

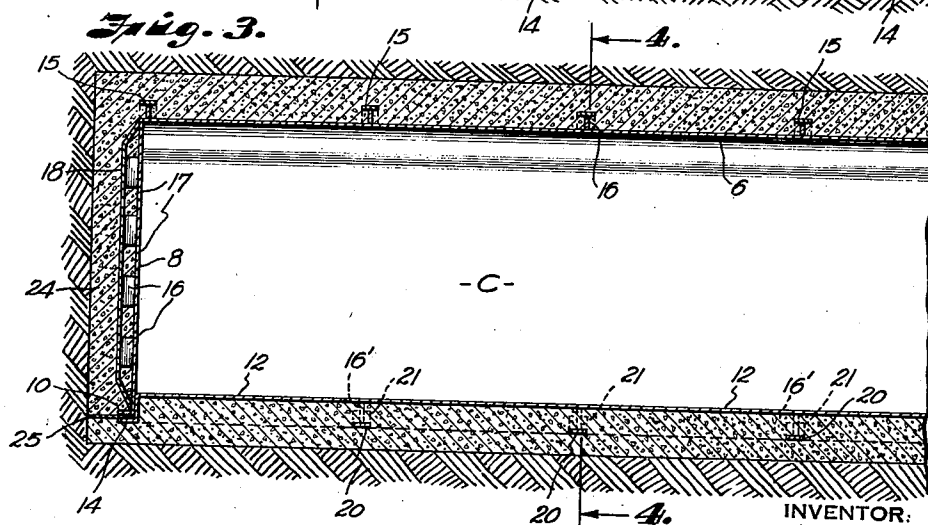
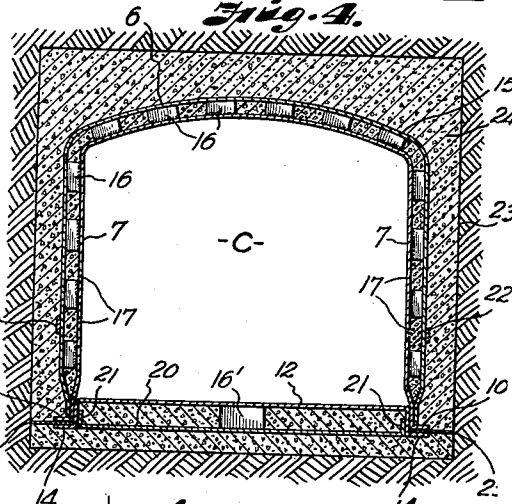
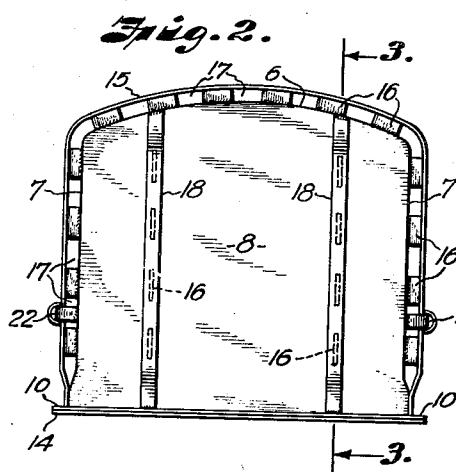
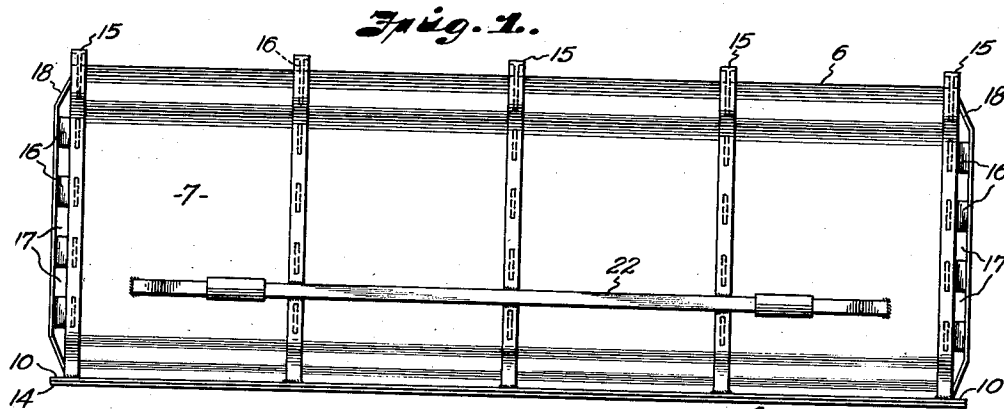
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REINFORCING AND BONDING MEANS FOR BURIAL VAULTS

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REINFORCING AND BONDING MEANS FOR
BURIAL VAULTS

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5 Claims. (Cl. 27—35)

The present invention relates to burial vault construction, and it is the primary purpose of the invention to provide an efficient form of steel vault having appropriate and improved means for not only reinforcing the vault but also adapted to provide effective anchoring means when the vault is to be embedded in concrete material.

Accordingly the invention provides a steel vault having suitably arranged reinforcing bands which are combined with spacer elements for providing openings or passages for a flow of concrete material, so that an efficient bond is produced between the vault and mass of concrete material when surrounded thereby.

The invention also contemplates such improved type of reinforcing and bonding means for not only the top and sides of the vault, but also the ends thereof as well, and if desired for the floor or bottom portion of the vault structure.

With the foregoing general objects in view the invention will now be described with reference to the accompanying drawing showing a suitable form of embodiment of the proposed improvements, and method of practicing the invention, after which those features and combinations deemed to be novel will be particularly set forth and claimed.

In the drawing—

Figure 1 is a side elevation showing a vault equipped with the improved features of the present invention;

Figure 2 is an end view of the same;

Figure 3 is a vertical sectional view, representing a section taken on the line 3—3 of Figure 3 and showing the vault embedded in concrete material in a grave; and

Figure 4 is a transverse sectional view, showing a section taken on the line 4—4 of Figure 3.

Referring now to the drawing in detail, the invention is illustrated in relation to a vault structure comprising a vault-shaped casing of suitable material, such as sheet steel or the like, having the crown or top portion 6, the sides 7 and the ends 8, the lower margins of which sides and ends are expanded outwardly (see Figures 3 and 4) and formed with horizontal outwardly projecting flanges 10. This vault-shaped casing thus provides a vault chamber C for receiving the burial casket to be supported upon a bottom or floor member 12, also of suitable material such as sheet steel, having an angular margin adapted to telescope within the bottom margin of said sides 7 and ends 8 and terminating in outwardly projecting horizontal flanges 14 underlying said flanges 10 of the vault casing.

The reinforcing and bonding means for the vault casing comprise a series of metal bands or straps 15 extending transversely about the top 6 and sides 7 at each end of the casing and also at a suitable number of intervals between said ends, as illustrated in Figure 1. These bands or straps 15 are spaced from the outside of the casing to provide for a plurality of metallic spacer blocks 16 which are secured in place in any suitable manner (as by welding to both the bands and casing) in the spaced relation clearly shown in Figure 2. The ends of each of the bands or straps 15 are bent inwardly sufficiently for securing said ends (as by welding) to the lower edges of the casing at the inner margin of the flanges 10. This band and block construction provides a rigid and effective reinforcing structure for the vault casing, and also a skeleton or open work for passage of concrete material into the spaces 17 between the blocks 16, for bonding purposes.

In a similar way, upright metal strips 18 are secured to each of the end walls 8, the upper ends of said strips 18 being secured, as by welding, to the top margins of said walls (see Figures 1 and 2) and spacer blocks 16 being provided for said strips 18 in the same way as with the bands or straps 15.

If desired, the bottom or floor member 12 may be similarly reinforced, as by means of transverse strips 20 having upturned terminal portions 21 secured to the angular margins of the floor 12 and provided with suitable blocks 16' welded thereto and to the bottom face of the floor member, as clearly illustrated in Figure 4.

Any appropriate or desired form of handle or handle bar structure 22 may be provided for the sides of the vault casing (see Figures 1 to 3).

It will thus be seen that an efficient reinforcing means is provided, combined with a bonding means, for accomplishing the purposes of the invention above stated. Figures 3 and 4 illustrate the use of the construction in a grave 23, with the vault casing and floor member in assembled relation, and concrete material 24 surrounding the vault for producing a monolithic structure. Obviously this effectively seals the vault parts together, and furthermore bonds the same in a positive manner by virtue of the fact that the concrete material penetrates through all the openings or passages 17, thus locking the structure throughout as a single monolithic unit. If for any reason a temporary or semi-permanent seal should be desired between the casing and floor member of the vault, this may be provided for by means of sheeting 25 of suitable material (such

as paper or cardboard) interposed between the flanges 10 and 14 and extending to the sides of walls of the grave 23, to permit separation of the concrete material at this level.

5 While I have shown and described what I now regard as the preferred form and mode of practicing the invention, I desire to be understood as expressly reserving the right to make whatever changes or modifications may fairly fall within
10 the scope of the appended claims.

What I claim is:

1. A burial vault structure comprising a metallic casing formed with top, side and end walls, metallic reinforcing bands or strips extending
15 transversely at intervals around said top and side walls and in spaced relation thereto, the ends of said bands being welded to the casing and their intermediate portions extending in spaced relation to the exterior of the casing to provide for
20 the passage of concrete material between said bands and casing, and a series of spaced metallic blocks welded to said bands and casing in the space between said bands and casing.

2. A burial vault structure comprising a metallic casing formed with top, side and end walls, spaced metallic reinforcing bands or strips traversing said side and end walls and across the top of the casing, the ends of said bands being secured to the casing and their intermediate
30 portions extending in spaced relation to the exterior of the casing to provide for the passage of concrete material between said bands and casing, and a series of spaced metallic blocks welded to said bands and casing in the space between
35 said bands and casing.

3. A burial vault structure comprising a metallic casing formed with top, side and end walls, a metallic bottom or floor member having a telescoping fit within the bottom of said casing, spaced metallic reinforcing bands extending
40 across the bottom face of said floor member and also traversing said side and end walls and across the top of the casing, and a series of spaced metallic blocks interposed between said reinforcing
45 bands and the exterior of the vault structure and

welded thereto and to said bands to form passages for the flow of concrete material between said reinforcing bands and said vault structure.

4. A burial vault structure comprising a metallic casing formed with top, side and end walls, a metallic bottom or floor member having a telescoping fit within the bottom of said casing and formed with a marginal flange underlying the bottom edges of said walls, reinforcing means comprising metallic strips extending across the bottom face of said floor member and terminating at said flange and metallic bands traversing said side walls and across the top of the casing and terminating at said bottom edges of the walls, and a series of spaced metallic blocks interposed
15 between said reinforcing means at the exterior of the vault structure and welded thereto and to said reinforcing means to form passages for the flow of concrete material between said reinforcing means and said wall structure.
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5. A burial vault structure comprising a metallic casing formed with top, side and end walls, the bottom edges of said walls being formed with an outwardly projecting flange extension, a metallic bottom or floor member having a telescoping fit within the bottom of said casing and formed with a marginal flange abutting beneath said flange extension, reinforcing means comprising metallic strips extending across the bottom face of said floor member and terminating at said flange and metallic bands traversing said side walls and across the top of the casing and terminating at said bottom edges of the walls, a series of spaced metallic blocks interposed between said reinforcing bands and strips and the exterior of the vault structure and welded thereto and to said bands and strips to form passages for the flow of concrete material between said reinforcing means and vault structure, and temporary seal means comprising a strip interposed
40 between said flange portions and projecting outwardly for engagement with the walls of the grave.
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