27. UNDERTAKING.

17

No. 819,301. PATENTED MAY 1, 1906.

L. H. MONTROSS.

BURIAL CASKET.

APPLICATION FILED MAR. 5, 1906.

2 SHEETS—SHEET 1.

Fig. 1.

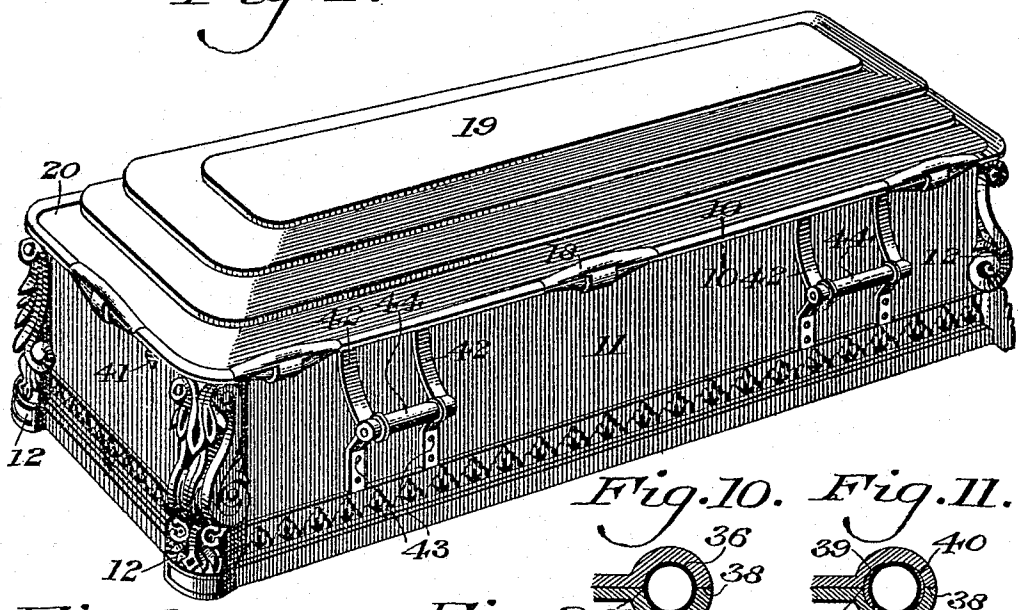


Fig. 10.

Fig. 11.

Fig. 3.

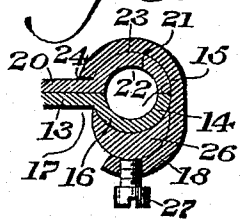


Fig. 2.

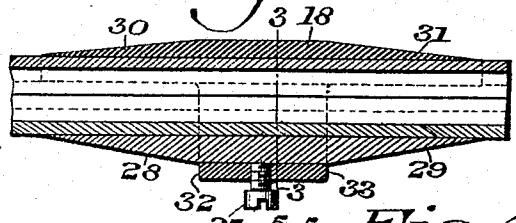


Fig. 5.

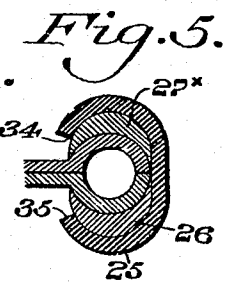


Fig. 9.

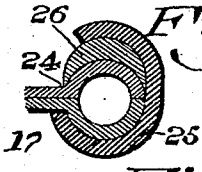


Fig. 4.

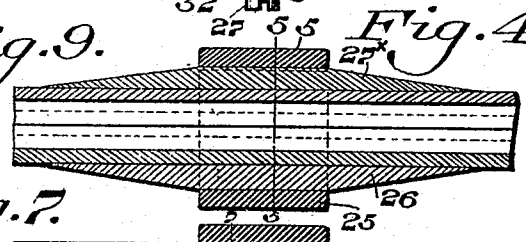


Fig. 7.

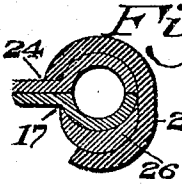


Fig. 6.

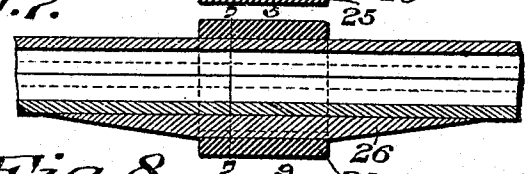
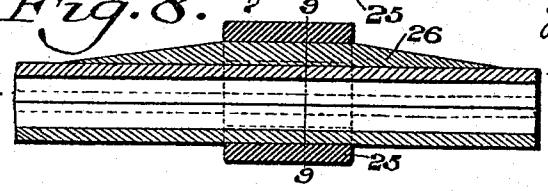


Fig. 8.



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27. UNDERTAKING,

17

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2 SHEETS—SHEET 2.

Fig. 12.

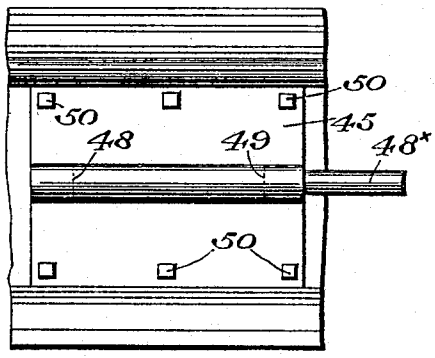


Fig. 13.

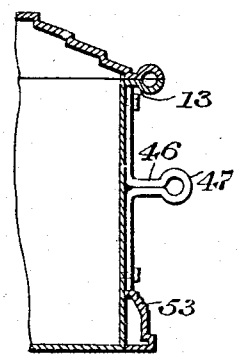


Fig. 14.

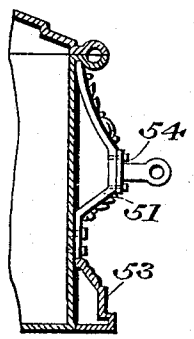


Fig. 17.

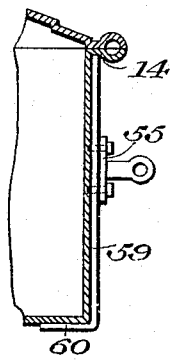


Fig. 16.

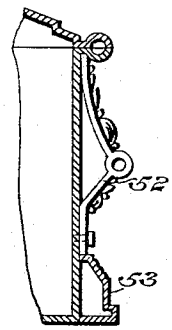
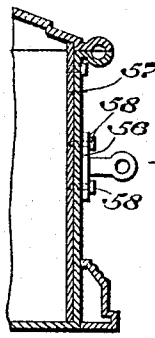


Fig. 15.



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UNITED STATES PATENT OFFICE.

LEVI H. MONTROSS, OF CAMDEN, NEW JERSEY.

BURIAL-CASKET.

No. 819,801. Specification of Letters Patent. Patented May 1, 1906.

Application filed March 5, 1906. Serial No. 304,301.

To all whom it may concern:

Be it known that I, LEVI H. MONTROSS, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Burial-Casket, of which the following is a specification.

An object of my invention is to form the joint between the several parts of such a preferably pressed-metal casket by a rib which shall at the same time form a finish to the raw edges of the metal, provide a seat for the sealing material, offer a continuous and uniform seat for the retaining-clamps, ornament the casket itself by a sightly molding in a quite usual location for such decoration, form a hollow beam to stiffen the casket against spring in all directions, particularly against buckling or bulging, and afford a stop against which the handles may be rested.

A further object of my invention is to cause retention of the clamp itself by means including fluid-pressure.

A further object of my invention is to provide a clamp coöperating with the hollow sealing-rim to support and stiffen the same.

A further object of my invention is to provide a clamp whose final setting or initial release is dependent upon the application or withdrawal of fluid-pressure.

A further object of my invention is to provide a continuous seat, (for sealing purposes throughout the line of junction of casket parts,) which is sealed by the insertion of fluid under pressure.

A further object of my invention is to provide a continuous casket-sealing whose direction of separation is such that fluid-pressure applied to seal the same will have no tendency to bulge or contract the sides or ends of the same.

A further object of my invention is to provide a casket-seal by the application of fluid-pressure.

A further object of my invention is to provide a casket-seal with fluid means for setting the same and to place a metal protecting-strip between the fluid-container and the edges of separation.

A further object of my invention is to provide a continuous sealing-rim of coöperating parts formed on the top and bottom casket portions, respectively, and to clamp the same and to seal this space by a tube inflated by protective fluid-pressure.

A further object of my invention is to provide a continuous sealing-space surrounding the casket, to place a closed tube therein, and to compress the said tube against the limiting-surfaces of the space by means of cement.

A further object of my invention is to provide a continuous sealing-tube within a passage formed between the walls of the separable parts of a casket and to expand said tube against the walls by a non-corrosive fluid protecting the tube against decay.

In carrying out my invention I project the meeting parts of the casket-sections in the form of ribs coöperating internally to form a passage of preferably curved and desirably cross-section and place therein a tube of flexible material, which I expand by means of fluid-pressure to make contact with the walls of the passage, with or without protective metallic strips external thereof along the junction edges. These ribs coöperate externally with the several sections to form curves within which a portion of the clamps are seated and to stop the handles against movement in a vertical direction. The clamps and reinforcing-strips form quite a material part of my invention, as they reinforce the material, permitting the use of comparatively thin sheet metal, preferably bronze or copper.

Figure 1 represents a perspective view of a casket embodying my invention. Fig. 2 represents a longitudinal cross-section through a portion of a clamp shown in Fig. 1. Fig. 3 represents a cross-section on the line 3 3 of Fig. 2. Figs. 4, 5, 6, and 8 are longitudinal cross-sections of modified forms of clamp. Figs. 5, 7, and 9 are transverse sections upon lines 5 5, 7 7, 9 9 of Figs. 4, 6, and 8, respectively. Fig. 10 is a section upon line 10 10 of Fig. 1, showing the rim and interior tubing. Fig. 11 represents a corresponding cross-section of a modification. Fig. 12 is an elevation of a handle used in connection with my casket. Fig. 13 represents a transverse section of Fig. 12. Figs. 14 and 15 are side elevations of modified forms of handle and handle-bracket. Figs. 16 and 17 are transverse sections of portions of my casket, showing modified forms of handle and bracket construction.

Similar numerals of reference indicate corresponding parts in the figures.

Referring to the drawings, 11 designates the base-section of a casket which is provided with separate decorative corner-pieces 12 and with an integral projecting rim 13 of hol-

low form at its outer extremity 14 to provide a preferably curved groove or gutter 15. The outside of this groove or gutter is a rib of corresponding shape at 16, between which and the body 11 is preferably provided a space 17, within which a portion of my clamp 18 is adapted to engage. The upper section 19 is provided with a like laterally-extending rim 20, whose outer part 21 is complementary in shape to the part 14, providing a downwardly-facing groove or gutter 22 of preferably curved cross-section, which together with the gutter 15 forms a passage entirely surrounding the casket at the joint thereof, which passage is of preferably curved and most desirably circular cross-section. A part of the benefit of my invention might be obtained without the curved cross-section; but the joint would not be of the most advantageous form. The outer and upper portion of 21 is in the form of an upwardly-extending rib 23, between which and the top 19 is formed a space 24, which provides a seat for a portion of my clamp.

In its preferred form and as shown in most of the clamps in Fig. 1 my clamp 25 consists of a strip of C cross-section fitting over the upper and lower portions of the laterally-extending ribs and closely engaging the same either directly or by means of an interposed reinforcing-strip 26, the clamp or the clamp and strip or strips constituting in its entirety a clamping member, so that either the clamp itself or a reinforcing-strip is in engagement with substantially the entire contour of the sealing-rib on the exterior thereof, reinforcing or supporting the same in close proximity or immediately over both points of separation of the walls of the passage formed. It will thus be seen that the pressure of a distended tubing between the walls in the spaces 15 22 will be directly taken care of throughout the entire boundary of said walls in every direction in which separation of the parts 13 and 20 might occur. This contact is intimate and effective.

In one of my forms I have shown a clamp in which the reinforcing-strip 26 may be temporarily secured or supported in intimate contact with the rim portion 16 by means of a screw 27; but it will be very evident that this means of holding the reinforcing-strip to its work will in most instances be entirely unnecessary, as the reinforcing-strips themselves may readily be tapered, as at 28 and 29, and fitting so accurately to the space allowed that they may be readily inserted from either end with whatever degree of tightness may be desirable. They are preferably made tight fits; but the pressure would be immediately increased and uniformly distributed by the increase of any internal pressure due to the expansion of the inflatable tube 36. This pressure is capable of accurate predetermination.

In Figs. 4 and 5 I have shown reinforcing-strips 26 and 27× both at the top and at the bottom, while in Figs. 6 and 7 the strip 26 is at the bottom only and in Figs. 8 and 9 a strip 26 is provided at the top only. In Figs. 2 and 3, as well as in all of the clamps illustrated in Fig. 1, I have shown the upper portion of the clamp itself performing the function of the reinforcing-strip in extending beyond the limits of the clamp at 30 and 31 to support a rim at a distance from the body of the clamp itself whose length would otherwise be only that between the edges 32 and 33, as shown in Fig. 2. It will be evident that as many clamps may be used as are desired and that within certain limits the reinforcing strips or clamps themselves may be made as long and therefore support as much of the rim as may in any particular instance be deemed desirable or necessary. In all of the forms of my clamp I have made the opening between the edges 34 and 35 of the C of sufficient size to permit the ready application of the clamp laterally at any point.

While my invention may be successfully carried out by any form of tubing which will make an air-tight joint with the surface of the space 15 22, I preferably make use of a pure-rubber tube 36, which has sufficient compressibility and resilience to be forced into most intimate contact with all the inequalities of the surrounding walls. It will be evident that the only point of access of external air or other corroding gases or fluids are at the edges 37 and 38, which separate the inner and outer limiting-surfaces of the top and bottom parts, respectively. In the form shown in Fig. 11 I specially protect this portion of the tubing against such corroding influences by means of strips 39 40, which are pressed against the limiting-surfaces of the upper and lower sections in proximity to the edges 37 and 38 by means of the fluid-pressure in the tube 36. These strips 39 40 may be formed of any suitable non-corrosive or protective material and may be supported in the position shown in any desirable way. In order to overcome the objections of undertakers to open cement or to themselves applying cement in such a form that it may engage the fabric used, I preferably apply the strips 39 and 40 to the tubing 36 by cement or other means initially, avoiding the necessity of cementing it to the limiting-walls of the passage and avoiding the danger of injury in placing the parts which would exist were the strips to be applied to the walls of the passage initially. I form the strips 39 40, preferably, of very thin metal, such as lead, which may readily be pressed into exact conformity to the surface of the metal in proximity to the edges 37 and 38. I apply the tubing to the passage in a collapsed form, or may exhaust the air from said tube 36, if desired. Where, however, it is desired to in-

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flate the tube by air this is unnecessary, and the tubing may be inserted in approximately its normal size and additional pressure brought to bear to compress it tightly against the surrounding walls. The fluid-pressure of whatever character is preferably applied by means of an inlet valve and passage 41.

In all of the forms of my invention the casket may be exhausted of air in connection with the sealing, if this may be desired, and this exhaustion may take place at any time, either initially, if the initial sealing caused by application of the clamps be sufficient to permit this issue concurrently with the inflation of my tube to form the seal, or subsequent to the sealing operation, and this exhaustion may take place by any well-known means through an aperture-valve. (Not shown.). Injury to the body from without and, in the case of contagion, dissemination of the germs from within are alike to be avoided.

In making use of a cement seal I insert the cement within my tube 36 under pressure with or without previous exhaustion of the air contained therein or auxiliary use of air-pressure. There is no exposed cement. When the air is previously exhausted the cement fills up substantially the entire space within the tube and itself holds the rubber of the tubing tightly compressed against the surface of the surrounding metal. With a cement which sets to practically its initial volume this provides for continuous compression of the rubber of the tubing and for a perfect protection of this tubing against oxidation or other corrosion from within. Where the air is not previously exhausted or where air is inserted along with the cement, or before the cement has entirely set, there is a consequent expansible medium taking care of the diminution of the volume of cement. If one be used which does not set to substantially its initial volume, the expansibility of the air maintains the compression of the rubber after the setting of the cement.

I may make use of an inert gas, such as nitrogen gas, or of any fluid which may not prove injurious to the particular material selected for the tubing. Thus I may make use of a protective oil with or without additional gas-pressure to maintain a constant coating of protective oil. It will be evident that this coating of oil or other protective liquid will be maintained by the presence and consequent creeping of the oil notwithstanding that a portion of the tubing is filled with air or other gas.

Since the corrosion in the form which I have described can take place from the exterior only except as some oxygen from the air contained in certain cases might be "satisfied," it will be evident that the joints 37 and 38 are the points of attack. It is for this reason that I provide a clamp which so completely embraces and supports the rim in proximity to these edges of junction or separation and which prevents movement of the parts in the direction of such separation.

In all of the forms which I have shown and described deterioration of the compressed rubber or other material of the tube 36 by reason of attack at the joints 37 and 38 will be slow because the rubber itself may be quite thin and the rubber within reach of the corroding agent at the joint must be almost completely destroyed before any of this corroding agent can have access to a portion adjoining it. In all the forms except my form depending upon gaseous inflation alone this slow process of corrosion and substantial removal of the corroded surface must take place throughout substantially half the surface of the passage within which the tube lies before any leakage of corroding agent can take place into the casket. In the form employing a protected liquid corrosion would release the liquid to protect the corroded and adjoining surfaces.

In the lead or other strip-protected joints shown in Fig. 11 even the slight opportunity for corrosion at the joints 37 and 38 is done away with. It will be evident that the form shown in Fig. 11 may be used with any of the inflating mediums to which I have herein referred and that any of the forms of clamp which I have illustrated and described may be used in connection with any of the tubes and inflating means herein mentioned.

In all of the forms of handle which I have illustrated, except that in Fig. 15, I have provided a handle or handled bracket, which coöperates with the lateral extension of the lower portion of the casket, so that the rim or the "neck" of the rim forms a stop against which the handle or handled bracket abuts and takes a large part of the vertical strain due to the handle. In all of the handles shown and in every handle which projects at all from the body of the casket there is also a coupling strain tending to crush the walls of the casket inwardly at the upper point of support of the handle. This tendency to buckle is also met by the rim, which in the form shown—that is, having a circular cross-section—is equally strong to resist strain in all directions. Both the upward and inward movements of the handle due to these strains are therefore prevented by this rim, and the rim is reinforced to withstand these strains by the clamp and by the reinforcing-strips. In the form shown in Fig. 15 the interior protecting-strip is secured to the casket-body in proximity to this rim, obtaining a portion of the advantage of the rim as protection against vertical and buckling strains.

In Fig. 1 I have shown strips or brackets 42 secured to the body of the casket at 43 and resting in the space 17 beneath the rib 14 in such manner as to be supported by the

projecting strip or neck connecting the body of the casket with the rib 14, this support preventing longitudinal movement of the strips. Intermediate the length of these strips I locate a handle 44, which may evidently be of any desired pattern.

In Figs. 12 and 13 I show a strip, sheet, or plate 45, having a width in excess of either of the strips 42, for the purpose of making use of this single strip 45 in place of the plurality of strips in Fig. 1. I form a projected neck 46, having at its end a roll 47 by which the upper and lower parts of the plate and neck are connected. This roll may itself form the handle, or a handle 48× may be secured therein, which handle may extend approximately the length of the casket, if desired. The neck 46 may be cut out between the parts 48 and 49 to permit the hands to pass therethrough, if desired. This plate is secured by bolts, rivets, or studs 50 with its upper portion in contact with the neck adjoining the rib 14 at 13, as in all of the other forms shown, except that in Fig. 15. At the lower edge of the plate 45 in the form shown in Figs. 12 and 13 and of the brackets 51 and 52 in the form shown in Figs. 14 and 16 I "finish" by means of a preferably metal molding 53, which will evidently improve the appearance of the casket, as well as prevent the bottom of the plate or bracket from showing excessively.

In the form shown in Figs. 14, 15, and 17 I provide a separate handle-plate 54, 55, or 56, riveted or otherwise secured to the body or bracket, as the case may be.

In the form shown in Fig. 15 an inner strengthening-rib 57 is provided to assist in prevention of buckling and to transmit the vertical and buckling strains to a point in proximity to the stiffening and sealing rib. In this case the handle is intended to be separable from the casket, and for that reason the bolts 58 are not passed entirely through the strip 57 to avoid leakage of air at this point.

In the form shown in Fig. 17 the external strengthening-strip or handle-support 59, in addition to being seated beneath the rib 14 and against the neck 13, is inwardly extended at 60 beneath the body of the casket and secured thereto in any suitable manner.

In all of the forms which I have shown it is the intention that the means of attachment of parts shall be fluid-tight, and it is evident that this result may be accomplished in a variety of ways with or without the initial use of cement and by means of bolts, screws, pins, or studs of any character, riveted or not riveted, as the needs may require. The recognized points of possible or probable leakage can be readily and effectually sealed or protected by soldering.

It will be evident that the neck or extension joining the rim 14 to the body of the casket may be made as long or as short as may be desirable or necessary in order to accommodate the handles or handle-brackets, strips, or supports, and the clamps where a form of clamp is to be used, such as in Fig. 9, which projects into the neck or that the neck may be altogether omitted where it is desired to rest the full or reduced end of the bracket or support against the rib itself or within the groove lying between it and the body of the casket in the absence of the neck. Where the neck is omitted a clamp of the form shown in Fig. 8 may be used to overlie and support the rib above the handle-strip or the clamps may be spaced about the handle strip or support.

It will be evident that a part of the benefit of my invention may be obtained by the use of different portions of the same separately and that I am entitled to protection in such use within the scope of my claims.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a burial-casket, upper and lower sections having lateral extensions grooved upon their lower and upper faces complementarily to form a passage therebetween, clamping members engaging said lateral extensions and a pneumatically-inflated tube for tightening said clamping members and sealing said passage to prevent access of air to the casket.

2. In a burial-casket, top and bottom sections having each lateral extensions of curved section, coöperating to form a passage therebetween said extensions forming grooves above and below the extensions respectively between them and the top and bottom sections, C-clamps resting within the upper groove, reinforcing-strips resting within the lower groove, said C-clamps and strips forming an inside surface conforming to the exterior of the lateral extensions and an inflatable tube for sealing the interior of said extensions against passage of air into the casket.

3. In a burial-casket, upper and lower sections having coöperating lateral extensions forming downwardly and upwardly directed grooves which coöperate to form a passage therebetween, clamping members securing said sections together by means of the extensions, an inflatable tube within said passage for hermetically sealing the casket and a protective material within the tube.

4. In a burial-casket, upper and lower sections having lateral extensions coöperating to form a passage thereabout, clamping members surrounding said passage a tube within the passage and cement within the tube.

5. In a burial-casket, upper and lower portions having laterally-extended curved edges coöperating to form upper and lower grooves between said extensions and the upper and lower sections respectively a tube within the grooves, a tube-protective medium within the tube preventing access of air to the walls

thereof, a gas within the tube, and a clamping member engaging said extensions within said grooves.

6. In a burial-casket, separable parts having coöperating lateral sealing extensions in combination with a clamp surrounding said extensions and reinforcing means adjacent said clamp supporting said extensions.

7. In a burial-casket, separable sections having semitubular coöperating sealing extensions about their junction, a clamp inclosing said semitubular extensions and reinforcing means extending beyond the clamp and conforming to the shape of the extension.

8. In a burial-casket, semitubular coöperating meeting flanges, an inflatable tube within said flanges, a clamping member preventing separation of the flanges and a preserving-strip between the tube and the line of division of the flanges.

9. In a burial-casket, separable sections having meeting grooved coöperating flanges forming a channel between the sections, means for retaining the flanges from separation, an inflatable tube within the channel and a preserving-strip secured to the tube in proximity to the line of division of said flanges.

10. In a burial-casket, separable sections having a strengthening-rib about their meeting edges, a handle, a handle-support resting against said strengthening-rib, a clamp surrounding said strengthening-rib and a reinforcing-strip secured to said clamp and adapted to overlie said rib above the point of contact with the handle-support.

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