

Filed Feb. 7, 1948

L. HOPP ET AL
DIVISION PLATE

2 Sheets-Sheet 1

Fig. 1.

Fig. 2.

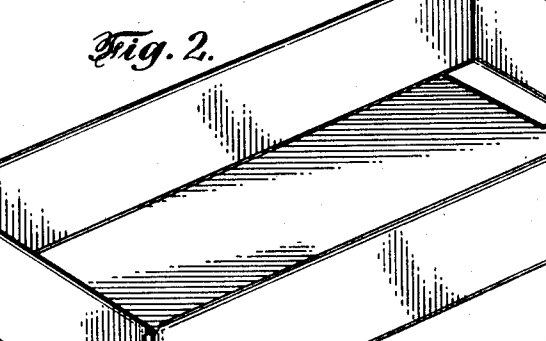


Fig. 3.

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24

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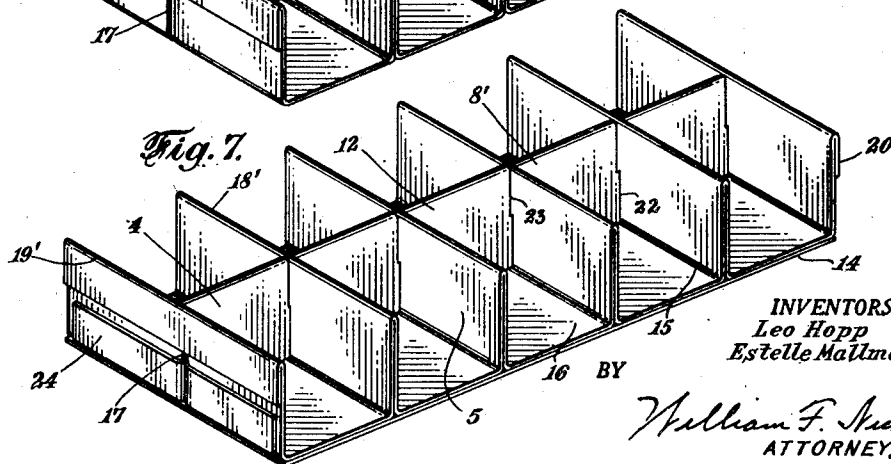
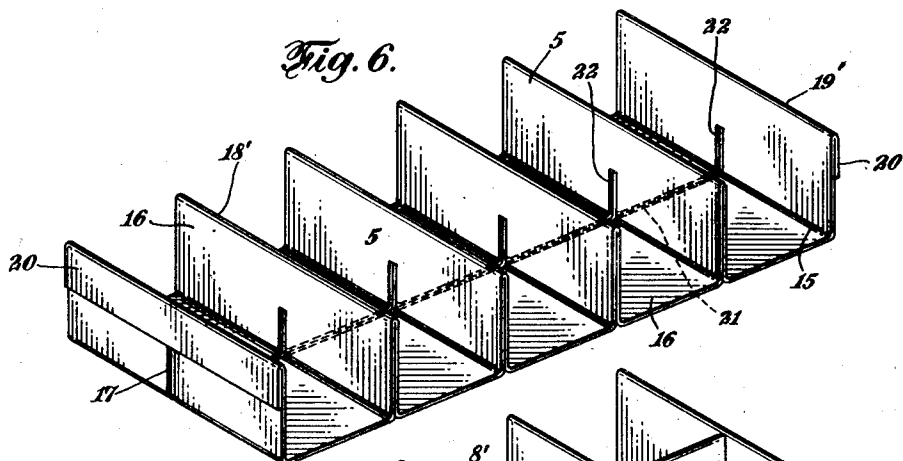
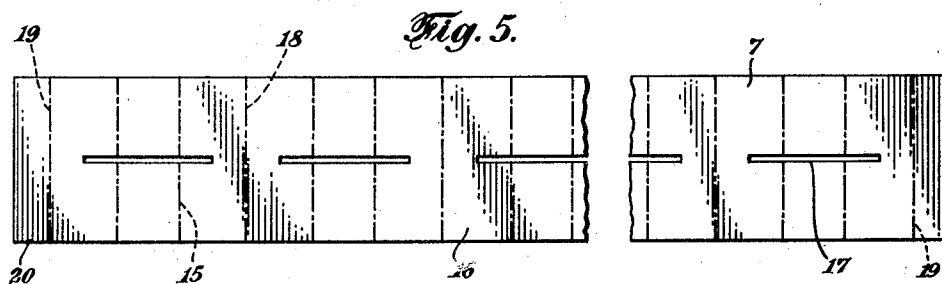
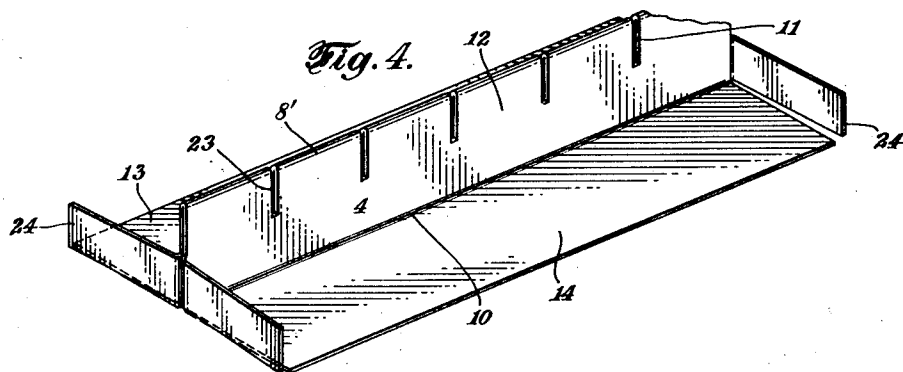
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2 Sheets-Sheet 2



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DIVISION PLATE

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5 Claims. (Cl. 229—42)

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Our invention is an improvement in containers, such as boxes or cartons of cardboard or other sheet material, and more particularly the interior construction thereof.

An important object of our invention is to provide a member adapted to be set up on the inside of a box or carton, and so designed as to divide it into a number of cells or compartments, for receiving and separating or grouping the contents of the box.

Another object is to provide such a member that consists of not more than two parts at most, each of which is preferably of sheet material bent into shape, one part being formed to divide the interior of the box longitudinally and the other crosswise, both said parts engaging each other in the required interfitted relation. The member is thus simple in structure and easy and inexpensive to produce.

The nature and advantages of the device are set forth in the ensuing description and the characteristics thereof are defined in the claims at the end hereof.

On the drawings,

Figure 1 is a perspective view of a receptacle having my invention.

Figure 2 is a perspective view of the box or carton only.

Figure 3 is a plan view of a blank of material forming one part of said member.

Figure 4 is a perspective view of said part after it is given its final shape.

Figure 5 shows in plan another blank of sheet material for the other part of said member.

Figure 6 is a perspective view of the last-named part in its final shape; and

Figure 7 shows in perspective the two parts assembled and ready for use.

The body of the box or receptacle is illustrated at 1. It has the shape of a tray, and may be fashioned of cardboard or other material and in any suitable manner. Within it is the member 2, embodying this invention, and dividing the interior into cells or compartments 3. These are formed by means of a longitudinal partition 4 and transverse partitions 5, intersecting the partition 4. The tray or body 1 receives a lid or closure, not shown, to cover the box and its contents.

The member 2 is made up of two parts, one of which has the shape of a blank 6 in Figure 3, and the other is formed from the blank 7 of Figure 5. These blanks are pieces of flat sheet material of the required outline, made so that they can be bent into the proper shape. The blank 6 has a central longitudinal score line 8, with par-

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allel score lines 9 and 10 at equal distances therefrom. Across the score line 8 extend slots 11, at substantially equal distances from one another and the ends of the blank, the ends of the slots 11 being at equal distances from the lines 9 and 10. The blank 6 is bent upward along the middle line 8 and the lines 9 and 10 to form the central longitudinal rib 4 in two layers 12, and the sides along the lines 9 and 10 are turned outward as indicated at 13 and 14. When the part is set up as presented in Figure 4, the two lateral sections 13 and 14 have an aggregate or combined width equal to the inside width of the box 1.

The part 7 is also a flat piece of material that has score lines 15, which are intersected by slots 17 running lengthwise of the blank along the middle. The slots 17 are all in line, and each of them extends across two of the lines 15, with a score line 18 between the adjacent ends of each slot and the next one. The score lines 15 and 18 are placed at predetermined distances from one another and divide the piece into transverse sections 16. Near the ends of the blank are additional score lines 19 marking off flaps 20 close to the ends of the adjacent slots 17.

This part 7 of the member 2 is set up by bending the blank downward along the lines 18 and outward along the lines 15 across the slots or cuts 17. Thus the transverse ribs 5 are made also in two layers each, and the slots 17 form a single cut 21 extending from one end of the part 7 to the other. This cut runs along the sections forming the bottom of the part 7 between the ribs 5 and up into the latter and up into the terminal sections which carry the flaps 19, as shown at 22. Similarly the slots 11 form notches or recesses 23 opening through the top of the longitudinal rib 4 of the part 6. Hence the two completely formed parts of the member 2 can be combined in the manner portrayed in Figure 7 by superposing the part 7 upon the part 6 so that the rib 4 is inserted into the long cut in the part 7 formed by the slots 17. The notches or recesses 23 in the rib 4 receive the upper parts of the ribs 5, and the tops 8', 18' and 19' of the main parts are thus flush with one another. The flaps 20 are turned down and also are disposed within the ends of the box 1. The blank 6 also has flaps 24 extending from the lower parts of the layers 12 of the rib 4, to be bent sideways across the upstanding end sections of the part 7 and beneath the flaps 20, to secure the parts of the member 2 in assembled positions and facilitate handling of the member as a whole to place it within the receptacle 1.

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The box is thus divided into a sufficient number of cells which can be utilized to receive price tags and other articles; the price tags being arranged in packs, the tags of each pack bearing such indications as may require this kind of grouping. The invention is capable of being easily and quickly made at low cost and serves all the purposes for which it is intended.

In practice changes in details of size, shape and arrangement of parts may be made without departing from the general plan which distinguishes the invention. The flaps 24 may be as long as the width of the sections 13 and 14, or shorter, and they of course pass through the vertical ends of the cut 17 in the end sections having the flaps 17 and lie against the outer faces of these sections. They are held in this position by the ends of the tray 1.

Having described our invention, what we believe to be new is:

1. A member for dividing the interior of a receptacle into cells, comprising a piece of sheet material bent to form transverse ribs on its upper face, another piece of sheet material bent to form a longitudinal rib on its upper face, the longitudinal rib having notches in its upper edge, the first piece having cuts therein running the length thereof and extending up into the transverse ribs, said pieces being assembled by superposing the first-named piece upon the other piece, with the transverse ribs inserted into said notches and the longitudinal rib inserted into said cut.

2. The member according to claim 1, wherein said first piece has upstanding terminal sections containing the ends of said cuts, and the longitudinal rib has extensions at its ends passing through said sections and bent over against the outer faces of same.

3. A member for dividing the interior of a receptacle into cells, comprising a piece of sheet material bent up about a center line to form an upstanding longitudinal rib with outturned sections along the bottom thereof, said rib having notches in its top edge, another piece of sheet material having transverse score lines and longitudinal slots each of which extends across a pair of said score lines, said other piece also having score lines across it between the slots, said other piece also being bent up along the first-named score lines and doubled along the

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other transverse lines to form upstanding transverse ribs, the slots then forming a continuous cut extending from end to end along the bottom of said other piece and up into the transverse ribs, said parts being combined to form said member by superposing said other piece upon the first piece, with the longitudinal rib in said cut and the transverse ribs in said notches.

4. The member according to claim 3, wherein said other piece also has bent up sections across its ends with down-turned flaps, the ends of said cut lying in said last-named sections, the longitudinal rib of the first piece having extensions from the ends thereof which pass through the cuts in said last-named sections and are bent over against the outer faces of the latter.

5. A member for dividing the interior of a receptacle into cells, comprising a piece of sheet material bent up about a center line to form an upstanding longitudinal rib with outturned sections along the bottom thereof, said rib having notches in its top edge, another piece of sheet material having transverse score lines and longitudinal slots each of which extends across a pair of said score lines, said other piece also having score lines across it between the slots, said other piece also being bent up along the first-named score lines and doubled along the other transverse lines to form upstanding transverse ribs, the slots then forming a continuous cut extending from end to end along the bottom of said other piece and up into the transverse ribs, said parts being combined to form said member by superposing said other piece upon the first piece, with the longitudinal rib in said cut and the transverse ribs in said notches, said sections, when said pieces are assembled, terminating substantially flush with the ends of said ribs.

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The following references are of record in the file of this patent:

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