

If the above operations are carefully accomplished and are practised without interruption, there is no reason why the products hereabove mentioned should not be preserved in a practically fresh condition.

(2) This second method, which consists in the sterilization of the product before its pouring into the container, is unquestionably, the oldest and still the most employed.

Well followed, this method is wonderfully successful for the preservation of most of the fruits, but is not to be used for vegetables in general, specially for vegetable greens, foliaceous vegetables, corn and meats.

Its disadvantage consists in occasioning more work and in allowing new spores or bacteria to deposit on the product while it is being canned.

(3) The third process, which consists in cooking or sterilizing the product after it is canned, is certainly the most simple and economic. It is applicable in the preserving of all edible vegetable or animal substance (fruits, vegetables and meats).

By this method, the sterilization is done in the containers in which products will be preserved, rendering impossible, by this fact, the introduction of new spores or bacteria once the food has been carefully sterilized or cooked.

This process demands considerably less work than the former, does not burn so much fuel and is by far the most effective.

(4) The fractional or intermittent sterilizing process consists in submitting the product to the influence of heat during three periods (each of them to be rather short) during three consecutive days.

It is based on the fact that some spores or bacterian species are much more resistant than others and are not killed by a single period of sterilization.

So, during the first period, bacterian cells are destroyed, but spores requiring a higher temperature are not.

During the 24 hours following the first cooking, spores which have not been destroyed germinate and produce new cells whose destruction the second period of sterilization should accomplish.

Finally, a third cooking, the third day, will destroy the new cells formed by spores that would not have germinated before the second period of sterilization and this to be absolutely sure of the thorough destruction of all micro-organisms, either in a growing state or in that of a spore (egg.)

This process would specially be recommendable for the preserving of vegetables, because products growing into the ground or on its surface such as beans, peas, asparagus, etc., are of a much more difficult steri-