## **Fireless Cooker**

If used with the Bucket Stove, a Fireless Cooker can be used to thoroughly cook beans, grain, or tough meat in water. Three quarts of such food can be cooked with less fuel than is required to soft-boil an egg over a small campfire.

Fig. 9.4. Boiling-hot pot of food being placed in an expedient Fireless Cooker.



A Fireless Cooker cooks by keeping a lidded pot of boiling-hot food so well insulated all around that it loses heat very slowly. Figure 9.4 shows one of these simple fuel-saving devices made from a bushel basket filled with insulating newspapers, with a towel-lined cavity in the center. The Cavity is the size of the 6-quart pot. A towel in this cavity goes all around the pot and will be placed over it to restrict air circulation. If the boiling-hot pot of food is then covered with newspapers about 4 inches thick, the temperature will remain for hours so near boiling that in 4 or 5 hours even slow-cooking food will be ready to eat. The essential materials for making an effective Fireless Cooker are enough of any good insulating materials (blankets, coats, paper, hay that is dry and pliable) to cover the boiling-hot pot all over with at least 3 or 4 inches of insulation. A container to keep the insulating materials in place around the pot is useful. Wheat, other grains, and small pieces of tough meat can be thoroughly cooked by boiling them briskly for only about 5 minutes, then insulating the pot in a Fireless Cooker for 4 or 5 hours, or overnight. Whole beans should be boiled for 10 to 15 minutes before they are placed in a Fireless Cooker.

## **Cooking Grain Only**

When whole grains are pounded or ground by expedient means, the result usually is a mixture of coarse meal, fine meal, and a little flour. Under shelter conditions, the best way to cook such meal is first to bring the water to a boil (3 parts of water for 1 part of meal). Add 1 teaspoon (5 grams) of salt per pound of dry meal. Remove the pot from the fire (or stop adding fuel to a Bucket Stove) and quickly stir the meal into the hot water. (If the meal is stirred into briskly boiling water, lumping becomes a worse problem.) Then, while stirring constantly, again bring the pot to a rolling boil. Since the meal is just beginning to swell, more unabsorbed water remains, so there is less sticking and scorching than if the meal were added to cold water and then brought to a boil. If any type of Fireless Cooker is available, the hot cereal only has to be boiled and stirred long enough so that no thin, watery part remains. This usually takes about 5 minutes. Continue to cook, either in the Fireless Cooker for at least 4 or 5 hours, or by boiling for an additional 15 or 20 minutes.

When it is necessary to boil grain meal for many minutes, minimize sticking and scorching by cooking 1 part of dry meal with at least 4 parts of water. However, cooking a thinner hot cereal has a disadvantage during a food crisis: an increased volume of food must be eaten to satisfy one's energy needs.

If grain were the only food available, few Americans doing physical work could eat enough of it to maintain their weight at first, until their digestive tracts enlarged from eating the very bulky foods. This adaptation could take a few months. Small children could not adjust adequately to an all-grain diet: for them, concentrated foods such as fats also are needed to provide enough calories to maintain growth and health.

## **Cooking Grain and Beans Together**

When soybeans are being used to supplement the lower quality proteins of grain and when fuel or pots are in short supply, first grind or pound the beans into a fine meal. To further reduce cooking time, soak the bean meal for a couple of hours, keeping it covered with water as it swells. Next put the soaked bean meal into a pot containing about 3 times as much water as the combined volume of a mixture of 1 part of dry bean meal and 3 or 4 parts of dry grain meal. Gently boil the bean meal for about 15 minutes, stirring frequently, before adding the grain meal and completing the cooking.

Stop boiling and add the grain meal while stirring constantly. Again bring the pot to a boil, stirring to prevent sticking and scorching, and boil until the meal has swelled enough to have absorbed all the water. After salting, boil the grain-bean mush for another 15 minutes or more before eating, or put it in a fireless cooker for at least 4 or 5 hours. Soybeans boiled alone have a taste that most people find objectionable. Also, whole soybeans must be boiled for a couple of hours to soften them sufficiently. But if soybeans are pounded or ground into a fine meal, and then 1 part of the soybean meal is boiled with 4 parts of meal made from corn or another grain, the soybeans give a pleasant sweetish taste to the resulting mush. The unpleasant soybean taste is eliminated. If cooked as described above, soybeans and other beans or dried peas can be made digestible and palatable with minimum cooking.