

## SEPARATED MILK POWDER.

The separated milk powder that has little or no fat in it has a far wider field of uses. Its chief use is in baking and in biscuit manufacturing. Some of the reasons for using it in place of fresh liquid milk in this work are the same so far as having milk in a dry state is concerned. Of course the uses are different to a large extent because for many purposes milk powder without the fat is preferable to milk powder with the fat content. For instance the biscuit manufacturer produces one-hundred different kinds of goods. Each kind has its particular formula. Each kind has its particular amount of milk and fat in the formula. As the fat or shortening element in a baking formula is the one that is varied perhaps more than any other, the biscuit manufacturer and the baker prefer to have their milk without the fat so that they can vary their fat ingredient by using in one article the highest grade butter, in another a cheaper dairy butter and in still another some form of shortening or hard fat that is common to the business. Separated milk powder, therefore, supplies the milk part of a formula for all biscuit and baking work.

Since the quality and flavor of separated milk powder, have been improved during the last two or three years its use in ice cream manufacturing and in general dairy and creamery work has increased so that today separated milk powder is almost indispensable to the ice cream manufacturer and to the creamery. For ice cream it supplies the milk solids of the ice cream. So often ice cream manufacturers use ice cream powders and fillers which are even more expensive than the pure milk solids. In other words separated milk powder adds to the food value of ice cream and at the same time offers other advantages in ice cream making. It is possible by using fresh unsalted creamery butter and water and separated milk powder to produce liquid cream which can be used for all purposes for which liquid cream is used. Thus supplying a ready means to hand for the ice cream manufacturer when he cannot get his usual supply of liquid cream. Separated milk powder is used in this way by dissolving it and combining it with the melted butter and emulsifying these ingredients or putting them through what is called a homogenizer which is simply a machine for thoroughly incorporating these products to make a smooth finished cream. Another important use for separated milk powder is in making culture for culturing cream for butter making. As separated milk powder is free from bacteria a solution of it is a clean medium in which to culture the lactic acid bacteria for starter or butter making purposes. As buttermilk, after the butter has been removed, is simply sour separated milk it can be seen that it is also possible to produce the same product which we call buttermilk by culturing a liquid mixture in this way.

## CREAM POWDER.

Coming to the cream powder, all that can be said about the use of this, is that when it is dissolved in the amount of water that was originally taken from it, it may be used for all purposes for which sweet cream may be used. Of course it is more expensive to produce than the regular cream. For domestic use this cream powder will not be common because the butterfat in it will not keep indefinitely and consequently it cannot become a grocery store proposition in the same manner as a domestic milk powder would have to be and is. Cream powder is, therefore, used almost exclusively by ice cream manufacturers during the shortage of cream in the summer and in fine caramel work. It is only recently that it was possible to produce cream powder that could be dissolved in water again and be the same as fresh liquid cream from which it was produced.