

proper time, by the exercise of care and judgment, many an unsightly udder might be coaxed into a semblance closely approaching the highest standard.

In case of the unevenly shaped udder of a heifer, it would be well to first draw the milk from the quarters best developed, for the reason that would throw all the weight of the undrawn milk into the smaller quarters, thus helping to distend the inferior parts. A still further advantage would be gained by a daily half-hour's gentle rubbing of the undeveloped quarters, moistening the hand from time to time with a few drops of sweet oil.

A cow from the time of dropping her first calf on through life should be milked three times daily for a period extending from five weeks to as many months, according to conditions directly after freshening. I have been told that this was the usual custom on some, or rather, on most of the best dairy farms in England, Scotland, Germany and France, and other countries where profitable dairying has reached a point near the limit of possibility. A five years' experience has given me a firm confidence in the value of this practice, for while it certainly assists materially in developing the milking qualities of a heifer, it is no less useful in enriching the quality and stimulating the flow of milk in an older cow.

These are the main points in the course I have endeavored to follow in my efforts to improve the cows of my herd, and I shall continue in this way until I am advised of a better method which, after a trial, should it prove superior to the one now in use, I shall adopt at once.

In conclusion I would say my career has not been one unbroken course of triumph. At times it has been marked by deep ruts of discouragement, and blocked by heavy crosses of disappointment. Still, although I am now far, far from my set standard of achievement, I have demonstrated to my own satisfaction that dairy farming conducted on business principles may be made not only one of the most delightful and interesting occupations, but a source

of gratifying profit as well. And while one is using his best efforts to enhance the beauty and worth of a creature that seldom fails to respond most generously to gentle care and intelligent management, they are at the same time nobly expanding the best qualities of heart and brain and physical strength, and their conscientious labor will meet a speedy and cordial recognition.

From "Hoard."

CHEDDAR-CHEESE.

(Continued).

Unfortunately, we know really very little about the composition of milk-fat. Most of the work which has been done has been with butter. It does not appear that this butter was made with separated cream, probably it was not, so that the fats exist separately, or how far they exist which at a low estimate would represent at least one-sixth of the whole, has apparently been entirely neglected. Further, although it is evident that butter-fat contains several different fatty acids, and therefore different fats, yet how far these fat exist separately, or how far they exist as compounds, appears to be uncertain. The preceding results point to the possibility of their existing separately under certain conditions. Otherwise, fats must at times be present in the milk which are not present at other times. The whole subject is one which requires further study.

The ultimate distribution of the constituents of the milk.

What becomes of the constituents of the milk during the manufacture of a cheese? Take the figures for July, 1895. The average volume of milk upon the days on which analyses were made amounted to 143 gallons, which would weigh 1,473 pounds. This milk contained 12.68 per cent of solid matter, or an average daily amount of 186.77 pounds of solids. By a simple calculation, it will be found that of this only 90.21 pounds are recovered in the curd, while 93.08 pounds pass off in the whey, and 3.48 pounds are lost in the liquids