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UNITED STATES DEPARTMENT OF AGRICULTURE,  
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**HOW TEACHERS IN RURAL ELEMENTARY SCHOOLS MAY  
USE FARMERS' BULLETIN 771, HOME-MADE FIRELESS  
COOKERS AND THEIR USE.**

*Relation to the course of study.*—The bulletin is useful in the cooking classes and provides useful correlations for other school subjects.

*Topics for study.*—Three topics for study with the related practice are suggested: (1) The principles of the fireless cooker, pages 3-4; how to make a fireless cooker, pages 4-8. (2) How to use the fireless cooker, pages 9-10. (3) Recipes for use with the fireless cooker, pages 11-16.

*Study questions.*—Topic 1: What is the principle of the fireless cooker? What is the source of the heat used? What crude methods have formerly been used to apply this principle? What are the three chief advantages of the fireless cooker? What other advantages? What are the materials essential for the making of a satisfactory cooker? What different materials may be used for the outer container? What is the most essential requirement as to this outer container? How much space will be required? What are the essentials of the inner container and the cooking utensils? What materials are best? Why should tinned iron not be used? What sources of extra heat may be used? What danger may this involve? What different packing material may be used? What very cheap material is good? How pack the insulating space? If extra heat is to be used, how avoid danger of fire? What is best material? What cheaper? How insulate the top?

Topic 2: The fireless cooker is best suited to what foods? How much baking may be done? What kinds of cooking can not be done? Under what conditions may different foods be cooked at the same time? How large a container should be used in each case? How shall foods be prepared for the cooker? How long cooked before being put in the fireless cooker? How long shall they remain in the fireless cooker?

Topic 3: Discuss the recipes which may have local application. Which recipes permit the long-time or overnight cooking? Which

are adapted only to short-time use of the cooker? How are soup stocks prepared? How are soups made? How cook breakfast cereals? Fresh vegetables? Meat and vegetable combinations? Dried fruits? Puddings and steamed bread?

*Illustrative material.*—A well-constructed homemade fireless cooker should be examined by the pupils before they attempt to make or use one. Plans and pictures of various types may be collected. Recipe books and instructions furnished by manufacturers will be helpful. Make a chart containing a list of cautions.

*Practical exercises.*—This subject is of little value except as it is applied to real practice, which should include both home and school work. Fireless cookers may be made by pupils either at school or at home. The cooking of a school lunch may be greatly simplified by the use of the fireless cooker. (See F. B. 712.) Soups and other warm dishes prepared early in the day will be ready for the lunch. The cooking class should become skilled in using this method of cooking. Arrange that each pupil shall practice at home the lessons learned at school, thus spreading the use of this article.

*Correlations.*—In manual training classes make a fireless cooker. Have the plans drawn in class. In language classes write descriptions of the making and using of the cooker.

In the physiology class discuss the relative food values of some cheaper foods which are rendered available by the cooker.

In this class or in elementary science show the close connection between this topic and that of refrigeration. Pupils should understand that insulation by means of nonconductors is the same in each case. Since both must be used in the summer season it may be wise to lay emphasis on this application also. Some families may profitably construct homemade refrigerators. Show the application of the same principle to the ice house and to the thermos bottle.

The recipes, cost of material, saving in fuel, etc., will provide interesting problems in arithmetic.

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