Oct. 3, 1933. H. W. MITCHELL 1,928,671

BURIAL VAULT

Filed Jan. 2, 1932

Fig. 1.

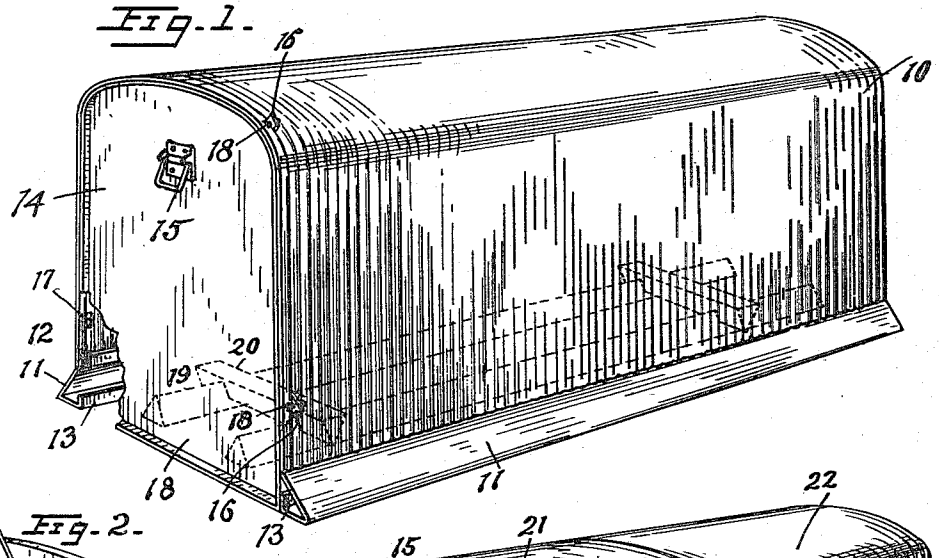


Fig. 2.

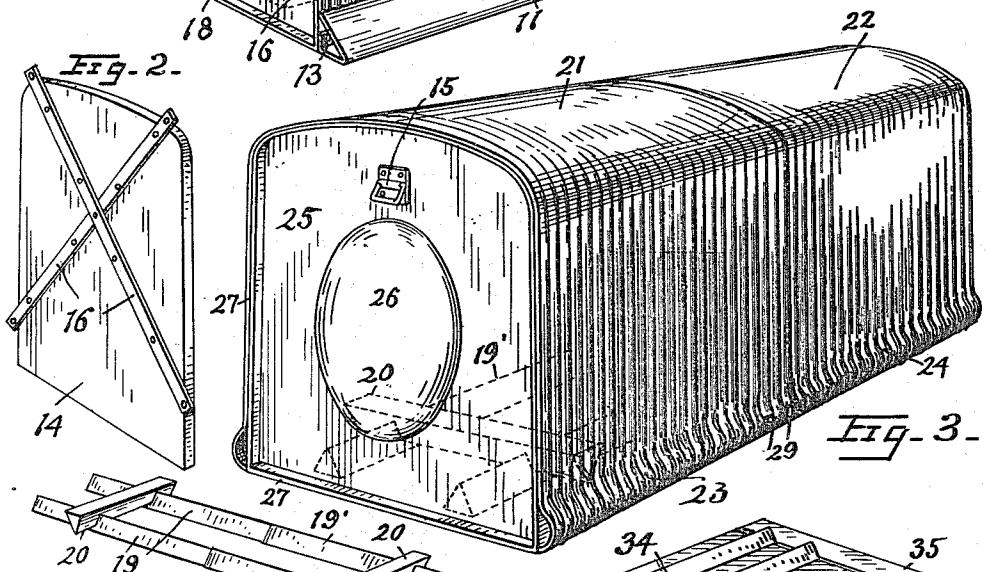


Fig. 3.

Fig. 4.

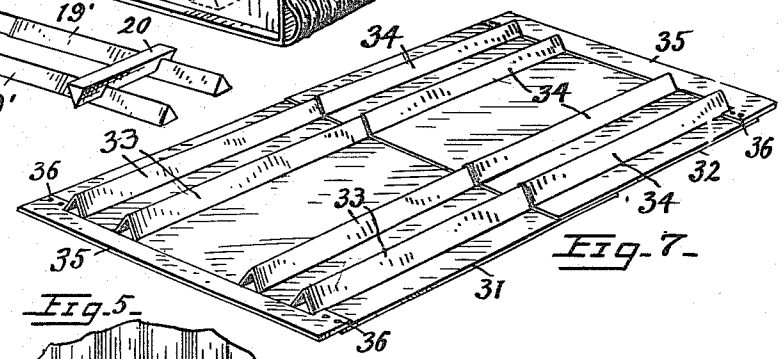


Fig. 7.

Fig. 6.

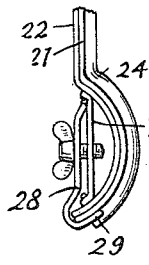
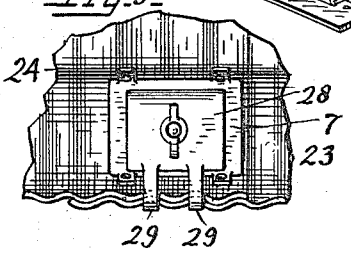


Fig. 5.



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BURIAL VAULT

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Application January 2, 1932. Serial No. 584,469

15 Claims. (Cl. 27—35)

This invention relates to improvements in burial vaults, particularly vaults of relatively low cost designed to perform more satisfactorily the functions ordinarily attributed to rough boxes.

One of the objects of the invention is the provision of a sheet metal vault of low cost which shall be adaped to withstand decay longer than the usual wooden rough boxes, and hence shall be adapted to provide protection for the casket through a longer period of time.

Another object of the invention is the provision of a vault so constructed that a series of them may be nested together for shipment in compact form.

Another object is the provision of a vault so constructed that water collecting in the vault will not be trapped there, but may find its way out readily at the bottom of the vault.

Still another object is the provision of a vault in two telescoping sections which may be nested together for shipment, and in assembly may be telescoped together to different degrees in order to provide vaults of different lengths.

A further object is the provision of braces for the end members so arranged as to constitute means for removably attaching the end members to the body member of the vault.

Other objects and features of novelty will appear as I proceed with the description of those embodiments of the invention which, for the purposes of the present application, I have illustrated in the accompanying drawing, in which

Figure 1 is a perspective view of a burial vault embodying the invention.

Fig. 2 is a perspective view of the inner side of one of the end members of the same.

Fig. 3 is a perspective view of a different form of the invention.

Fig. 4 is a perspective view of a casket support which may be employed in connection with the constructions of Figs. 1 and 3.

Fig. 5 is a detail elevational view of the inner side of the vault showing my adjustable fastening means.

Fig. 6 is an end elevation of the fastening means, and

Fig. 7 is a perspective view of another form of casket support.

That form of the vault cover illustrated in Figs. 1 and 2 consists of a body member 10 comprising the top and two opposite side walls, constructed of corrugated metal with the corrugations running transversely. The arched construction thus provided is strengthened to a considerable extent by these corrugations. At the lower edge of each of the side walls I provide longitudinally extending reenforcing members 11, also formed of sheet metal, each of these reenforcing members having a vertical flange 12 secured to the rear side of the body member by rivets, welding, or any other suitable means. At the base of the reenforcement 11 there may be a second flange 13, but the reenforcement is otherwise open toward the interior of the vault, and as its ends are open it may serve as a drain passage for conducting moisture out of the vault past the end members thereof.

In order that a series of body members may be stacked or nested together for compactness in shipping, I make at least one of the end members detachable, although both end members can be so made if preferred. One of these detachable end members is shown at 14 in the drawing, having an outwardly extending flange all around its perimeter, and provided with a handle 15 for use in handling the vault. On the rear side of the end member I mount, by rivets or other suitable means, a pair of crossed braces 16, the ends of which protrude beyond the edges of the end member 14. Openings 17 are formed in the body member 10 for the reception of the protruding ends of the braces 16, the resilience of the metal of the body member making it possible to spread the side walls of the body member sufficiently to spring the end member into position with its braces extending through the holes 17. Thereafter cotter pins 18 or other suitable fastenings may be mounted in holes provided in the ends of the braces 16, in order to prevent dislodgment of the end member and to provide a reasonably tight joint between the end member and the side walls of the body member.

The transverse dimension of the vault at the top is made slightly less than the corresponding dimension at the bottom in order to facilitate stacking or nesting of the body members for shipment.

In connection with the vault I employ a casket support or platform, illustrated in Fig. 4, which preferably consists of two longitudinal rails 19, two other rails 19′ telescoping within the rails 19, and a pair of transverse rails 20. All of these rails may be conveniently constructed of sheet metal bent into tubes of triangular cross section with their edges welded together. The rails 19, 19′ or the rails 20, or both sets of them, may be notched out in order that the rails 20 may set down into the rails 19 and 19′. After assembly the parts are welded together. The casket support 19, 19′, 20 is adjusted to a length shorter than the distance between the end members 14,

so that the support may be entirely enclosed by the vault cover. It will be noted that the transverse rails 20 are elevated somewhat above the longitudinal rails 19, 19', thereby providing space to accommodate the straps used for lowering the casket into the grave.

The vault illustrated in Fig. 3 is adjustable to different lengths to correspond with the different lengths of caskets ordinarily used, thereby reducing considerably the number of vaults which it may be necessary to carry in stock. In this form of the invention the body member sections 21 and 22 are formed of sheet metal transversely corrugated, just as in the case of the first described form of the invention. However, the reenforcements 23 and 24 at the bottoms of the sections are formed as continuations of the body member proper instead of as separate elements attached to the body member as in the previously described form of the invention. As shown in the drawing, these reenforcements or ribs are produced by curving the corrugated metal outwardly and then inwardly again. In this form of the invention the end plates 25 are preferably permanently secured to the body member sections, as by welding or riveting, and they are preferably formed with oval or other panels 26 pressed outwardly to stiffen the end plates. As in the other case, they are provided with outwardly extending flanges 27.

The corrugations of the body member sections are preferably one and one-fourth inches in width. The two sections of the body may be fitted together to produce vaults of various lengths from fully extended to practically fully collapsed in one and one-fourth inch steps; that is to say the proper length for a given casket is determined and the two sections fitted together to the nearest corrugation. As several corrugations of one section fit into corrugations of the other section, even in the fully extended condition of the vault, there is no possibility of relative movement of the sections endwise if the lower edges of the sections are held tightly together at the joint. This latter result I secure by the new fastening means which I will now describe.

On the inner side of section 22 near the end of that section and within the reenforcement or rib 24 at each side of the vault I mount, by means of rivets or otherwise, a metal plate 7 which has a tapped opening therein. When the two sections are arranged in the adjusted position desired I slip over the lower edges, where they come together opposite the plates 27, a clamp comprising a plate 28 and two fingers 29 so spaced as to fit within adjacent corrugations. The plate 28 has a hole therethrough for the reception of a bolt 30 that is threaded into the tapped opening in the plate 27. By turning the bolt 30 down tightly the edges of the two body sections are clamped together so as to prevent relative movement inwardly or outwardly. Obviously there can be no relative movement vertically on account of the interfitting of the curved reenforcements 23 and 24. Consequently the two sections of the body are securely held together, and the vault may be handled just as though it were built in one piece. The casket supporting frame or platform 19, 19', 20 may of course be adjusted to fit the adjusted length of the vault.

The vault in this form of the invention, like that previously described, is built slightly narrower at the top than at the bottom. When a number of such vaults are to be shipped, they are assembled with different length adjustments, and they are then nested together with the longest one outside, the next longest within that, and so on down to the shortest. The amount of space occupied for several of them, say five or six, is therefore not much greater than that which would be occupied by a single one, and the freight rate is correspondingly less. Furthermore, the assembly of the body member and end plates is thereby facilitated.

By supporting the casket upon the transverse rails 20 of the supporting frame an air space is maintained beneath the casket, which assists greatly in postponing the decay thereof. The reenforcements of the bottom of the body member of the vault, having some little width, are adapted to take the load of the earth supported by the vault and transmit it to the ground beneath without cutting into the ground, as straight vertical sides would do. Hence the vault is prevented from sinking down and contacting with the top of the casket, thereby subjecting the casket to the load of the earth above it.

In Fig. 7 I have illustrated a modified form of adjustable casket support or platform, wherein the earth beneath the casket is entirely covered by the support, so that when the value cover is lowered around the casket and rests upon the border of the support the casket is fully enclosed. The support is formed of two sheets of metal 31 and 32, which are bent to provide angular ribs 33 and 34 extending entirely across the sheets. The ribs are so positioned on the sheets that a flat border remains on each side of the sheet. At one end of each sheet I attach a flat end border member 35 provided at each extremity with a laterally extendng lip 36 which is riveted or otherwise secured to the side border element of the sheet. When the support is placed in a grave the two sheets 31 and 32 may be overlapped to whatever extent is necessary to produce a support of the required length, the ribs 33 fitting within the ribs 34. It will be observed therefore that the casket is supported by the ribs 33 and 34 in such manner as to provide air spaces therebeneath, and that the edges of the vault cover rest upon the flat end and side border members, thereby fully enclosing the casket. Furthermore the edges of the vault cover receive from the flat border members of the support a firm foundation support which is capable of taking any load to which the vault may be subjected without sinking into the earth.

In the foregoing description I have necessarily gone somewhat into detail in order to explain fully the particular embodiments of the invention herein illustrated, but I desire it to be understood that such detail disclosures are not to be construed as amounting to limitations, except as they may be included in the appended claims.

Having thus described my invention, I claim:

1. In a burial vault, a metal cover comprising a body member having top and side walls, and comprising a pair of end walls, said side walls having longitudinal reenforcing members at their lower edges, said reenforcing members being provided with longitudinal drain passages open to the interior of the vault lying outside of the said end walls, whereby water collecting within the vault may find a ready exit.

2. In a burial vault, a sheet metal body member comprising flexible top and side walls, a pair of end members, and braces attached to one of said end members and projecting beyond the edges thereof, said body member having openings therethrough adapted to receive the projecting

ends of said braces, whereby the said end member is detachably connected with the body member.

3. In a burial vault, a sheet metal body member in two sections each having top and side wall portions transversely corrugated across the full extent thereof, said sections being adapted to be telescoped together in various relative positions with the corrugations of the two sections interfitting, and means for securing the sections together at their lower edges.

4. In a burial vault, a sheet metal body member in two sections each having top and side wall portions transversely corrugated across the full extent thereof, said sections being adapted to be telescoped together in various relative positions with the corrugations of the two sections interfitting, said sections having along their lower edges interfitting ribs, and means for securing the ribs together.

5. In a burial vault, a sheet metal body member in two sections each having top and side wall portions transversely corrugated across the full extent thereof, said sections being adapted to be telescoped together in various relative positions with the corrugations of the two sections interfitting, and a pair of clamps secured to one section on opposite lower edges thereof adapted to grip the lower edges of the other section in any relative position of adjustment of the two sections.

6. In a burial vault, a sheet metal body member in two sections each having top and side wall portions transversely corrugated across the full extent thereof, said sections being adapted to be telescoped together in various relative positions with the corrugations of the two sections interfitting, said sections having along their lower edges interfitting ribs, and a pair of clamps secured within the opposite ribs of the inner section adapted to grip the lower edges of the outer section in any relative position of adjustment of the two sections.

7. In a burial vault, a sheet metal body member in two sections, each section having top and side wall portions, and having continuous transverse corrugations extending entirely across the section from one bottom edge to the other, and means for securing said sections together with some of the corrugations interfitting.

8. In a burial vault, a body member comprising a top and sides of sheet metal corrugated transversely, the bottom edges of the sides having deformations constituting longitudinally extending ribs or moldings, said corrugations extending through said ribs.

9. In a burial vault, a sheet metal body member extending across the top and down both sides of the vault, said body member having continuous transverse corrugations extending entirely across the same from one bottom edge to the other, the said bottom edges having deformations constituting longitudinally extending ribs or moldings with said corrugations running across them.

10. In a burial vault, a metal cover comprising a sheet metal body member extending across the top and down both sides of the vault to the level of the bottom thereof, and provided with continuous transverse ribs extending from edge to edge thereof, and said cover also comprising end members joining the top and sides, the body member and the end members having an inward transverse inclination from the bottom toward the top of the vault.

11. In a burial vault, a sheet metal body member extending across the top and down both sides of the vault, said body member having continuous transverse ribs therein extending across the same from one bottom edge to the other, and end plates secured to the body member, said end plates extending from the top to the bottom of the vault and having integral deformations constituting reenforcements.

12. In a burial vault, a sheet metal body member extending across the top and down both sides of the vault, said body member having continuous transverse ribs therein extending across the same from one bottom edge to the other, and end plates secured to the body member, each of said end plates extending from the top to the bottom of the vault and having an embossed panel therein, whereby it is rendered rigid.

13. In a burial vault, a sheet metal body member extending across the top and down both sides of the vault, said body member having continuous transverse ribs therein extending across the same from one bottom edge to the other, and end plates secured to the body member, each of said end plates extending from the top to the bottom of the vault and having a flange at its perimeter and an embossed panel therein, whereby the plate is rendered rigid.

14. In a burial vault, a sheet metal cover adapted to be employed in connection with a casket platform, said cover being adapted to enclose a casket supported upon said platform, and comprising a top and side wall body member continuous from bottom edge to bottom edge, transversely ridged from bottom edge to bottom edge, and extended downwardly to the level of the casket platform.

15. In a burial vault, a sheet metal cover adapted to be employed in connection with the casket platform, said cover being adapted to enclose a casket supported upon said platform, said cover comprising a top and side wall body member continuous from bottom edge to bottom edge and provided with transverse ribs continuous from bottom edge to bottom edge and extending downwardly to the level of the casket platform, the top of the body member being arched, and the side walls being inclined inwardly from the bottom to the top, the cover also including an end plate joining the top and side wall portions of the body member and extending downwardly to the level of the platform.

HARRY W. MITCHELL.