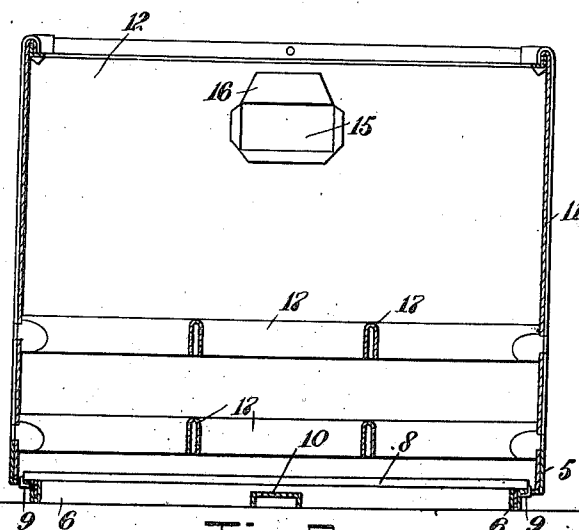
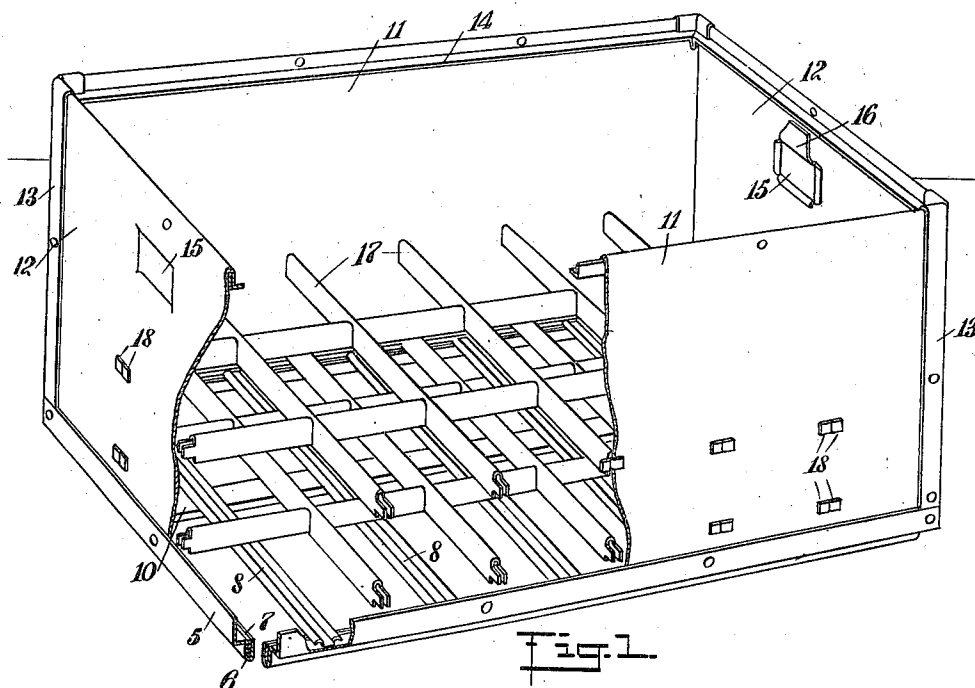


CRATE.

1,030,845.

2 SHEETS—SHEET 1.



WITNESSES

W. W. Foster

Fig. 2.

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CRATE.
APPLICATION FILED AUG. 24, 1909.

1,030,845.

Patented June 25, 1912.
2 SHEETS—SHEET 2.

Fig. 3.

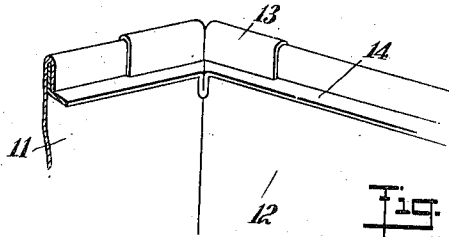


Fig. 4.

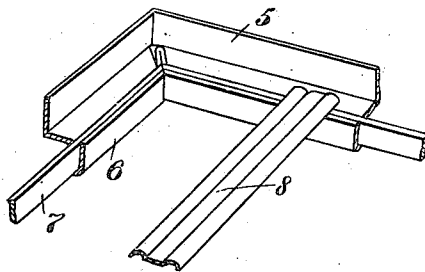


Fig. 5.

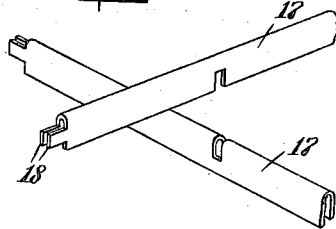


Fig. 6.

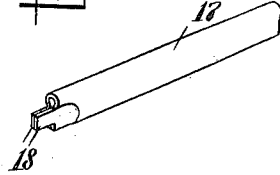


Fig. 7.

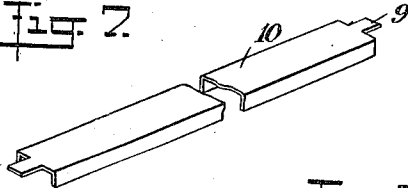


Fig. 10.

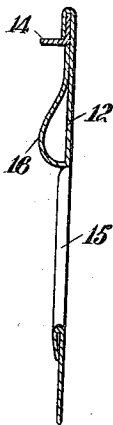


Fig. 9.

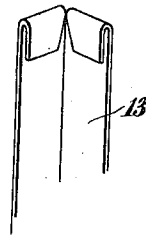
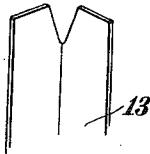


Fig. 8.



WITNESSES

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UNITED STATES PATENT OFFICE.

LOU B. KAUFFMANN, OF NEW YORK, N. Y., ASSIGNOR TO KAUFFMANN KASE COMPANY,
OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

CRATE.

1,030,845.

Specification of Letters Patent.

Patented June 25, 1912.

Application filed August 24, 1909. Serial No. 514,364.

To all whom it may concern:

Be it known that I, LOU B. KAUFFMANN, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Crate, of which the following is a full, clear, and exact description.

The invention is an improvement in crates for bottles and other receptacles, and has in view a substantially indestructible box adapted to be nested within like boxes and having a rack of intersecting bars forming a number of receptacle pockets, the entire structure being preferably of sheet metal, with the frame and bottle rack bars of such cross-sectional shape as to insure strength and rigidity, while being relatively light.

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 views.

Figure 1 is a perspective view of a crate constructed in accordance with my invention, one corner of the crate being broken away and in section to better illustrate the construction; Fig. 2 is a cross-section of the crate; Fig. 3 is a perspective view of one of the upper corners of the crate; Fig. 4 is a similar view of one of the bottom corners of the crate; Fig. 5 is a perspective view, illustrating the connection between the intersecting bars of the bottle rack; Fig. 6 is a similar view, showing the manner in which the ends of the bottle rack bars are shaped preparatory to inserting them through the sides of the crate; Fig. 7 is a perspective view of a conveyer bar of the crate; Fig. 8 is a perspective view of the upper end portion of one of the corner binding strips preparatory to bending it to the inside of the crate; Fig. 9 is a view similar to Fig. 8, showing the end of one of the corner binding strips folded inwardly; and Fig. 10 is a vertical section through the hand opening at one end of the crate.

In the construction of the crate, I provide a marginal bottom frame constructed of a bar or angle-iron 5, L-shaped in cross-section, with a channel rail 6 depending from the inner edge of the horizontal flange of the angle-iron and receiving a reinforcing bar 7, the sides of the bottom frame being connected together at intervals by channel

bars 8 having their upper edges outwardly curved or beaded, the flanges of the bars being cut away at the ends, as shown in Fig. 2, with the bottoms thereof passed through openings in the horizontal flanges of the angle-irons and bent against the under faces of the said flanges, as indicated at 9. The bottom frame of the crate is further reinforced by a channel conveyer bar 10 longitudinally and centrally arranged, with the ends of the bar fastened to the ends of the frame similarly to the bars 8, and with the edges of the flanges arranged in substantially the plane of the bottom of the channel rail 6. To the vertical flanges of the bottom frame are secured by riveting or any other suitable manner, the sides 11 and ends 12 of the crate, the same being preferably of sheet metal, with the sides and ends secured together at their meeting edges by angular binding strips 13. The sides and ends are reinforced at the top of the crate by an angle or L-shaped bar 14, over the vertical flange of which are inwardly turned the edges of the sides and ends, the upper portions of the angular binding strips 13 being likewise turned into engagement with the sides and ends, as best shown in Fig. 3. The bottom horizontal flange of the angle-iron 14 forms an internal shoulder, which, in connection with the top edge of the crate, provides seats for the rail 6 and horizontal flange of the bottom or base frame, of a like crate, whereby a number of crates may be nested one within the other without interfering with the bottles or other receptacles which the crates may contain, the walls of the crates being sufficiently high for this purpose.

The angle-iron 5 of the bottom frame and the angle-iron 14 are each formed continuously at the corners, with the surplus metal in bending the angle-irons at these points folded upon itself as respectively shown in Figs. 3 and 4, the folded metal in the case of the angle-iron 14 being pressed below the horizontal flange, and in the case of the angle-iron 5 the metal is pressed above the flange, thus, in each case avoiding the weakening of the metal and interference with the nesting of the crates together. Directly below the angle-iron 14 each of the ends 12 is provided with a hand opening 15 having the metal curled back at the edges of the opening, as shown in Figs. 1 and 10, to

avoid the cutting of the hand, with the metal at the top bulged inwardly sufficiently to form a comfortable grip 16.

In the lower portion of the crate is a rack 5 constructed of two frames arranged one above the other, as shown in Fig. 2, each frame being constructed of a number of intersecting channel bars 17 facing downwardly and having curved tops, the bars 10 forming a series of bottle or receptacle-pockets, with one of the cross-bars or strips 8 centrally arranged under each pocket and serving to support the bottle without danger of scratching or otherwise damaging it on 15 the outwardly-curved flanges with which these cross-bars are provided. The ends of the intersecting channel bars of the bottle rack are flattened and cut away at the bottom and top to provide fingers or projections 18, 20 which pass through the walls of the box and are oppositely turned at the outside thereof, as shown in Fig. 1, to securely fasten the rack frames in place, the rack frames in this way obviously materially reinforcing the 25 crate. At the intersections of the bars 17, one bar is notched at the top and the other at the bottom in order that the bars may interfit and lie in approximately the same horizontal plane.

30 Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A metal crate including in combination, a bottom, side walls connected with 35 the bottom, a frame within the top edges of the side walls extending all the way around the four sides of the crate, said frame consisting of a flat piece formed longitudinally into two parts at an angle to each other, 40 one of such parts lying against the inner face of the side walls adjacent the upper edge thereof, and the other part extending inwardly from a point below the upper edge of the first-named part, and said side walls 45 being bent over the part lying thereagainst, and having their bent-over portions secured to the frame.

2. A metal crate including in combination, a bottom, side walls connected thereto, 50 a single integral frame within the top edges of the side walls, and extending all the way around the four side walls, said frame consisting of two parts, one lying against and attached to the side walls, and the other projecting inwardly from the first-named part, 55 and at substantially right angles thereto, the inwardly projecting part at each corner

thereof being folded downwardly upon itself, to allow the frame to form a right-angle turn to conform to the right-angle 60 corner between the side walls.

3. A metal crate including in combination, a bottom, side walls connected thereto, a single integral frame within the top edges of the side walls, and extending all the way 65 around the four side walls, said frame consisting of two parts one lying against and attached to the side walls, and the other projecting inwardly from the first-named part, and at substantially right-angles 70 thereto, the inwardly projecting part at each corner thereof being folded downwardly upon itself to allow the frame to form a right-angle turn to conform to the right-angle corner between the side walls, 75 said side walls being bent over the part lying thereagainst, and having the bent-over portion secured to said frame.

4. A metal crate including in combination, side walls, a frame extending all 80 around the bottom edge of the crate, said frame being bent longitudinally into three parts, one of said parts lying against and being attached to the bottom portion of the side walls, the next adjacent of said parts 85 extending inwardly at right angles to the first-mentioned part, and the third of said parts being formed at the inner edge of the inwardly extending part, and a reinforcing member secured to said third part, said bot- 90 tom being attached to said second or intermediate part at a point outside of said reinforcing member.

5. A metal crate including in combination, side walls, a bottom, a frame extending all 95 around the bottom edge of the crate, said frame being bent longitudinally into three parts, one of said parts lying against and being attached to the bottom portion of the side walls, the next adjacent of said parts 100 extending inwardly at right angles to the first-mentioned part, and said third part being bent downwardly and then upwardly, and a reinforcing member lying within said third part, said bottom being attached to 105 said second or intermediate part at a point outside of said reinforcing member.

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

LOU B. KAUFFMANN.

Witnesses:

W. W. HOLT,
JOHN P. DAVIS.