rough place on each bottle with an emery stone and writing the numbers on in pencil. The bottles can then be removed for testing, and even if mixed no harm is done if corresponding numbers are written on the testing-bottles also when testing.

Various styles of sample-cabinets are in use, a chest of drawers, in my opinion, being as good as any. Each drawer can be made to represent a district, and the drawer can be used to heat the samples in when testing.

Only the highest grade of scale is good enough to weigh cream-samples, and speed must be secondary to accuracy. The scale should be sensitive to one drop of cream. The reading of the tests is now seldom done without the use of coloured oil or super-fatted alcohol to level off the meniscus. The mistake of using the oil too cold is sometimes made, however. It should be slightly hotter than the fat-column—say, 145° F.

The importance of extreme care in testing cannot be too strongly urged. The supplier must trust to the factory-manager for a fair deal, and, unfortunately, testing-day is usually an extra, and to be got through with an effort. There is a good deal to be said in favour of the independent tester from the point of view both of the manager and of the supplier. A mistake of 1 per cent. in a 40-per-cent. test represents 2½ per cent. of the total butter-fat, and 3·05 in overrun.

NEUTRALIZING AND PASTEURIZATION.

The only reliable system of neutralizing cream is by means of the double vat, and the vat should be of such size that the pasteurizer will empty it in about forty-five minutes, otherwise the acidity will be found to rise before the cream is all through. The practice of tipping a few cans of cream and then adding some soda can never be relied upon to give the acidity aimed at.

Various calculations are in use to ascertain the amount of neutralizer necessary to reduce the acidity of the cream to the desired point—all of them more or less useful as a guide, but not to be relied upon for accurate results. A change in the brand of soda, neglect of proper stirring of the cream after adding the soda, mixing the soda with hot water, and many other things, may quite upset the calculation.

By the use of a double vat the first sections can be filled to a given mark which will approximate the same weight of cream daily. A little practical experience and tabulating of results will soon give a table of quantities of soda required to reduce the acidity to the desired point with cream varying in ripeness from