June 5, 1934. F. J. MEAD 1,961,158

LINED BURIAL VAULT

Filed May 1, 1931

Fig. 1.

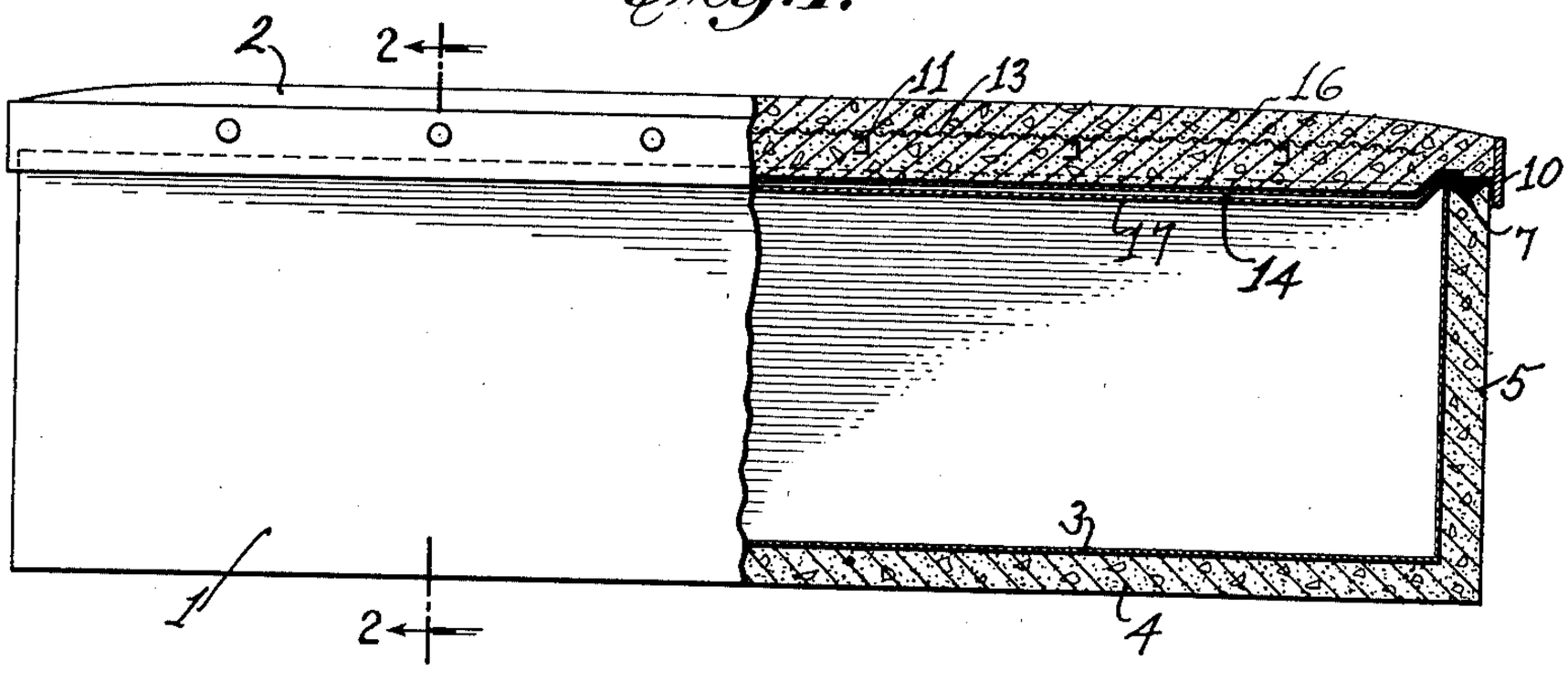


Fig. 3.

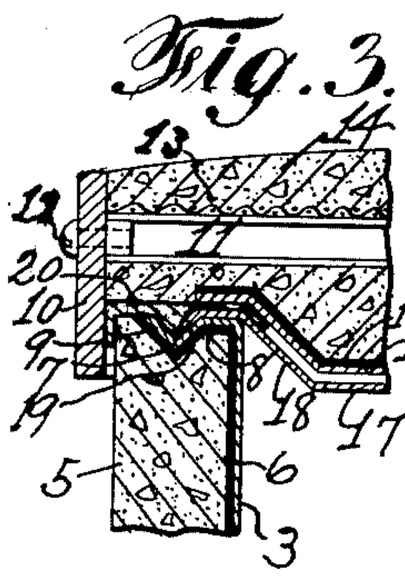
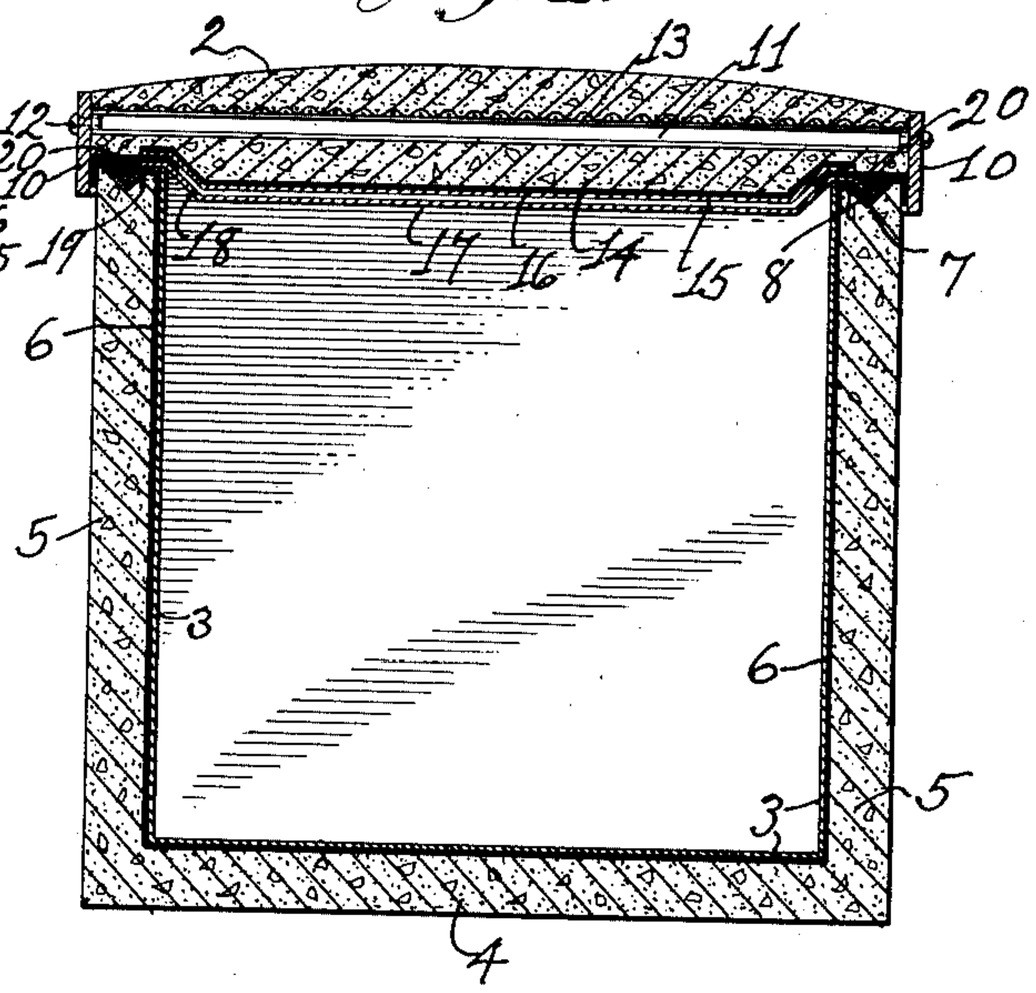


Fig. 2.



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LINED BURIAL VAULT

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3 Claims. (Cl. 72—7)

This invention relates to a burial vault that is made of concrete lined with metal, such as copper, for example, and provision is made to prevent access of water to the interior of the vault and also to avoid cracking concrete because of expansion and contraction of the metal.

The invention will be understood from the description in connection with the accompanying drawing in which Fig. 1 is a side view partly in section showing an illustrative embodiment of the invention; Fig. 2 is a section along the line 2—2 of Fig. 1 and Fig. 3 is a section on an enlarged scale showing some of the details.

In the drawing reference character 1 indicates the body portion of the burial vault and 2 the top or cover therefor. The body portion of the vault is lined with metal 3 in such a way as to make a metallic box. Copper may be used for this purpose and the box may be made up of sheets thereof with the edges soldered together. Concrete 4 is at the bottom and concrete 5 at the sides and ends of the body portion of the vault.

Heretofore troubles have been experienced in structures of this sort due to the differences in coefficients of expansion of metal and concrete with the result that the concrete is sometimes cracked when the metal expands. This objection is obviated in the present invention by applying a thin coating 6 of plastic adherent material, such as asphalt, between the outside surfaces of the metal box 3 and the inside surfaces of the concrete 4 and 5. The presence of this plastic material permits relative expansion and contraction between the metal and concrete and at the same time it also seals any imperfect joints that may be present in the metal box, so as to prevent moisture from penetrating to the inside thereof. The air does not gain access to the asphalt or plastic material, so that it does not harden, but remains plastic and adherent for an indefinite length of time. The plastic layer 6 also prevents any chemicals or injurious substances in the concrete or in the soil in which it is buried from reaching and attacking the metal. The sheets of metal 3 also stick to the layer 6 and are thereby prevented from bulging out, so that they would not give a hollow sound.

The upper edges of the walls of concrete 5 are provided with V-shaped grooves 7 and the upper edges of the sheets of metal 3 are bent outwardly to form flanges 8 with V-shaped grooves 9 to fit into the grooves 7.

The cover comprises a metal band 10, which may be of copper, around its edges with reinforcing bars 11 extending across the same, these bars being connected to the band 10 by screws 12, for example. A wire screen 13 may also be provided and concrete 14 poured into forms of proper shape to make up the cover. A metal plate 15 of pan shape is embedded along the side of the cover that is to face the box 3 when the concrete is formed. A layer of plastic adherent material 16 is applied between the concrete 14 and the metal 15 for the same purpose as the layer 6 already described.

A metallic member 17, which may also be made of copper and is preferably of the same shape as the member 15, is formed with its edges 19 extending slightly downwardly into the metal grooves 9 in the flanges 8 of the box 3.

After the body portion of the vault has been put in place the metal member 17 is first applied and then the cover 2 is put on. A quantity of asphalt or the like 20 is applied before the cover is put in place and this asphalt fills the grooves 9 and is squeezed a short distance between the member 17 and plate 15 along the edges and may also be squeezed a short distance downwardly along the inside of the metal band 10 of the cover.

The advantage of using the metallic member 17 is that none of the asphalt 20 can creep into the inside of the box 3 to spoil the looks or cause an unattractive appearance. At the same time this asphalt hermetically seals the top to the body portion of the vault.

I claim:

1. In a burial vault, a box having thick walls and a groove in the upper edges of said walls spaced from the inner sides of said walls, a metal plate extending across the top of said box and having its edges extending into said groove, a cover for said box extending beyond the edges of said plate, and plastic material between the outer portions of the lower sides of said cover and the upper edges of said walls.

2. In a burial vault, a box having thick walls and a groove in the upper edges of said walls spaced from the inner sides of said walls, a metal plate extending across the top of said box and having its edges extending into said groove, a cover for said box extending beyond the edges of said plate, and a metal rim around the edges of said cover extending below the upper edges of said walls.

3. In a burial vault, a box having thick walls and a groove in the upper edges of said walls spaced from the inner sides of said walls, a metal plate extending across the top of said box and having its edges extending into said groove and terminating short of the bottom of said groove, and a cover for said box having its lower side conforming in shape to said plate.

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