May 6, 1930. W. RASTER 1,757,141

KNOCKDOWN RECEPTACLE

Filed May 19, 1927 2 Sheets-Sheet 1

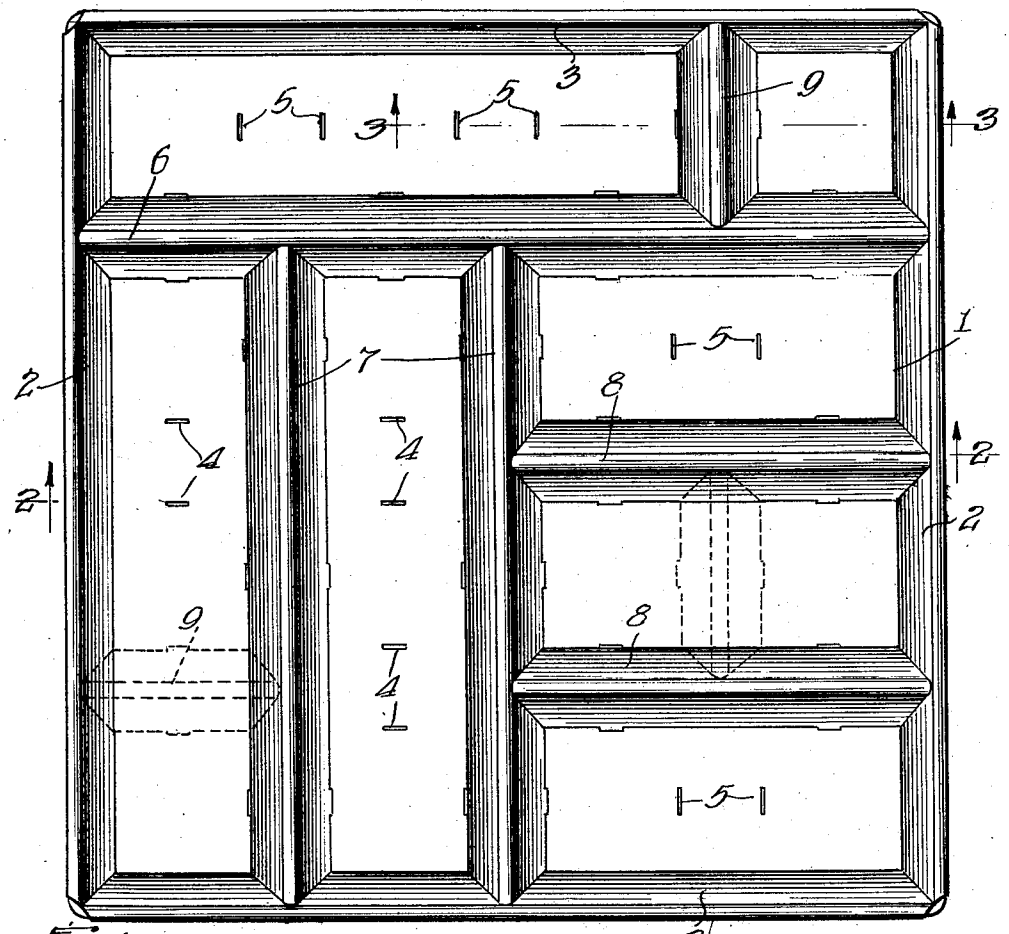


Fig. 1.

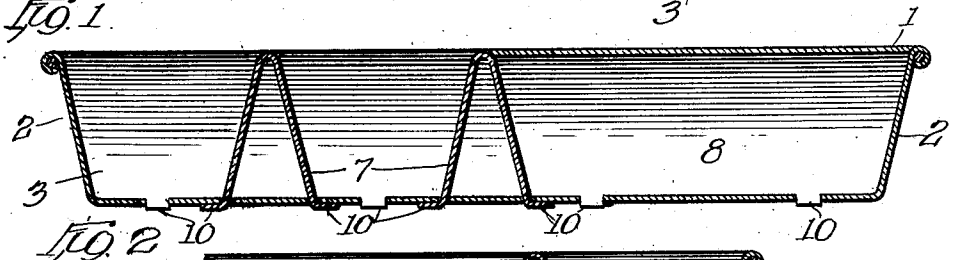


Fig. 2.

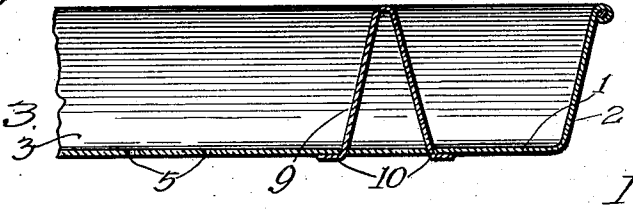


Fig. 3.

Witness:
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Inventor:
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KNOCKDOWN RECEPTACLE

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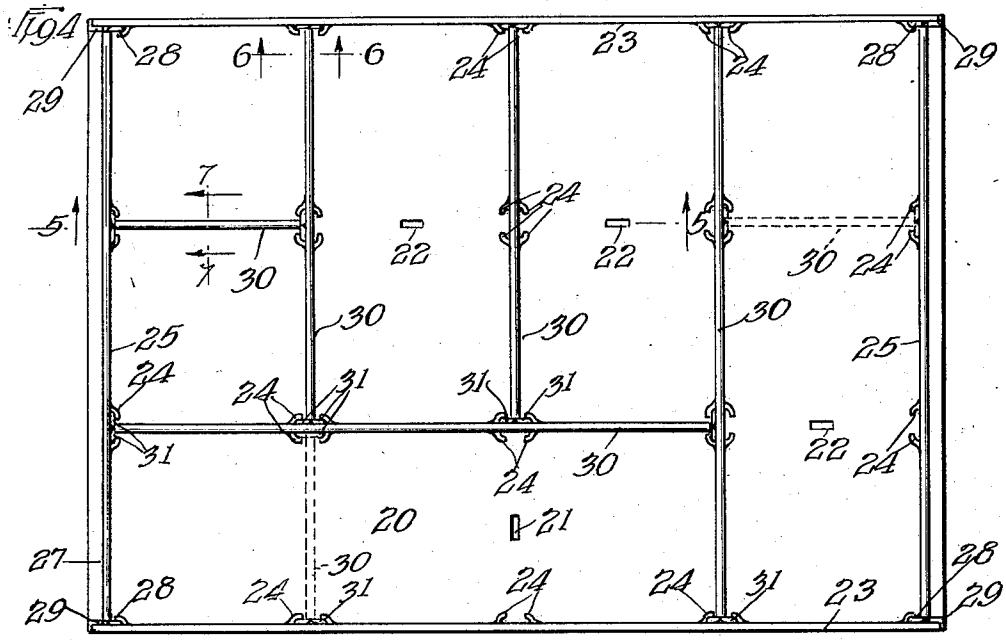


FIG. 4.

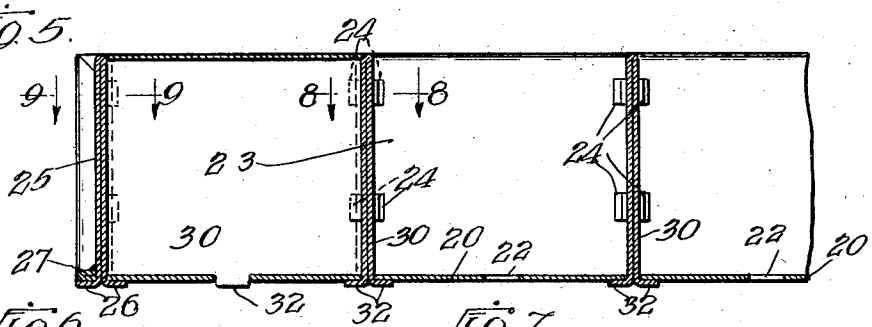


FIG. 5.

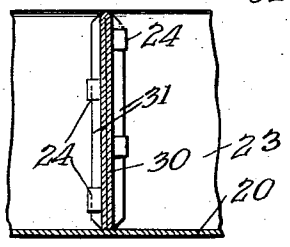


FIG. 6.

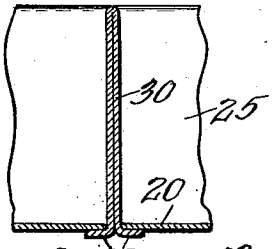


FIG. 7.

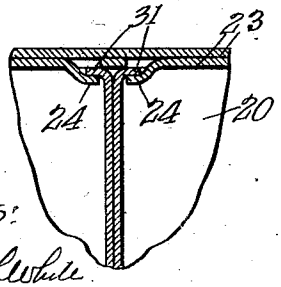


FIG. 8.

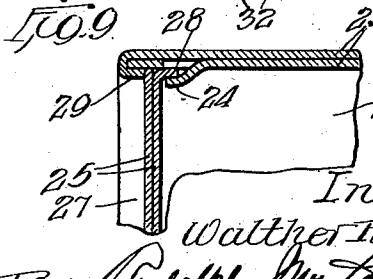


FIG. 9.

Witness:
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Patented May 6, 1930 1,757,141

UNITED STATES PATENT OFFICE

WALTHER RASTER, OF CHICAGO, ILLINOIS

KNOCKDOWN RECEPTACLE

Application filed May 19, 1927. Serial No. 192,649.

This invention has for its object to provide a receptacle and partition walls therefor capable of being variously easily associated to divide the receptacle into a number of compartments of the same or different sizes by the purchaser of the component elements of the ultimate structure and, further, to provide the receptacle and partition walls therefor in such form as to permit nesting thereof for convenience and protection against injury in shipment.

A further object of the invention is to provide an ultimate completed structure which is cheap and durable and wherein, in its preferred embodiment, the walls of each of the compartments of the receptacle are inclined to diverge from the bottom of the compartment for ease of removal of contents.

The invention, in its broader aspects, may be variously embodied and in the accompanying drawings I have illustrated two satisfactory embodiments thereof differing from each other in certain details of construction as hereinafter fully described. In said drawings:

Figure 1 is a top plan view of a completed receptacle constructed in accordance with the invention.

Figure 2 is a section of the same on the line 2—2 of Figure 1.

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

Figure 4 is a top plan view of another form of embodiment of the invention.

Figures 5 to 9 inclusive are sectional views of the same on the lines 5—5, 6—6, 7—7, 8—8 and 9—9, respectively, of Figures 4 and 5.

In the embodiment shown in Figures 1 to 3, I employ a rectangular receptacle 1 having flaring or divergent peripheral walls 2 and 3 respectively. This receptacle has a flat bottom which is provided with a plurality of rows of pairs of parallel slots 4 and a plurality of rows of slots 5, the latter extending at right angles to the slots 4 and parallel with the walls 3, the slots 4 being parallel with the walls 2. The slots 4 and and 5, respectively, of each pair are equally spaced apart, and each pair of slots of each row is equally spaced from the next adjacent or succeeding pair. The rows of pairs of slots 4 intersect the rows of pairs of slots 5 midway between two contiguous pairs of slots 5 and vice versa as clearly shown in Figure 1.

For dividing the receptacle 1 into a plurality of compartments, I provide inverted V-shaped partition walls 6, 7, 8 and 9, made preferably of sheet metal and provided along the free edges of their component flanges with projections or tongues 10 adapted to pass through the slots 4 and 5 and be bent over or clinched against the lower face of the receptacle bottom.

The angle of divergence of the component flanges of the respective partition walls is preferably equal to the angle of divergence of the several pairs of opposed peripheral walls 2 and 3 of the receptacle in order that the ends or end edges of said component flanges of the partition walls may be all arranged to extend at the same angle to each other as do the said component flanges thereof, thus causing said ends to lie in snug contact with the opposed surface such as the inner face of a peripheral wall 2 or 3 or an outer face of a transverse partition wall when said partition walls are mounted in the receptacle.

The respective partition walls 6, 7, 8 and 9 are made in respectively different lengths, the walls 6 being of such length as to have their ends contact with opposed inner faces of one pair of peripheral walls 2 or 3, the partition walls 7 of such length as to fit between a partition wall 6 and wall 2 or 3 parallel therewith, and partition walls 8 being shorter than walls 7 to fit between two transversely disposed walls 6 or 7 or between one of said walls and a wall of the receptacle, it being obvious that the lengths of the said several partition walls must be regulated by the number of rows of pairs of perforations 4 and 5, respectively, the number of sizes i. e. lengths of such partition walls being variable also. It will further be obvious that the rows of perforations 4 and 5, respectively, are equally spaced from each other and the peripheral walls 2 and 3 as to middle lines or

medial planes of said rows. Thus, as illustrated, there are three rows of perforations 4 and three rows of perforations 5, and only four different lengths of partition walls 6, 7, 8 and 9 will be required for effecting all possible subdivision of the receptacle 1. In short, the number of varying lengths of partition walls will be determined by the greatest number, plus one, of rows of perforations 4 or 5 provided between either the peripheral walls 2 or the peripheral walls 3.

The invention may also be embodied as illustrated in Figures 4 to 9 inclusive, wherein there is a sheet metal plate 20 provided with rows of slots 21 and 22, respectively, which constitutes the bottom wall of the receptacle, said sheet being provided with a pair of opposed double-thick side edge flanges 23 presenting smooth outer walls. The inner walls of the said flanges 23 are provided with pairs of opposed offset lugs 24 struck from the body thereof and disposed so that the free spaces between said pairs of lugs 24 lie in the vertical planes of the rows of perforations 21.

A pair of detachable double-thick walls 25 is provided which correspond in structural characteristics with the side walls except that they are provided along their lower edges with tongues 26 which engage in the perforations or slots 21 of the outermost rows of the latter.

The end edges of the plate 20 are folded over upon the body portion to provide shoulders 27 which border the outer rows of perforations 21 and abut the lower edge portions of the outer portions of the end walls 25. The inner portions of the walls 25 are provided at their ends with flanges 28 extending at right angles thereto. The outer portions of the side walls 23 are provided with flanges 29 which are folded over the edges of the inner portions of said walls. The free edges of the flanges 29 are opposed to sets of projections or lugs 24 which engage the flanges 28, the said free edges of the flanges 29 abutting the outer faces of the end walls 25 and coacting with the last-mentioned lugs 24 to hold said end walls and side walls in proper relative positions.

Partition walls 30, each consisting of a plate of sheet metal folded along a medial line, are provided. Each of the latter is provided at its ends with oppositely projecting flanges 31 for engagement by pairs of lugs 24 of the peripheral walls 25 and 23 or with pairs of said lugs 24 of other partition walls, each of the latter which is of greater length than the distance between adjacent rows of said slots 21 or 22 being provided on opposite sides with said pairs of lugs 24.

The said pairs of lugs 24 of the peripheral walls 23 and 25 and of the partition walls 30 are, in every instance, so located as to be in alignment with the row of slots 21 or 22 with respect to which the said walls extend transversely. The partition walls 30 are of the same relative lengths as are the several partition walls 6, 7, 8 and 9 of Figures 1 to 3, inclusive, for the same reasons. All of the partition walls are also provided at their lower edges with tongues 32 to engage in the slots 21 and 22, the said tongues 32 being disposed in staggered relation to the pairs of lugs 24 and the end flanges 31 of the partition walls and the end walls. The tongues 32 are bent divergently to engage the lower face of the receptacle bottom, as shown.

The receptacle of Figures 4 to 9 inclusive, differs from that of Figures 1 to 3 in that the partition and peripheral walls thereof extend perpendicularly to the bottom wall and are interlocked with each other, this interlocking being unnecessary in the structure of Figs. 1 to 3 by reason of the shape of the partition walls and the spacing of the tongues thereof.

The structure of Figs. 4 to 9 inclusive, is intended to be shipped in dissembled form with the side walls thereof sufficiently divergent to permit nesting. The partition walls are intended to be sold separately from the receptacle per se of Figs. 1 to 3 or the receptacle parts of Figs. 4 to 9, the purchaser selecting the number and lengths of partition walls desired for subdividing the receptacle into compartments to suit his needs.

It will be noted that the partition walls are of respective lengths constituting multiples of the distance between adjacent slots of a row and, likewise, of the distance between adjacent parallel rows of said slots.

I claim as my invention:

1. A receptacle provided in its bottom with rows of slots extending transversely of each other, the slots of each row being equidistant from each other and arranged with respect to the other row midway between points of intersection of said rows, the latter being spaced from each other a distance equal to the spacing of the perforations from each other, and partition walls provided at their lower edges with bendable tongues passed through said slots and bent over upon the lower face of the receptacle bottom, said partition walls being lengths constituting multiples of the spacing of said rows of slots from each other.

2. A rectangular receptacle provided with a flat bottom wall equipped with two sets of parallel rows of slots, said sets of rows extending transversely of each other and of the peripheral walls, the slots of each row being equally spaced from each other a distance equal to the spacing of two adjacent rows from each other, the latter intersecting each other at points midway between adjacent perforations and partition walls equipped on their lower edges with tongues engaging through said slots to hold said partition walls in desired relative positions.

3. A receptacle having a flat bottom wall, flaring inclined peripheral walls, and inverted V-shaped partition walls, some of the latter corresponding in length with a diameter of the receptacle and others of less length, all of said partition walls having inclined ends for abutment against the peripheral walls and side faces of other partition walls, each of said partition walls equipped at the lower edges of its component flanges with tongues spaced from the ends thereof, there being pairs of slots in the bottom wall of the receptacle arranged in parallel rows, some of the latter extending longitudinally and others transversely of the receptacle and engaged with said tongues for retaining said partition walls in desired relative positions.

4. A receptacle provided in its bottom with two sets of relatively transversely arranged rows of means for attaching partition walls thereto, the means of each row being equidistant from each other and arranged with respect to the means of transversely extending rows midway between points of intersection of said relatively transversely arranged rows, the said rows of each set being parallel and spaced from each other a distance equal to the spacing of the means of any row from each other, and partition walls provided with means coacting with the first-named means for detachably securing said walls to the receptacle bottom, said partition walls being of lengths constituting multiples of the spacing of said rows from each other.

WALTHER RASTER.