

March 26, 1935.

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1,995,310

BOTTLE CRATE

Filed May 21, 1931

2 Sheets-Sheet 1

Fig. 1.

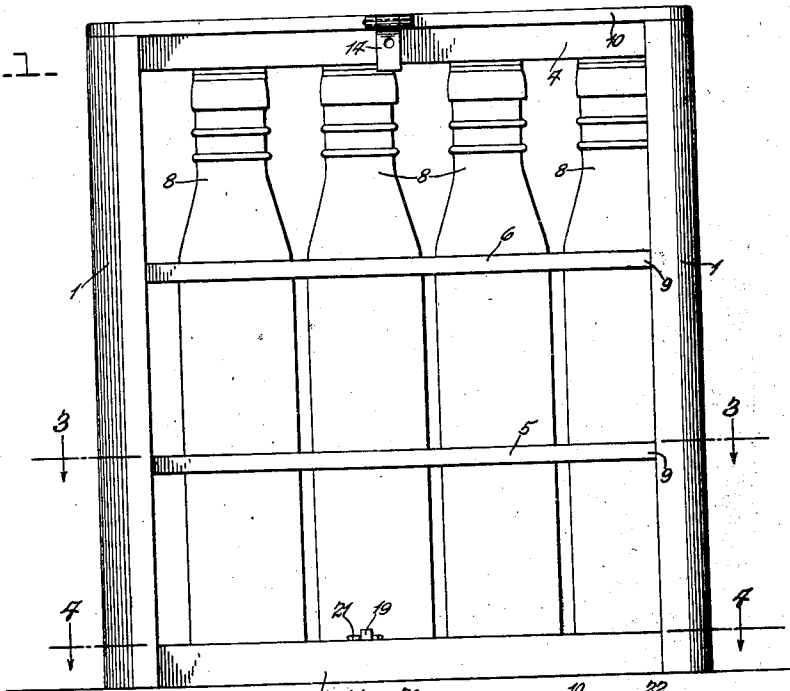
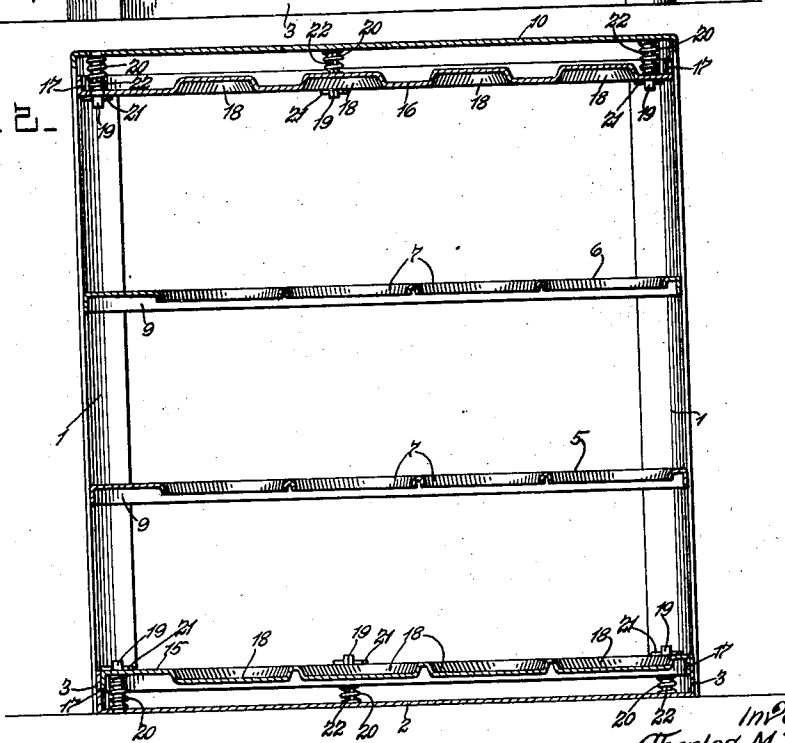


Fig. 2.



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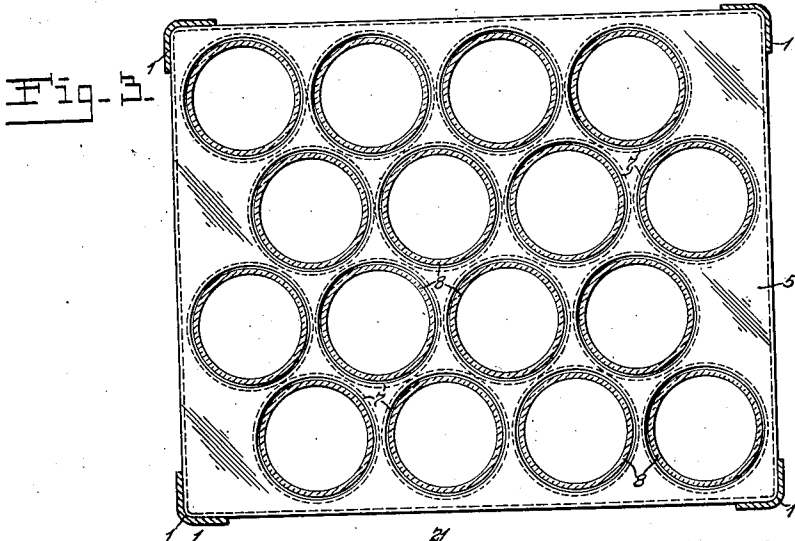
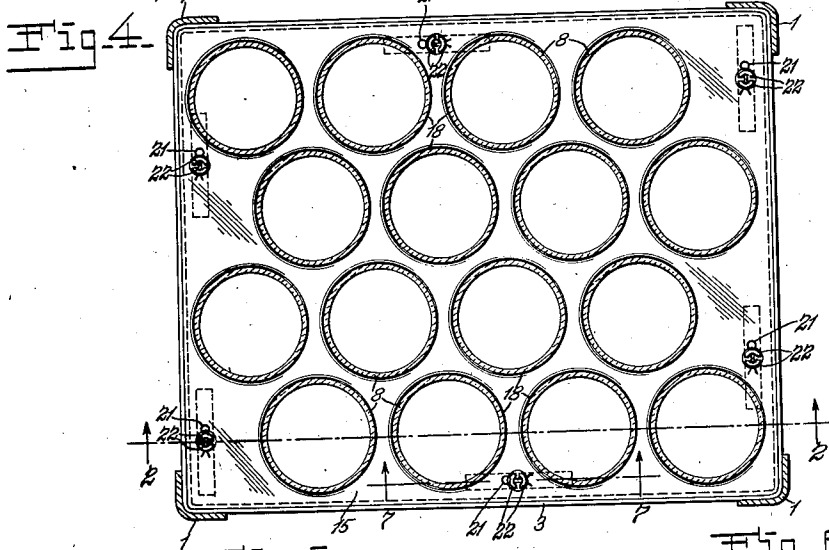
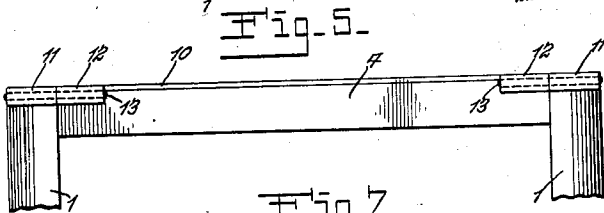
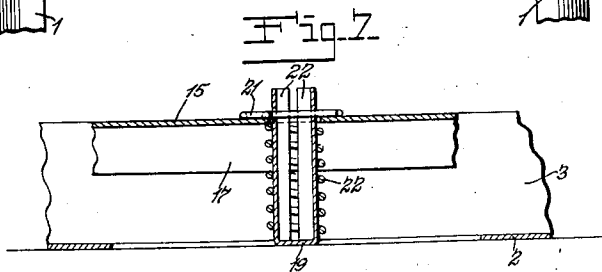
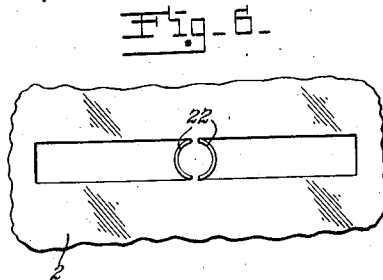
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UNITED STATES PATENT OFFICE

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BOTTLE CRATE

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Application May 21, 1931, Serial No. 538,893

3 Claims. (Cl. 220—66)

This invention relates to a shipping case and particularly to the type used for packing bottles.

An object of this invention is to provide a device of the class described in which may be packed bottled goods in such a manner that the bottles will be held securely out of contact with one another and thus prevent breakage.

Another object of this invention is to provide a device of the class described which may be constructed entirely of sheet metal thus resulting in economy in manufacture.

Other and specific objects will be apparent from the following detail description taken in connection with the accompanying drawings in which—

Fig. 1 is a side elevation.

Fig. 2 is a vertical cross section taken on line 2—2, Fig. 4.

Fig. 3 is a cross section on line 3—3, Fig. 1.

Fig. 4 is a cross section on line 4—4, Fig. 1.

Fig. 5 is a detail view showing in part a rear elevation.

Fig. 6 is a view showing the detail construction of the post.

Fig. 7 is a sectional view showing the details of the post construction taken on line 7—7, Fig. 4.

The construction of the device as shown in the attached drawings is such that substantially every part is constructed of sheet metal which may be formed cheaply in quantities by a die press, and it may be assembled by spot welding thus resulting in economy of manufacture.

The frame of the device comprises four corner uprights 1, a bottom plate 2 having upturned attaching flanges 3 and top cross members 4.

Intermediate plates 5 and 6 are arranged within the frame and are punched to provide holes 7 to receive and position bottles 8 which may be packed in the carrier. The plates 5 and 6 each have attaching flanges 9 by which they may be secured to the uprights 1 and which also serve as strengthening members for the frame. It is to be understood that the bottom 2 may be secured to the uprights most conveniently by spot welding the flanges 3 to the members 1, and cross members 4 and the plates 5 and 6 also may be conveniently secured to the uprights 1 by spot welding.

A hinged lid 10 is provided, the lid member being preferably formed of sheet metal. The hinge by which it may be secured to the frame is preferably constructed by forming rolls 11 integral with the lid 10 and rolls 12 integral with the rear cross member 4. Each pair of rolls 11 and 12 may be provided with a pin 13. The lid 10 may also be provided with a hasp 14

by which the lid may be secured to the front cross member 4 and thereby to the frame.

A false bottom 15 is resiliently supported on the bottom plate 2 and a false lid 16 is suspended from the lid 10. Since these two plate members are of like construction one description will suffice for both. Each of the members 15 and 16 comprise a sheet metal stamping and has a guiding flange 17 and sockets 18 to receive the bottles. Posts 19 are secured to the bottom 2 or the lid 10, as the case may be, and about these posts are positioned helical springs 20. The posts 19 project through holes in the plates 15 or 16 and the plates rest upon the springs 20. Pins 21 passing through the posts 19 serve to hold the plates against displacement.

The posts 19 are preferably constructed in the manner best illustrated in Figs. 6 and 7. A pair of strips 22 are punched from the bottom 2, bent outwardly and formed in such a manner as to provide a substantially circular post.

From the preceding description it will be seen that the bottles 8 may be inserted in the carrier through the holes 7 in the intermediate plates 5 and 6 and seated in the sockets 18, having their tops in engagement in the socket 18 of the plate 16. When the lid is closed the springs 20 will be slightly compressed and each bottle will be rigidly held against displacement, it being understood that the dimensions of the carrier with relation to the bottles to be carried is such as to require tension of the springs 20 in order to close the lid. The details of construction are such that the carrier may be economically constructed using sheet metal stampings almost entirely and employing spot welding for the purpose of fastening the several parts together.

Parts of the invention may be used without the whole, and various changes may be made in the details of construction, within the scope of the appended claims, without departing from the spirit of this invention.

I claim:

1. A shipping case comprising an open frame, a false bottom having sockets forming seats for the articles, posts rigidly secured to the frame adjacent the corners of the frame and passing through the false bottom, resilient means interposed between the false bottom and the frame and about the posts, a hinged lid, a plate suspended from the lid and adapted to bear against the top of the articles, and resilient members interposed between said lid and said plate.

2. In a shipping case of the class described, 55

means for resiliently supporting a false bottom comprising posts integrally formed with the frame and comprising strips punched from the frame, and resilient members positioned between the frame and the false bottom and about the posts.

5 3. A shipping case for bottles including a frame comprising a bottom wall and a top wall and uprights integrally united to said walls at the corners thereof, an intermediate wall between the top and bottom walls having a plurality of spaced
10 openings arranged to laterally support bottles inserted therein, a plate having a plurality of concave recesses formed therein within the cen-

tral zone thereof, said recesses being in vertical alignment with the openings in said intermediate wall, connecting posts supported by the bottom wall and extending through said plate near the corners thereof, springs between the plate and the bottom wall, a second plate having a series of concave recesses axially aligned with the recesses in said first named plate, supports carried by the top wall and extending through said last named plates near the corners thereof, and springs between the top wall and said last named plate. 5 10

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