Dec. 9, 1941. J. H. SLEICHTER 2,265,876

BURIAL VAULT

Filed Aug. 3, 1940

Fig. 1.

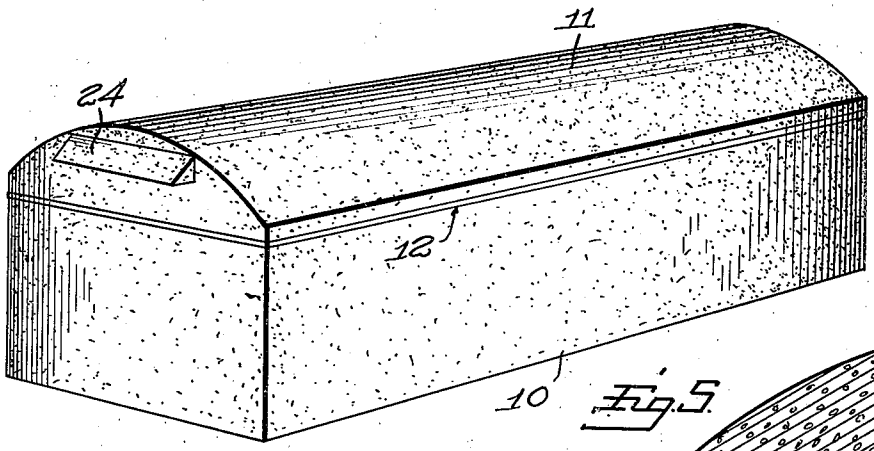


Fig. 2.

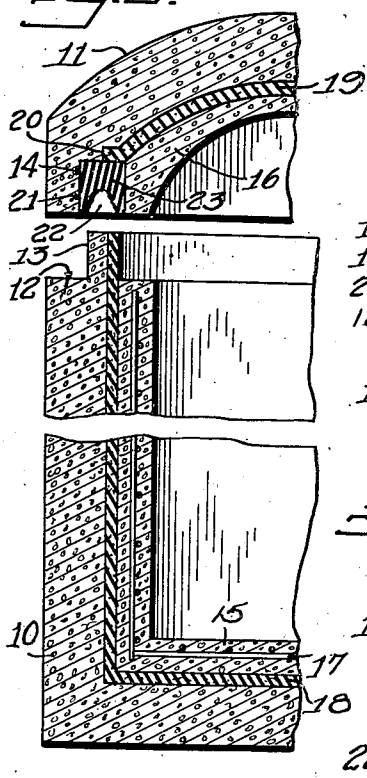


Fig. 3.

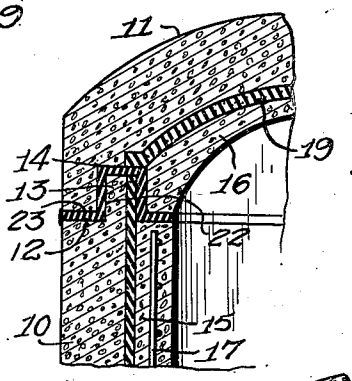


Fig. 4.

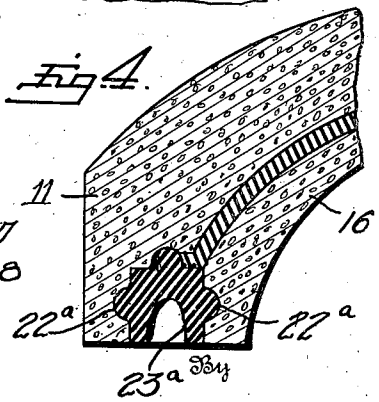


Fig. 5.

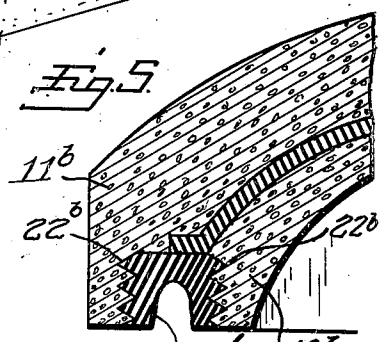
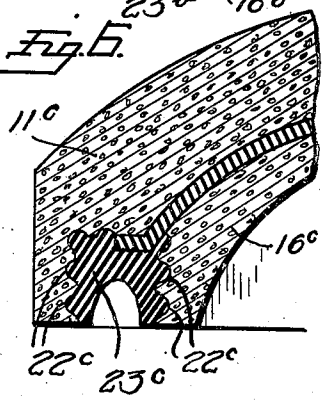


Fig. 6.



Inventor
J. H. SLEICHTER
By
Attorney

Patented Dec. 9, 1941

2,265,876

UNITED STATES PATENT OFFICE

2,265,876

BURIAL VAULT

Joseph H. Sleichter, Shippensburg, Pa.

Application August 3, 1940, Serial No. 350,358

2 Claims. (Cl. 72—7)

This invention relates to a burial vault.

It is a particular object to provide such a vault as will be constructed of three layers, namely, inner and outer concrete layers with an intermediate layer of sealing material therebetween, the parts being so constructed that each layer has a lid sealed to a box section thereby uniformly distributing the weight necessarily carried by a burial vault, and providing maximum area for sealing.

Further, it is aimed to provide a construction of the nature mentioned wherein the outer layer is a complete vault in itself with a portion of its inner wall surface directly engaged by the sealing layer, wherein the intermediate layer renders the structure impervious to moisture, and wherein the inner layer supports and positions the intermediate layer. I also aim to provide for maximum sealing effect by having the main sealing groove provided with auxiliary longitudinal grooves or corrugations.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with the accompanying drawing.

In said drawing:

Figure 1 is a perspective view of the vault;

Figure 2 is a fragmentary vertical section, on an enlarged scale, through the vault, with the sections separated.

Figure 3 is a section similar to Figure 2 with the vault closed, and

Figures 4 and 5 and 6 are detail sections on the same plane as Figures 2 and 3, through modified forms of construction.

Referring specifically to the drawing, wherein like reference characters designate like or similar parts, the outer layer consists of a box section 10 and a cover section 11. Box section 10 is cut away around its upper outer corner to provide a shoulder 12 on which the cover section 11 is supported and to provide an upstanding flange 13 which is received in a cut away portion or recess 14 of the cover.

The inner section or layer consists of a box section 15 and a cover section 16 adapted to be supported on the upper edge thereof and is of slightly less dimension both transversely and longitudinally than the box section.

The upper and lower sections of the outer and inner layers are preferably cast from concrete and it is to be understood that the latter is used in its general sense. Such sections are preferably reinforced as suggested at 17 in connection with box section 15, by metallic elements for instance, but such reinforcement may be omitted, if desired.

It will be noted that the upper edge of section 15 terminates in the same plane as shoulder 12. Between sections 10 and 15, a box-like layer or body 18 is provided which is coextensive to the inner surface of section 10 and rises to the upper edge of the flange 13. Layer 18 is of sealing or caulking material, preferably bituminous in nature or any equivalent, and for instance, pitch or asphalt.

Disposed between the cover sections 11 and 16 is a layer or body 19 of the same material as layer 18, the marginal edge of which is horizontal and disposed in a recess 20 of section 11.

The cut away 21 in combination with the marginal wall of section 16 forms a sealing groove 22 in which a sealing means 23 is accommodated. Such means 23 is bituminous like asphalt or pitch and applied in a plastic condition so that when the vault is closed the weight of the cover sections will distribute it over all surfaces at the joint as shown in Figure 3, with it adhering particularly to the layers 18 and 19.

Offsets 24 are cast on the ends of cover section 11 to accommodate clevises of a handling chain for such cover section, thereby avoiding the use of usual metal eyes or handles.

The upper and lower units of the vault are made in a similar manner, but the lower unit is made while in an inverted condition. With appropriate molds, the inner layer member is first cast of concrete preferably with a reinforcement therein and permitted to dry, following which the outer portion of the mold is removed and the material to form the intermediate layer is poured thereover, properly molded, and permitted to dry. Then a heavy asphalt primer is applied to the outer surface of the intermediate layer, following which, the outer layer is molded thereover and permitted to dry, such outer layer preferably including reinforcement.

In actual practice, the walls of the sections 15 and 16 are usually ¾ of an inch thick, the thickness of the intermediate layers 18 and 19 is usually $\frac{5}{16}$ of an inch and the thickness of the walls of the sections 10 and 11 is usually 1½ inches.

In order for the adhesive sealing feature to be effective over a long period of time, the outer vault or layer is made sufficiently heavy to sustain the weight of the ground, the intermediate layer renders the inner vault or layer proof against outside moisture, and the inner layer is sufficiently heavy and stable to give permanent support to the intermediate layer.

In the modified form of Figure 4, the sealing medium **23***a* is adapted to extend into auxiliary grooves or corrugations **22***a* of the sections **11***a* and **16***a* of sections like those at **11** and **16**, respectively. Thus additional lateral support and engagement for the medium **23***a* is afforded to enhance the sealing effect, especially if there is flow and a tendency thereof to settle.

The same effect as in Figure 4 is carried out by the auxiliary grooves or corrugations in Figures 5 and 6 at **22***b* and **22***c*, respectively, of sections **11***b* and **16***b* of Figure 5 and **11***c* and **16***c* of Figure 6 for sealing media at **23***b* and **23***c*, respectively.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

I claim as my invention:

1. A burial vault comprising a box and a suitable cover, said box comprising a plurality of concrete layers, an outer concrete layer having a square shoulder, an upstanding tongue integral with said shoulder around the peripheral edge of the box, an inner concrete layer having a squared peripheral edge aligned in the same plane with the shoulder on the outer layer, a layer of hardened asphalt between the said outer and inner layers having an exposed portion extending upward along the inner side of the said tongue at substantially right angles to the shoulder on the inner concrete layer; said cover comprising a plurality or concrete layers, each layer having opposed offset shoulders and spaced depending flanges adapted to form an elongated channel, a layer of hardened asphalt between the concrete layers having an exposed elongated flanged-over portion in and extending longitudinally around within said elongated channel and a filling of plastic solvent material in the channel adapted to lap and fuse with the relatively harder exposed asphalt flange of the cover and the said relatively harder upstanding exposed part of the asphalt layer along the upstanding tongue on the outer box layer when the cover is placed on the box to form moisture-proof lap-joints within said cover channel.

2. The combination described in claim 1, wherein the inner opposed surface of the depending flanges adapted to form the side walls of the channel housing the plastic solvent containing material are grooved to receive a portion of said fluent plastic mdeium.

JOSEPH H. SLEICHTER.