A. G. ANDREWS.

LIFTING TRAY.

APPLICATION FILED NOV. 12, 1917.

1,279,071. Patented Sept. 17, 1918.

Fig. 1.

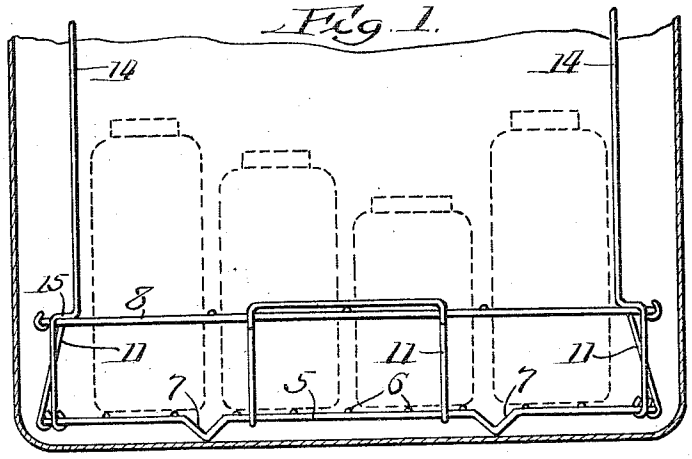


Fig. 2.

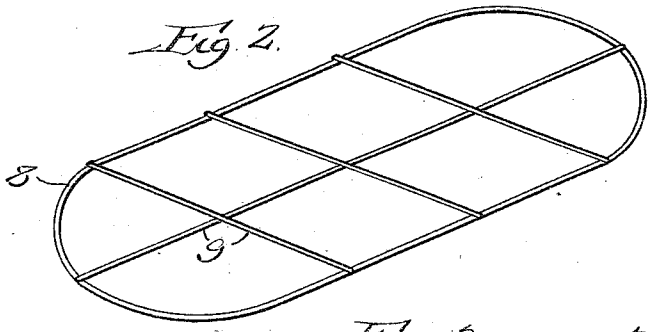
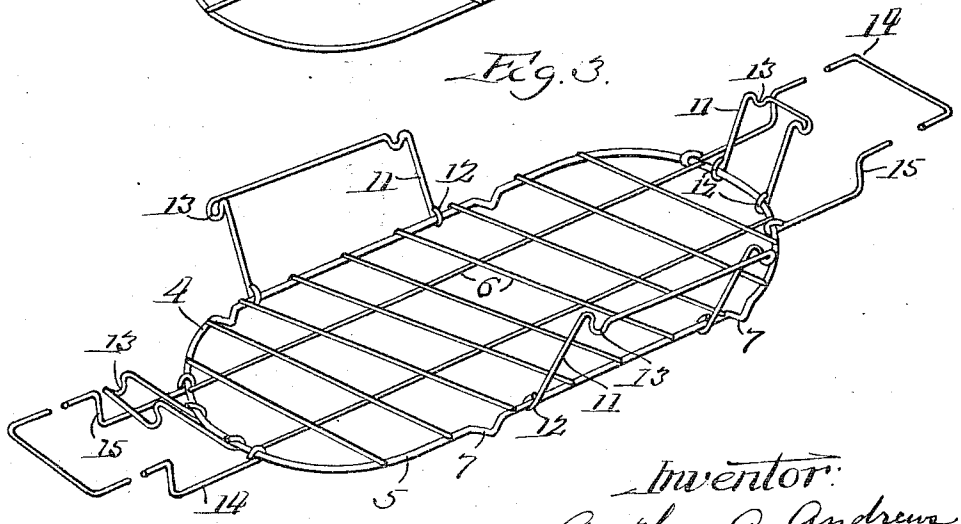


Fig. 3.



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UNITED STATES PATENT OFFICE.

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LIFTING-TRAY.

1,279,071. Specification of Letters Patent. **Patented Sept. 17, 1918.**

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To all whom it may concern:

Be it known that I, ARTHUR G. ANDREWS, a citizen of the United States, residing at Rockford, in the county of Winnebago and State of Illinois, have invented certain new and useful Improvements in Lifting-Trays, of which the following is a specification.

This invention relates in general to improvements in trays, and has more particular reference to what might be termed a "lifting tray," of special utility as part of a home canning outfit, although adaptable also for other uses.

In preserving and canning food products by the one-period cold-pack method, it is desirable, especially when such canning is done in the home, to provide a suitable tray or container for lifting of placing the jars or cans containing the product into and out of a vessel of boiling water for cooking. While containers or lifting trays for this purpose have been heretofore provided, these have not been so constructed as to be capable of production and sale at as low a cost as is desired for an article of this character, nor have they been as well suited for this work as might be.

In the present instance, therefore, I have aimed to provide a lifting tray of improved construction especially adapted to carry a number of jars, cans, or the like and to be easily and conveniently placed into and out of a container of boiling water.

I have also aimed to provide as an article of manufacture, a lifting tray of the character described, which while effectually serving the purposes desired, is constructed in such simple manner as to be capable of production and sale at a comparatively low cost.

I have further aimed to provide a lifting tray which is collapsible, or rather may be arranged in a folded or knocked-down condition so as to present a compact flat bundle, thereby enabling the lifting trays to be packed and shipped very economically whether in small or large quantities. The collapsible trays are also so designed that they may be set up or assembled and placed in condition for use very quickly and easily without the employment of any tools whatsoever and may be equally as quickly folded up when not in use and stored away in a small space for future use.

Referring to the drawing,—

Figure 1 is a side elevation of a lifting tray embodying my improvements, showing the manner in which the tray is used;

Fig. 2, a perspective view of the top member of the container; and

Fig. 3. a perspective view of the bottom member and parts connected thereto arranged in a spread-out position for purpose of illustration.

In the present instance, I have illustrated one example of use to which my improvements are applicable, this case being for the purpose of a tray for handling jars, cans or other vessels when canning foods. In the home made outfits for canning foods by the one-period cold-pack method, the jars or the like containing food must be immersed in boiling water for cooking. For this purpose it is very common practice to employ an ordinary wash boiler as the water container, and the present invention provides a tray especially adapted for placing the jars into and out of a boiler or any other container of boiling water which may be employed.

The lifting tray is preferably of wire construction. Generally stated, it consists of a bottom member of wire mesh upon which the jars or cans are placed, a top member held in spaced relation above the bottom member and provided with partitions adapted to hold the jars in spaced relation in the tray, and handles of sufficient length to extend above the boiling water in which the jars are to be immersed, so that the operator may conveniently immerse and raise the tray. The tray is also capable of being arranged in a compact flat bundle so that it will occupy but little space when not in use and may be very economically packed and shipped in large numbers.

The bottom member, designated generally by reference character 4, of reticulate construction, and in this instance shaped similar to the bottom of an ordinary wash boiler, is preferably formed of wire consisting of a somewhat heavy border member 5, the sides of which are joined by crossed wires 6, suitably arranged and welded in position. The bottom member or rack is preferably provided with short legs 7 which support the rack in slightly elevated position. The top member conforming in shape to that of the bottom member, may be constructed of a wire border member 8 and wire members 9, dividing the top member into a plurality of compartments, in this instance, eight in all. Means is provided for supporting this top member in spaced relation above the bottom member so that the jars, cans or other vessels containing the food to be cooked may be placed on the bottom member or rack in the compartments defined by the top member and thus held in proper position at all times and against displacement. The means for connecting the top and bottom members of the rack is constructed so that when the tray is not in use these members may be arranged in close flat relation for purposes already mentioned. Such means preferably consists of supports pivotally connected to one of the members and detachably engaged with the other. In the present instance, I have pivotally connected the supporting members to the ends and sides of the bottom member of the tray and shaped the members at their free ends to receive the marginal wire piece 8 of the top member. These supporting members are preferably each formed of a single piece of wire 11 pivotally connected at its ends 12 to the marginal wire member 5 of the bottom member and shaped intermediate its ends to provide a pair of spaced seats 13 adapted to receive the wire member 8, as shown. When the top member is seated on the supports 11, it will be held in suitable spaced relation above the bottom member 4, as shown in Fig. 1, and will be removable from such supports. For the purpose of securing the top member in position on the supports I have provided means formed in common with handles which serve to lift the tray. These handles 14 are each formed of a single piece of wire pivotally connected at its ends to the border 5 of the bottom member at the ends thereof, and shaped to provide shoulders 15 adapted to hook or clamp over the border 8 of the top member. Thus, as shown in Fig. 1, the top member is secured in fixed connection with the supporting members; and the handles are relatively long and of sufficient length to project above the boiling water in which the jars on the tray are immersed, so that the operator may conveniently grasp the handles to lift the trays.

From the foregoing, it will be manifest that I have provided a tray of very simple construction, which can be manufactured at a low cost, and which is adapted for various carrying purposes and is of special utility in the canning of foods wherein it is desired to place a number of jars or cans of food into and out of boiling water. It will also be evident that the tray is so designed that it may be arranged in a compact flat bundle for storing, shipping and similar purposes. To arrange the tray in this manner it is only necessary to release the handles 14 from the top member 8 by swinging the handles outwardly, removing the top member 8 from the supports 11, swinging these supports and the handles inwardly against the bottom member, and finally by placing the top and bottom members together in flat relation.

I claim:

1. A tray of the character described comprising a bottom member adapted for carrying jars and the like, a top member adapted to hold the jars against lateral displacement from the bottom member, side supporting members pivotally connected to the bottom member and providing seats upon which the top member rests and from which the top member is removable, and handles pivotally connected to the bottom member and detachably coöperable with the top member for securing the latter against displacement from said seats.

2. A lifting tray of the character described comprising a bottom member for the reception of jars and the like, a top member for holding the jars in spaced relation, side members pivotally connected to the bottom member and detachably engageable at their upper ends with the top member and through means of which the latter is removably supported above the bottom member, and handles pivotally connected to the bottom member and extended when in upright position substantially above the top member, the handles having portions intermediate their ends for preventing removal of the top member from the side members.

3. A lifting tray comprising a bottom adapted for the reception of jars and the like, sides pivotally attached to the bottom and each provided at its upper end with a recessed seat, a top member adapted to be supported above the bottom by said sides for holding the jars against lateral displacement from said bottom and having portions removably insertible in said seats, and handles pivotally attached to the bottom and having portions engageable with the top member in a clamping action for securing said member against displacement from said seats, said

sides and handles being movable into close relation with the bottom when the top member has been removed from said seats.

4. A lifting tray of wire construction comprising a bottom member formed of a wire border and an open wire mesh interior, side members each formed of a single length of wire pivotally attached at its ends to the wire border member of the body and shaped intermediate its ends to provide seats for a top member, a top member having a wire border removably seated on said sides, and handles pivotally attached to the bottom border member and detachably securing the top member on the sides.

ARTHUR G. ANDREWS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."