April 26, 1938. R. W. WISE 2,115,292

BURIAL VAULT

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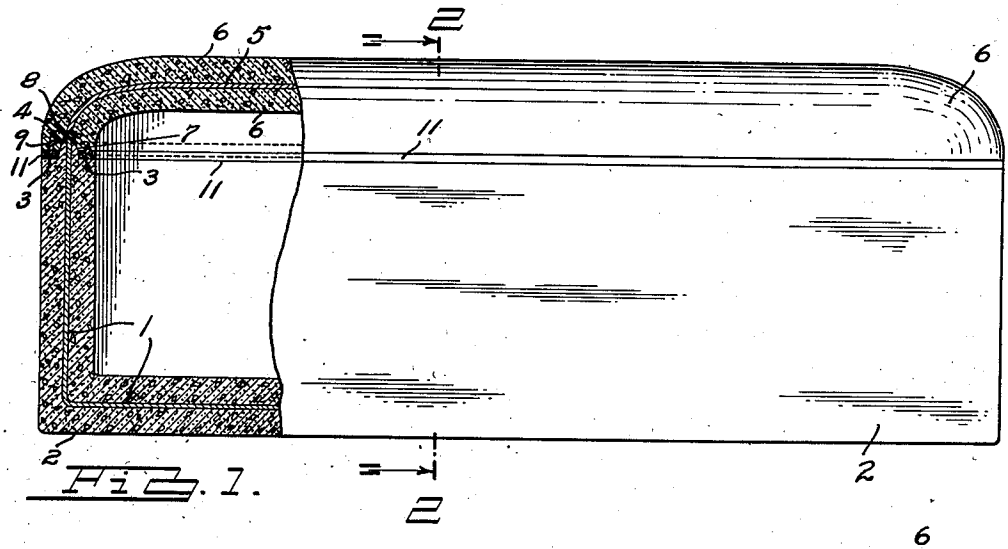


Fig. 1.

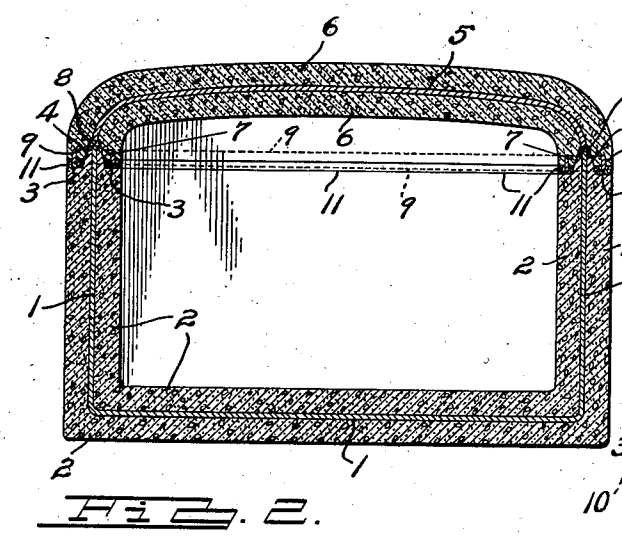


Fig. 2.

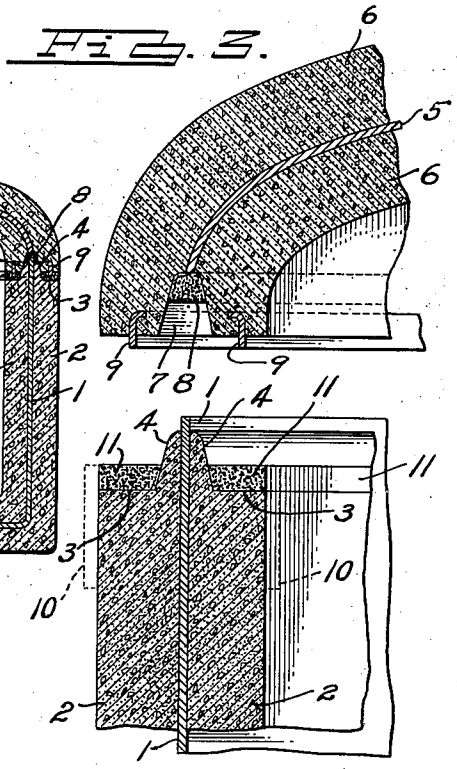


Fig. 3.

INVENTOR.
Robert W. Wise

BY Charles E. Thomas

ATTORNEY.

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BURIAL VAULT

Robert W. Wise, Detroit, Mich., assignor of one-half to Bigham D. Eblen, Detroit, Mich.

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4 Claims. (Cl. 72—7)

This invention relates to burial vaults and the object of the invention is to provide a burial vault formed of concrete and sheet metal and arranged so that the vault may be hermetically sealed.

One of the particular objects of the invention is to provide a vault and cover construction in which the joint between the vault and cover is provided with solid asphalt into which sheet metal sealing strips are embedded to seal the vault.

Another object of the invention is to provide a joint in which one wall is provided with an extending rib and the other wall is provided with a groove to receive the rib, the groove of one wall being partially filled with asphalt and the other wall being provided with asphalt shoulder portions to receive sealing strips which may be embedded in the asphalt to provide an hermetically sealed joint.

A further object of the invention is to provide a burial vault including a sheet metal shell encased in concrete, the concrete preventing deterioration of the sheet metal and the sheet metal acting as a seal to prevent water from seeping through the porous concrete.

Another object of the invention is to provide a sheet metal shell about which concrete is moulded and shaped to provide a rib at the upper edge of the vault, with the sheet metal shell extending slightly beyond and above the upper edge of the rib, and the cover being formed of a sheet metal shell encased in concrete and the concrete of the cover being formed with a groove to receive the rib, the groove being partially filled with solid asphalt so that the upper edge of the sheet metal vault shell will become embedded in the asphalt when the cover is placed thereon.

A further object of the invention is to provide a structure similar to the above wherein the upper edges of the concrete vault are provided with shoulders onto which solid asphalt is moulded and the cover is provided with sheet metal sealing bands extending slightly from the cover and arranged to embed in the asphalt on the shoulders when the cover is positioned on the vault.

These objects and the several novel features of the invention are hereinafter more fully described and claimed and the preferred form of construction by which these objects are attained is shown in the accompanying drawing in which—

Fig. 1 is an elevation of the vault partly in section.

Fig. 2 is a transverse section through the vault taken on line 2—2 of Fig. 1.

Fig. 3 is an enlarged view of the joint between the cover and vault with the cover partially raised to show the construction.

The vault is formed of a water tight sheet metal receptacle 1 which may be of steel, copper, copper bearing steel or other corrosion proof or corrosion resistant sheet metals. This shell 1 is encased on both sides in concrete 2 which is moulded or cast onto the shell. The upper edge of the concrete wall 2 is provided with shoulders 3 shown more particularly in Fig. 3 and an extending longitudinal rib 4 is formed in the upper edge of the wall 2 as shown between the shoulders 3. The rib 4 and shoulders 3 extend completely about the upper edge of the vault and the sheet metal shell 1 extends through and slightly above the top of the rib 4 as shown.

The cover comprises a sheet metal shell 5 having concrete 6 moulded or cast on opposite sides thereof and the lower edge of the cover is provided with a groove 7 shown in Fig. 3 which terminates at the edge of the shell 5 and is arranged to fit over the rib 4 of the vault. This groove 7 is partially filled with hard or solid asphalt by inverting the cover and placing the asphalt 8 in the bottom of the groove. On each side of the groove 7, the cover is provided with a metal flange 9 embedded in the concrete and extending approximately three-eighths of an inch from the edge of the cover while the sheet metal shell 1 extends approximately three-eighths of an inch above the top of the rib 4.

Asphalt is also applied to the shoulders 3 of the vault by providing moulding strips 10, shown in dotted lines in Fig. 3, on opposite sides of the concrete wall 2 and then filling the intervening space with asphalt 11. After the asphalt has set, the moulding strips 10 are removed. If the cover is then positioned on the vault the extending flanges 9 will rest on the asphalt strips 11 while the extending flange 1 of the vault shell will engage into the asphalt strip 8. The weight of the cover will cause the flanges 9 to embed in the asphalt 11 and will also cause the shell 1 to embed in the asphalt 8 to form an hermetically sealed joint.

However, before applying the cover to the vault, the extending edge of the shell 1, rib portions 4 and shoulders 11, are coated with a semi-plastic asphalt to insure an absolute seal when the cover is placed on the vault.

When so sealed, there is no possibility of leakage between the cover and the vault and the

asphalt strip 8 provides a seal between the sheet metal vault shell 1 and the sheet metal cover shell 5, while the flanges 9 insure a double seal between the concrete wall 6 of the cover and the concrete wall 2 of the vault. The concrete being semi-porous might allow seepage through the concrete wall but the sheet metal vault 1 and the sheet metal cover shell 5 prevent any possibility of seepage through the vault or cover and the asphalt sealing strip 8 between the sheet metal cover shell and the sheet metal vault shell prevent seepage between these shells.

From the foregoing description it becomes evident that the construction is comparatively simple, provides an hermetically sealed joint between the cover and the vault which will not allow seepage between the cover and the vault and by the use of the sheet metal shells provides a water tight and air tight burial vault.

Having thus fully described my invention, its utility and mode of operation, what I claim and desire to secure by Letters Patent of the United States is—

1. A burial vault comprising a non-foraminous sheet metal shell encased in concrete and the concrete being formed to provide shoulders at the edge on opposite sides of the sheet metal shell and with a rib extending upwardly between the shoulders, the sheet metal shell extending through the rib and slightly thereabove, a solid asphalt strip mounted on each of said shoulders and extending continuously about the edge of the receptacle, a non-foraminous sheet metal cover member encased in concrete and the concrete being formed to provide a longitudinal groove in the edge thereof and a shoulder on each side of the groove, the edge of the sheet metal cover member terminating at the bottom of the groove, a solid asphalt strip positioned in the bottom of the groove and extending continuously about the edge of the cover member and a pair of metal flanges embedded in the concrete shoulders on opposite sides of the groove of the cover member and extending slightly from the shoulders, the arrangement being such that as the cover is positioned on the receptacle the metal flanges of the cover engage in the asphalt strips on the shoulders of the receptacle and the asphalt strip in the bottom of the groove rests on the extending edge of the sheet metal receptacle.

2. A burial vault comprising a non-foraminous sheet metal shell encased in concrete on both sides and the concrete being formed to provide a longitudinal rib at the upper edge of the receptacle having a shoulder on each side of the rib, the sheet metal shell extending through the rib and slightly above the same, a non-foraminous sheet metal cover member encased in concrete on both sides, the concrete edge of the cover member being provided with a groove to fit over the rib and having shoulder portions on opposite sides of the groove, the shoulder portions of the cover member being provided with metal flanges extending slightly therefrom and the shoulders on the edge of the receptacle being provided with strips of asphalt and the groove of the cover member being provided with a strip of asphalt whereby when the cover member is positioned on the receptacle the flanges of the cover member rest on the strips of asphalt on the shoulders of the receptacle and the extending metal edge of the receptacle engages the asphalt strip in the groove of the cover member.

3. A burial vault comprising a non-foraminous sheet metal receptacle encased in concrete on both sides, the concrete being formed at the edge of the receptacle to provide a longitudinal rib and the edge of the sheet metal receptacle extending slightly above said rib, a non-foraminous sheet metal cover shell encased in concrete and the concrete at the edge of the cover being formed to provide a groove to receive the rib of the receptacle, a solid asphalt strip partially filling the groove and fitted therein, the arrangement being such that when the cover is positioned on the receptacle the edge of the sheet metal receptacle supports the cover by its engagement with the asphalt strip.

4. A burial vault comprising a concrete receptacle formed with a longitudinal rib at the upper edge, a non-foraminous sheet metal receptacle embedded in the concrete receptacle and having an edge extending through the longitudinal rib, a cover member having a groove to fit over the rib of the receptacle and the groove being partially filled with solid asphalt whereby when the cover member is positioned on the receptacle the weight of the cover member rests on the asphalt and extending edge of the sheet metal receptacle.

ROBERT W. WISE.