

FRACTIONAL OR INTERMITTENT STERILIZATION.

The term "intermittent" is used when the packed jars are subjected to boiling temperature for a definite period on each of three successive days. In beginning the process the jar is only half sealed, but the jar is completely sealed after each period of sterilization, and the clamp loosened again when put into the canner to allow for the expansion caused by heat. The temperature of the water in the canner should be the same as the temperature of the contents of the jar on the second and third days.

It is always necessary to can vegetables which have been picked for several hours by this method. Between the periods of sterilization, when the jars are kept at ordinary temperature, the spores not killed develop into bacteria of the easily killed growing state. These are then killed by the next period of sterilization. Rarely do any spores fail to develop and be destroyed by the third boiling.

The disadvantage of this method is that the jars are handled several times and more fuel is used.

OPEN KETTLE METHOD OF CANNING.

The old fashioned method of canning, especially of fruits and tomatoes, was by the open kettle method. This method consisted of cooking the fruit in an open kettle, transferring it, boiling hot, to a hot sterilized jar, and sealing immediately. Mould frequently appeared on the top of the jar, often causing complete loss.

This method is not advisable on account of so frequently resulting in insufficient sterilization and a product of inferior quality. The housekeeper is forced to watch her product very carefully, necessitating standing over a hot stove.

When this method is used, as in the case of apple sauce, the jar should be sterilized for at least ten minutes after being filled.

THE STEAM PRESSURE METHOD OF CANNING.

The steam pressure canner is constructed of very strong material, has a tightly fitted lid, which when stamped into place, allows the steam to be held under pressure and obtain a high temperature. It is fitted with a steam gauge and a thermometer. These register the number of pounds pressure and the temperature. A great heat is necessary to bring the temperature up quickly on account of the canner being made of very heavy material.

The advantage of this method is that it requires less time for complete sterilization and is very often more successful.

The disadvantage is that it requires special apparatus, which costs more than the average housekeeper can afford to pay, and it is not as successful for fruits as for vegetables.

NON-COOKING METHODS.

The non-cooking method of canning rhubarb, gooseberries and sour cherries did not prove a success. A peculiar flat taste was noticed when the product was tested.

Several methods were used including the following:—The jars were packed with fresh sound fruit, placed in a receptacle deep enough so that the water came four inches over the tops of the jars. The receptacle was placed under a source of fresh running water and the water was allowed to run for from ten to twenty minutes until all the air bubbles had disappeared. The jars were then sealed under water.

Another method used:—The jars after being packed with fresh sound fruit were filled with cold sterilized water and sealed.

The success of these methods depends upon the acidity of the fruit.