is put in to jars, and at breakfast is helped with a spoon and is delicious with oatmeal, jams, berries—everything, in fact, that ordinary cream is used for, its merits being, that not only does one obtain the richest cream, but it will keep two or three days without becoming sour. Why this English dainty is not used in this country to the same extent as in England, is to be wondered at, but our dairy folk seem to know nothing about it.

(Scientific American.)

#### THE NEW NAME FOR JERSEYS.

##### CONDENSED MILK FACTORIES.

The breed fight of dairy cows at Chicago has shown that the Jersey can be bred to produce a wonderfully large quantity of milk. Contrary to my expectations, and contrary to what I wished might have been the results, the Jersey cow not only outmilked the Guernsey but the Short-horn also. Some Jersey men are much pleased at this result. I am not; I would have been much better pleased if the Jersey had come out third in quantity and still have remained first in pounds of butter, as she might have done, and as I believe she could be bred to do. I know I shall be met with the objection that the only way to increase the amount of butter is to increase the amount of milk. "You can't feed fat into the milk, you know." But, I don't know; I only know that that is a claim whose only foundation is that the contrary has not yet been scientifically proven. Not to say any more on that point, there is another that, I think, no one will dispute, and that is if fat can't be fed into the milk it can be bred into it. The Jersey came to us a condensed milk factory; we are breeding her into a skim milk factory. We used to say, when twitted with the small amount of milk the Jersey gave, "Yes, that's so, but see how rich it is!" Now, we (some of us) can say, "Huh! We can beat you Short-horn fellows now, and we are going for the Holsteins." Wouldn't it be better to go in for a little condensation, both in the size of the Jersey and the quantity of milk she gives? A. L. CUOSBY, in *National Stockman*.

#### THE COW'S VACATION.

The remarks of Mr. Newton on page 695 in regard to the prolongation of

(1) On the contrary, the Devon people use pans 9 inches deep, and the milk stands from 16 to 30 hours before heating. Ed.

the milking period of cows that drop their calves in October, is, in most essentials, an experience that I have had with my own winter dairy. I am now fully satisfied that a winter-milker will give at least one-fourth more milk than the same cow would if she freshened in the spring months. When I began winter dairying, the cows were practically dry from July 4, until they commenced dropping their calves in the fall, but now the cows—substantially the same ones—give us no let up in milking, and we go to the creamery every day in the year. This season, dry as it has been, when the first cows became fresh in early September, the daily yield of milk was over one third that of the best day's yield of last winter. Only a few of the cows now but will milk up to within four to six weeks of calving. There is no guess work about the thing with me, for I find there is no vacation in milking the cows, and the scales that weigh the milk twice a day, tell the increase.

Ohio.

J. G.

(R. N. Y.)

#### BUTTER FAT IN CHEESE.

At the recent gathering of the New-York Dairymen's Association, Dairy Commissioner Robertson was called on to answer a question about butter fat in milk and its relation to making dividends in the manufacture of cheese and responded as follows: I had about 250 boxes of cheese made for the express purpose of finding out the comparative value of milk with different percentages of butter fat, in the manufacture of cheese. In three factories I had a vat constructed with three compartments. Then I had the milk from the several patrons classified, and I had a given quantity of milk put into compartment No 1. In it was put milk as near as possible averaging 3 per cent of butter fat; in the middle compartment, milk averaging 3½ per cent; and in the other, milk averaging 4 per cent. The cheese were made in the same manner, and weighed to discover the yield of cheese from the milk of different qualities. I had the cheese examined to compare their market value, and I came to the following conclusions: From a general average of the milk in one compartment, which contained 3.86 lbs. butter fat per 100 lbs. of milk, I obtained 9.22 lbs. of cheese; from milk containing 3.45 lbs. of butter fat I obtained only 8.92 lbs. of cheese. In every case there was a gradual reduction in the quantity of cheese when there was a less quantity of butter fat in the milk. But the increased yield of cheese was not in direct proportion to the increased percentage of butter fat, that is, milk containing 3 per cent. of butter fat will yield a certain quantity of cheese, but if you take milk having one-third more butter fat, or 4 per cent., it will not yield one-third more cheese. At the same time, such milk is worth one-third more for cheese-making, and thereby hangs a tale. You see, if it does not yield so much more cheese it makes a quality of cheese so much better that the market value of cheese from 100 lbs. of milk is a third greater than that of cheese in the other case.

Questioned for an explanation of this point Mr. Robertson said; It will hold more water with success. My experiments show that difference.

Milk containing 3 per cent. of butter fat will make a given amount of cheese, Milk containing 4 per cent. will not make one-third more cheese. But you should gain nearly 150 lbs. of cheese for 100 lbs. of butter fat, or a pound and a-half to one pound. By the same method of manufacture, 10½ lbs. of cheese would be obtained from 100 lbs. of 4 per cent milk, if 9 lbs. of cheese be obtained from 100 lbs. of 3 per cent. milk. From 0.2 of 1 per cent. butter fat in the milk we obtain 0.3 of 1 per cent. of additional weight in the cheese. If you take this same calculation, you will get from 10,000 lbs. of milk, say, 400 lbs. of cheese. Then if you get that from 3 per cent. milk, you will get from 4 per cent. milk 1,050 lbs. of cheese. Now 900 lbs. of cheese at 10c. would bring \$90, and 1,050 lbs. at 10½c. would bring you \$108.93. It will often pay a man better to make his milk into butter than into cheese. But when he takes milk to a cheese factory that is richer than 3½ per cent. of butter fat, he is entitled to more per 100 lbs. than the man who takes poorer milk. His milk will increase the quantity of cheese by 3 lbs. for every additional 2 lbs. of butter fat which he sends; and it will improve the quality. The calculations based on the number of tests I have mentioned, lead me to this conclusion: That every man who furnishes milk to a cheese factory, containing between 3 per cent. and 4 per cent. fat, should be paid for that milk according to the quantity of butter fat.

(Country Gentleman.)

#### A GOOD SHORT-HORN DAIRY IN NEW-HAMPSHIRE.

ED. HOARD'S DAIRYMAN.—I have been taking your very valuable paper for only a few months, but I like it very much. I notice that the writers in the DAIRYMAN quite generally prefer the Jersey as a dairy cow, and that there is no breed like it. I will say a word for a class of Short-horns we have here in New-Hampshire and what they have done for me.

I commenced to keep a record in 1889 from ten cows that I have raised from calves. In 1889 the average per cow was 306 pounds of butter. In 1890 it was 307 pounds; in 1891, 320 pounds, besides the butter, milk, and cream used in our family of from six to ten. The cows are from 8 to 10 years old. I am getting 30 cents a pound for my butter the year round. I have now a Babcock tester and I think it will prove a great help to me. One of my cows has tested the past year by the Babcock about 475 pounds of butter, and one other nearly as much. That is what the Short-horns are doing for us in N. H. Yours truly,

GEN. W. STANLEY.

Cheshire Co., N. H.

It is a pity Mr. Stanley did not send some of his herd to the Dairy-test at the Fair.

#### CANADIAN CHEESE AT CHICAGO.

Cheese at the World's Fair October competition; two United-States and one Canadian Judges:—Canada won 109 awards, in Cheddar cheese made previous to 1893, United States won none. Canada took 369 awards against 45 to the United-States in Cheddar of this year's make (factory class); also, Canada had 130 exhibits of cheese scoring higher than the highest United-States cheese.