Jan. 20, 1959 J. S. OVERLAND ET AL 2,869,216

CASKET SEALING CONSTRUCTION

Filed May 24, 1957 2 Sheets-Sheet 1

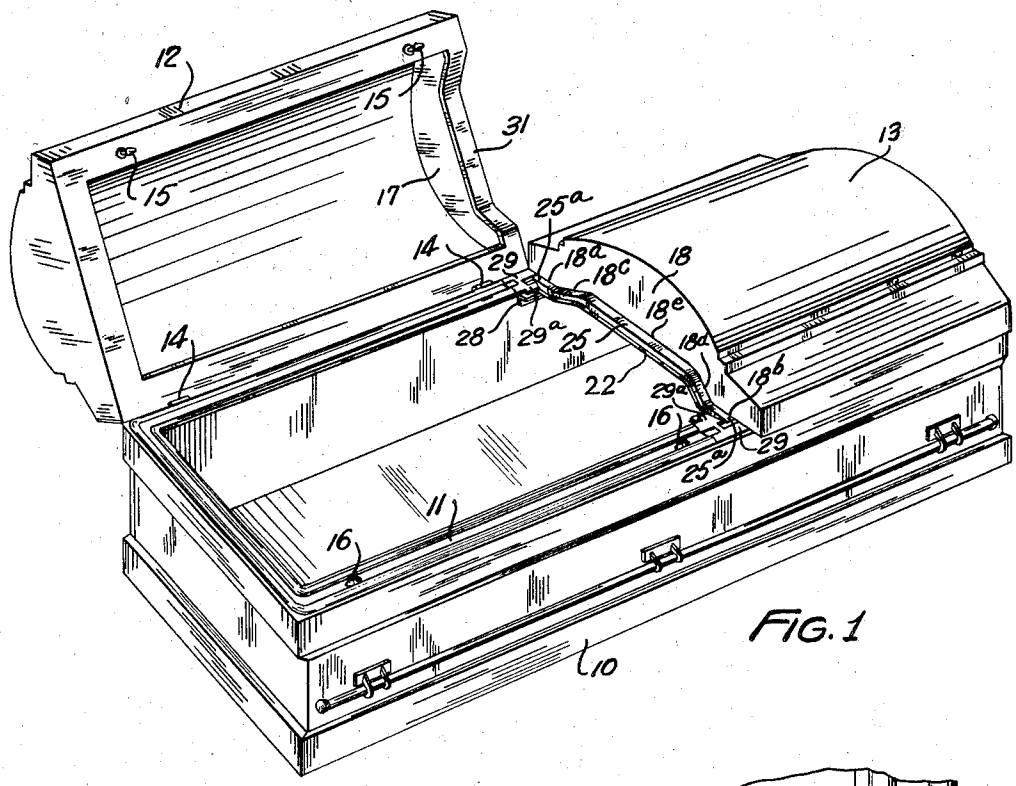


FIG. 1

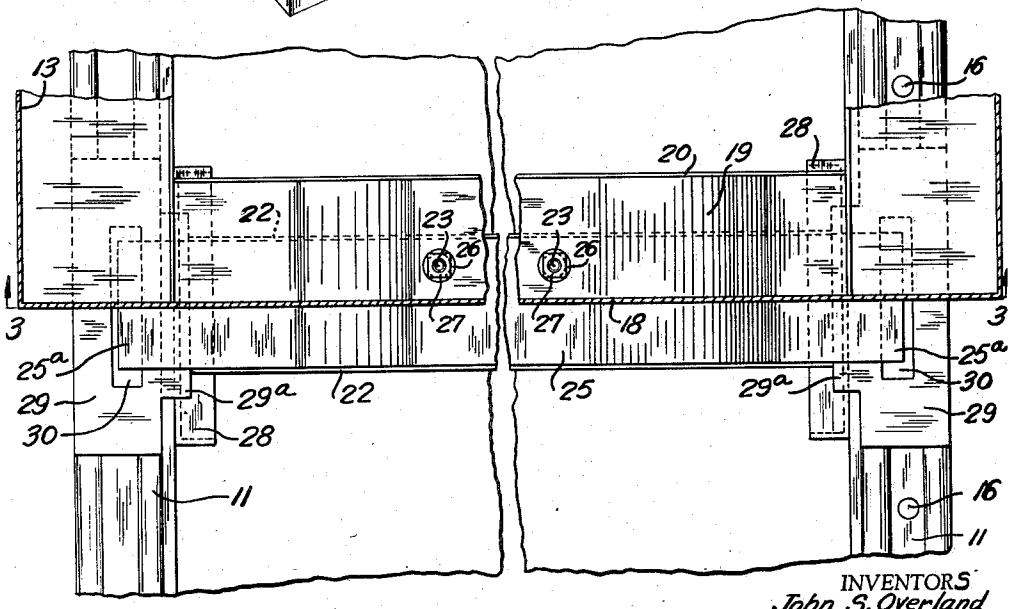


FIG. 2

INVENTORS
John S. Overland
James T. Hill
Victor H. Seger
BY Hudson, Boughton, Williams, David & Hoffmann
ATTORNEYS

Jan. 20, 1959 J. S. OVERLAND ET AL 2,869,216

CASKET SEALING CONSTRUCTION

Filed May 24, 1957 2 Sheets-Sheet 2

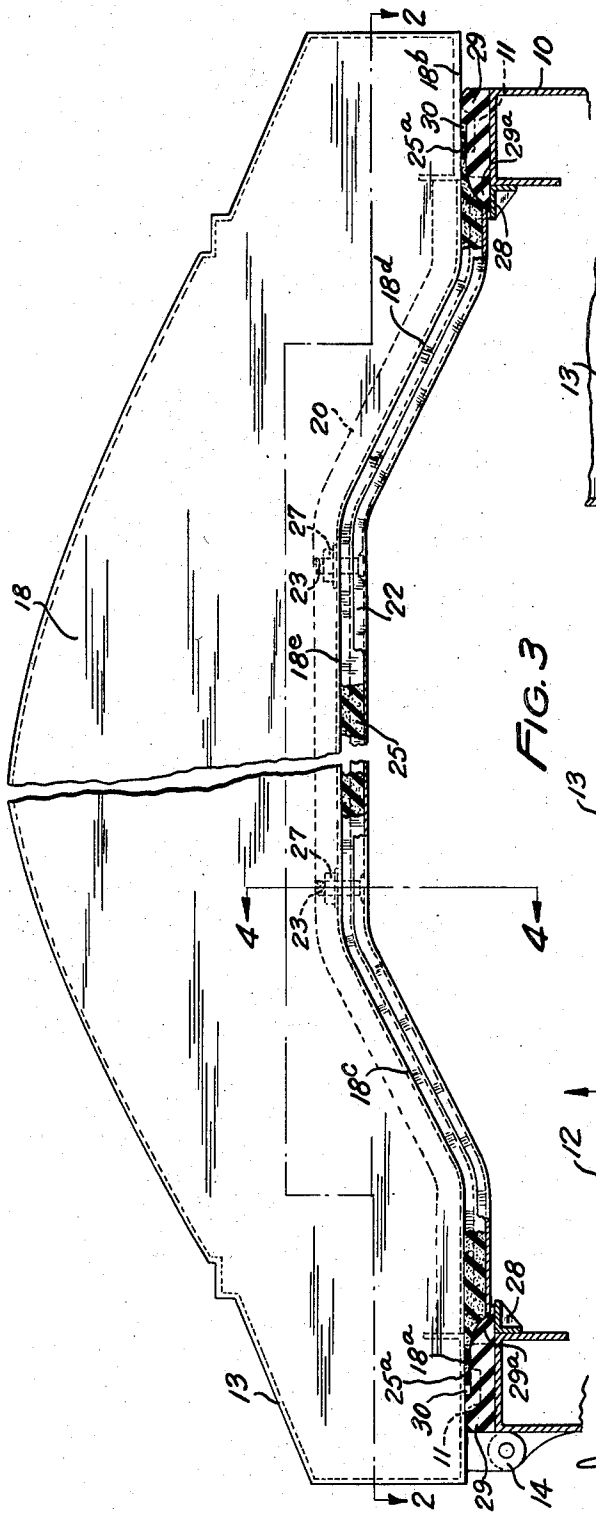


FIG. 3

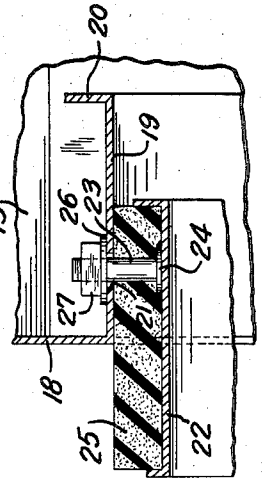


FIG. 4

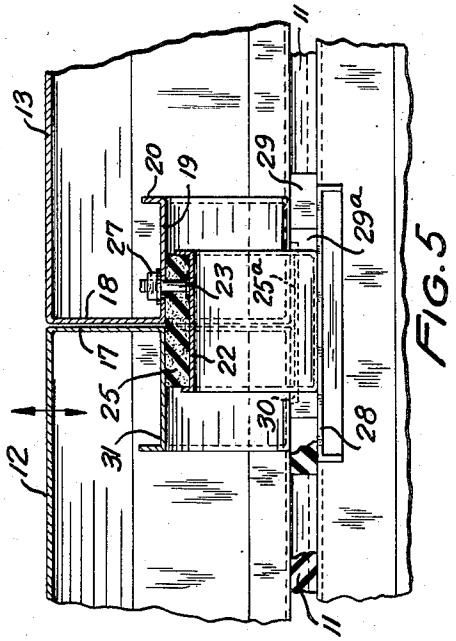


FIG. 5

INVENTORS
John S. Overland
James T. Hill
Victor H. Seger
BY Hudson, Boughton, Williams, David & Hoffmann
ATTORNEYS

United States Patent Office 2,869,216
Patented Jan. 20, 1959

2,869,216

CASKET SEALING CONSTRUCTION

John S. Overland, James T. Hill, and Victor H. Seger, Chicago, Ill., assignors to F. H. Hill Company, Inc., Cleveland, Ohio, a corporation of Ohio

Application May 24, 1957, Serial No. 661,477

13 Claims. (Cl. 27—17)

This invention relates to a casket, and particularly to the sealing means between the two separate hinged top sections or lids of the casket.

It is customary in caskets of the type having two separate hinged top sections or lids, one for the head end of the casket and the other for the foot end thereof, to provide, in addition to marginal sealing means extending entirely around the margin of the body of the casket and cooperating with the top or lid sections, a sealing means between the two top sections or lids and extending transversely of the casket.

Ordinarily the sealing means between the two top sections or lids of the casket includes a transverse gasket mounted on a rigid portion of one of the top sections or lids and engaged by a rigid portion of the other top section or lid when the two sections are in closed position relative to the casket.

In the usual arrangement the rigid gasket supporting portion on the one top section or lid forms the structural transverse support for the other top section or lid when the sections are in closed position. However, unless the interrelated transverse portions of the two top sections or lids are accurately complementary to one another a perfect transverse seal may not be effected between the two sections or lids when closed.

If the interrelated transverse portions of the two top sections or lids are not accurately complementary in shape to each other the only compensation for the inaccuracies is the compressibility of the rigidly supported gasket itself.

An object of the invention is to provide in a casket of the type having two hinged top sections or lids, improved and novel means carried by one top section or lid and engaged by the other top section or lid when the lids are closed and forming a transverse floating structural support and sealing means between the top sections or lids.

Another object is to provide in a casket construction an improved and novel transverse supporting and sealing means between the two top sections or lids of a casket and which means is carried by one section or lid and is self-compensating to accurately conform to the cooperating portion of the other top section or lid which engages it when the lids are closed and are drawn into tight sealing engagement with the marginal sealing means between the lids and the body of the casket.

A more specific object of the invention is to provide in a casket of the type having two hinged top sections or lids a floating transverse bridge carried by one of the top sections or lids and with said bridge mounting a sealing gasket engageable by a portion of the other top section or lid when the lids are closed and are drawn into sealing engagement with the body of the casket, wherefore the floating bridge forms a transverse structural support for the top sections or lids while the floating movement of the bridge, together with the compressibility of the gasket carried thereby, provides for accurate sealing adaptation of the gasket to the contour of the cooperating portion of the other top section or lid, thus effecting an improved and efficient hermetic seal between the two top sections or lids.

A further object of the invention is to provide an arrangement such as referred to in the last named object and wherein the opposite ends of the floating bridge engage positive supporting means carried by the casket body to provide for structural strength while the opposite ends of the gasket carried by the bridge extend beyond the opposite ends of the bridge for sealing engagement with gasket means located on the upper margin of the casket body.

Further and additional objects and advantages inherent in the invention and not explicitly recited above will become apparent hereinafter during the detailed description of an embodiment of the invention which is illustrated in the accompanying drawings forming a part of this specification and wherein,

Fig. 1 is a perspective view of a casket embodying the invention with the top section or lid at the head end of the casket in raised or open position while the top section or lid at the foot end of the casket is in closed position.

Fig. 2 is a fragmentary view, partly in plan and partly in horizontal section, of the casket shown in Fig. 1 and is taken through the closed top section or lid at the foot end of the casket and substantially on irregular line 2—2 of Fig. 3 looking in the direction of the arrows.

Fig. 3 is a vertical transverse section through the casket and is taken substantially on line 3—3 of Fig. 2 looking in the direction of the arrows.

Fig. 4 is a fragmentary vertical longitudinal section taken substantially on line 4—4 of Fig. 3 looking in the direction of the arrows, and

Fig. 5 is a view similar to Fig. 4 but on a reduced scale and shows the top section or lid at the head end of the casket closed and engaging the sealing means mounted on the floating bridge that is carried by the top section or lid at the foot end of the casket.

The casket body 10 can be of any desired or usual construction and the upper marginal end of the walls of the body mounts a marginal sealing means 11 in the form of a suitable sealing gasket as will be well understood in the art and which may have substantially the form of the marginal sealing gasket shown in the McEwan Patent No. 2,533,827, December 12, 1950.

The casket includes a hinged top section or lid 12 at the head end of the casket and a hinged top section or lid 13 at the foot end of the casket as will be well understood in the art.

The top sections or lids 12 and 13 are hinged along their rear longitudinal sides to the rear of the casket body by suitable hinging means such as indicated at 14 in Figs. 1 and 3.

The casket is provided with suitable means for drawing the top sections or lids 12 and 13 when closed into tight sealing clamping contact with the marginal sealing means 11. This means for drawing the top sections or lids into clamping contact with the marginal sealing means 11 may take any preferred form and per se constitutes no part of the invention.

The means just referred to may include headed pull down studs 15 on the marginal front longitudinal portions of the lids 12 and 13. The studs 15 when the lids are closed enter draw down devices 16 carried by the longitudinal marginal portion of the front side of the casket body 10 and operated in unison from the foot end of the casket by suitable operating means not shown. A suitable draw down arrangement of the character just referred to is shown in said Patent 2,533,827 and also in Purkiss Patent 2,284,921, issued June 2, 1942.

The adjacent ends of the top sections or lids 12 and 13 are provided, respectively, with end plates 17 and 18,

which when the top sections or lids are in closed position will lie closely adjacent and parallel to each other.

The lower edge of the end plate **18** of the top section or lid **13** is provided at the rear and front of the lid with straight portions **18***a* and **18***b* merging into the plane of the marginal sides of the lids and bearing upon the marginal sealing means **11** of the body **10** when the lids are in closed position.

The inner ends of the straight portions **18***a* and **18***b* of the end plate **18** connect with upwardly inclined edge portions **18***c* and **18***d*, respectively. The inner ends of the inclined edge portions **18***c* and **18***d* of the end plate **18** interconnect with a straight edge portion **18***e* which is parallel to the straight edge portions **18***a* and **18***b*.

The lower edge of the end plate **18** has an inturned flange **19** extending toward the foot end of the casket and shaped to conform to the straight and inclined portions of the lower edge of the plate **18**. The free edge of the flange **19** may be provided with an upturned flange **20**.

The flange **19** is provided with a series of openings **21**, see Fig. 4, spaced apart transversely of the top section or lid **13** and in the preferred form of construction as presently contemplated therewill be three of these opening although this number of openings may be varied.

The flange **19** supports beneath it the floating bridge **22**. This floating bridge is an upwardly facing channel member having the same general configuration as the lower edge of the end plate **18** but spaced downwardly from said edge. The straight portions of the floating bridge **22** which are beneath the straight portions **18***a* and **18***b* of the end plate **18** are substantially shorter in length than said straight portions **18***a* and **18***b* for a purpose later to be explained.

The floating bridge **22** is of a width such that it underlies that part of the flange **19** which is adjacent to the end plate **18** but extends beyond the end plate **18** toward the head end of the casket so as to also underlie the top section or lid **12** when the lids are closed as will later become more apparent.

The width of the floating bridge **22** approximately is such that it will underlie that half of the width of the flange **19** adjacent to the end plate **18** and half of the width of a similar flange on the end plate **17** and later to be referred to, although it will be understood that the width of the floating bridge **22** could vary so as to have a somewhat different relationship with respect to the widths of said flanges.

The floating bridge **22** has secured to it a series of upwardly extending bolts **23** which pass through the openings **21** in the flange **19** previously referred to, there being in the present embodiment three of the bolts **23**, two of which are shown in Figs. 2 and 3 while the third would be located in the broken away central portions of said figures.

The bolts **23** are secured to the upper side of the bottom of the channel-shaped floating bridge a relatively substantial distance to one side of the longitudinal center line of the bridge for a purpose later to become apparent. The bolts **23** are provided with relatively thin heads **24** which are welded or otherwise secured to the upper side of the bottom wall of the floating bridge.

The channel-shaped floating bridge **22** mounts a sealing means **25**, later to be referred to more in detail, and which sealing means is substantially rectangular in cross section and preferably is formed of a compressible natural or synthetic rubber adhered to the floating bridge by a suitable adhesive or cement. The flange on the left-hand side of the bridge **22**, as viewed in Fig. 4, is of less height than the other flange of the bridge to provide for greater compressibility of the sealing means **25** that is adjacent thereto.

The bolts **23** extend through the sealing means **25** as well as the openings **21** and their upper ends project above the flange **19** and mount thereon washers **26** and

nuts **27**. When the floating bridge is secured to the flange **19** the nuts **27** are not tightly screwed down on the bolts **23** and, in fact, are only screwed down enough to bring the upper side of the sealing means **25** into engagement with the flange **10** and such that they can be unscrewed manually by the fingers.

In view of the fact that the nuts **27** are not firmly tightened down on the bolts and there is a clearance between the wall of the openings **21** and the circumference of the bolts the floating bridge **22** can have limited rocking movement in multiple directions relative to the flange **19**, it being recalled that said bolts are located a substantial distance to one side of the longitudinal center line of the floating bridge whereby certain of said rocking movements will have a relatively long radius.

The opposite straight end portions of the floating bridge **22** do not engage the marginal sealing means **11** when the top section **13** is in closed position but are supported by the horizontal arms of the angle brackets **28**, the vertical arms of which are rigidly secured to the inner sides of the rear and front side walls of the body **10**. These angle brackets **28** provide a structural support for the opposite ends of the floating bridge when the top section **13** is closed but do not prevent the floating bridge from having said limited rocking movements.

The marginal sealing means **11** substantially midway of the longitudinal length thereof at the rear and the front sides of the body **10** is cut away and substantially rectangular sealing means **29** are vulcanized to the ends of the sealing means **11** and are secured to the marginal upper edge of the rear and front walls of the body **10**. These sealing members **29** on their inner longitudinal edges and substantially midway of the ends of the members are provided with extension portions **29***a* which overlie and engage a portion of the horizontal arms of the angle brackets **28**. The opposite ends of the floating bridge engage the portions **29***a* adjacent their free ends and compress the same. The extension portions **29***a* and the sealing members **29** are molded to have a rectangular cross section.

The sealing members **29** also are provided on their upper sides and in alignment with the portions **29***a* of the members in the transverse direction of the body with slight depressions or recesses **30** which are indicated for illustrative purposes as of rectangular configuration.

The opposite ends of the sealing means **25** where said means extends beyond the opposite ends of the floating bridge **22** have their undersides formed on a radius as clearly indicated in Fig. 3. Also the opposite ends of the sealing means **25** terminate in very thin portions which may be termed feather portions as indicated at **25***a* in Fig. 3 and which thin portions overlie the depressions or recesses **30** in the sealing members **29** for a purpose later to become clear.

The end plate **17** of the top section or lid **12** has its lower edge shaped substantially the same as the lower edge of the end plate **18** of the lid **13** and said lower edge of the end plate **17** is provided with a similarly contoured flange **31** extending laterally of the end plate toward the head end of the casket.

We may now assume that the section or lid **13** is in closed position and that the top section or lid **12** is swung downwardly to closed position. This movement of the lid **12** brings the flange **31** of the end plate **17** of the lid into engagement with the sealing means **25**. Also the studs **15** of the lid **12** enter their cooperating draw down devices **16** and when the devices **16** are operated in unison from the foot end of the body the lids **12** and **13** will be drawn down tightly into sealing engagement with the marginal sealing means **11**. Also the flange **31** will be drawn into tight engagement with the sealing means **25** and will exert a compressing force on said sealing means.

Although the flange **31** is intended to be complemen-

tary to the sealing means 25 and the floating bridge 22 it may not have the same engaging contact with the sealing means 25 throughout the entire length thereof and if this is the situation the sealing means 25, due to its compressibility and because of the universal rocking or adapting movements of which the floating bridge is susceptible, will conform itself to the entire area of the flange 31 to provide a complete and efficient seal therebetween. Also the drawing down of the lids 12 and 13 by the draw down devices 16 will press the curved under surfaces of the opposite ends of the sealing means 25 into close sealing engagement with the upper surfaces of the extensions 29*a* of the sealing members 29. Furthermore, the drawing down of the lids 12 and 13 will exert pressure on the thin or feathered end portions 25*a* at the opposite ends of the sealing means 25 and cause said end portions to be pressed into the depressions or recesses 30 of the sealing members 29. Consequently an effective hermetic seal is provided transversely of the casket between the top sections or lids 12 and 13 and also between the same, the opposite ends of the sealing means 25 and the sealing members 29 at the front and rear marginal locations of the body.

From the foregoing description it will be noted that the novel floating bridge 22 which carries the transverse sealing means 25 provides for self-adaptation of the sealing means 25 to the contour of the flange 31 on the end plate 17 of the lid 12 to assure a perfect seal between the lids 12 and 13 transversely of the casket. Not only does the floating bridge 22 perform this function but it also performs the function of a transverse structural supporting element for the lids 12 and 13, thus imparting stability and strength to the casket.

Although a preferred embodiment of the invention has been illustrated and described herein it will be understood that the invention is susceptible of various modifications and adaptations within the scope of the appended claims.

Having thus described our invention what we claim is:

1. In a casket of the type having a body provided on its upper marginal edge with sealing means, separate top lid sections hinged to said body at the rear longitudinal side thereof and covering when closed the head and foot portions of said body, sealing means extending around said upper marginal edge of said body and engageable by said top lid sections when closed, and cooperating means carried by said top lid sections and said body at the front side thereof for drawing said lid sections into sealing engagement with said sealing means; a combined transverse seal and support at the adjacent ends of said lid sections when the latter are in closed position and comprising a bridge separate from said sections and extending transversely of the body and of a width to underlie the adjacent ends of both of said lid sections, means operatively connecting said bridge to one of said lid sections to have limited floating or self-adapting movement relative to said lid sections, and a sealing gasket carried by said bridge on the upper side thereof and engaging said lid sections when closed and of a length such as to extend beyond the opposite ends of said bridge and sealingly engaged said sealing means on the upper marginal edge of said body.

2. In a casket as defined in claim 1 and wherein said body is provided adjacent its upper marginal edge and inwardly of its rear and front sides with positive supporting members, while the opposite ends of said bridge are supported by said members when said one top lid section is closed.

3. In a casket as defined in claim 2 and wherein the sealing means on the upper marginal edge of said body at the front and rear thereof is provided with inwardly extending portions overlying a part of said supporting members, while the opposite ends of said bridge engage and compress said portions and the opposite ends of said sealing gasket which extend beyond the opposite ends of said bridge have their under surfaces curved and engaged with the upper surfaces of said inwardly extending portions of said sealing means.

4. In a casket as defined in claim 3 and wherein said sealing means on the upper marginal edge of said body outwardly of said inwardly projecting portions of said sealing means at the rear and front sides of the body is provided with depressions, while the opposite ends of said sealing gasket are reduced in thickness to provide substantially feathered ends and which ends overlie said depressions.

5. In a casket of the type having a body, separate top lid sections hinged to said body at the rear longitudinal side thereof and covering when closed the head and foot portions of said body, sealing means extending around the upper marginal edge of said body and engageable by said top lid sections when closed, and cooperating means carried by said top lid sections and by said body at the front side thereof for drawing said lid sections into tight sealing engagement with said sealing means; a combined transverse seal and support at the adjacent ends of said lid sections when the latter are closed and comprising an end plate on the inner end of the top lid section for the foot portion of said body and extending transversely of the body and having on its lower edge a flange extending toward the foot end of the body and provided with a series of openings spaced apart transversely of the body, a bridge extending transversely of the body and of substantially the same configuration as the lower edge of said end plate and said flange and underlying that portion of the flange that is adjacent to said end plate and extending beyond said lower edge toward the head portion of the body, said bridge having secured to it upwardly extending bolts passing through said openings in said flange with a clearance, a sealing gasket substantially of the same width as said bridge carried by the latter and with said bolts extending through said gasket, nuts on said bolts tightened sufficiently to engage said gasket with said flange but sufficiently loose to permit floating or self-adapting movement of said bridge and gasket relative to said flange and said end plate, the other of said lid sections being provided on its inner end with a similarly shaped end plate having a flange extending toward the head end of the body and engaging said sealing gasket when said lid sections are closed, said sealing gasket being of a length so as to extend beyond the opposite ends of said bridge and sealingly engage said sealing means on the upper marginal edge of said body.

6. In a casket as defined in claim 5 and wherein said body is provided adjacent its upper marginal edge and inwardly of its rear and front sides with positive supporting members, while the opposite ends of said bridge are supported by said members when the top lid section for the foot portion of said body is closed.

7. In a casket as defined in claim 6 and wherein the sealing means on the upper marginal edge of said body at the front and rear thereof is provided with inwardly extending portions overlying a part of said supporting members, while the opposite ends of said sealing gasket which extend beyond the opposite ends of said bridge have their under surfaces curved and engaged with the upper surfaces of said inwardly extending portions of said sealing means.

8. In a casket as defined in claim 7 and wherein said sealing means on the upper marginal edge of said body outwardly of said inwardly projecting portions of said sealing means at the rear and front sides of the body is provided with depressions, while the opposite ends of said sealing gasket are reduced in thickness to provide substantially feather ends and which ends overlie said depressions.

9. In a casket as defined in claim 5 and wherein said bridge is of upwardly facing channel shape while said

sealing gasket fills said channel and is substantially rectangular in cross section.

10. In a casket as defined in claim 9 and wherein said bridge at its opposite ends is formed with straight portions connected at their inner ends to inclined portions which in turn are connected at their inner ends to an intermediate straight portion parallel to said straight end portions, while the flange on the end plate of said lid section for the head portion of the body is of the same configuration as said bridge.

11. In a casket as defined in claim 9 and wherein one side wall of said bridge is of less height than the other side wall thereof to provide for increased compressibility of said sealing gasket adjacent said one side wall.

12. In a casket as defined in claim 1 and wherein the

means operatively connecting the bridge to one of said lid sections is located a substantial distance to one side of the longitudinal center line of said bridge to provide a relatively large radius rocking movement of said bridge in a direction transversely of the bridge.

13. In a casket as defined in claim 5 and wherein said upwardly extending bolts secured to said bridge are located a substantial distance to one side of the longitudinal center line of said bridge to provide for a large radius floating movement of the bridge.

References Cited in the file of this patent

UNITED STATES PATENTS

2,519,633	Brown et al.	Aug. 22, 1950
2,533,828	McEwan	Dec. 12, 1950