

test of 42 will produce 1,680 lb. butter-fat. To produce the same amount of butter-fat at a 35 test it would have to carry 4,800 lb. of cream, a difference of 20 per cent.; and this 20 per cent. extra will have to be handled right through the manufacturing process until the churning process is reached. The suppliers, on the other hand, will have 800 lb. less skim-milk on the farm. Most of the bad flavours noticed on the receiving-platform are found in thin cream, which develops acid quicker than a rich cream, has a rough, lumpy appearance, blocks up the strainer, burns on the pasteurizer, is almost impossible to sample fairly, causes a bigger loss in buttermilk, and, when manufactured into butter, usually makes an inferior article. A 42-per-cent. cream, on the other hand, is smooth and free from lumps, can be more accurately sampled, and leaves more skim-milk on the farm. It will keep sweet longer, and when sour more frequently develops a clean acid flavour. It costs less per pound of butter to manufacture, gives a bigger overrun, and, with proper handling, will turn out a higher-grade article.

QUALITY OF CREAM DETERMINES QUALITY OF BUTTER.

That on the amount of care exercised on the receiving-platform largely depends the quality of the butter turned out is as true under home separation as it always has been where whole milk is received; the manager who sets a high standard and insists on the cream being up to that standard is still making the best butter. Where, owing to competition and other causes, managers have to take in cream which should not be accepted, the quality of the butter is correspondingly low. Some suppliers argue that so long as a factory output is all first grade all is well, but the reputation of New Zealand butter was not built up on an 88 grade, and it is not likely to be maintained by the manufacture of an article of such quality. To accept everything that comes along, as some managers are unfortunately instructed to do, is altogether wrong in principle, and simply means that the supplier of good cream has to help to pay for the carelessness of a careless neighbour.

Cream-grading has been successfully tried at a number of factories, and payments made according to the condition of the cream. There is an almost universal agitation in countries working under the home-separator system for its adoption. The standard fixed in those New Zealand factories which have adopted grading is not very exacting, and may be reached by any supplier with reasonable care. First grade is usually cream testing over 35 per cent. of butter-fat, smooth texture and clean in flavour, though not necessarily sweet; second grade, cream testing under 35 per cent. of butter-fat, or coarse in texture or unclean in flavour, and is paid for at $\frac{1}{2}$ d. per pound less.