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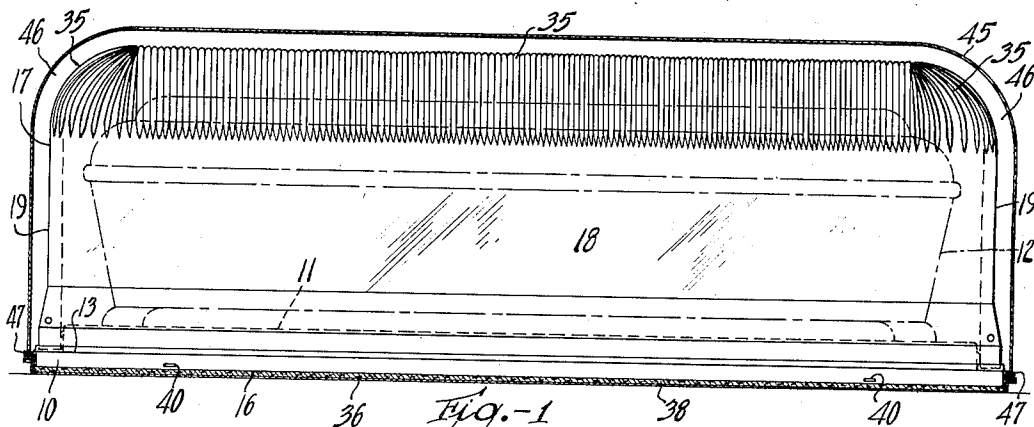
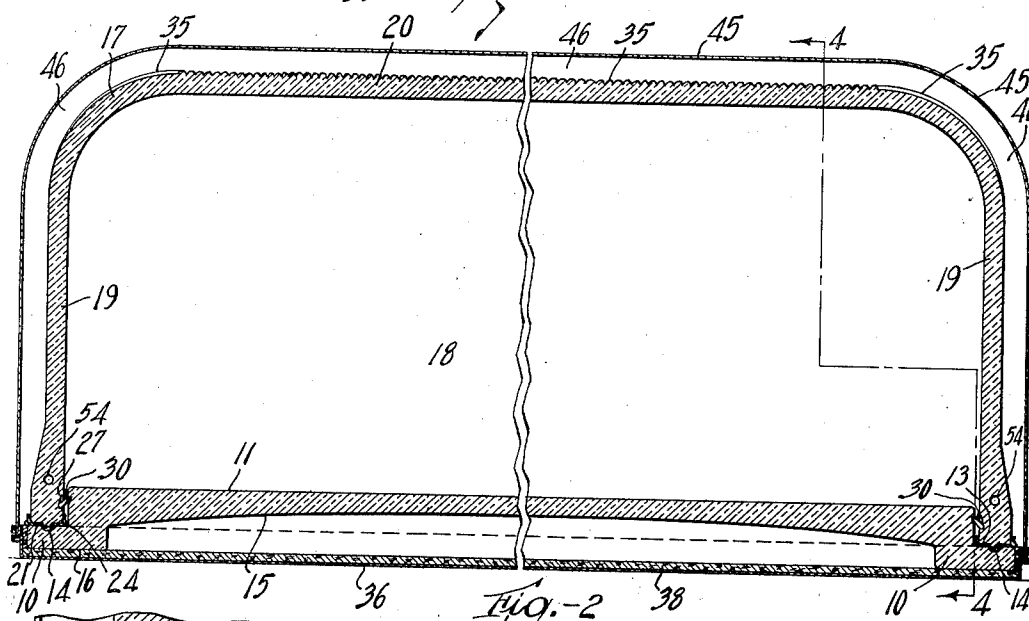
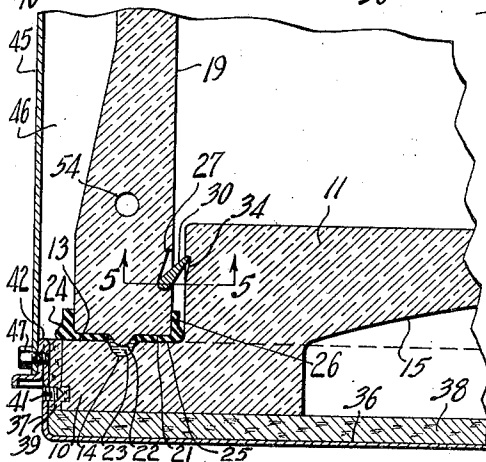
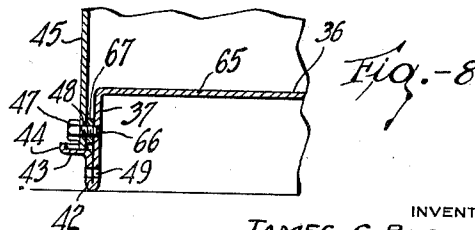
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2,111,275

BURIAL VAULT

Filed Jan. 6, 1936

2 Sheets-Sheet 1



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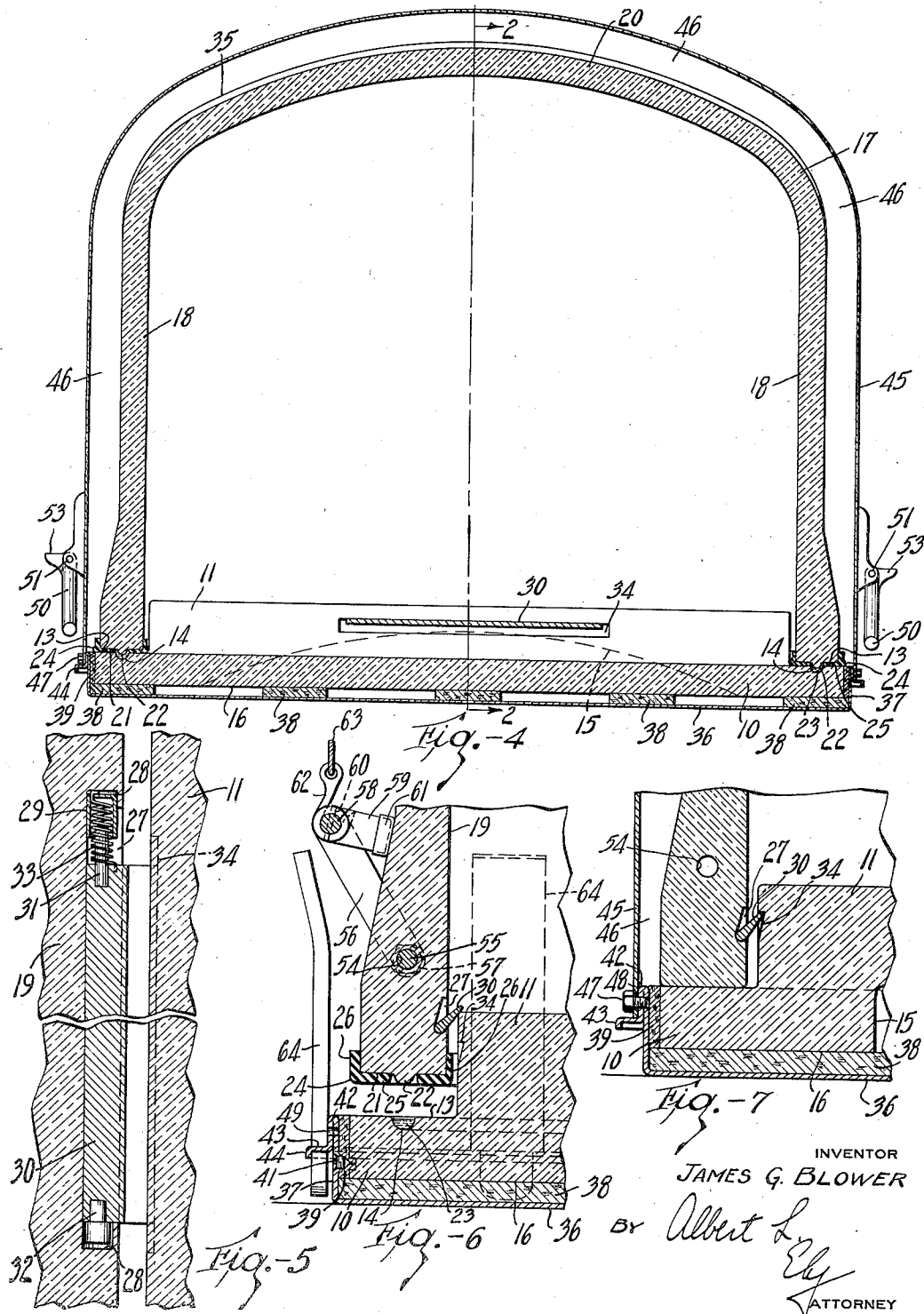
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2 Sheets-Sheet 2



UNITED STATES PATENT OFFICE

2,111,275

BURIAL VAULT

James G. Blower, Akron, Ohio

Application January 6, 1936, Serial No. 57,749

4 Claims. (Cl. 27—35)

This invention relates to improvements in burial vaults and has for its primary object to provide a vault made of glass and hermetically sealed in such a manner as to permit expansion and contraction due to temperatures but without permitting any passage of fluid either from within or without the vault.

A further object of the invention is to provide a sectional glass vault having a base and top with automatically actuated mechanical means for interlocking the same against unauthorized separation.

A still further object of the invention is to provide a resilient gasket between the top and base to prevent breakage and provide a cushioning means for the top when lowered into engagement with the base but without affecting the efficiency of the hermetic seal.

Another object of the invention is to provide a metal receptacle to receive the base so as to prevent breakage of the latter both in use and in transportation.

Another object of the invention is to provide a metal enclosure for the top and connected to the metal base receptacle, there being an air space provided around the top and sides so as to prevent sweating within the latter which ordinarily results from changes in earth temperatures, sweating taking place within the metal enclosure and outside of the glass top and sides.

Another object of the invention is to utilize the metal receptacle and enclosure as an inexpensive all-metal vault by merely reversing the former position of the receptacle and securing them together, the casket resting upon the inverted bottom of the receptacle.

With the objects above indicated and other objects hereinafter explained in view, the invention consists of the construction and combination of elements hereinafter described and claimed.

Referring to the drawings,

Figure 1 is a side elevational view of a vault embodying the present invention, the metal enclosure and base receptacle being in section;

Figure 2 is a longitudinal sectional view taken on line 2—2 in Figure 4 showing the general assembly on an enlarged scale;

Figure 3 is a fragmentary vertical sectional view showing details of the structure on an enlarged scale;

Figure 4 is a transverse sectional view taken substantially on line 4—4 in Figure 2;

Figure 5 is a transverse sectional view taken

on line 5—5 in Figure 3 and showing the details of the interlocking mechanism;

Figure 6 is a fragmentary sectional view showing the manner in which the top is lowered into engagement with the base;

Figure 7 is a fragmentary sectional view showing a modified construction but embodying the present invention;

Figure 8 is a fragmentary sectional view showing the arrangement of the metal receptacle and enclosure when used alone as a vault.

In the drawings, a vault embodying the present invention is shown which comprises a glass base 10 of suitable size and preferably rectangular in shape although other shapes may be used. The base has a raised portion 11 upon which a casket 12 may be supported as indicated in dot and dash lines in Figure 1. This raised portion is inwardly of the outer edge of the base 10 to provide a marginal flange 13 which has a continuous groove 14 provided in its upper surface substantially centrally thereof. The base 10 is hollowed out at 15 upon its under side to lighten the structure, there being provided a flat surface 16 of sufficient extent so that the base may be securely supported thereby, as more clearly shown in Figures 2 and 4.

A glass top or enclosure 17 is provided which is hollow and has side walls 18, end walls 19 and top wall 20, all being integrally united, the lower end being open. These side and end walls are shaped on the inside so that the lower portions fit over the raised portion 11 on the base 10 with some clearance. The bottom edges of the side and end walls are flat and continuous as indicated at 21 and are provided with a continuous bead or tongue 22 coextensive with the groove 14 and projecting slightly thereinto, the bead and groove being so proportioned, however, that a clearance is maintained therebetween under all conditions. A plastic, non-hardening cement 23 is placed within the groove 14 to a height so that the bead 22 will be embedded therein. By using a non-hardening, plastic cement a yieldable joint is provided to take care of expansion and contraction and yet maintain a hermetic seal.

A cushioning means is provided between the enclosure 17 and the base 10 which in the present instance consists of substantially L-shaped rubber members 24 having horizontally disposed flanges 25 engageable with the bottom edges of the side and end walls and extending inwardly to a position adjacent the bead 22. Vertically disposed flanges 26 extend upwardly in engage-

ment with the adjacent walls, one of the flanges being disposed in the clearance provided between the enclosure 17 and raised portion 11 as more clearly shown in Figure 4. The rubber members 24 are continuous so as to produce a seal when in lowered position as shown in Figure 3, the thickness of the flanges 25, however, being such as not to interfere with the hermetic sealing function of the bead 22 and groove 14.

A mechanical locking means is provided between the enclosure 17 and base 10 which automatically secures them against unauthorized separation. In this instance the locking means is provided upon the inside of the enclosure which makes it inaccessible from the outside. At the opposite ends of the enclosure 17 grooves 27 are provided upon the inner surfaces below the raised portion 11 and extend horizontally for a portion of their width as more clearly shown in Figure 5. At the opposite ends of the grooves adjacent the lower portions are bores 28. As the construction of the locking mechanism is identical at the opposite ends of the enclosure a detailed description of one will be sufficient for a clear understanding thereof.

In one of the bores a tubular member 29 has a closed end fitted tightly therein and its open end projecting into the groove 27 as more clearly shown in Figure 5. A metal latch member 30 of lesser width than the groove 27 but of substantially the same depth is normally disposed within the latter and has extensions 31 and 32 projecting from its lower opposite ends coaxially of the bores. A coiled spring 33 encircles the extension 31 and has one end secured in the adjacent side of the latch member 30, the opposite end being disposed within the tubular member 29 and secured to the end thereof. This arrangement permits axial movement of the latch member 30 as well as rotary movement about the axis of the extensions and the spring exerts a pressure on the latch member 30 tending to move its free end inwardly toward the raised portions 11 of the base as more clearly shown in Figure 6. The extension 32 has an enlarged head loosely fitting within the other bore. A groove 34 is provided in the adjacent end of the raised portion 11 with which the free end of the latch member 30 cooperates and is so shaped that any attempt to raise the enclosure 17 off of the base 10 causes the latch member 30 to more securely engage the base. The spring 33 maintains the latch member 30 normally in engagement with the groove 34 in the base 10. This latching means being provided at opposite ends of the base prevents the enclosure from being removed when once lowered into place. The top wall 20 is provided with ribs 35 on its outer surface which extend transversely and have their opposite ends blending into the outer surfaces of the side walls 13 as more clearly shown in Figure 4, the end ribs blending into the end walls 19 as more clearly shown in Figure 1.

Glass vaults heretofore available are subject to breakage and have been broken because of inadequate protection which results in considerable loss by reason of the great expense for vaults of this type. To materially lessen this disadvantage a metal receptacle 36 is provided which has an upstanding marginal flange 37. The base 10 is disposed within this metal receptacle 36 and rests upon cushion members 38, preferably strips of cork material, which extend longitudinally the length of the base and are

spaced transversely thereof, five being illustrated but any desired number may be employed. The flange 37 is spaced slightly from the adjacent edges of the base 10 to receive continuous strips 39 of similar material. This prevents any metal and glass contact which might result in damage or breakage. The base 10 is provided with spaced slots 40 on its sides and ends and the metal receptacle has screw-threaded openings in its flange 37 adjacent the slots 40 to receive screws 41 which when turned into position forces the material 39 into the slots to provide a secure connection, the heads of the screws being flush with the outer surface of the flange as more clearly shown in Figure 3.

The flange 37 on the metal receptacle 36 has its upper end bent downwardly upon itself at 42 and then outwardly to provide a lateral flange 43 terminating in a marginal extension 44. A metal enclosure 45 encloses the glass top 17 and is of complementary shape, there being a space 46 provided between adjacent walls. The lower end of the metal enclosure 45 rests upon the lateral flange 43 and is secured to the base receptacle 36 by bolts 47. These bolts 47 have screw-threaded engagement with screw-threaded openings 48 provided in the lower portion of the metal enclosure with the ends of the bolts projecting freely into aligned elongated openings 49 provided in the flange 37 and downwardly bent portion 42. This metal enclosure not only protects the glass top 17 from being damaged or broken but by providing the space 46 therebetween any sweating occurring by reason of changes in surrounding earth temperatures will be confined to the inside of the metal enclosure 45 and therefore prevent any similar sweating from taking place within the glass vault. Hand grip members 50 are pivotally secured at 51 to the outside of the metal enclosure 45 and have stop portions 53 engageable with the enclosure to limit the pivoted movement of the hand grip members 50 so that the enclosure may be lowered into engagement with or removed from the base receptacle 36.

In lowering the glass top 17 into position any method may be employed, but due to its weight and breakable nature care, of course, should be exercised. Preferably, as shown in Figure 6, the ends of the glass top 17 are provided with transverse openings 54 extending entirely there-through adjacent the lower portion. A steel rod 55, covered with rubber, is placed within the opening and has a loose fit so that it can be readily removed. The opposite ends of the rod project beyond the sides of the glass top and receive the lower ends of links 56 which are held in place by nuts 57 threaded onto the ends of the rod. The upper ends of the links 56 receive the opposite ends of a second steel rod 58 on which is mounted at intervals a plurality of brace members 59. The outer ends of these brace members are secured to the rods by pins 60 so as to maintain them in angular position so that their ends abut the adjacent sides of the glass top 17, the free ends being covered with rubber 61 to prevent metal-to-glass contact. A hook 62 engages the rod 58 between the link 56 and adjacent brace member 59 which prevents any appreciable sliding movement of the hook and a cable 63 has one end connected to the hook and its opposite end available for lowering the glass top 17 into engagement with the base 10. Guide bars 64 are removably mounted in the flange 43 and extend upwardly so as

to prevent excessive swinging movement of the top as it is being lowered. All of the herein-mentioned parts are removable after the glass top has been lowered into position.

5 If an inexpensive vault is desired the metal base receptacle 36 may be used alone by reversing its position as shown in Figure 8 whereby the bottom becomes a casket supporting surface 65. The metal enclosure 45 rests upon the oppo-
10 site side of the flange 43 and the same bolts 47 connect the enclosure to the flange 37 by elongated slots 66 in the same manner as heretofore explained. Spacer washers 67 are provided between the enclosure and flange to compensate
15 for the bent portion 42 with which the enclosure engages in its reversed position.

While I have described the preferred embodiments of the invention, it should be understood that I am not to be limited thereto inasmuch
20 as changes and modifications may be resorted to without departing from the spirit of the invention as defined in the appended claims.

What is claimed is:

25 1. A burial vault comprising a hermetically sealed container adapted to receive a casket, and

a second hermetically sealed container completely surrounding the first container and being spaced from the first container at least around the top and sides thereof, thereby providing an air space between said containers to prevent
5 sweating within said first container.

2. A burial vault comprising a hermetically sealed container adapted to receive a casket, a second hermetically sealed container completely
10 surrounding the first container and being spaced from the first container at least around the top and sides thereof, thereby providing an air space between said containers to prevent sweating
15 within said first container, and connections hermetically sealing said second container to the first without substantially affecting the air space between said containers.

3. A burial vault as recited in claim 1 characterized by having at least the inner container
20 made of glass.

4. A burial vault as recited in claim 1 characterized by having the inner container made of glass and the outer container of metal.

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