

April 19, 1949.

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2,467,698

HOLDING CASE FOR BOTTLES AND THE LIKE

Filed Nov. 30, 1945

2 Sheets-Sheet 1

FIG. 1.

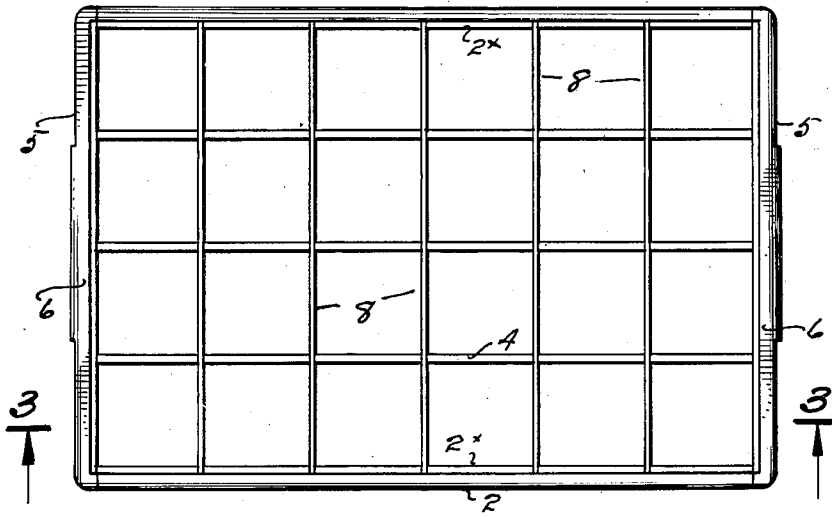


FIG. 2.



FIG. 3.

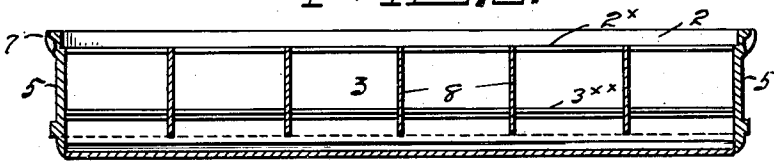
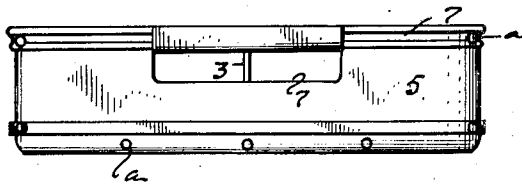


FIG. 4.



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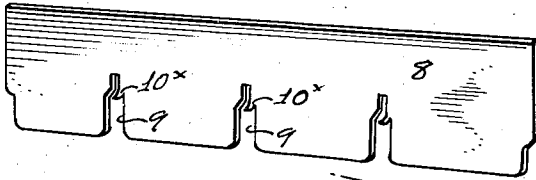


FIG. 8.

FIG. 5.

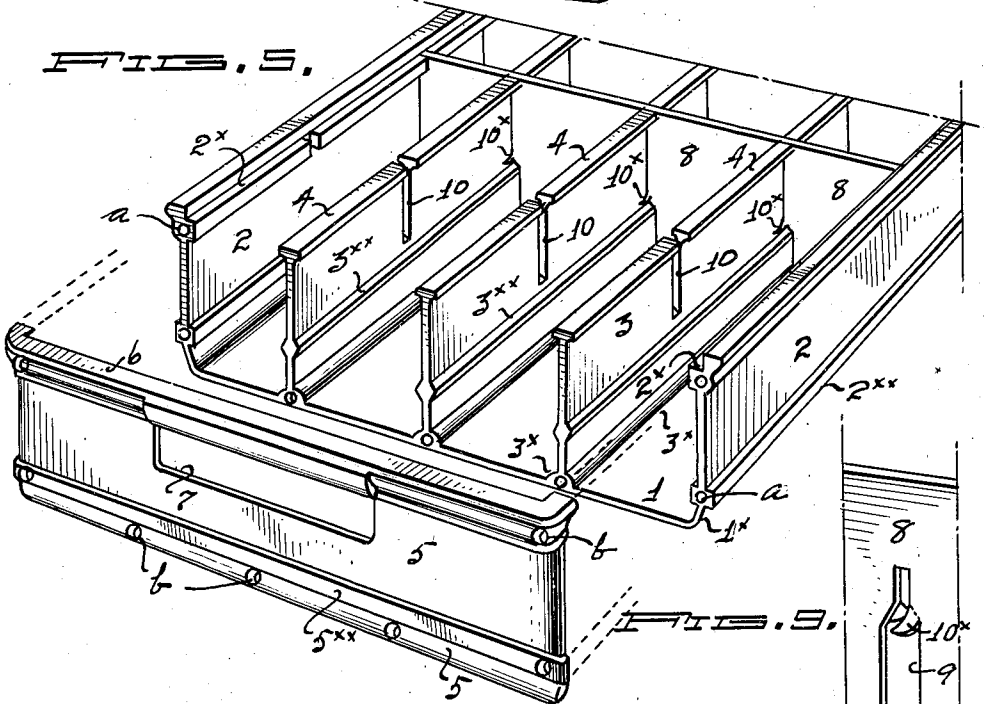


FIG. 5.

FIG. 6.

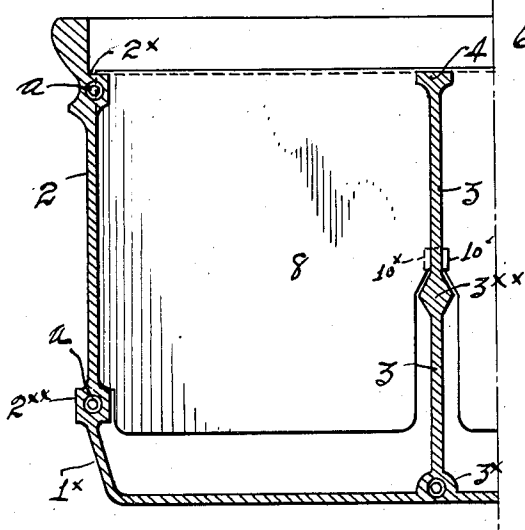
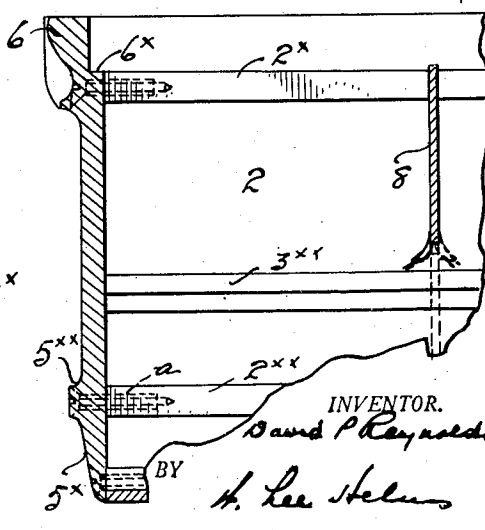


FIG. 7.



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HOLDING CASE FOR BOTTLES AND THE LIKE

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Application November 30, 1945, Serial No. 631,887

2 Claims. (Cl. 220—21)

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The object of the present invention is to provide a bottle holding case, for holding, for example, two dozen beverage bottles, which will be entirely of metal so formed as to the primary body and division walls as to have great strength. The form of the primary member is such that it may be a single extrusion, preferably of aluminum, and the end members are of special form so as to be particularly adapted for the extruded primary member. Secondary division walls are separately formed and of such character that they are self-locking when applied.

By means of the invention a bottle holding case is provided which will withstand long usage, which is entirely of metal and hence may be subjected to liquid cleaning without harm, and which is relatively inexpensive.

The invention will be described with reference to the accompanying drawings, in which:

Figure 1 is a plan view of the case;

Figure 2 is a side elevation;

Figure 3 is a longitudinal section on the line 3—3, of Figure 1.

Figure 4 is an end elevation;

Figure 5 is an isometric view showing the front area of the primary member, with one of the secondary division walls in place, and one end wall in position for attachment;

Figure 6 is an enlarged fragmentary transverse section taken at a corner of the assembled structure near an end member;

Figure 7 is an enlarged fragmentary section taken longitudinally through the assembled structure and showing one of the secondary division walls near the end of its downward movement to final position;

Figure 8 is a detail perspective view of one of the secondary division walls, and

Figure 9 is a fragmentary perspective view showing a slotted and pronged area of one of the secondary division walls.

Referring to the drawings, the bottle case consists of a primary body member which I prefer to be made of extruded aluminum and therefore its bottom 1, side walls 2, and longitudinal division walls 3 are integral. A substantial advantage is derived by employing the extrusion method since the aluminum is forced through a die under very high pressure, and inasmuch as aluminum alloys may be selected, the metal is "worked" by its movement through the die, with such resulting increase in strength that the thickness of walls may be substantially reduced as compared with cast aluminum structures of the kind.

In the embodiment shown, three division walls

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are employed, and these walls are reinforced so that they may be of minimum gauge-thickness and yet have adequate strength. Thus, at the base of each division wall 3, a rib 3x lies at each side of the division wall and is integrally joined therewith and with the bottom wall 1. Intermediate its base and top each division wall 3 is provided with opposed ribs 3xx, running longitudinally, and each division wall is surmounted by a horizontal rib 4. Thus each division wall has the structural advantage of an I-beam, longitudinally reinforced at or near its center.

The primary or body member just described may be extruded continuously and sections thereof cut off, each section being of the length required for a bottle holding case. Each body member thus extruded will have further features as follows: The side walls 2 have, at their tops, L-shaped longitudinal reinforcing areas, and the side wall 2, as it joins the bottom wall 1, tapers inwardly in such manner that the bottom wall of one case may be received within the top of an underlying case and its longitudinal margins will rest upon the horizontal leg of the L-shaped top reinforcement of each side wall. Also, as now to be explained, the end walls of the case are correspondingly formed and specially adapted for stacking of a plurality of the cases.

The form of the end walls is best shown in Figures 5 and 7, and these end walls may be cast or otherwise formed from aluminum or other suitable metal. Each end wall, indicated at 5, has an inwardly tapered base area 5x at the top of which is a thickened bar-like reinforcement 5xx; also the reinforced top 6 is provided with an inner shoulder 6x in line with the horizontal bar 2x of the L-shaped top reinforcements of side walls 2. If desired, each end wall may be shaped with a finger recess at 7 for convenient handling of the carrying cases.

The side walls 2 in addition to their reinforced top areas, are provided with reinforced bottom areas. That is to say, immediately above the tapered and hence inwardly extending areas 1x, Figure 5, each side wall is formed with a longitudinally extending and thickened integral reinforcement, which may be of any desirable shape and cross section, but which is rectangular in the present embodiment, as shown at 2xx, Figure 8.

The relatively heavy reinforcing areas at the tops of the side walls 2 and at 2xx and 3x, may, as to each extrusion section, forming a primary or body member of the case, be formed with apertures as at a, Figure 5, for receiving self-

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tapping screws, or the apertures may be threaded, and the screws will be passed through the apertures at *b* in the end walls 5. This will complete the bottle holding case, with the exception of transverse or supplemental division walls 8.

One of the supplemental division walls is shown in Figure 8, at 8. It will be formed with spaced apertures at 9 for receiving the primary division walls and the latter also will be vertically slotted at 10 for reception of the supplemental division walls. The apertures at 9 in the supplemental division walls have shoulders to conform with the ribs 3*xx* of the primary division walls and also are cut with spurs 10*x* projected laterally for frictional engagement with the sides of the primary division walls. This lateral projection of the spurs is automatically effected in the downward movement of the supplemental division walls when the points of the spurs strike the areas 3*xx*. Thereupon the supplemental division walls will be held against removal. They will exert frictional pressure on the primary division walls and also they will encompass an area greater than the slots 10 as to width of the slots, so that they will lie under the thickened reinforcing areas 4 of the primary division walls.

Thus, independently of frictional engagement the spurs will prevent falling out of the supplemental walls when the cases are inverted.

It will be understood that various modifications may be made in the form of the elements constituting the embodiment herein shown and described, without departing from the spirit of the invention, and what I claim and desire to secure by Letters Patent being as follows:

1. An extruded metal case body, for a case adapted to hold bottles and the like, said body being formed of a single extrusion and consisting of a bottom wall, side walls and a plurality of division walls, the side walls being formed with longitudinal reinforcing ribs near the lower

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margins, said lower margin of the side walls being inwardly tapered and merging with the bottom walls, said side walls also having inner shoulders near their upper ends, upon which the bottom of a like case is adapted to rest in stacking a plurality of such cases, the division walls having reinforcing, longitudinally extending, thickened areas merging with the bottom wall, and said division walls having longitudinally extending reinforcing thickened areas at the tops thereof, said reinforcing areas presenting bulk-faces at the ends of the body members, serving as attachment areas for end members, end members at the ends of the body member and having complementary attaching areas abutting said bulk-faces, and means securing said abutting areas of the body member and end members.

2. A metal case constructed in accordance with claim 1 in which the end members are formed with inner shoulders near their upper ends in register with the like shoulders of the said walls, forming therewith a rectangular inner shelf, the base of each end wall being inwardly tapered in conformation with the tapered base of each side wall.

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