June 20, 1950 F. T. PADEN 2,511,871

INNER SEAL CASKET

Filed Oct. 25, 1946 3 Sheets-Sheet 1

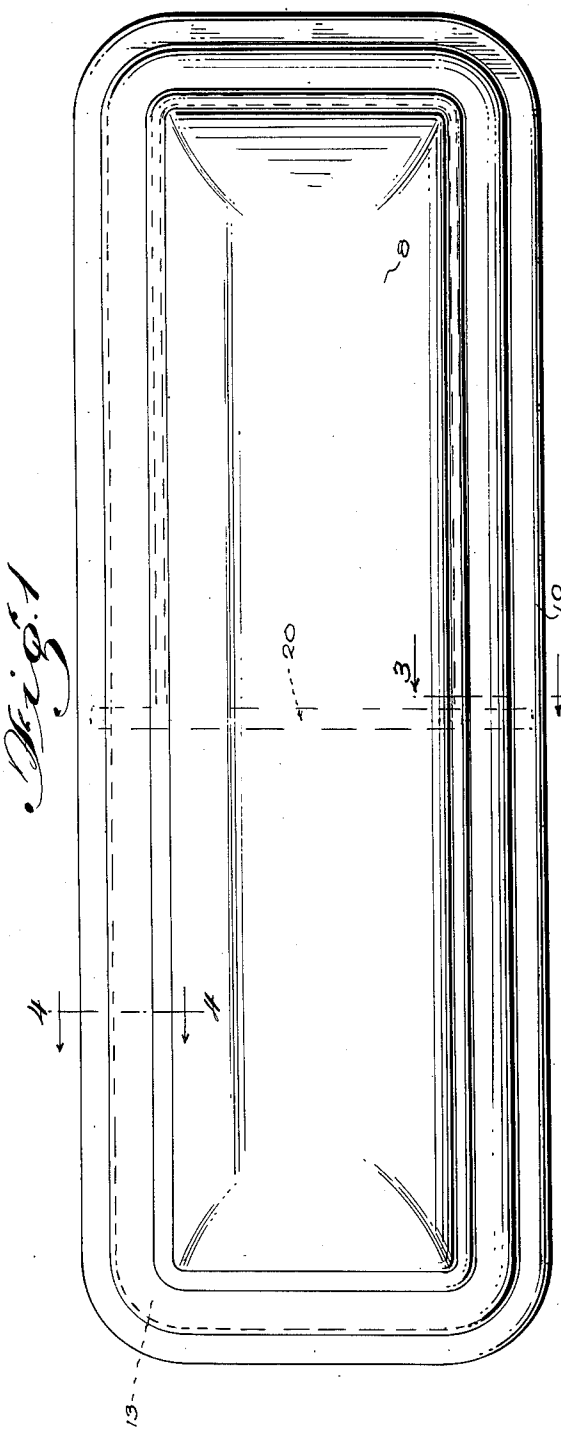


Fig. 1.

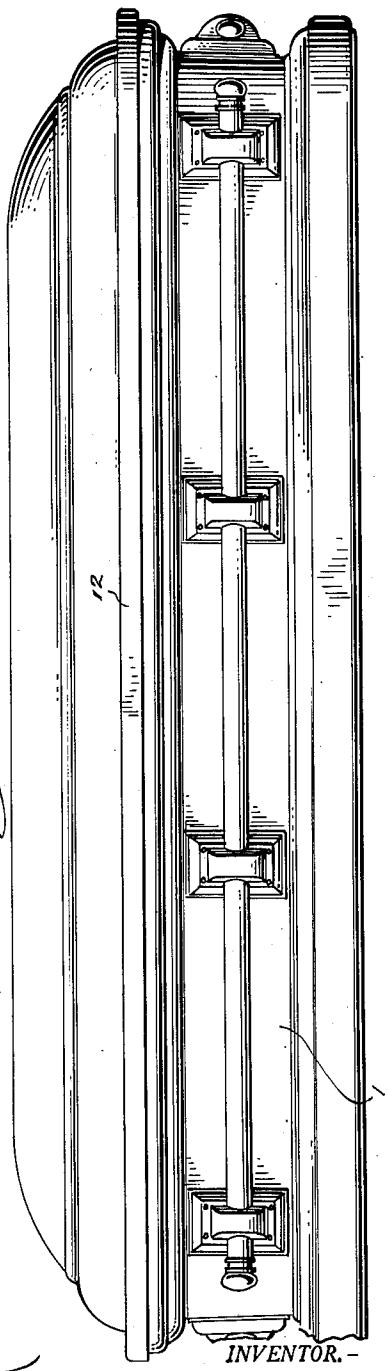


Fig. 2.

INVENTOR.-
Frederick T. Paden
BY
W. J. Eccleston,
ATTORNEY

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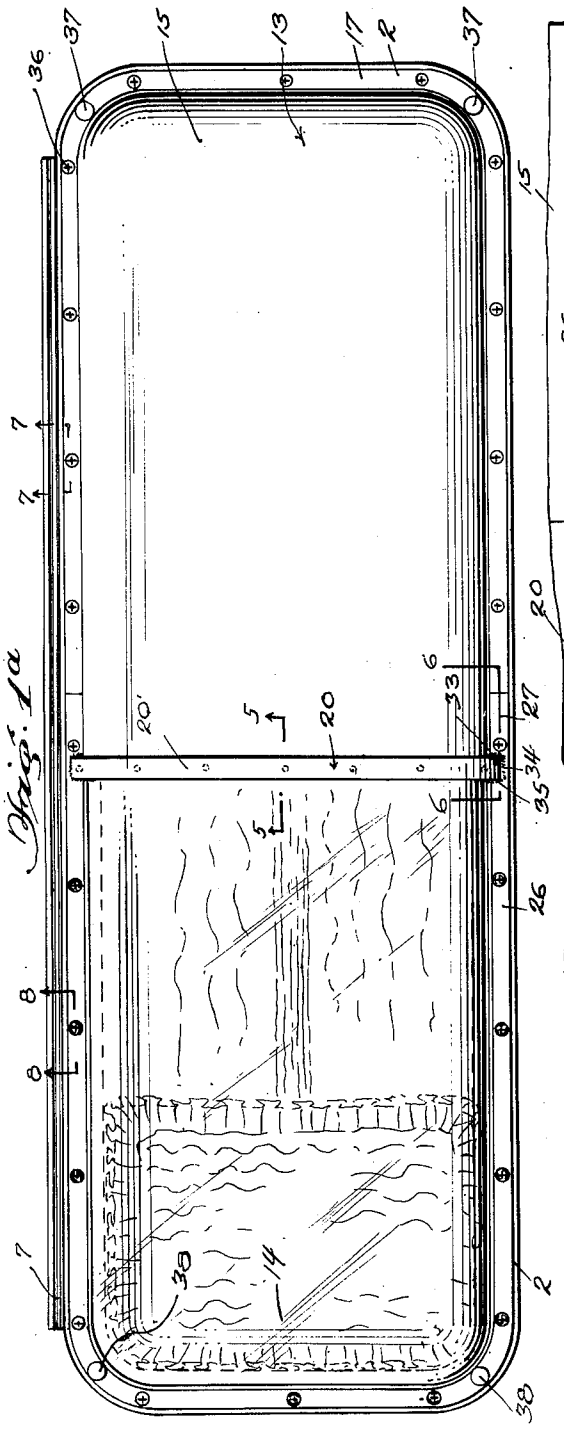


Fig. 1a

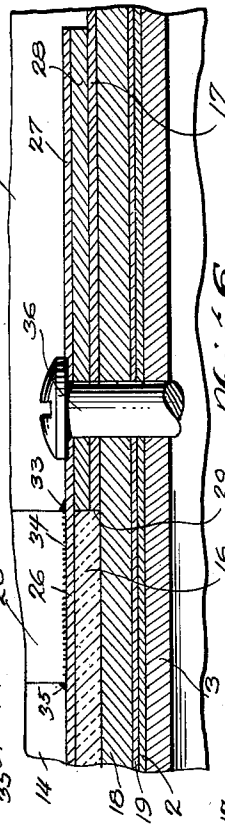


Fig. 6

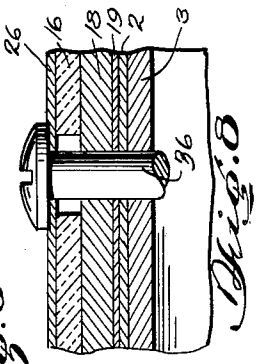


Fig. 8

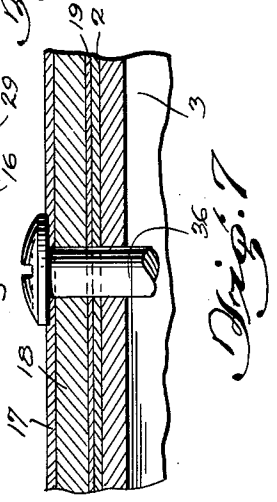


Fig. 7

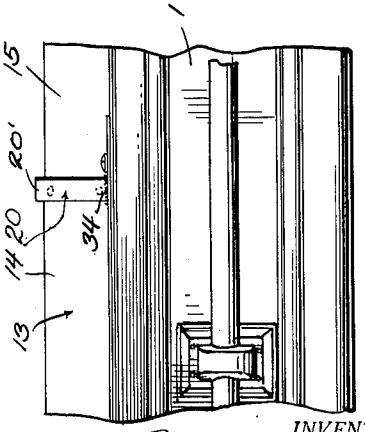


Fig. 2a

INVENTOR.
Frederick T. Paden
BY
W. J. Eccleston.
ATTORNEY

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Fig. 3

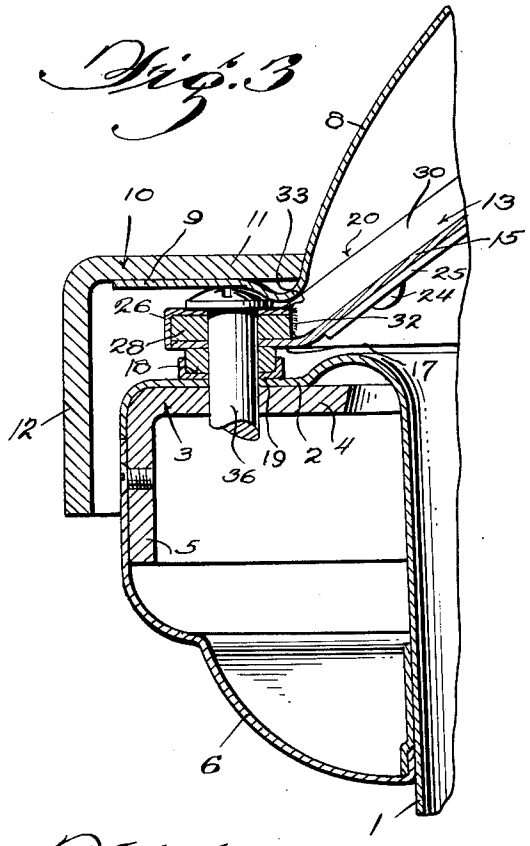


Fig. 4

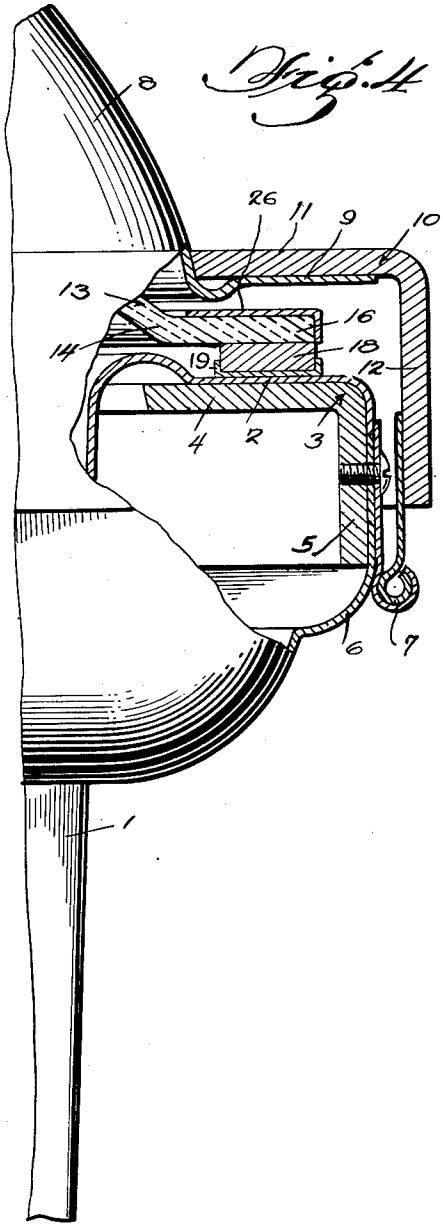
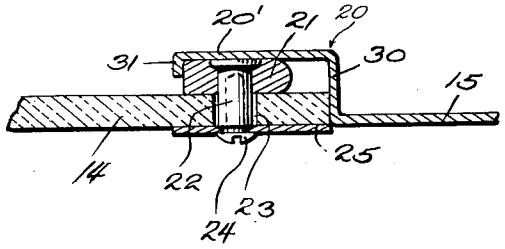


Fig. 5



INVENTOR.
Frederick T. Paden
BY
W. J. Eccleston,
ATTORNEY

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UNITED STATES PATENT OFFICE

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INNER SEAL CASKET

Frederick T. Paden, Collingswood, N. J.

Application October 25, 1946, Serial No. 705,789

7 Claims. (Cl. 27—17)

(Granted under the act of March 3, 1883, as amended April 30, 1928; 370 O. G. 757)

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The invention described herein, if patented, may be manufactured and used by or for the Government for governmental purposes, without the payment to me of any royalty thereon.

This invention relates to a sealed receptacle, and more particularly, to a burial casket provided with a seal-tight inner lid including a transparent portion.

Heretofore, caskets having lids with transparent portions have been difficult to make air-tight due to the composite construction of the lid. Also in existing caskets where a transparent section is utilized, said transparent section invariably forms a small portion of the casket lid permitting only a limited view of the interior of the casket. It is therefore a major object of this invention to provide a casket having a composite inner lid with a transparent section and an opaque section being coextensive in a transverse direction to provide a maximum view of the interior of the casket, and in which an air-tight seal is provided between the transparent and opaque sections and between the inner lid as a whole and the casket body.

It is another object of this invention to provide a sealed receptacle having a composite lid of opaque and transparent sections joined together to form a transverse joint, and in which the sections abut each other and overlap each other along different portions of said joint.

It is still another object of this invention to provide an improved sealed receptacle having a composite lid formed of a sheet metal section and a transparent plastic section joined together to form a transverse joint in which the marginal portions of said sections abut and the intermediate portions of said sections overlap.

It is a still further object of this invention to provide a sealed receptacle having a lid composed of a sheet metal section and a transparent section joined to form a transverse joint, in which a metallic strip reinforces the marginal portion of the transparent section, in which the sheet metal section overlaps the transparent section along a portion of the transverse joint, and in which the seal of the transverse joint is completed by welding ends of the overlapping portion of the sheet metal section to the metallic strip.

A further object of this invention is to provide a casket having a composite lid including a transparent section and a sheet metal section overlapping each other along a transverse joint, and in which a gasket provided between the overlapping portions at the transverse joint is

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tightened by the use of studs secured to the under surface of the overlapping portion of a sheet metal section, the studs passing through the gasket and the transparent section.

It is a still further object of this invention to provide an improved sealed casket having a lid of upwardly convexed formation and with a flattened rim for cooperation with an endless flange around the casket opening to form an air-tight joint, and in which the lid has a sheet metal section and a transparent section substantially coextensive in width.

Still another object of this invention is to provide an improved inner seal casket having a hinged outer lid and an inner lid bolted to the casket body along a sealed joint around the body of the casket, and in which the inner lid includes a transparent section and an opaque section substantially coextensive in width, interconnected along a transverse joint, the joint between the two sections being gasketed to provide an air-tight seal.

Other objects and advantages of the present invention will appear in the following detailed description and will be pointed out particularly in the appended claims, reference being had to the accompanying drawings forming part of this specification, and in which:

Figure 1 is a plan view of the complete casket;

Figure 1*a* is a plan view of the casket with the outer lid removed;

Figure 2 is a front elevational view of the complete casket;

Figure 2*a* is a fragmentary elevational view of the casket with the outer lid removed;

Figure 3 is a sectional detail taken on line 3—3 of Figure 1;

Figure 4 is a fragmentary elevational view and partly in section taken on line 4—4 of Figure 1;

Figure 5 is a sectional detail taken on line 5—5 of Figure 1*a* and showing the overlapping relationship along the major portion of the transverse joint;

Figure 6 is a sectional detail taken on line 6—6 of Figure 1*a* and showing the transverse joint at the marginal portion of the lid;

Figure 7 is a sectional detail taken on line 7—7 of Figure 1*a*; and

Figure 8 is a sectional detail taken on line 8—8 of Figure 1*a*.

Referring to the drawings, reference numeral 1 denotes the receptacle body or casket body generally which is made preferably of seamless sheet metal construction in the manner discussed in my co-pending application for U. S. Patent,

Serial No. 701,861 filed October 8, 1946, now Patent No. 2,503,293, dated April 11, 1950, and covering a Metal burial casket.

As disclosed in the above-referenced co-pending application, the receptacle or casket body 1 has its top portion flared outwardly to form the horizontally extending endless flange 2 extending about the opening to the casket or receptacle 1. As further disclosed in said co-pending application, the flange 2 is reinforced by an angle 3 having its horizontal portion 4 suitably welded or otherwise secured to the undersurface of the flange 2 and with its vertical portion 5 positioned outwardly of the horizontal portion 4 to provide a support for a molding 6 and a hinge means 7. The hinge means 7 permits hinging of the outer lid 8, shown in Figures 1, 2, 3 and 4, which lid is preferably of sheet metal construction and has its rim flattened out as at 9, which rim 9 is reinforced by an angle or angles 10 having their horizontal portions 11 suitably secured to the rim 9 as by welding, and their vertical portions 12 extending downwardly and outwardly of the angles 3. As shown in Figure 4, the hinge means 7 is fastened to the angles 3 and 10 to thus hinge the lid 8 over the casket or receptacle body 1. As shown in Figure 4, the vertical portion 12 of the angle 10 extends downwardly to overlap the joint formed between the flange 9 and the flange 2 so as to conceal said joint from view.

It is to be noted that the lid 8 is not an air-tight covering means for the casket or receptacle 1 and in order to provide for an effective seal for the casket or receptacle, an inner lid, denoted generally by reference numeral 13, is provided as shown in the figures. This lid is a composite lid composed of a transparent section 14 at the head end of the casket or receptacle 1 and a sheet metal section 15 joined to section 14 approximately at the center of the casket to form a transverse joint denoted generally by the numeral 20. Any suitable transparent material such as glass or a plastic may be used for the transparent section 14. It has been found that the acrylic plastics are especially suitable for this purpose. As clearly shown in Figures 1*a*, 3 and 4, the transparent section 14 and the sheet metal section 15 are substantially coextensive in a transverse direction and cover the whole width of the casket body 1. Inasmuch as the transparent section 14 extends substantially half the length of the casket body and the full width of the casket body, it affords an effective means for viewing a large portion of the interior of the casket. Also in order to eliminate glare, the transparent section 14 is convexed upwardly in both a longitudinal plane and transverse plane so that it will not reflect light when viewed from a normal position. In order to provide for a uniformly shaped inner lid 13, the sheet metal section 15 is similarly convexed upwardly in both a longitudinal and transverse direction.

In order to provide for an air-tight seal at the joint between the lid 13 and the casket body 1, the rim portion 16 of the transparent section 14 and the rim portion 17 of the sheet metal section 15 are flattened as shown clearly in Figures 3 and 4 to extend horizontally parallel with the endless flange 2 of the casket body 1. Between the endless flange 2 and the rim portions 16 and 17, there is provided an endless gasket 18 suitably glued in a channelled gasket retainer 19 suitably calked and welded to the flange 2. Thus when the composite lid 13 is placed in position on the gasket 18 and tightened as hereinafter described, an air-tight joint will be provided between the lid 13 and the casket body 1.

As clearly shown in Figures 3, 4 and 6, the transparent section 14 is of greater thickness than the sheet metal portion 15 inasmuch as the material of which the transparent section is made is usually of less strength than sheet metal. Due to the differences in thickness of these two sections, a special transverse joint which still affords an air-tight casket, has been provided. Referring to Figure 5, it is seen that the sheet metal section 15 at the transverse joint 20, extends upwardly and over the transparent section 14 to overlap the same. To provide for an air-tight transverse joint 20, a gasket 21 is provided between the overlapping portions of the two sections 14 and 15. To tighten the transverse joint 20 there is provided a plurality of spaced studs 22 at spaced intervals and welded to the undersurface of the overlapping portion 20'. These studs pass through the gasket 21 and through openings 23 formed in the transparent section 14 and are tapped to receive the screws 24 bearing against a metallic strip 25 pressing against the bottom of transparent section 14 along the joint 20. The joint just described and shown in Figure 5 constitutes the major portion of the joint between the sheet metal and transparent sections, and is the joint used all along the transverse arch extending from adjacent one side of the lid to adjacent the other side of the lid. At the rim portions of the lid 13 the joint shown in Figure 5 merges into a different type of joint as shown in Figures 1*a*, 3 and 6, as described hereinafter.

In order to strengthen the rim portion 16 of the transparent section 14 where the fastening bolts secure the inner lid 13 to the casket body as described hereinafter, a metal trimming strip 26 having an L-cross-section is provided. As clearly shown in Figure 1*a*, the metal strip 26 is of U-shape formation in plan view and extends as at 27, for a short distance over the rim portions 17 of the sheet metal section 15, as indicated in Figures 1*a* and 6. Inasmuch as the transparent section 14 is thicker than the sheet metal section 15, a space is formed between the overlap 27 of strip 26 and the rim portion 17 of the sheet metal section 15, and this space is suitably filled by a filler means 28 clearly shown in Figure 6. The filler means 28 may be spot-welded to the rim portion 17 and the overlap 27 may be spot-welded to the filler 28. As clearly shown in Figure 6, which constitutes a longitudinal section through the marginal portion of the inner lid 13, the transparent section 14 and sheet metal section 15 abut as at 29. A permanent-type mastic seal is provided at the joint 29 and between the transparent section 14 and filler means 28 to provide an air-tight seal. The joint 29 only occurs in the marginal portions of the lid 13 and the width of the joint at 29 is substantially equal to the width of the strip 26 and the marginal portions 16 and 17. This joint just described and shown in Figure 6 merges into the joint shown in Figure 5 and described above. In order to effect this merger, the rim portion 17 merges into the arch portion of sheet metal section 15 as shown in Figure 3, and the arch portion of section 15 extends beyond the rim portion 17 and overlaps the transparent section 14, as at 20' in Figure 5. In forming the overlap, the sheet metal section 15 is struck upwardly as at 30, Figures 3 and 5, then straight across at 20', and downwardly as at 31. As can be seen in Figure 3, the overlapping portion 20', 30, 31 is arched and merges into the metal strip

26 and the filler strip 28. Where said overlap 20', 30, 31 contacts the metal strip 26 and filler 28, welding is applied to completely seal the ends of the transverse joint 20 to prevent air from passing into or out of the casket around the ends of the gasket 21. The welding is denoted by the numerals 32, 33, 34 and 35.

In order to secure the marginal portions 16 and 17 of the inner lid 13 to the casket body 1, a plurality of spaced bolts 36 are provided, passing through said marginal portion 16, 17, through the gasket 18, through the flange 2, and through the horizontal portion 4 of the angle or angles 3. Also in the region of the filler material 28 and in the region of the U-shaped strip 26, the bolts 36 likewise pass through these elements as seen in Figure 3. These bolts are preferably of the cam-action type so that they may be tightened by merely turning the bolts a quarter turn. Also, preferably these bolts 36 are provided with spring means to raise the bolts automatically to an upper position when said bolts are in non-locking position. With such construction, it can be readily determined at a glance when the bolts are in non-locking position. A number of types of such bolts are available on the market and any one of these types may be used to secure the inner lid 13 in the manner described.

As seen in Figures 3 and 4, the outer lid 8 in its closed position has its marginal portion 9 spaced somewhat further from the marginal portion 17 of the inner lid 13 than from the trimming strip 26. To provide for this spacing, there are provided, as shown in Figure 1*a*, a pair of high bumpers 37 glued to the marginal portion 17 at the corners of the casket, and similarly a pair of low bumpers 38 glued to the metallic trimming strip 26. Inasmuch as the marginal portion 17 is at a lower plane than the strip 26, the bumpers 37 are made higher than the bumpers 38 so as to keep the lid 8 horizontal.

It is evident that applicant has provided a receptacle or casket body having an endless flange around its opening and to which a composite inner lid may be sealed, said lid having a transparent section affording a wide view of the interior of the casket or receptacle, and in which the seal-tight character of the casket or receptacle is preserved by the use of a specially designed transverse joint between the transparent and opaque sections of the lid, and which transverse joint merges into the joint between the lid and the main casket body in a manner to maintain the air-tight character of the casket or receptacle.

Although this invention has been described with particular reference to a casket, it is not limited thereto since the features of this invention, as described and claimed, are equally applicable to other types of receptacles where a seal-tight lid is desired and where a window is provided for viewing the contents of the receptacle. Therefore, the use of the term "casket" in the specification and claims should be construed broadly to cover other types of receptacles as well.

While the invention has been described in more or less detail, it is not to be limited thereby as changes may be made in the form, arrangement and construction of parts and equivalents may be substituted without departing from the spirit and scope of the invention as claimed, the structure hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. An arched lid and sealing flange for a receptacle comprising an opaque section and a transparent section joined together to form a transverse joint, portions of said sections abutting each other edge-to-edge at the flange portion only of said joint and other portions of said sections overlapping each other at said joint.

2. An arched lid and marginal sealing flange for a receptacle comprising a sheet metal section and a transparent section of greater thickness than said sheet metal section joined together to form a transverse air-tight joint and with an intermediate portion only of said sheet metal section overlapping a portion of said transparent section at said joint.

3. An arched lid and marginal sealing flange for a receptacle comprising a sheet metal section and a transparent section of greater thickness than said sheet metal section joined together to form a transverse air-tight joint, longitudinal marginal portions of said sections abutting each other edge-to-edge only at said joint, and an intermediate portion of said sheet metal section overlapping an intermediate portion of said transparent section at said joint.

4. An arched lid and marginal sealing flange for a receptacle comprising a sheet metal section and a transparent section joined together to form a transverse joint, a metallic strip covering the marginal portion of said transparent section for reinforcing said marginal portion, longitudinal marginal portions of said sections abutting each other and sealed at said joint, and an intermediate portion of said sheet metal section overlapping an intermediate portion of said transparent section at said joint and in contact with said metallic strip and welded thereto to make said transverse joint air-tight.

5. An arched lid and marginal sealing flange for a receptacle comprising a sheet metal section and a transparent section joined together to form a transverse joint, a U-shaped metallic strip covering the marginal portion of said transparent section and overlapping marginal portions of said sheet metal section, longitudinal marginal portions of said sections abutting each other at said joint, an intermediate portion of said sheet metal section overlapping an intermediate portion of said transparent section at said joint, and a gasket between said intermediate portions, the intermediate portion of said sheet metal section having side portions contacting said metallic strip and welded thereto whereby said joint is made air-tight.

6. An arched lid and marginal sealing flange for a receptacle comprising a sheet metal section and a transparent section of greater thickness than the thickness of said sheet metal section joined together to form a transverse joint, a U-shaped metallic strip covering the marginal portions of said transparent section and overlapping marginal portions of said sheet metal section, longitudinal marginal portions of said sections abutting each other and sealed at said joint, filler material filling the spaces between said strip and the marginal portions of said sheet metal section, an intermediate portion of said sheet metal section overlapping an intermediate portion of said transparent section at said joint, and a gasket between said intermediate portions, the intermediate portion of said sheet metal section having side portions contacting said metallic strip and welded thereto whereby said joint is made air-tight.

7. An arched lid and marginal sealing flange for a receptacle comprising an opaque section

and a transparent section joined together to form a transverse joint extending entirely across the lid, intermediate portions only of the sections overlapping at the joint while the marginal portions of the sections are arranged in abutting edge-to-edge relationship at the joint.

FREDERICK T. PADEN.

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