March 14, 1933. B. DANCER 1,901,149

BURIAL VAULT

Filed Oct. 31, 1930 2 Sheets-Sheet 1

Fig. 1.

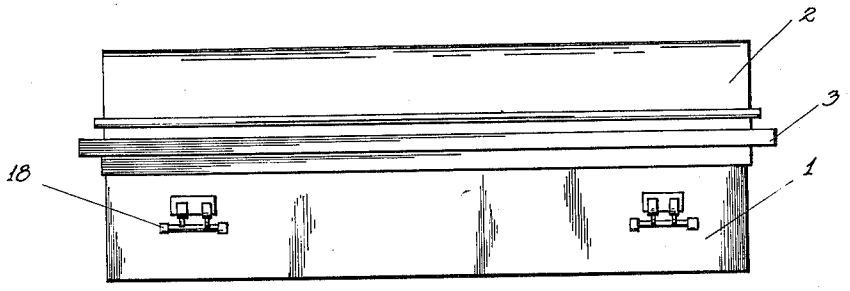


Fig. 2.

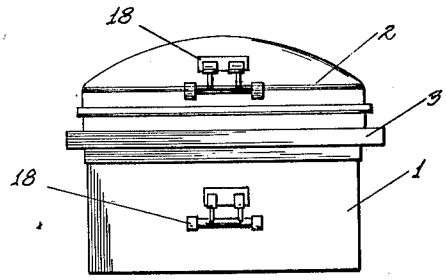


Fig. 3.

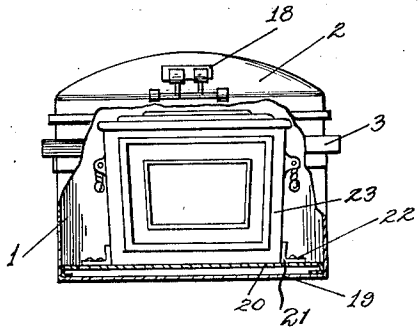


Fig. 4.

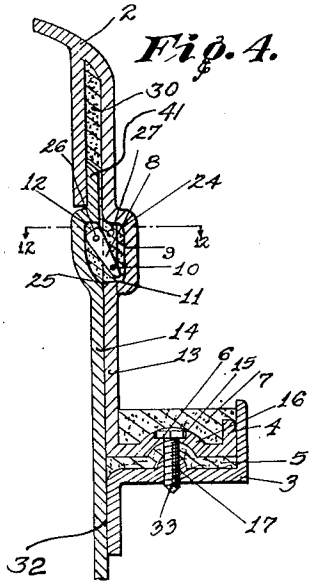
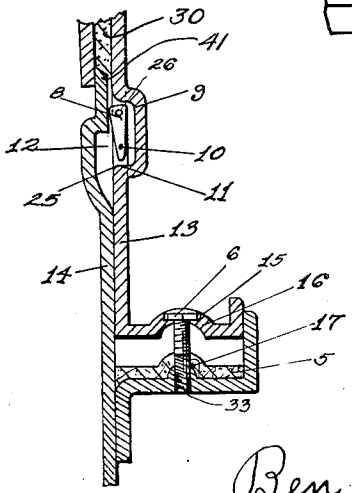


Fig. 5



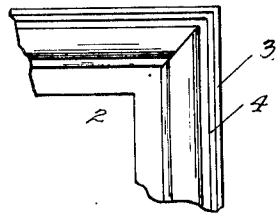


Fig. 6.

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BURIAL VAULT

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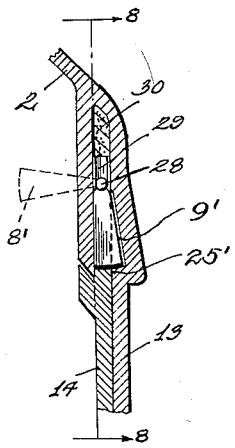


Fig. 7.

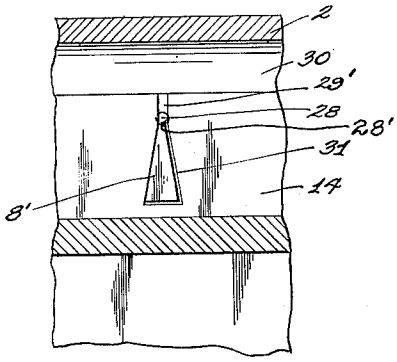


Fig. 8.

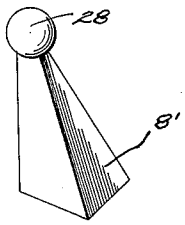


Fig. 9.

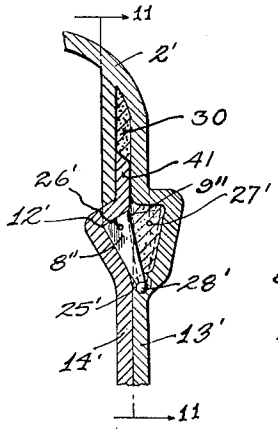


Fig. 10.

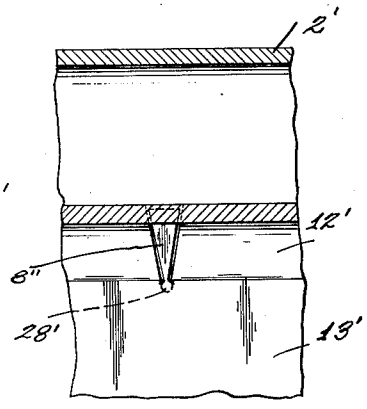


Fig. 11.

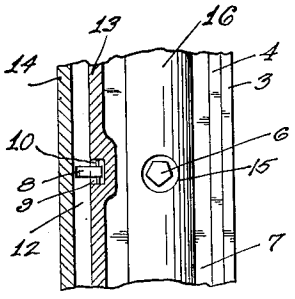


Fig. 12.

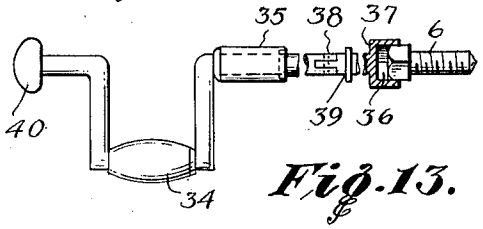


Fig. 13.

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By Joseph N. Dotson

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Patented Mar. 14, 1933 1,901,149

UNITED STATES PATENT OFFICE

BEN DANCER, OF HOUSTON, TEXAS, ASSIGNOR OF ONE-HALF TO PHYLURA E. SKALINDER, OF HOUSTON, TEXAS

BURIAL VAULT

Application filed October 31, 1930. Serial No. 492,542.

This invention relates to improvements in burial vaults and more particularly to a means for sealing and locking such vaults, and its main object is to prevent the entrance thereto of air, water or other disturbing elements of nature, and, at the same time, lock the same to prevent entrance thereto by unauthorized persons.

Another object is to provide a grave vault which is economical in construction, light in weight and yet strong and durable.

Another object is to provide a burial vault having a main body portion and a cover therefor, and means associated therewith for automatically and permanently locking the cover to the body portion.

Another object is to provide a means for rendering the permanent locking devices temporarily inoperative for the purpose of exhibiting and shipping the same, which means may be easily rendered inactive and the lock operative when the vault is ready for permanent use.

Another object is to provide an effective seal between the main body and cover members.

Another object is to provide a sealing means comprising an adhesive substance or tape which, for the purposes of shipment, may be used in place of compounds of gilsonite, pitch, tar or the like to form a temporary or even a permanent seal.

With the above-mentioned and other objects in view, the invention consists also in the parts and combinations and arrangement of parts, as hereinafter particularly described and further set forth in the claims appended hereto.

Referring to the drawings,—

Figure 1 is a side elevation of the complete burial vault;

Fig. 2 is an end elevation of the vault;

Fig. 3 is an end elevation showing a portion of the vault in cross section;

Fig. 4 is a wall section showing the top in a locked and sealed position;

Fig. 5 shows the position of parts just prior to locking;

Fig. 6 is a top plan view showing a corner of the vault;

Fig. 7 shows a modification of the cover locking and sealing means;

Fig. 8 is a view taken on line 8—8 of Fig. 7, looking in the direction of the arrows;

Fig. 9 is a perspective view of one of the latches;

Fig. 10 is another modification of the ball-lever lock used in an inverted position;

Fig. 11 is a side elevation of Fig. 10 taken on line 11—11;

Fig. 12 is a sectional view taken on line 12—12 of Fig. 4, looking in the direction of the arrows and showing an enlarged view of the top in locked position; and

Fig. 13 is a longitudinal view of a special extension socket wrench.

In the detailed description of the invention, similar reference characters indicate corresponding parts.

In the drawings, 1 represents the base of the vault provided with a sealing flange 3 welded at 32 and made an integral part of the base wall 14. Flange 3 has a tongue 17 that fits into the female portion of the flange 4, a part of the cover 2. The corrugated portion 16 of flange 4 has countersunk holes 15 in which are fitted bolts 6 of irregular shaped heads that require a special socket wrench as shown in Figure 13. The bolts 6 are pointed so as to enable them to be more easily threaded into the aperture 33. Between the two flanges 3 and 4, an adhesive substance such as tape 5, saturated with a sealing fluid, is compressed by means of a plurality of bolts 6 placed at strategic positions around the vault, their tightening action hermetically sealing the vault. This method of sealing is particularly advantageous as a temporary seal where a body is sent to a distant point and intended to be viewed before interment, or for storing a diseased body. If desired, the channel formed by the flange 3 may be filled with a suitable sealing and hardening liquid 7, thereby hiding the bolts 6 from view.

For strengthening purposes, the wall 13 of the cover 2 has been designed to lie adjacent the wall 14 of the base 1. Associated therewith are secreted recessed lever locks 8; the lower end of each lock butts into the corner

11 of recess 9 and is pivoted in an off centered position by means of a bolt 10. This lever can never assume more than a horizontal position because of the square shoulder at the point 25. The action of the cover 2 being placed over the base part 1, the upper wall 13 of which strikes the lever, pushing it back into the recess 9 until such time as the recess 12 comes directly opposite recess 9, at which time the gravity operated lock automatically drops into crosswise position which positively and permanently locks the vault. These locks are secreted at strategic positions along the sides and ends. It would be impossible by any tilting of the vault or of maneuvering of any kind to release all locks at the same time. As a further precaution, however, a reservoir 30 formed between the bifurcated parts of cover 2 is filled while in an inverted position with a hot sealing fluid which seeks its own level and after a short time, becomes semi-plastic; when the cover is turned right side up and placed over the bottom portion of the vault, the upper part of wall 14, designated 41, then penetrates the reservoir 30, forcing this plastic substance down into the locking recess 9 where it seals the crevice 25, solidifying and permanently sealing and holding levers 8, 8′ and 8″ in an ever fixed locked position. It is very evident to see how the impending weight of the earth upon the cover of the vault when buried helps in accomplishing and aiding automatically this designed result.

If, for purposes of showing or shipment of an empty vault, it is desirous to not have the levers 8, 8′ and 8″ lock, they may be easily removed or held in a fixed position by the placing of a bolt into holes 26 of levers 8 and 8″ of part 24, and then into the threaded hole 27, thereby suspending the action of the lever over any desired period of time.

For purposes of transporting and convenience in removing the casket 23, after lowering the casket into the already lowered base of the vault sleepers 20 are provided resting on the flooring 19 a convenient distance up from the bottom to allow removal of the lowering straps. These sleepers are provided with angled brace 21 and adjustable means 22. Handles 18 are provided for convenience in handling base 1 and cover 2 separately or assembled, when desired, thereby relieving strain that the body, casket and vault would cause on the lowering device if placed in position in one operation.

Fig. 7 represents a modified form of the lock. Lever 8′, as shown in Fig. 9, is a semi-pyramidically shaped device having a ball 28 as an integral part thereof. In the upper edge of base wall 14, a hole 29 is drilled a trifle larger than the circumference of the ball 28 so as to allow freedom in movement. A slot is then cut on the inner side of wall 14 at the thinnest edge of the drilled hole 29, shown in Fig. 8 as 29′, a triangle-shaped section 31 is then removed from the base wall 14 narrower at the top than the circumference of the ball, thereby forming shoulders 28′ from which the ball and lever can hang. When the cover is removed, the ball 28 may be inserted while held in a horizontal position, as illustrated by the dotted lines of Fig. 7, at which time gravity, if allowed, will assist the lever 8′ in assuming a normal balanced position as shown in Fig. 8. The base of the lever 8′, as illustrated in Fig. 7, is much wider than the thickness of the base wall 14; the innermost edge of the cover 2 crowds lever 8′ into the recess 9′ as the cover 2 slips into position due to the pressure of the earth on its surface, thereby wedging lever 8′ into a position from which it would be impossible to separate the cover from the base; in addition, however, the sealing liquid as previously described, works down and around the lock and permanently seals and interlocks the cover and base inseparably together. In some instances, in order to lessen the amount of material used, also the cost of manufacture, the cover wall need only extend to a point near that designated by the numeral 13, thus eliminating flange 16, and as a result, making it unnecessary to weld flange 3 to the base wall 14 as is suggested by either figure 8 or Figure 10 of the drawings.

Fig. 13 illustrates an extension ratchet socket wrench having a specially designed socket 37 to fit the five point bolt shown at 36 in Fig. 12, although this form is only suggestive, it not being intended to limit the scope of the application to this structure alone. This wrench is composed of a bearing grip 40, a handle 34, a knuckle joint 38 by which means it will be possible to fold the handle of the above wrench, a sleeve 35 intended to be slipped against the shoulder 39 to prevent the knuckle 38 folding when the wrench is in use.

It may be seen from the applicant's disclosures, that much labor and time may be effected by employing means whereby the whole work may be done from the surface, that the sealing and locking means are combined in such a way as when placed in readiness, automatically seal and interlock the bottom and top integrally and permanently together.

It is obvious that the means as herein described may be widely varied without departing from the spirit of the invention, and it is my intention to not restrict myself to the details of construction herein specifically disclosed.

What I claim is:

1. In a vault, a body member having a bottom and side walls extending vertically therefrom, a cover member having downwardly extending walls arranged to overlap said side walls a substantial distance when in operative

position thereon, oppositely extending recesses in said members, a gravity operable latch pivotally mounted in one of said recesses, said latch being movable automatically by gravity to engage said other recess when said cover member is in position.

2. In a vault, a body member having upstanding walls, a cover member arranged to telescope over said body member, said cover member comprising spaced wall portions, a gravity operable latch pivotally mounted on one of said spaced wall portions, a recess on one of said upstanding wall portions and adapted to receive said latch, said upstanding wall portions being positioned between said spaced wall portions when said cover is in position.

3. In a vault, a body member, a cover member therefor, a lateral extension on said body member, said extension having an upstanding end portion, a lateral extension on said cover member, said extensions being adjacent each other when the cover is in position, bolts engaging said extensions said end portion forming with said extensions a channel adapted to receive a sealing substance to provide a seal and cover the heads of said bolts.

4. In a vault, a body member having upstanding walls, a cover member arranged to telescope over said body member, said cover member comprising bifurcated wall portions forming a space therebetween, a gravity operable latch pivotally mounted on one of said spaced wall portions, a recess on one of said upstanding wall portions and adapted to receive said latch, said upstanding wall portions being positioned between said spaced walls when said cover is in position.

5. In a vault, a body member, a cover member therefor, a lateral extension on said body member, said extension having an upstanding end portion, a lateral extension on said cover member, said extensions being adjacent each other when the cover is in position, vertically extending bolts for engaging said extensions and a sealing substance overlying the heads of said bolts and retained by said end portion.

6. In a vault, a body member, a cover member therefor, a lateral extension on said body member, said extension having an upstanding end portion, a lateral extension on said cover member, said extensions being adjacent each other when the cover is in position, a sealing substance lying between said lateral portions, and means for drawing said lateral portions together, said end portion and said lateral extensions forming a channel adapted to receive a sealing substance whereby to cover the drawing means.

7. In a vault, a body member, a cover member therefor having a channel for receiving a sealing substance, a plurality of gravity operable latches pivotally mounted on one of said members, a recess in said other member, said latches being movable automatically by gravity to engage said recess when said cover member is in position, and means forcing said substance into a predetermined space around the junction of said members.

8. In a vault, a body member, a bifurcated wall cover member therefor adapted to receive a sealing substance while in an inverted position, a gravity operable latch pivotally mounted on one of said members, a recess in said other member, said latch being movable automatically by gravity to engage said recess when said cover member is in position, and means for forcing said sealing substance into the recess containing said latch.

9. In a vault, a body member, a bifurcated cover member therefor adapted to receive a sealing substance while in an inverted position, when the cover is in position, means for forcing said substance into a lower receptacle in connection with a channel formed by the lateral extension on said body member, having an upstanding end portion, a lateral extension on said cover member, said extensions being adjacent each other when the cover is in position, said end portions of said lateral extensions forming a channel adapted to receive a sealing substance.

10. In a vault, a body member, a bifurcated cover member therefor adapted to receive a sealing substance while in an inverted position, when the cover is in position, means for forcing said substance into a lower receptacle in connection with a channel formed by the lateral extension on said body member, having an upstanding end portion, a lateral extension on said cover member, said extensions being adjacent each other when the cover is in position, said end portions of said lateral extensions forming a channel adapted to receive a sealing substance, and means for drawing said lateral extensions together.

11. A vault comprising a plurality of parts, means for automatically locking said parts together when they are placed in vault forming position, means for preventing subsequent unlocking of said parts, a drawing means and means of making said drawing means inaccessible.

12. A vault comprising a plurality of parts, means for automatically locking said parts together when they are placed in vault forming position, and means for forcing a plastic substance around said first-named means to prevent subsequent unlocking of said parts.

13. A vault comprising a plurality of parts, a movable member on one of the parts adapted to take a predetermined position under the influence of gravity, means cooperating with the member when the parts are placed in vault forming position to prevent further movement of the parts, a drawing means and means of preventing subsequent extraction of said drawing means.

14. A vault comprising a plurality of

parts, a movable member on one of the parts adapted to take a predetermined position under the influence of gravity, means cooperating with the member when the parts are placed in vault forming position to prevent further movement of the parts, and means for forcing a plastic substance around said member to prevent subsequent movement thereof.

15. A vault comprising a plurality of parts, one of said parts being provided with a continuous channel, a continuous projection on another part adapted to be received in the channel when the parts are placed in vault forming position, a member on one part movable into a predetermined position under the influence of gravity, a shoulder on the other part adapted to cooperate with said member to prevent relative motion of the parts after the parts are placed in vault forming position, and a plastic substance in said channel adapted to be displaced by the projection when the projection enters the channel, and forced around the member to prevent subsequent movement thereof.

16. A vault comprising a plurality of parts, one of said parts being provided with a continuous projection adapted to be received into a channel on the other part when the parts are in a vault forming position, a plastic substance in said channel adapted to be displaced by the projection when the projection enters the channel to form a primary seal between said two parts, a continuous extension on each of said two parts, the extensions being in abutting relation when the parts are in a vault forming position, and a sealing substance between said two extensions to form an auxiliary seal for the two parts.

17. A vault comprising a body member and a cover member, one of said members having a continuous wall portion and a top section, a continuous flange affixed to and surrounding said wall portion, said flange being substantially perpendicular to said portion and parallel to said section, a continuous rim portion on the other of said members adapted to surround the flange when said members are in a vault forming position, said portions and flange forming a channel adapted to receive a sealing substance, and a seal packing material in said channel positioned between the interfitting of said flange and rim for effectively sealing the joint between the flange and said last named portion.

18. In a vault a bottom member provided with up-standing walls, a cover member provided with down-wardly extending sides of sufficient length to overlap said walls to provide a seal against entry of water, gravity detents mounted on said sides, recesses on said walls, said detents adapted to engage respective recesses automatically when the cover member is in place on the bottom member, a drawing means associated with said cover and bottom members which means are capable of being hidden from view by an auxiliary sealing means.

19. In a vault comprising a cover having a peripheral flange, a base having a complementary peripheral flange, the one adapted to nest in the other and to provide a substantial trough for the reception of a sealing material and means for drawing and securing said flanges together, said trough being of sufficient depth to provide concealment of the securing means.

20. In a vault a cover provided with peripheral flange that seats itself within a complimentary flange of the base member when in a vault forming position the said combined flanges provide a trough of substantial depth, removable means for securing said flanges to retain the cover and body members in an assembled relation and means disposed in the trough to conceal and prevent access to said securing means.

21. A vault comprising a body member and a cover member, one of said members having a continuous wall portion and a top section, a continuous flange affixed to and surrounding said wall portion, said flange being substantially perpendicular to said portion and parallel to said section, a continuous rim portion on the other of said members adapted to surround the flange when said members are in a vault forming position, said portions and flange forming a channel adapted to receive a sealing substance and a seal packing material in said channel positioned between the interfitting of said flange and rim, for effectively sealing the joint between the flange and said last named portion, a drawing means associated therewith which drawing means are capable of being hidden from view by means of a sealing substance.

In testimony whereof I affix my signature.

BEN DANCER.