

April 17, 1934.

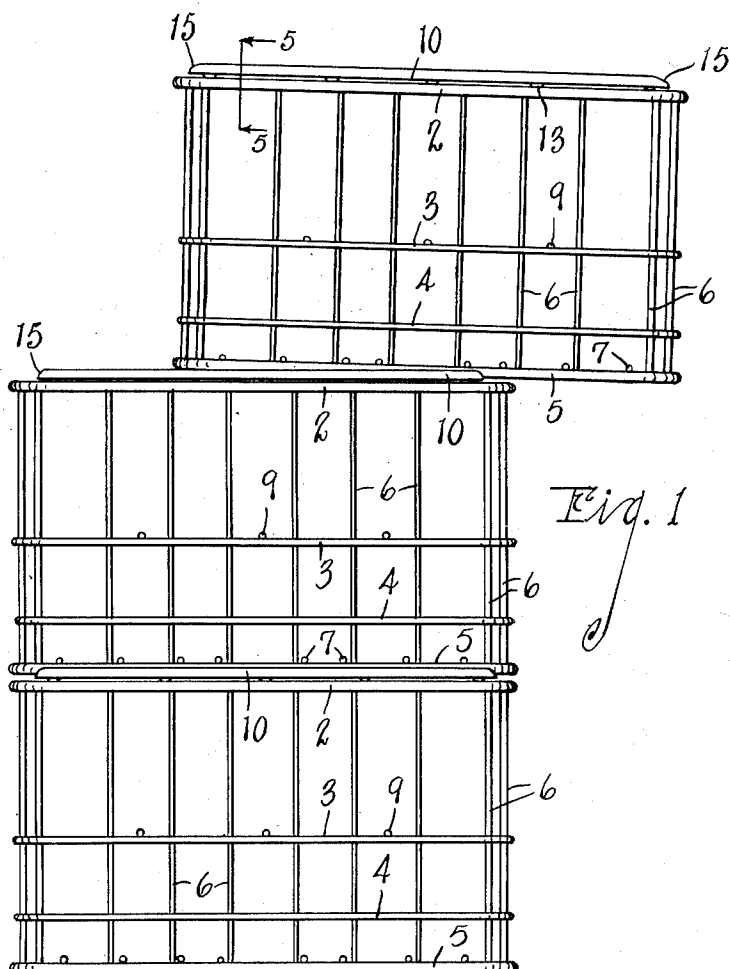
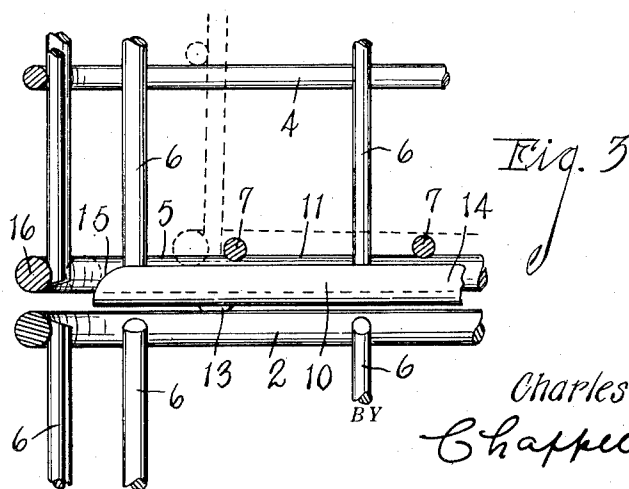
C. H. JARVIS

1,955,236

GRATE

Filed Oct. 3, 1932

2 Sheets-Sheet 1



INVENTOR
Charles H. Jarvis
BY
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April 17, 1934.

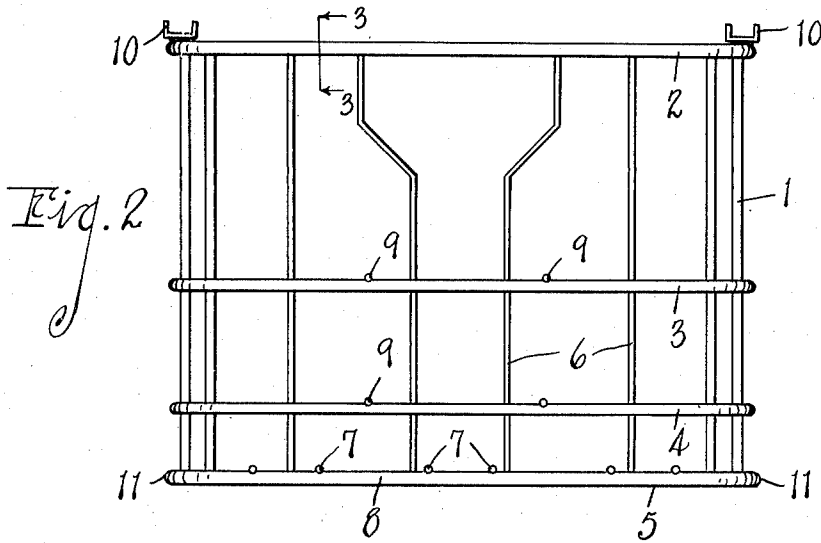
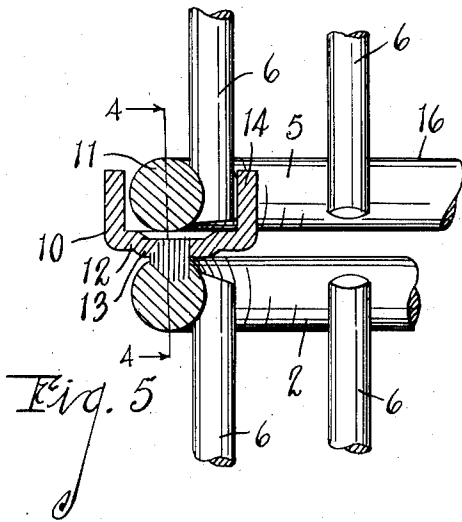
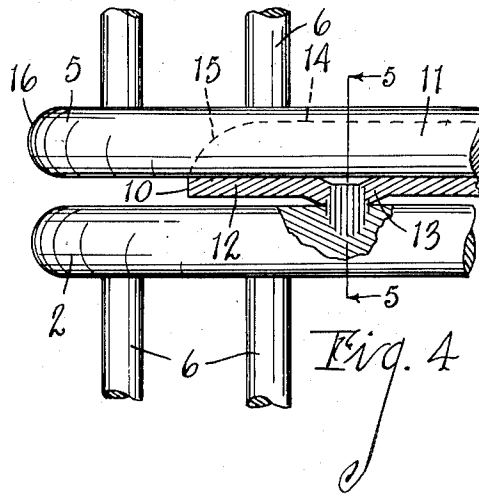
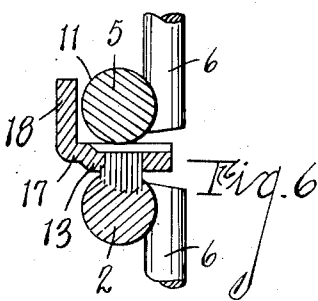
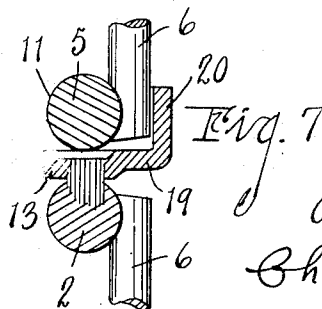
C. H. JARVIS

1,955,236

CRATE

Filed Oct. 3, 1932

2 Sheets-Sheet 2



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UNITED STATES PATENT OFFICE

1,955,236

CRATE

Charles H. Jarvis, Battle Creek, Mich., assignor to
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Mich.

Application October 3, 1932, Serial No. 635,892

5 Claims. (Cl. 220-97)

The main objects of this invention are:

First, to provide a bottle crate or the like which may be stacked and is effectively held or supported in the stack, and at the same time the crates are readily slidable upon each other for stacking or removing from the stack.

Second, to provide a crate having these advantages in which there are no objectionable projecting parts and the crate is attractive in appearance.

Objects relating to details and economies of the invention will definitely appear from the description to follow. The invention is pointed out in the claims.

A structure which is a preferred embodiment of my invention is illustrated in the accompanying drawings, in which:

Fig. 1 is a side elevation of a stack of crates embodying features of my invention, the top crate being shown in an intransitu position.

Fig. 2 is an enlarged end elevation of a crate using channels for the way members.

Fig. 3 is an enlarged fragmentary section on a line corresponding to line 3-3 of Fig. 2.

Fig. 4 is an enlarged fragmentary view in side elevation, a portion of the way member and top frame being broken away and shown in section on line 4-4 of Fig. 5.

Fig. 5 is an enlarged fragmentary section on a line corresponding to line 5-5 of Figs. 1 and 4.

Fig. 6 is an enlarged fragmentary section on a line corresponding to line 6-6 of Fig. 1 of a modification.

Fig. 7 is a fragmentary section of a further modification wherein only an internal flange is provided on the way member.

Referring to the drawings, 1 is a crate comprising a substantially rectangular top frame 2, intermediate frames 3 and 4 and a bottom frame 5, the frames being formed of light rod or heavy gauge wire. The top and bottom frames are preferably of heavier material than the intermediate frames. Spaced vertical slats or uprights 6 are arranged on the inner sides of the frames and are united therewith, preferably by being welded directly thereto. Spaced longitudinal bottle supports 7 are disposed on the end portions 8 of the bottom frame and coact with the partition members 9 to provide bottle compartments. The parts 6, 7, 8, and 9 are of light rod or heavy wire and are preferably welded in assembled relation.

On the top frame of each crate I mount a pair of support or way members as 10, these members being of channel cross section in the embodiment

illustrated in Figs. 1-5, inclusive, and being arranged in superimposed relation upon the opposed side members of the top frame and facing upwardly. These members are parallel and are of such width as to receive the corresponding bottom members or side portions 11 of the bottom frame of a superimposed crate.

The web 12 of the channel is preferably provided with spaced offsets at 13 which are welded to the top frame, the offsets facilitating the welding. When the crates are superimposed as shown in Figs. 4 and 5 the bottom members of a superimposed crate rest within the channels, the transverse members as 16 of the bottom frame lying at the ends of these supports so that the inner flanges 14 serve to limit the sliding movement of the superimposed crate on the under crate. The inner ends of the flanges are beveled at 15 to facilitate the sliding of an upper or superimposed crate to and from its stacked position, and this is of great advantage as it is frequently desired to make stacks of considerable height, and the filled crates are of considerable weight particularly when employed as bottle crates.

In the embodiment shown in Fig. 6 the support or way members 17 have only one flange 18 which is disposed on the outside of the superimposed frame. This embodiment is not so effective in limiting the sliding movement of the superimposed crate longitudinally of the way members.

In the embodiment shown in Fig. 7 the way members 19 have only a single upwardly projecting flange which is arranged on the inside and this serves as a stop or positioning means against movement in both directions.

With this arrangement of parts the crates may be very easily stacked or held in stacked relation and at the same time a superimposed crate may be quite easily pulled off the stack. The structure has the further advantage that there are no objectionable projecting parts which are likely to catch in bottle washing machines where the crates are used in translating the bottles through the machine. The retaining members are very securely attached and constitute reinforcing members for the crate.

I have illustrated and described my improvements in embodiments which I have found very practical. I have not attempted to illustrate or describe other embodiments or adaptations, as it is believed this disclosure will enable those skilled in the art to embody or adapt my improvements as may be desired.

Having thus described my invention what I

claim as new and desire to secure by Letters Patent is:

1. A crate comprising rectangular top and bottom frames and upright slats secured thereto, and angular supports mounted on opposed side members of the top frame with their flanges projecting upwardly and constituting positioning means for a superimposed crate, said supports constituting slideways for the opposed bottom members of a superimposed crate, and the ends of the flanges of the supports constituting stops coacting with the cross members of such bottom frame.
2. A crate comprising bottom and top frames disposed in vertical alinement, and upwardly facing channel members secured in parallel relation to opposite members of the top frame, said channel members being adapted to receive opposite members of the bottom frame of a similar crate superimposed thereon, the ends of the inner flanges of said channel members being beveled to facilitate the sliding manipulation of a superimposed crate thereon.
3. A crate comprising bottom and top frames disposed in vertical alinement, and upwardly facing channel members secured in parallel relation to opposite members of the top frame, said channel members being adapted to receive opposite

members of the bottom frame of a similar crate superimposed thereon, and the ends of the inner flanges of the channels constituting stops coacting with the cross members of such bottom frame.

4. A crate comprising rectangular top and bottom frames and upright slats secured thereto, and angular supports mounted on opposed side members of the top frame with flanges projecting upwardly at the inside thereof and constituting positioning means for a superimposed crate, the ends of such flanges being beveled to facilitate the sliding manipulation of a superimposed crate.

5. A crate provided with rectangular top and bottom frames of heavy gauge wire, vertical wire uprights secured to said frames, and channel-like way members mounted on the side members of the top frame and having beveled inner flanges for coaction with the bottom frame cross member of a superimposed crate when slid thereon, the channels receiving the side members of the bottom frame when the superimposed crate is arranged in substantially vertical alinement with the supporting crate, and the ends of the inner flanges of the channels constituting stops coacting with the cross members of such bottom frame.

CHARLES H. JARVIS.

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