April 1, 1952 N. M. STONE 2,591,104

RECEPTACLE

Filed June 22, 1948 2 SHEETS—SHEET 1

FIG. 1

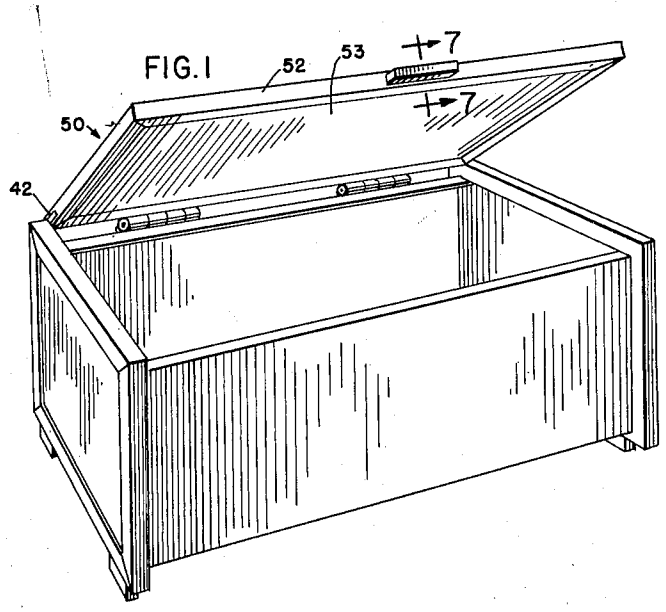


FIG. 2

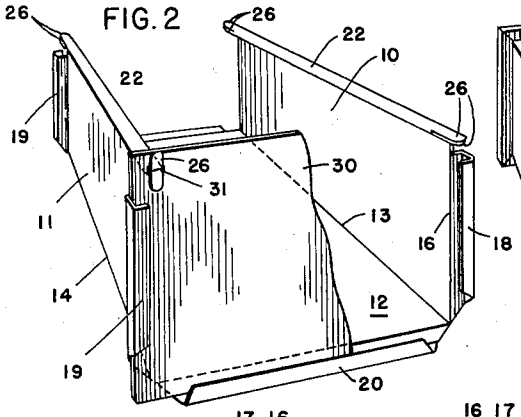


FIG. 3

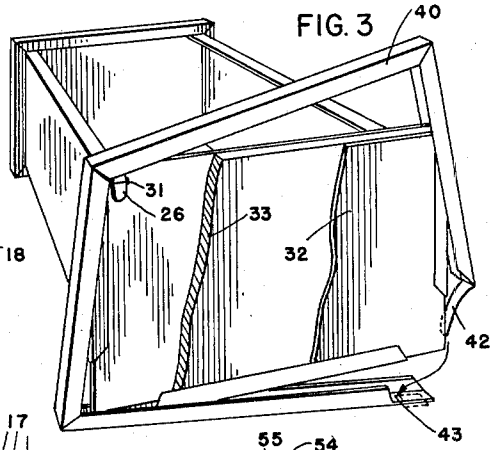
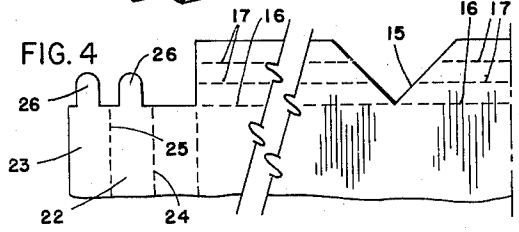


FIG. 4



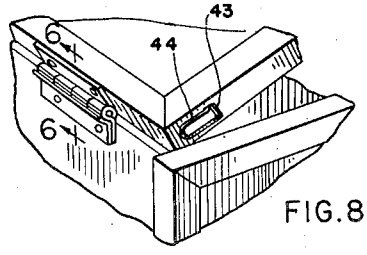


FIG. 8

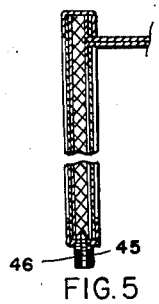


FIG. 5

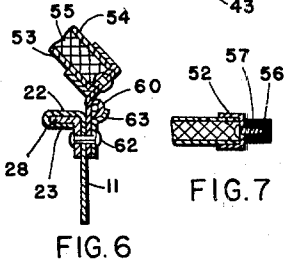


FIG. 6

FIG. 7

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FIG. 9

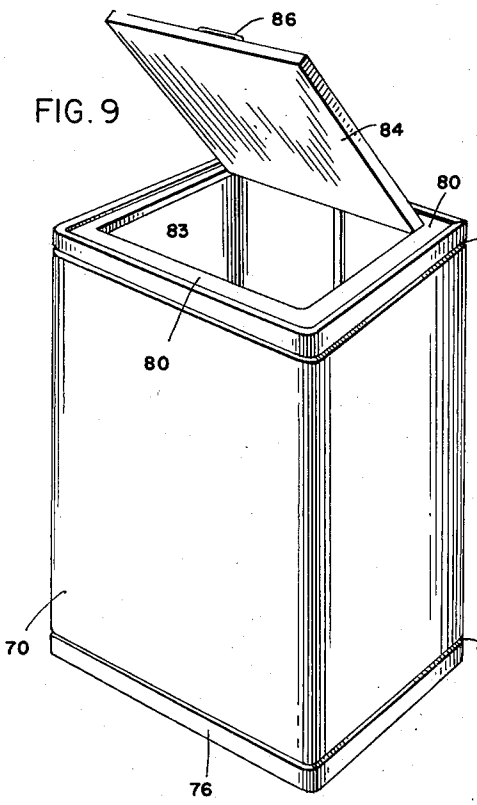


FIG. 10

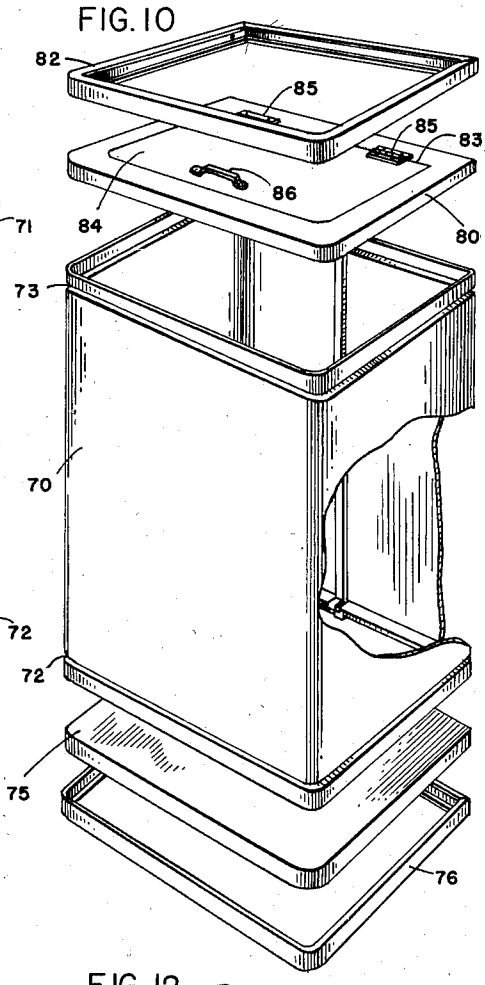


FIG. 11

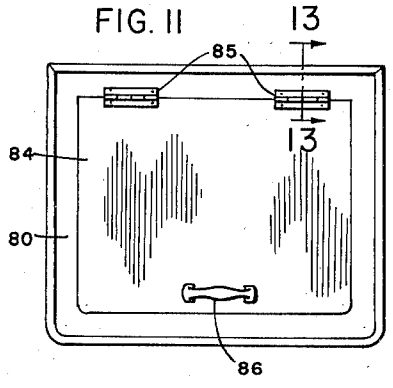


FIG. 12

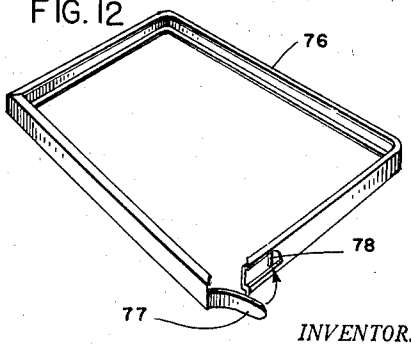
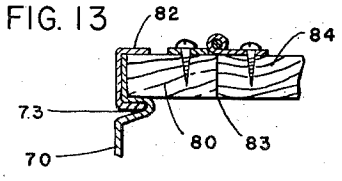


FIG. 13



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RECEPTACLE

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Application June 22, 1948, Serial No. 34,513

6 Claims. (Cl. 220—4)

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This invention relates in general to a receptacle or container and may be built in a variety of styles, shapes and forms for the different uses. It is more particularly described as a sheet metal container having larger or projecting ends connected by a central body and with a hinged top or cover fitting over the top of the receptacles between and flush with the tops of the ends.

In this form, the structure has a neat and pleasing appearance and may be made in various sizes, shapes, and of colored materials to provide such different receptacles as radio cabinets, cigarette holders, jewel boxes, clothes hampers, trunks, suitcases, package boxes, as well as containers for various articles of merchandise, and also for shipment or storage.

An important object of the invention is to provide a receptacle in which the central portion is made of sheet metal having end attaching tongues and flanges formed therewith by means of which the ends are separately assembled and secured in place.

A further object of the invention is to provide a novel end construction for receptacles and containers which comprises a continuous marginal rim applied around the tongues and flanges of the intermediate body portion for securing end panels within the flanges and covering the tongues and flanges to make a neat and attractive composite end structure.

A further object of the invention is to fold the body structure of the receptacle at one or both edges to enclose a strengthening bar and to provide a crosspiece to which a cover may be securely hinged.

A further object of the invention is to provide an enclosing marginal rim for the end pieces and the cover in which a single channel member is wrapped around the edges of the end or the cover and fastened in place by a projecting tongue which is seated in a recess at the opposite end of the member so that it will be flush with the outer surface of the channel member when connected in place.

Still a further object of the invention is to provide a marginal channel which is wrapped around the edges of the ends so that the joint is at the bottom and in covering the joint with feet or other supports which conceal the means for attaching the marginal channel.

Other objects of the invention will appear in the specification and will be apparent from the accompanying drawings in which,

Fig. 1 is a perspective view of a receptacle in accordance with this invention having outwardly

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projecting end pieces and a hinged cover similar to the ends;

Fig. 2 is a perspective view of a partial assembly of the receptacle body with one of the end plates;

Fig. 3 is a perspective view of a partial assembly of a receptacle showing the application of one of the end channel members in completing the end structure;

Fig. 4 is a fragmentary view of a portion of the body blank showing the flange fold lines and the locking tongues;

Fig. 5 is a sectional view through one of the end pieces showing the locking tongues engaging in the end piece;

Fig. 6 is a detail sectional view as taken on the line 6—6 of Fig. 8 showing the bar for reinforcing the body at the rear edge and a cover hinge; Fig. 7 is a sectional detail on the line 7—7 of Fig. 1 showing the method of attaching a finger hold to the cover; Fig. 8 is a perspective view of one corner of the receptacle showing a portion of the hinge cover and the adjacent corner of one of the end pieces;

Fig. 9 is a perspective view of an end opening receptacle in accordance with this invention in the form of a hamper or similar device; Fig. 10 is an exploded view of the parts making up the receptacle of Fig. 9; Fig. 11 is an elevational view of the top; Fig. 12 is a perspective view of the marginal frame for the top before it is applied to the container; and Fig. 13 is a sectional detail as taken on the line 13—13 of Fig. 11.

Although this receptacle is described as made of thin sheet metal, it may also be made of other materials such as plastics, or it may be a combination of metal and plastics. The panels contained in the cover and the ends are preferably of thin sheet metal or plastics, particularly the outermost or exposed sheets or panels which may be of different material at the inside and at the outside, and these materials may be of different colors and surface ornamentation so that the appearance of the receptacles made in this manner may vary widely depending upon the use or application of the receptacle.

Referring now more particularly to the drawings, a receptacle body is formed of sheet material having a front panel 10 and a back panel 11 connected to a bottom panel 12 by fold lines 13 and 14 respectively. At each end of the body opposite the fold lines 13 and 14 are V-shaped cuts 15 separating these panels, and at the sides of the cuts, the extremities of the panels are bent outwardly on fold lines 16 and then inwardly on

fold lines 17 to provide attached and projecting channels 18, 19 and 20.

At the upper edge of the front and rear panels 10 and 11 is a rounded and reinforcing edging, each edging comprising two longitudinal strips 22 and 23 formed by folding the material on fold lines 24 and 25 respectively, and each of the strips having a tongue 26 projecting at each end thereof beyond the fold line 16 engaging the apex of each V-cut. The front strips are folded flatly together and bent inwardly on the fold line 24, and the rear strips are similarly folded, or if desired, a reinforcing angle bar 28 may have one web inserted between the strips and the other end extending flatly against the back panel 11 as shown in Fig. 6 for reinforcing this edge of the panel.

To close the ends of the receptacle body formed by the panels 10, 11 and 12, a thin sheet 30 of metal or any other suitable material is inserted in the projecting channels 18, 19 and 20 and near its upper end, it has slots 31 for receiving therethrough the tongues 26 from the strips 22 and 23 which are then bent oppositely, binding this inner sheet 30 tightly in place and forming the inside surfaces of the ends of the receptacle. An outer cover sheet 32 is likewise inserted in the end channels 18, 19 and 20 and may be of sheet metal, paper, plastic, or any other desired material, the outer surface of which may be colored or decorated to make the end of the box more attractive. Between the inner and outer sheets 31 and 32, a filler 33 is inserted to take up the entire space in the channels and to make the inner and outer sheets fit tightly and closely therein.

A continuous marginal frame 40 is bent in the form of a channel of a size to fit closely over the end channels 18, 19 and 20 and the opposite webs of the channel frame are angularly notched at the corners so that it will fit closely around the edge projecting above, below, and outwardly from the sides of the body panels 10, 11 and 12. A neat concealed joint for the adjacent ends of the frame is formed by providing a tongue 42 projecting from one of the frame extremities and a slot 43 adjacent the end of the opposite frame section at one end of a slight depression 44 so that when the end of the tongue 42 is inserted through the slot 43 and bent backwardly into the depression 44 it will be closely seated therein and by soldering or otherwise connecting the tongue into the depression, a neat and almost invisible joint will be formed which holds the frame about the end. By inserting fastening nails 45 through openings in the frame 40, supporting feet or blocks 46 may be attached to the under sides of the frame 40 near the corners thereof, thereby forming suitable supports for the receptacle and hiding the frame connection.

A cover 50 has an outer frame 52 similar to each of the end frames 40 and similarly connected by a tongue and slot connection at the extremities of the frame. An inside panel 53 may be provided similar to the inside panel 30 of each of the ends and an outer cover 54 may be combined therewith to enclose a filler 55 which makes up the thickness of the cover, as in the end pieces, the entire cover having the thickness of the interior of the channel frame 52 with a pleasing inner and outer surface which may be similar in appearance or different depending upon the decorative design of the receptacle. A finger hold projection 56 may be secured to the front edge of the cover by inserting one or more fastening

nails into it from the inside of the cover frame 52 as shown more clearly in Fig. 7 which conceals the means for attaching the finger hold and produces a pleasing and decorative appearance.

The cover is connected by hinges 60 to the upper edge of the back 11 which is reinforced by the angle bar 28, one leaf of each hinge being attached to the edge of the cover, and the other leaf of the hinge being attached through the upper side of te back and through one web of the angle bar 28 by suitable rivets 62 or other fastening devices. A limit guard 63 is also attached by the fastening rivets 62 at the outer side of the receptacle hinge leaf which covers this portion of the hinge and provides an engagement for the cover, limiting its backward movement so that the cover will be supported in an upward open position just beyond a vertical position at the back of the receptacle for providing free access to the receptacle when the cover is raised.

With this construction, an attractive variable receptacle is provided in which the same construction may be employed in various containers for widely different purposes, made of different materials and produced from relatively inexpensive and also more costly materials. This construction is particularly adapted for a variety of decorative and structural effects, for by varying only the outer surface of the end pieces and the covers which consist of a thin outer cover sheet, the whole appearance and decoration of the receptacle may be changed. If the receptacle is to be used for merchandise containing boxes, it will will be made of relatively cheap and inexpensive materials, and if it is to be used for a jewel box, it may be made of more expensive materials.

In the form of the invention as shown by Figs. 9 to 13, a similar construction is applied to a top opening or hamper type of receptacle.

In this form of the invention, a hollow tubular body 70 of sheet material may be circular or rectangular in cross section and formed with sharp grooves 71 and 72 at the top and bottom or the ends respectively of the body, leaving an end rim 73 with its outer surface substantially flush with the remainder of the body. A bottom 75 in the form of a board either solid or of composite materials is adapted to fit within the lower marginal rim 73, and a continuous marginal channel frame 76 is applied around and over the marginal rim 73 and the end board or bottom 75 within the rim 73, the edges of the channel rim engaging in the groove 72 and over the end of the bottom board and held tightly in place by a tongue 77 at one end of the frame 76 which is movable into a slot 78 in the adjacent end of the frame for tightly binding the frame 76 in place.

At the top or other end of the receptacle, a similar construction may be employed for closing the end or door panel 80 may be enclosed in the top marginal rim 73 by means of a marginal channel frame 82 similar to the channel frame 76. This door panel 80 is composed of wood fiber, a composition material, metal, or any other suitable material and comprises an opening 83 in which a door 84 is movably mounted preferably by hinges 85 so that it fits flush in the panel. A handle 86 is provided at the free edge of the door by means of which it may be raised and lowered as desired.

In this hamper construction, either or both ends are secured to the body by continuous mar-

ginal frames of channel form and the marginal frames may be mounted so that they are flush with the outer surface of the body 70 or they will be inconspicuous providing a substantially smooth and finished outer appearance or the marginal frames may project slightly from the body of the receptacle providing a distinctive and decorative construction which may be of a different material or a different color, thus adding a distinction and attractive appearance to any receptacle to which they are applied. Usually the body of the receptacle will be of sheet metal and the cover panel together with the cover may be of different material depending upon the use for which the receptacle is intended. This type of receptacle also is adapted to be varied in form, construction and appearance, the body may be round or oval instead of rectangular in cross sections and the ends will then be shaped accordingly to conform to the shape of the body.

While the preferred constructions of these receptacles have been described in some detail, they should be regarded as illustrations or examples rather than as limitations or restrictions of the invention as many changes may be made in the construction, combination and arrangement of the parts without departing from the spirit and scope of the invention.

I claim:

1. A receptacle comprising a continuous body of sheet material bent to form front, back, and bottom portions with outwardly projecting channels at the ends of each portion and with top, front, and rear strips to form edges for the receptacle and having tongues extending from the ends of each strip, inner and outer panels insertable within the end channels to close each end of the receptacle, the inner panel at each end having slots through which the tongues at the upper front and rear edges are inserted and bent oppositely to secure the inner panel in place, and a connected marginal frame extending around the edges of the panels and the channels at the ends of the receptacle body and projecting outwardly beyond the body at the sides, bottom and across the top thereof.

2. A receptacle, comprising a body formed of continuous sheet material bent to form connected front, rear and bottom portions with the upper front and rear edges bent over upon themselves, and longitudinal strips to form the corresponding edges of the receptacle and with projecting tongues at the extremities of each strip, the extremities of the body portions being bent outwardly to form inwardly opening channels, inner and outer end panels fitting within the channels to close each of the ends of the receptacle, the inner panel conforming to the inner surface of the body portion and having slots near the top through which the tongues of the slits are inserted and bent in opposite directions to hold this panel in place, and a connected marginal frame in the form of a channel extending over the edges of the panels and the body channels and enclosing the end panels therein.

3. In a receptacle of the class described, a sheet metal body bent to provide front, rear, and bottom panels with strips at the upper edges of the front and rear panels folded over upon themselves and having projecting tongues at the ends thereof, a strengthening angle bar for at least one edge of the receptacle having one web included between the bent over strips and the other web fastened to the corresponding portion

of the body, each of the body portions having projecting channels at the ends, inner and outer end panels located in the channels to close the ends of the receptacle and to fill the channels, the inner panel at each end having slots near the upper front and rear edges for receiving the tongues of the front and rear strips therethrough, the tongues being bent oppositely at the other side of the panel to hold this panel tightly in place, a marginal frame extending around the edges of the end panels and the channels at each end and covering the marginal edges of the end panels up to the outer surfaces of the front, rear and bottom panels of the body, and a cover hinged to the upper edge of the rear panel and adapted to close over the top of the receptacle flush with the upper edges of the marginal frames covering the ends of the receptacle.

4. In a receptacle of the class described, a body formed of sheet metal having connected front, back, and bottom panel portions with connected strips at the upper edges of the front and rear panels folded over upon themselves to provide smooth inner edges and the ends of the strips having projecting tongues, the ends of the panel portions having projecting channels opening inwardly, inner and outer end panels seated within the channels and closing each end of the receptacle, at least the inner panel of each end having slots near the upper, front and rear ends through which the tongues are inserted and bent oppositely to hold the end panels in place, a marginal frame for each end of the receptacle extending over the edges of the end panels and the channel extensions and covering the marginal edges of the end panels, a strengthening angle bar, one web of which is included between the strips of the rear panel and the other web of which is secured to the upper edge of the rear panel, a cover comprising a marginal frame similar to the receptacle end, and hinges secured to the rear edge of the cover and to the upper edge of the rear panel through the connected web of the strengthening angle bar therefor.

5. In a receptacle of the class described, a body portion of sheet material folded to provide connected front, rear and bottom panel portions with strips at the upper edges of the front and rear panels folded over upon themselves to provide a smooth inner edge for the receptacle and having tongues projecting from both ends of each of the strips, channel projections at the ends of the panel portions opening inwardly but projecting outwardly from the outer sides of the corresponding panel portions, inner and outer end panels insertable in the channels and the innermost panel having slots near its upper, front and rear edges for receiving the corresponding tongues from the front and rear strips, the tongues being bent over oppositely to secure this panel to the inner end of the receptacle, a connected marginal frame extending around the channel members and the edges of the panels at each end of the receptacle, a cover for the receptacle comprising a marginal frame extending around the edges, hinges connecting one edge of the cover with the upper rear edge of the rear panel, the marginal frame of the ends and the cover each comprising a channel strip with angularly notched opposite webs at the corners, a tongue at one end of the strip and a slot at the other end of the strip through which the tongue is inserted from the inside in completing the marginal frame, the outer edge of the frame adjacent the connecting slot being recessed in-

wardly to seat the outer end of the tongue therein flush with the outer surface of the marginal frame.

6. In a receptacle of the class described, a body comprising sheet material folded to provide connected front, bottom, and rear panel portions with projecting channels at the ends of each panel portion, receptacle ends comprising end panels seated in the projecting channels, a marginal frame extending around the channels and the edges of the end panels therein to attach each of the receptacle ends to the remainder of the body, a cover comprising a plurality of panels and a marginal confining frame extending around the edges of the panels, hinged means for connecting the cover to the upper edge of the rear panel, and means projecting from the bottoms of the receptacle ends and from the front

edge of the cover attached to the marginal frames thereof from the inner side thereof, thus concealing the means for attaching the projections.

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