

similar to that shown by Fig. 85. This handle should be of $\frac{3}{4}$ -in. round iron, having a foot at one end provided with two screw holes for fixing to the sifter, and a bow at the other end. A notch must be cut in one end of the box to allow the handle to work, and also in the cover.

An iron handle could be fitted to the cover, as shown in Fig. 82, and two handles (Fig. 86) could be fitted to the sides of the box to enable it to be moved more easily.



Fig. 78.—Dustless Cinder-sifter

A couple of coats of paint will make the sifter more durable.

FIRELESS COOKER

A fireless cooker or hay-box is shown complete by Fig. 87. It consists of a wood box which is built up with four sides and a bottom, while a cover is hinged to the top edge of one side. The cooker must be fitted with a suitable metal stew-pan, and this is packed in hay, as shown in Fig. 88, while a hay-stuffed cushion is made to fit above the stew-pan.

The cooker as shown in the illustrations is made up with a front and back

and sides, which are framed up as shown in Fig. 90. The framework in each case consists of four rails which are 1 ft. long by 2 in. wide by $\frac{3}{4}$ in. thick, and are framed together with half-lapped joints similar to that shown by Fig. 91. The half-lapped joints will not be very difficult to cut. They should be marked off with a square and marking gauge, and cut with a tenon saw; while fixing them together they should be secured with glue and a couple of nails or screws. The front and back frames are lined on the inside with $\frac{1}{4}$ -in. boards, which are nailed to the framework. For this purpose there is nothing better than ply-wood.

The front and back must now be connected with two sides c (Fig. 89), each 1 ft. 2 in. long by 1 ft. deep by $\frac{1}{4}$ in. thick of ply-wood, and they are nailed or screwed to the side rails of the front and back framework. The bottom d may also be of ply-wood, and it is 1 ft. 2 in. long by 1 ft. 1 in. wide by $\frac{1}{4}$ in. thick, nailed or screwed to the bottom edges of the front, back, and sides. Two handles e are arranged at the front and back as shown in the illustrations. These handles should be 1 ft. 1 in. long by 1 in. deep by $\frac{1}{2}$ in. thick, and they are simply nailed or screwed in position. The cover f is framed together, as shown in Fig. 92, and is covered on the inside with a $\frac{1}{4}$ -in. panel in a similar manner to the front and back. The side rails of the framework are 1 ft. 2 in. long by 2 in. wide by $\frac{3}{4}$ in. thick, and the top and bottom rails are 1 ft. 1 in. long by 2 in. wide by $\frac{3}{4}$ in. thick. The rails are half-lapped and screwed or nailed together, as shown by Fig. 91, while the panel is simply nailed or screwed to the framework. The cover is hinged to the back b with a pair of 2-in. butt hinges, and a catch similar to that shown by Fig. 94 is arranged at the front to secure the cover.

The hay-stuffed cushion which is fitted to the upper portion of the interior of the cooker should be about 4 in. deep, and may be made up as shown by Fig. 93. For the top of the cushion cut a piece of wood 1 ft. square by $\frac{1}{2}$ in. thick, so that it will fit between the sides of the cooker. The hay stuffing is held in place with a linen

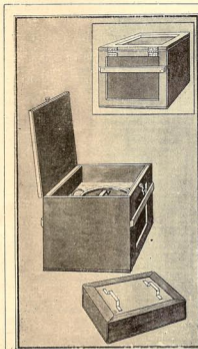


Fig. 87.—Hay-box Cooker. Inset—Back View of Cooker



Fig. 93.—Details of Cushion



Fig. 94.—Catch for Cover



Fig. 91.—Framework Joint

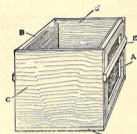


Fig. 89.—Body of Cooker



Fig. 90.—Front and Back Frames



Fig. 92.—Cover Framework

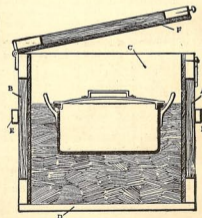


Fig. 88.—Section through Cooker

covering, which is made up in the form shown in Fig. 93, and is nailed to the upper face of the board which forms the top of the cushion. Two tape handles could be arranged on this board, as shown in Fig. 87. The stew-pan which should be used in the



Fig. 95.—Stew-pan for Cooker

cooker should be similar to that shown by Fig. 95. It should be of enamel-ware or, better still, aluminium, and should be 2-qt. size. The stew-pan is arranged in the cooker, as shown in Fig. 88, and is packed in hay, which should be stuffed fairly tight round the pan. The pan is placed so that when the cushion is fitted over the pan, and the cover is closed, the cushion will fit tightly on the pan.

The method of using the cooker is no doubt well known. The stew-pan containing the food to be cooked is simply brought to the boil on the gas or fire, and is then placed in the hay-box cooker. The time required to cook in this way will, of course, vary with the nature of the food being treated; but the great saving in fuel will be very evident to everyone. The cooker, when complete, could be stained and varnished.

WOODEN BATH

At first sight, the advantage of using wood as a material for a bath may appear somewhat doubtful; but in some cases there are advantages, though there is no economy as regards first cost. Wood is lighter as regards weight than iron, and a bath of wood can be removed or even stood on end out of the way when not in use. It is stronger and more durable than zinc, and has the same advantage over this as over iron, while with both zinc and iron there is the question of paint or enamel; but with the wood neither need be used.