

ments were not as extensive as could have been wished, yet they are important, as clearly illustrating the preceding remarks.

"The composition of the milk of the common variety of cows:

Water.....	88.18
Solid.....	11.10
Butter.....	4.00
Casein.....	4.00
Sugar.....	2.75

Analysis of milk obtained from Mr. K., of Greenbush, taken from the common tub containing a mixture from all the cows:

Water.....	88.40
Dry Matter.....	11.45
Casein.....	5.43
Butter.....	3.47
Sugar.....	2.55

"One thousand grains of milk gave 6.729 of ash. By churning, one pound of milk gave 375 grains of butter. The cows were fed on brewer's grains, wheat bran and screenings. The grains were old, having been of the previous autumn.

"Another analysis of the milk of his own cow, of the Dutch breed, made the 1st of February, 1851, gave the following results:

Water.....	86.92
Dry.....	13.07
Casein.....	4.56
Butter.....	6.63
Sugar.....	1.87

"It seems from many analyses that certain animals give a milk rich in butter, while others give milk rich in cheese or casein.

"Analysis of the milk of a Durham cow—the animal was five years old, and gave fourteen quarts per day—fed on cut hay, stalks and grains, and was, moreover, thin in flesh:

Specific Gravity.....	1030.4
Water.....	89.37
Dry.....	10.72
Casein.....	4.49
Butter.....	4.70
Sugar.....	4.72
Casein obtained by acid.....	4.08

The uniform composition of the milk in butter, sugar and cheese is worthy of remark.

"The analysis of the milk of an Ayrshire cow, regarded as one of the best specimens of the breed, was as follows:

Specific Gravity.....	1032.90
Water.....	85.94
Dry.....	14.06
Casein.....	4.65
Butter.....	5.42
Sugar.....	3.93

One thousand grains gave 7.24 of ash. The cream was thick and yellow, and the butter amounted by churning to 516 grains to the pound of milk. At

the temperature of 56°, the butter came in eight minutes. The time occupied in churning the milk of Mr. K.'s cows was thirty minutes, and the butter was white and granular.

"In cheese making, the great object will be to secure cows which give the largest quantity of milk, for thereby we may expect to obtain the most casein with sufficient butter to impart richness to the cheese. A cow of the Ayrshire breed would be less profitable than the Durham, though her milk is richer.

"The milk of the Devonshire and some other varieties, not being obtained, was not analysed. The concluding analysis in his remarks was of the Alderney or Jersey cow, furnished by Mr. J. TAINTOR, of Hartford, Ct.

Specific Gravity.....	1031.1
Water.....	84.73
Dry Matter.....	16.27
Butter.....	8.07
Casein.....	5.02
Sugar.....	3.05
Ash.....	0.70

"It will be seen that the specific gravity is high—less water—large proportion of dry matter—quantity of butter remarkably great—while the casein is also above the standard of other cows. The butter was obtained by ether in the first instance, and afterwards by churning at the temperature of 68° Fahrenheit. The butter came in eight minutes from the commencement, but as he lost three minutes, it may be set down at five. The butter was in hard lumps, free from grains, of a rich yellow color, comparatively dry, and free from casein and milk. One pound of milk gave 706.79 grains of butter, equivalent to 9.33 per cent. The cow was not five years old, had recently calved, was in poor condition, had been fed upon hay all winter with four quarts of grain daily, and gave from eleven to twelve quarts of milk a day.

"According to the foregoing analysis, the milk obtained from the Jersey cows, would give 12.32 lbs. of butter weekly, as she yielded 154 lbs. of milk; while the Ayrshire would yield only 11 lbs. 11 oz. in sixteen days from 309 lbs. 11 oz. and 6 dr. of milk (according to a report of Prof. THOMPSON, published by order of the British government.) During an equal period, Mr. TAINTOR's cow would yield 352 lbs. of milk, or 28.16 lbs. of butter, which shows a balance of 18 lbs. in her favor. The Ayrshire from Mr. P. gave 516 grains of butter for 16 oz. of milk."

The cut represents an imported Alderney or Jersey cow, bred by Col LE CONTUN, of the Island of Jersey, the property of Mr. ROSWELL COLT, of Paterson, N. J.