No. 689,694. Patented Dec. 24, 1901.

W. D. SNOW & H. M. PALMER.

BOTTLE CARRIER.

(Application filed July 12, 1901.)

(No Model.)

Fig. 1.

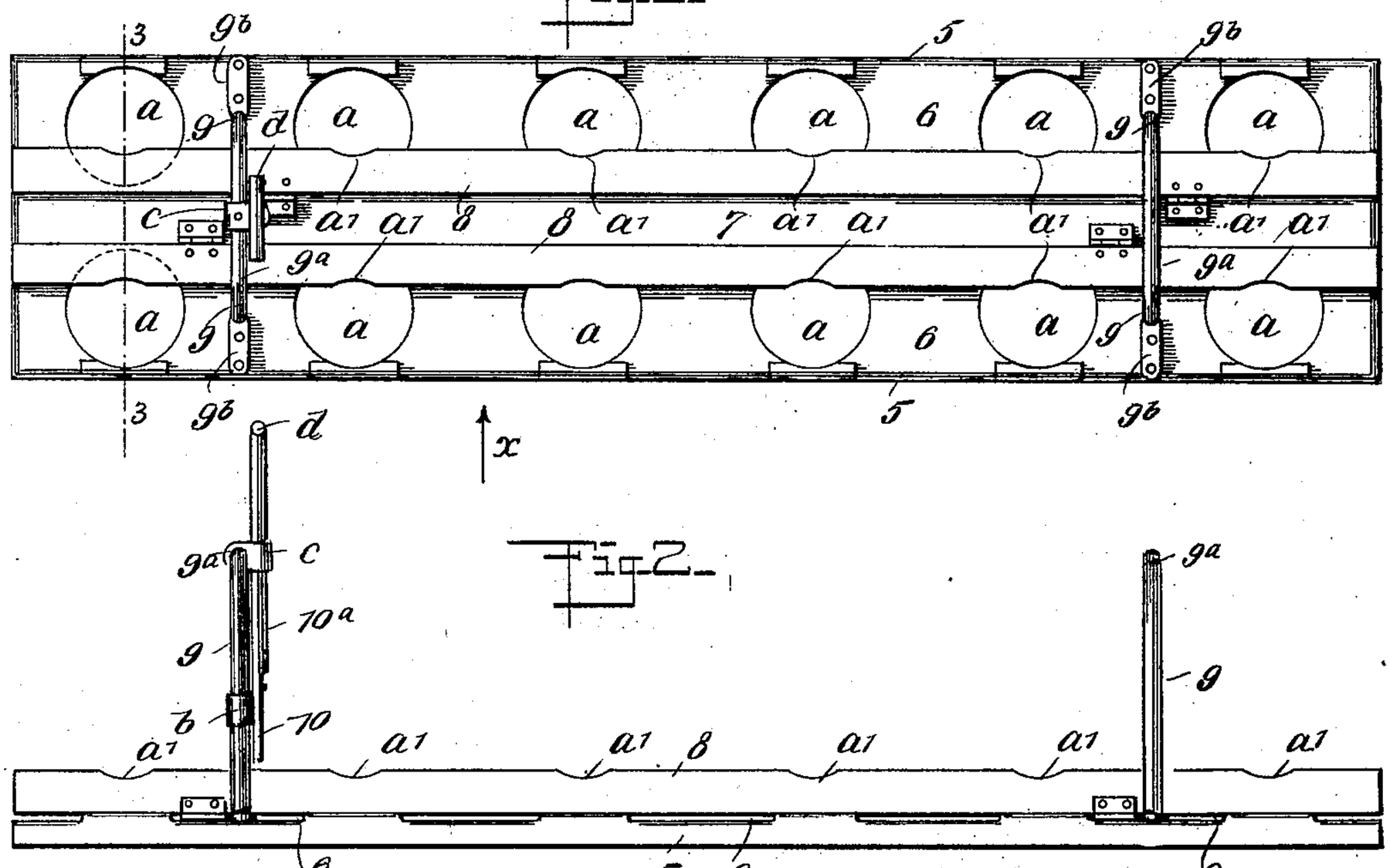


Fig. 2.

Fig. 3.

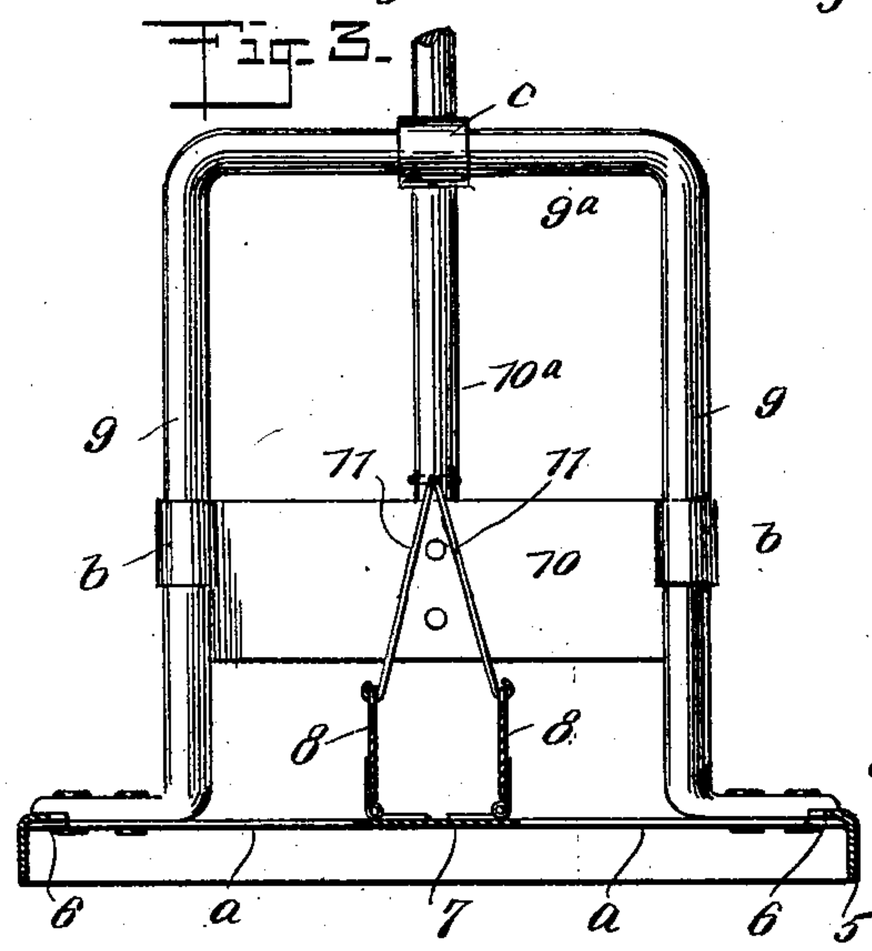
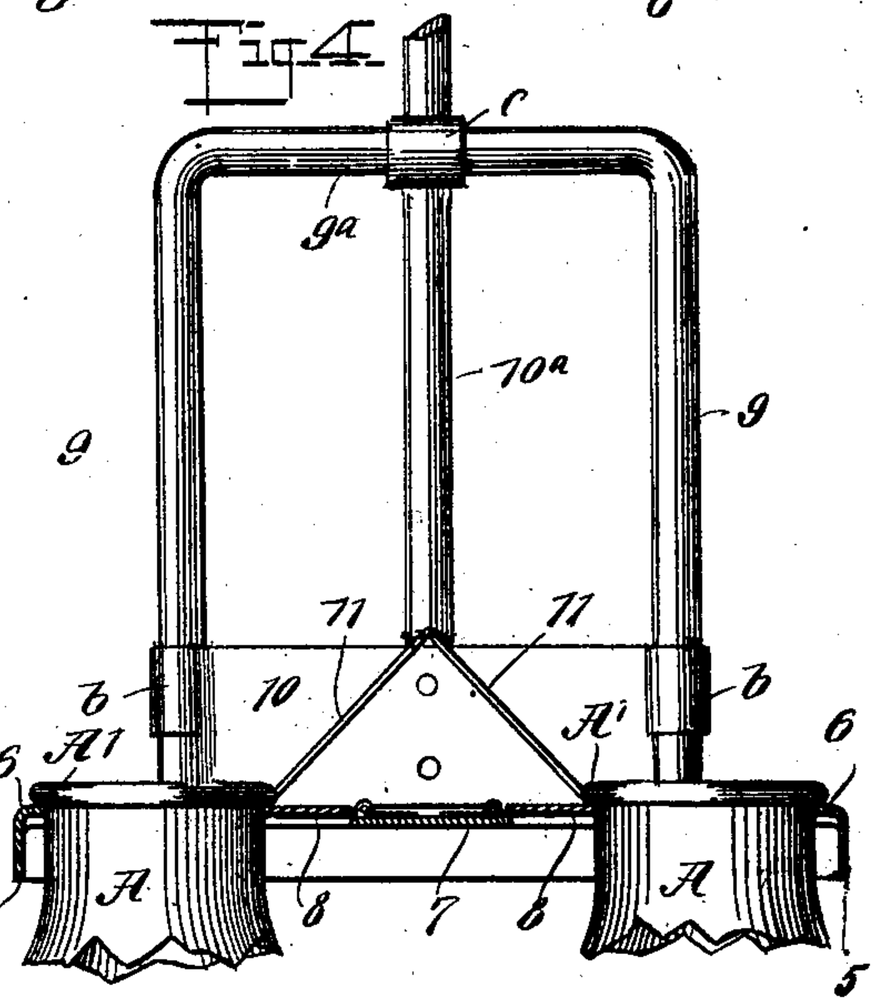


Fig. 4.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIS DANIEL SNOW AND HARRY MEREDITH PALMER, OF BLOOMINGTON, ILLINOIS.

BOTTLE-CARRIER.

SPECIFICATION forming part of Letters Patent No. 689,694, dated December 24, 1901.

Application filed July 12, 1901. Serial No. 68,017. (No model.)

To all whom it may concern:

Be it known that we, WILLIS DANIEL SNOW and HARRY MEREDITH PALMER, citizens of the United States, and residents of Bloomington, in the county of McLean and State of Illinois, have invented a new and Improved Bottle-Carrier, of which the following is a full, clear, and exact description.

This invention provides a novel device for assembling a number of jars or bottles so that they may be carried in pendent condition with open mouths for immersion into a tank holding liquid for filling the bottles or jars, the invention being especially adapted for filling milk-jars in quantity at one operation.

The invention consists in the novel construction and combination of parts, as is hereinafter described, and defined in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a plan view of the improved bottle-carrier. Fig. 2 is a side view of the same in the direction of the arrow x in Fig. 1. Fig. 3 is an enlarged transverse sectional view substantially on the line 3 3 in Fig. 1, and Fig. 4 is a similar view showing the device as applied for service.

The invention comprises the following details: An elongated rectangular frame is provided for the support of the vessels to be filled, said frame embodying a depending marginal flange 5 and two similar cap-plates 6 6, which extend horizontally toward each other from opposite side members of the depending flange 5, and at suitable intervals the inner edges of the cap-plates 6 are scalloped to produce openings a therein. A center bar 7 is secured by its ends upon the end members of the flange 5, and upon the side edges of the center bar two similar clamping-plates 8 are hinged at one edge, which adapts the plates to receive folding movement, so as to extend toward the scalloped edges of the cap-plates 6 or be raised into parallel vertical planes, and in the free edges of the plates 8 notches a' are formed opposite the scallops a.

Two yoke-pieces are provided to serve as handles for the device in its complete form, and, as shown, said yoke-pieces each consist of a metal rod bent at two points equally distant from its ends, forming two parallel legs 9, spaced apart by the cross-bar 9^a. A pad 9^b is formed on the lower end of each leg 9, and these pads on each yoke-piece are seated and secured near an end of the frame upon the cap-plates 6 thereof, which disposes the yoke-pieces transversely and at a proper distance from each other, as shown in Figs. 1 and 2. Upon one of the yoke-pieces a cross-head 10 is held to slide vertically by tubulations b, formed on its ends, and which loosely embrace the legs 9. A handle-rod 10^a extends upward from the cross-head 10 and passes loosely through a guide-box c, which projects laterally from the cross-bar 9^a of the yoke-piece whereon the cross-head is held to slide. Upon the portion of the handle-rod 10^a which extends above the guide-box c a cross-handle d or other handle is formed or affixed. Upon the handle-rod 10^a, above the cross-head 10, the upper ends of the two links 11 are loosely secured, these links having a similar engagement at their lower ends with the free edges of the clamping-plates 8, and it will be seen that by manipulation of the handle-rod 10^a the clamping-plates 8 may be raised into parallel vertical planes or be depressed so as to lie in the same horizontal plane with the cap-plates 6, and when so depressed each one of the notches a' in the free edges of the clamping-plates 8 will be arranged opposite a respective scallop a in the cap-plates 6.

The jars A, usually employed for holding milk or cream to serve as retail-trade packages of such products, ordinarily have an annular rib or rounded flange A′ projected outward from the edge of the neck, as shown in Fig. 4. The space between each scallop a at the center of its concave edge and an opposite notch a' is of such a degree as to adapt the plates 8 when folded down upon the necks of jars A that are entered within the scallops a to embrace said necks between the edges of the scallops a and notches a' when the clamping-plates are lowered to a horizontal position by manipulation of the handle-rod 10^a. As the jars A may be quickly ar-

ranged on a level support for engagement by the improved carrier device, it will be obvious that the jars A in sufficient number to fill the openings in the frame of the device may be gripped therein by manipulation of the clamping-plates 8, and the carrier, having the jars thus held without sealing, may be lifted by the cross-bars 9^a and carried to a suitable tank or other receptacle wherein milk is held, and by an immersion therein the jars are almost instantly filled with the milk. Upon lifting the jars A that have been filled the carrier device is transferred from the tank (not shown) to a draining-table. Then the clamping-plates 8 are raised, thus releasing the filled jars A, ready for a like engagement with a double row of similar jars that are empty.

The operation of filling jars with milk or bottles with any other liquid, such as a medical preparation, can be very rapidly effected by use of our improved bottle or jar carrier without injury to the jars or bottles or to the liquid contents.

Having fully described our invention, we claim as new and desire to secure by Letters Patent—

1. A bottle or jar carrier, comprising a frame having a cap-plate notched at one edge, a clamping-plate rockable on the frame toward the notched edge of the cap-plate, and means to move the clamping-plate toward or from said cap-plate.

2. A bottle or jar carrier, comprising an elongated frame, cap-plates thereon having a plurality of openings along their free inner edges, clamping-plates held to rock toward and from the openings, said clamping-plates having notches opposite the respective openings in the cap-plates, and means for rocking the clamping-plates toward and from the openings.

3. A bottle or jar carrier, comprising an elongated plate-metal frame, consisting of a depending border-flange, and two cap-plates extended inwardly from the sides of the border-flange, the free inner edges of each of said cap-plates having a series of scalloped openings therein, a center bar on the frame, two clamping-plates hinged on the center bar and foldable toward the scalloped openings, said clamping-plates having spaced notches disposed opposite the respective openings in the cap-plates, means for rocking the clamping-plates, and means for handling the carrier device.

4. A bottle or jar carrier, comprising a frame having openings in its top, rockable clamping-plates on the frame, having notches opposite the openings in the frame, looped handles secured on the top of the frame, and a slidable handle-rod connected by links with the rockable clamping-plates for their rocking adjustment.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

WILLIS DANIEL SNOW.
HARRY MEREDITH PALMER.

Witnesses:
CORA L. SNOW.
VERA M. SNOW.