

W. A. LORENZ.
JAR TRAY.
APPLICATION FILED DEC. 12, 1904.

938,675.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

Fig. 1

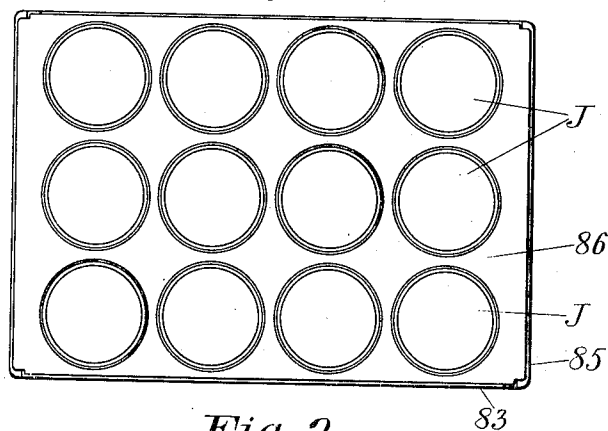


Fig. 2

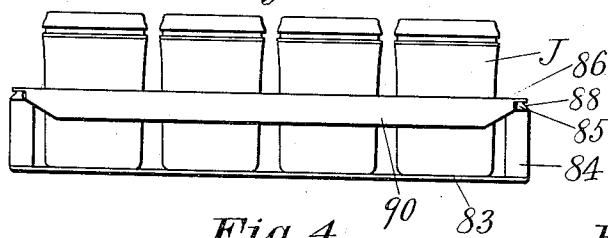


Fig. 4

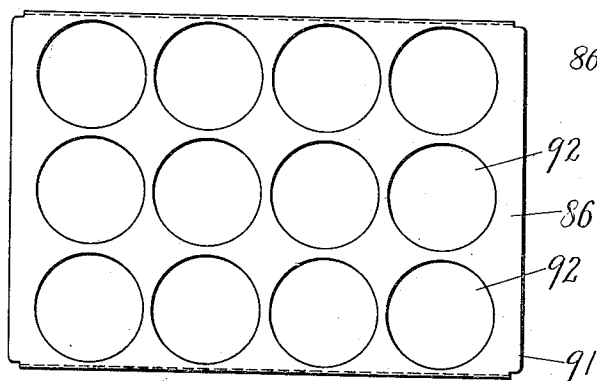


Fig. 5

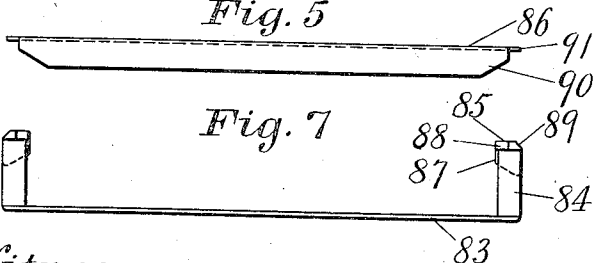


Fig. 7

Fig. 3

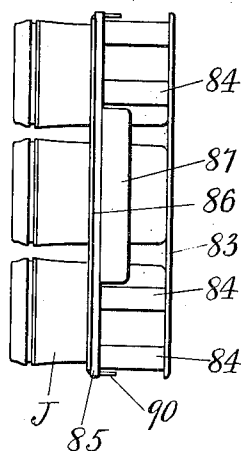
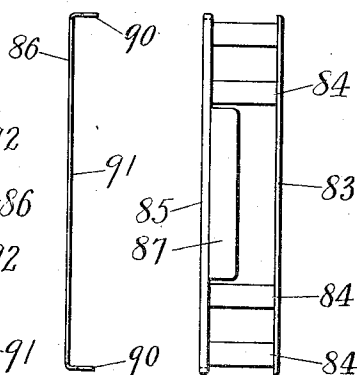


Fig. 6 Fig. 8



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2 SHEETS—SHEET 2.

Fig. 9

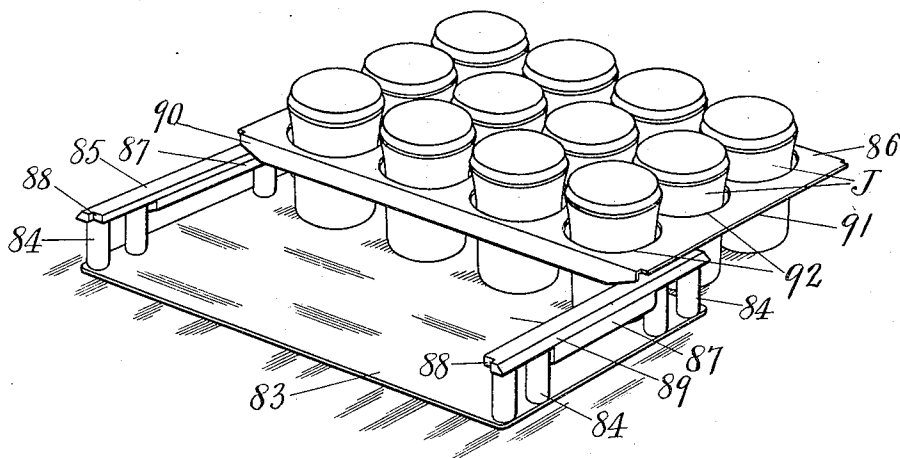
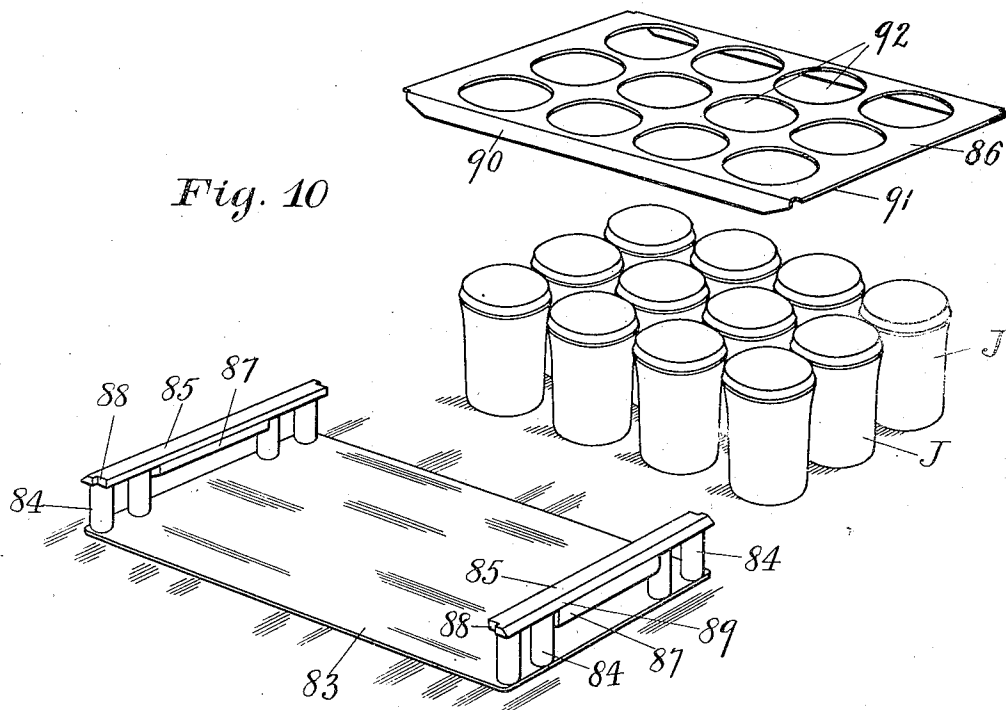


Fig. 10



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UNITED STATES PATENT OFFICE.

WILLIAM A. LORENZ, OF HARTFORD, CONNECTICUT, ASSIGNOR OF ONE-HALF TO BEECH-NUT PACKING COMPANY, OF CANAJOHARIE, NEW YORK, A CORPORATION OF NEW YORK, AND ONE-FOURTH TO WILLIAM H. HONISS, OF HARTFORD, CONNECTICUT.

JAR-TRAY.

938,675.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed December 12, 1904. Serial No. 236,485.

To all whom it may concern:

Be it known that I, WILLIAM A. LORENZ, a citizen of the United States, and resident of Hartford, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Jar-Trays, of which the following is a full, clear, and exact specification.

This invention relates to apparatus for handling jars and similar receptacles and consists of an improved tray and locator by means of which any suitable number of jars may be located and maintained in predetermined positions on the tray, and quickly removed therefrom when desired, without danger of breakage or disarrangement.

Figures 1, 2 and 3 are plan, side and end views respectively of an improved tray and locator, with a number of jars in place on the tray. Figs. 4, 5 and 6 are plan, side and end views respectively of the locator. Figs. 7 and 8 are side and end views, respectively of the tray. Fig. 9 is a perspective view of the tray with the locator detached therefrom, and in the operation of removing a set of jars from the tray. Fig. 10 is a perspective view of the tray, the locator and a set of jars after the jars have been removed from the tray and the locator disengaged from the jars.

The jar tray comprises a bottom 83, preferably of sheet metal, at each end of which are secured upright standards or posts 84 supporting a pair of end bars 85. The surface of the tray bottom 83 is preferably made without depressions or projections. The ends are closed by the posts 84 and end bars 85; but the lateral sides are open and unobstructed. Handles 87 are secured to the end bars 85 for convenience in lifting and moving the loaded tray.

The locator 86 is preferably of sheet metal and when so constructed may have its side edges 90 turned over to stiffen it. The ends 91 extend outward sufficiently to enable them to rest upon the end bars 85 of the tray and thus support the locator. The turned over edges 90 fit into notches 88 formed in the ends of the bars 85, thus registering the locator in a fixed position on the tray while at the same time permitting it to be readily lifted therefrom when desired. Holes 92 of a size to freely fit the bodies of the jars J are formed in the locator and these holes

correspond in number and position to the set of jars disposed as desired on the tray. Each jar is thus located in its proper position on the tray and cannot move therefrom under ordinary conditions unless the locator is lifted out of place. This maintaining of the jars in predetermined positions on the tray is an important function when the jars are to be operated upon in quantities, as in a sealing or capping apparatus, since it is only necessary to correctly locate the tray in the apparatus to make sure also of the correct location of the individual jars. The locator also serves to keep the jars from contact with each other while the tray is being handled or moved, and thus eliminates one very prolific source of breakage. This latter function is of great service in transporting and handling the jars even where their position on the tray is not a matter of importance. In lifting the tray by the handles 87 the thumbs or balls of the hands naturally close down upon the locator, thus holding the latter firmly in place till the tray is again set down.

When it is desired to remove the jars from the tray, the latter is placed upon a table or other suitable surface and the locator 86 detached from the tray by raising it enough to disengage one of the turned-over edges 90 from the notches 88 but not enough to disengage the locator from the jars. This operation is facilitated by beveling off the outer top edges of the end bars 85 at 89, so as to give room for the operator's fingers to get at the underside of the locator or the ends of 90 the locator could extend beyond the bars 85. By now pushing the locator sidewise the jars may be slid in a body off the tray on to the table (Fig. 9) the open side of the tray offering no obstruction to the passing of the jars, while at the same time the location of each jar in its hole 92 keeps it separated from its fellows. After the jars are entirely clear of the tray the locator may be lifted from them (Fig. 10) and replaced on the tray ready to receive another set of jars.

Although the tray bottom 83 and the locator 86 are preferably of sheet metal, they may obviously be formed of other material. The bottom 83 for instance may be made of wood with its side edges suitably beveled to allow the jars to slide off smoothly. The locator 86 may also be made of wood and pro-

vided with pins or other projections for suitably engaging the notches 88. The locator 86 may be made, if desired, with only a single hole for one or a number of jars, though in the latter case the size of the jars should be sufficient to approximately fill the hole of the locator, in order to dispose the jars on the tray properly.

An important advantage of this tray is its reversible feature, whereby the trays may be used with either end foremost, and whereby the jars may be slid off from either of the two open lateral sides. The locator is also made reversible upon the tray, so that it will drop into place when placed in approximate coincidence with the tray, without regard to having its ends in a particular direction. In practical use, these trays and locators are made uniform and interchangeable, so that any locator will register upon any tray; and in either of its two coincident positions on the tray.

I claim as my invention:—

1. In jar handling devices, the combination of a jar tray, and a detachable unitary jar locator provided with a plurality of openings for locating a plurality of jars upon the tray in symmetrical relation to the ends of the tray, the locator being also provided with means for reversibly registering itself upon the tray and maintaining the symmetrical relation of the jars to the ends of the tray in either position of the locator.

2. In jar handling devices, the combination of a jar tray, open at its lateral sides, and a detachable locator consisting of a sheet metal plate, provided with apertures for locating and maintaining a plurality of jars in predetermined positions on the tray, the plate being also provided with means for reversibly registering it upon the tray and maintaining the jars in their same predetermined positions upon the tray in both of the positions of the locator.

3. In jar handling devices, the combination of a jar tray open at its lateral side, a detachable locator made in a unitary structure and provided with means for reversibly registering itself upon the tray, and with means for locating jars in a relation to the ends of the tray, unchanged by the reversal of the locator.

4. In jar handling devices, the combination of a jar tray open at its lateral side, a detachable locator made in a unitary structure, and provided with means for locating jars symmetrically relative to the ends of the tray, and means at the ends of the tray and locator for detachably registering them together, whereby the locator may be bodily disengaged from the ends of the tray, to slide the jars out of one of the open lateral sides of the tray.

5. In jar handling devices, the combination of a jar tray, comprising a flat bottom portion provided with standards rising from opposite sides of the bottom, a handle appurtenant to each of said standards, a detachable locator provided with openings for locating a series of jars in a predetermined position in the tray, the ends of the locator being provided with means for registering with the said standards, with portions of said locator adjacent to the said handles, whereby the tray and its locator are arranged in manipulative relation to the hand of the operator.

6. In jar handling devices, the combination of a jar tray, comprising a flat bottom portion having upwardly projecting standards at its opposite sides, leaving the other opposite lateral sides open, and a detachable locator provided with openings for locating a series of jars in a predetermined position in the tray, and having its ends provided with means for supporting and registering the locator upon the standards.

7. In jar handling devices, the combination of a reversible tray, comprising a flat bottom having standards extending upwardly from its opposite sides, leaving the tray open on its other opposite sides; and a detachable locator provided with openings for registering a series of jars in symmetrical relation on the tray, the locator being provided with means for reversibly registering it upon the said standards.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM A. LORENZ.

Witnesses:

JAS. W. GREEN,
WM. H. HONISS.