

curd which is produced from one gallon of the milk. The amount of fat can be approximately estimated by the creamometer though more accurately by the Babcock or Gerber tester. The determination of the acidity of the milk will also afford some indication of its quality.

### THE FAT OF MILK.

In all the estimations of fat this substance is isolated and weighed in little glass flasks. Experiments were made, first by mixing it with hot water, to dissolve out any acid soluble in water that might be present; but only a trace could ever be found. Then the fat was treated with alcohol, to dissolve out any acid soluble in alcohol, and the acidity of the solution was estimated. In some years no soluble acids were obtained, but in 1896, both in the fat of whey and in that of curd, an appreciable amount of acid substance was found. I have calculated the acidity present as oleic acid, and the following table gives the average results obtained from about ten determinations made each month in both whey and curd:

Percentage of Oleic Acid in Fat from Whey and Curd.

	Whey.	Curd.
May.....	.....	4.10
June.....	30.74	8.44
July.....	31.20	6.94
August.....	16.18	3.10
September.....	17.79	3.55
October.....	19.08	3.94

The results vary with each cheese in a somewhat remarkable manner, for which fact an explanation has yet to be sought. One experiment was made by determining the acidity or oleic acid in the fat from a cheese when ripe to compare it with that found in the same curd at the time of vating. The results were as follows:—

	Per cent. Oleic acid.
On Sept. 7th, 1896, in curd.....	1.98
On Nov. 25th, in cheese.....	2.23
On Jan. 28th, 1897, in ripe cheese	2.23

Practically no change seems to be produced in the fat by ripening.

I am unable to trace any relation between the acidities produced during cheese-making and these oleic acid determinations, so that it would appear that the fat in the original milk varied in nature from day to day.

In 1895, the fat which was coming from the press was found to be not ordinary butter-fat, but a fat of exceptional properties. It had the normal composition of butter-fat in most respects, but its melting point was as low as 54 deg. F., the solidifying point being 51 deg. F. In another instance a sample of this fat showed solidifying point 66 deg. F., the fat in the whey butter from the same milk had a solidifying point of 79 deg. F., while the average melting point of butter-fat is about 89 deg. F. The question thus arises, does this fat form a regular constituent of milk-fat?

(To be continued).

### WARN CHEESE MAKERS.

To the Editor of the "Journal of Agriculture."

Dear Sir,—I was just sitting down to pen you an article on Fodder Cheese when this came to hand, it is so good that I would ask you to publish in full.

### WARN CHEESE MAKERS.

The Montreal Butter and Cheese Association have issued the following circular:

Montreal, Feb. 19, 1901.

Gentlemen,—The Montreal Butter and Cheese Association desires to draw the serious attention of Canadian dairymen to the undesirability of manufacturing in Canada any cheese at all from fodder milk, either at the beginning or the end of the seasons, believing this to be in the interests of all classes, from the farmer to the exporter, connected with the manufacture of full grass cheese.

It requires no argument to prove that if our cheese is to be sold at remunerative