

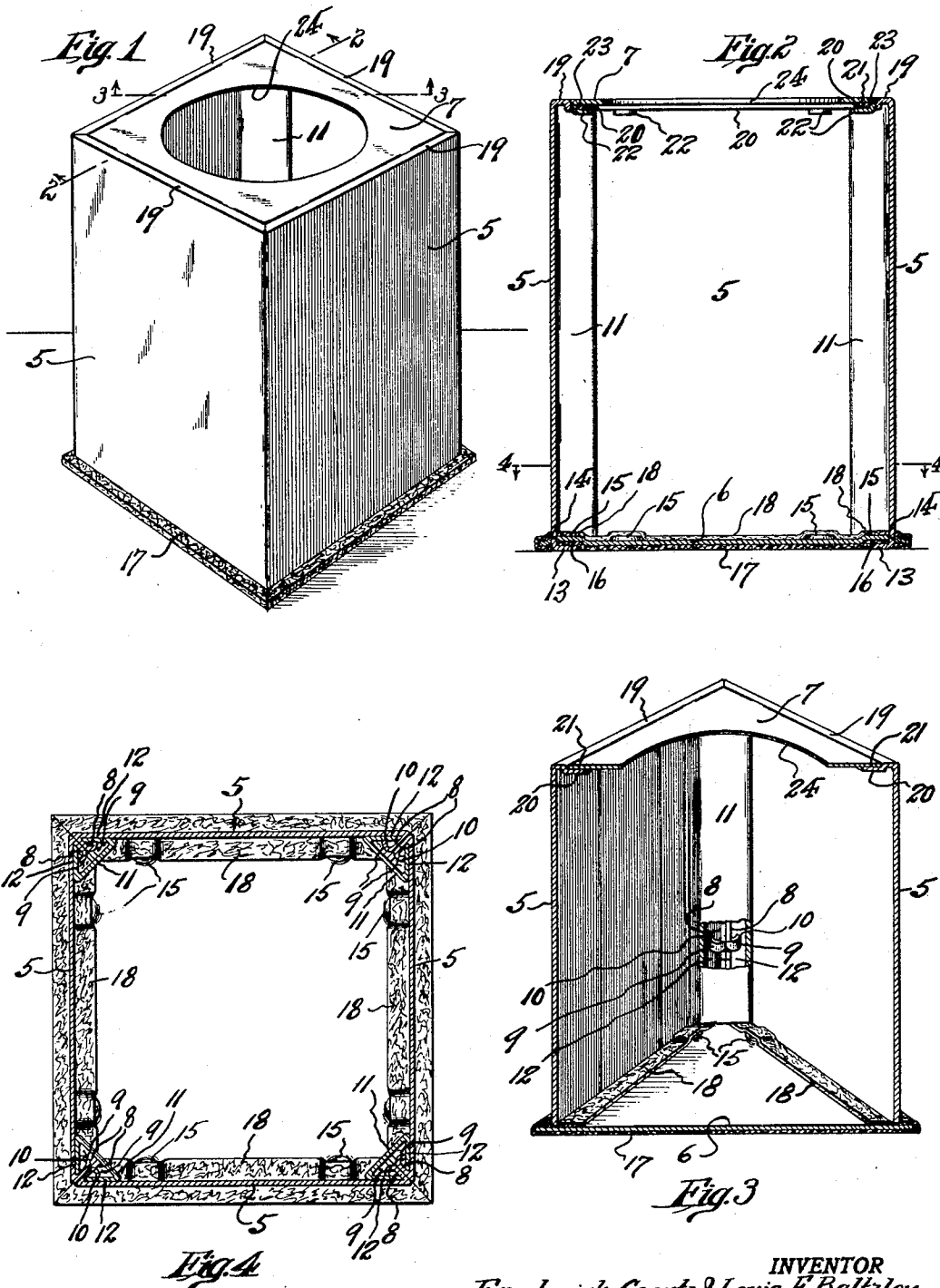
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METALLIC RECEPTACLE

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METALLIC RECEPTACLE

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This invention relates to improvements in metallic receptacles, and especially to a novel form of receptacle capable of being fabricated from sheet metal stampings.

5 This invention has for its principal object to provide a novel construction of metallic receptacle, the parts of which may be rapidly and economically produced by stamping from sheet metal, and then assembled and interlocked together, easily and quickly, and in a novel manner calculated to provide a strong, rigid and durable structure.

10 This invention has for a further object to provide in a metallic receptacle, a bottom or base member having a non-abrasive covering combined therewith, so that the receptacle in use may be moved about without risk of injury to the surfaces upon which it rests, as e. g. the surfaces of highly polished furniture and the like.

15 Other objects of this invention, not at this time more particularly enumerated, will be understood from the following detailed description of the same.

20 An illustrative embodiment of this invention is shown in the accompanying drawing, in which:

25 Fig. 1 is a perspective view of a metallic receptacle made according to this invention; Fig. 2 is a vertical longitudinal section through the same, taken on line 2-2 in Fig. 1; Fig. 3 is another vertical longitudinal section of the same, taken on line 3-3 in Fig. 1; and Fig. 4 is a horizontal section, taken on line 4-4 in Fig. 2.

30 Similar characters of reference are employed in the above described views, to indicate corresponding parts.

35 Referring to the drawing, we have shown a novel metallic receptacle comprising side panels or sections, a top section and a bottom plate, all capable of being stamped out of sheet metal, and thereupon assembled and mutually interlocked together to form the complete novel receptacle or container. As shown, the box or receptacle is illustrated as of rectangular cross sectional shape, comprising four side panels or sections, but it will be understood, that the same may be produced in other shapes, comprising more or less than four side panels or sections, or that the side panels or sections may be made of either straight, angular or curved form as dictates of design may require, while nevertheless retaining the principles of construction and the novel interconnecting elements, as hereinafter described, by means of which the parts of the receptacle are assembled and interlocked together.

In said drawing, the reference character 5 indicates the side panels or sections, 6 the bottom plate and 7 the top section which form the main parts of the assembled receptacle structure.

Each side panel or section 5 is provided along each vertical margin thereof with inturned angular flanges 8. These flanges 8 are formed by inwardly bending the vertical side marginal edge portions of the side panels or sections 5 at an angle to the body of the panel or section, which angle is substantially equal to one-half of the total angle to be provided between adjoining side panels or sections of the finished receptacle, so that, when said side panels or sections are arranged in assembled relation, the flanges 8 of adjoining panels or sections meet face to face so as to abut one another as shown in the drawing. At intervals along the length of said flanges 8, the same are cut out to form lugs 9 which are turned or bent over toward the inner faces of the main body of the respective side panels or sections 5. The inner free end 10 of each of the lugs 9 lies closely adjacent to the surface of the panel or section of which the lug form an integral part.

When the side panels or sections 5 are arranged together, in the positions to be occupied thereby in the assembled receptacle structure, the lugs 9 will be disposed, preferably, in horizontally aligned pairs, each pair being made up of one lug from each of two adjoining panels or sections.

The means for interlocking and securing the side panels or sections 5 in operative assembled receptacle forming relation, comprises vertically extending yoke members 11, having the form of a split or longitudinally slitted tube, adapted to be slidably engaged over the meeting angular flanges 8 of adjoining panels or sides, with portions disposed between the ends of said lugs 9 and the inner faces of the adjoining panels or sections. To this end, each yoke member 11 is formed at its opposite vertical sides with angular flanges 12 which converge toward one another, with the angle included between them being substantially the same as the desired angle to be maintained between adjoining side panels or sections when assembled in receptacle forming relation.

In assembling the side panels or sections 5 together, the flanges 8 of adjoining panels or sections are brought into meeting or abutting relation as shown in Fig. 4, whereupon a yoke member 11 is then slid lengthwise between the adjoining panels or sections, so that the meeting flanges 8 of the latter enter the slit of the yoke member

and project into the hollow interior of the same. The flanges 12 of the yoke member slide under the ends 10 of the lugs 9, which ends press the respective flanges 12 against the inner surfaces respectively of the adjoining panels or sections, said lugs being resiliently yieldable to this end, and consequently the flanges 12 are firmly gripped, and all the parts are thereby so related as to be firmly and rigidly joined together in mutually interlocked assembled relation.

The form of joint thus provided between and serving to interconnect and secure the side panels or sections of the receptacle together, is, per se, of the general type and character disclosed by us in our copending application for Letters Patent of the United States therefor filed July 27, 1931 and bearing Ser. No. 553,368/25.

Integrally formed with and projecting from the bottom margins of the side panels or sections 5 are clenching lugs 13 by which the bottom plate 6 is secured in assembled relation to the receptacle body as formed by the interengaged assembled side panels or sections 5. The bottom plate 6 comprises a body of sheet metal of an area somewhat exceeding the cross-sectional area of the assembled side panels or sections 5. Adjacent to its margins, said bottom plate is pierced with openings 14, corresponding in number and position to the number and position of said clenching lugs 13. Contiguous to said openings 14 of the bottom plate 6 are upwardly pressed portions 15 providing seats 16 at the underside of the bottom plate 6. Said bottom plate 6 is provided with a covering member 17 of soft non-abrasive material overlying its exterior bottom surface. This covering member may be made of felt or textile fabric, leather, or any other relatively soft and non-abrasive material. The area of said covering member 17 exceeds the area of the bottom plate 6 so as to provide free marginal portions 18, which are folded upwardly around the periphery of the plate and then overlaid upon the upper surface of the marginal portions thereof. This being done before assembling the bottom-plate with body of the receptacle as formed by the assembled side panels or sections 5. If desired, the covering member 17 may be adhered to the bottom plate 6 by any suitable adhesive or cementitious material. After the bottom plate 6 and its covering member 17 are assembled together, the same are applied to the lower end of the body of the receptacle so that the clenching lugs 13 of the latter may be passed through the openings 14 of the bottom plate 6 and also through the covering member 17, whereupon the free end portions of said lugs 13 are turned or clenched over and into the counter-sunk seats 16, whereby the same are disposed in a plane within the exposed surface plane of the layer of covering material lying across the under-surface of the bottom plate 6. In this manner the bottom plate and its covering member is firmly and securely interengaged and interlocked in operative assembled relation to the receptacle body as formed by the assembled side panels or sections 5, and at the same time the contact surface of the bottom plate 6 is rendered non-abrasive, whereby the receptacle may be set upon and moved upon highly polished surfaces of furniture or the like without risk of scratching or otherwise marring the latter.

Preferably the receptacle is provided with a top section 7, which in some cases, however, may be omitted if desired, or which may be made in forms and assembled in manner other than that hereafter described as a preferred form and

manner of assembly. In a preferred arrangement, as shown in the drawing, each side panel or section 5 is provided along its top margin with an inwardly projecting flange 19 provided with a downwardly offset free marginal lip 20 forming an internal peripheral seat 21 around the upper open end of the receptacle body. The top section 7 comprises a plate of size to fit within the seat 21. Extending from the margins of said top section are a plurality of clenching lugs 22, and formed in the lips 20, close to the juncture thereof with the flanges 19, are openings 23 corresponding in number and position to the clenching lugs 22 of said top section. Said clenching lugs 22 are turned downward at right angles to the plane of the top section, and then passed through said openings 23, until the top section engages on the seat 21, whereupon the free end portions of said clenching lugs are turned or clenched over upon the undersides of the lips 20, thus firmly securing the top section 7 in assembled relation to the body of the receptacle. Said top section 7 is provided with a suitably shaped opening 24 giving access to the interior of the receptacle.

From the above description it will be seen that a very strong and rigid fabricated sheet metal receptacle is provided, which may be made in many different sizes suitable for various purposes.

Having thus described our invention, we claim:—

1. A fabricated sheet metal receptacle, comprising a plurality of adjoined side panels having abutting angular flanges inwardly projecting along their meeting edges, the angle between a flange and the main body of a side panel being equal to one half of the angle between adjoining side panels, yoke members having angular flanges to abut the inner faces of adjacent side panels with their free margins embracing and retaining against separation said abutting angular flanges of adjacent side panels, a bottom plate, a non-abrasive covering member extending over the exterior under surface of said bottom plate and having its marginal portions turned upwardly around the periphery of said bottom plate and inwardly over the upper surface thereof and in underlying relation to said side panels, and said side panels having clenching lugs projecting from their bottom margins to extend through said bottom plate and its covering member with their free ends clenched over and upon the latter parts.

2. A fabricated sheet metal receptacle, comprising a plurality of adjoined side panels having abutting angular flanges inwardly projecting along their meeting edges, the angle between a flange and the main body of a side panel being substantially equal to one half the angle between adjacent side panels, yoke members having angular flanges to abut the inner faces of adjacent side panels with their free margins embracing and retaining against separation said abutting angular flanges of adjacent side panels, a bottom plate, a non-abrasive covering member extending over the exterior under surface of said bottom plate and having its marginal portions turned upwardly around the periphery of said bottom plate and inwardly over the upper surface thereof and in underlying relation to the lower edges of said side panels, and said side panels having clenching lugs projecting from their bottom margins to extend through said bottom plate and its covering member with their free ends clenched over and upon the latter

parts, said side panels having inwardly projecting flanges at their upper ends, said flanges having downwardly off-set lips to form an internal peripheral seat around the upper ends of the adjoined panels, and a top-section supported within said seat, and mutually cooperating means provided in connection with the upper ends of said side panels and with said top section for securing said parts in assembled relation.

3. A fabricated sheet metal receptacle, comprising a plurality of adjoined side panels having abutting angular flanges along their meeting edges, yoke members embracing said abutting flanges between adjacent side panels, said flanges being cut out at intervals to provide lugs, said lugs being bent over into pressed engagement with said yoke members, a bottom plate, a non-abrasive covering member extending over the exterior under surface of said bottom plate and having its marginal portions turned upwardly around the periphery of said bottom plate and inwardly over the upper surface thereof so as to underlie the lower edges of said side panels, and said side panels having clenching lugs projecting from their bottom margins to extend through said bottom plate and its covering member with their free ends clenched over and upon the latter parts, said side panels having inwardly projecting flanges at their upper ends, said flanges having downwardly off-set lips to form an internal peripheral seat around the upper ends of the adjoined panels, and a top-section supported within said seat, and mutually cooperating means provided in connection with the upper ends of said side panels and with said top section for securing said parts in assembled relation.

4. A fabricated sheet metal receptacle, comprising a plurality of adjoined side panels having abutting angular flanges inwardly projecting along their meeting edges, yoke members having angular flanges to abut the inner faces of adjacent side panels with their free margins embracing and retaining against separation said abutting angular flanges of adjacent side panels, the angular flanges of said panels being formed with resilient lugs at spaced intervals for engaging said yoke member flanges to retain said panels in assembled relation, a bottom plate, and mutually cooperating means provided in connection with the lower ends of said side panels and with said bottom plate for securing said parts in assembled relation, said side panels having inwardly projecting flanges at their upper ends, said flanges having downwardly off-set lips to

form an internal peripheral seat around the upper ends of the adjoined panels, and a top-section supported within said seat, and mutually cooperating means provided in connection with the upper ends of said side panels and with said top section for securing said parts in assembled relation.

5. A fabricated sheet metal receptacle, comprising a plurality of adjoined side panels having abutting angular flanges inwardly projecting along their meeting edges, yoke members having angular flanges to abut the inner faces of adjacent side panels with their free margins embracing and retaining against separation said abutting angular flanges of adjacent side panels, a bottom plate, a non-abrasive covering member extending over the exterior under surface of said bottom plate and having its marginal portions turned upwardly around the periphery of said bottom plate and inwardly over the upper surface thereof, and said side panels having clenching lugs projecting from their bottom margins to extend through said bottom plate and its covering member with their free ends clenched over and upon the latter parts, said bottom plate having inwardly depressed seats formed therein to receive the clenched over ends of said clenching lugs to dispose the same within the plane of the exterior surface of said covering member, said side panels having inwardly projecting flanges at their upper ends, said flanges having downwardly off-set lips to form an internal peripheral seat around the upper ends of the adjoined panels, and a top-section supported within said seat, and mutually cooperating means provided in connection with the upper ends of said side panels and with said top section for securing said parts in assembled relation.

6. In a metallic receptacle, a body, a bottom plate, a covering member extending over the exterior under surface of said bottom plate and having its marginal portions turned upwardly around the periphery of said bottom plate and inwardly over the upper surface thereof so as to directly underlie said body, and said body having clenching lugs projecting from its bottom margins to extend through said bottom plate and its covering member with their free ends clinched over and upon the latter parts, said bottom plate having inwardly depressed seats formed therein to receive the clenched over ends of said lugs to dispose the same within the plane of the exterior surface of said covering member.

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