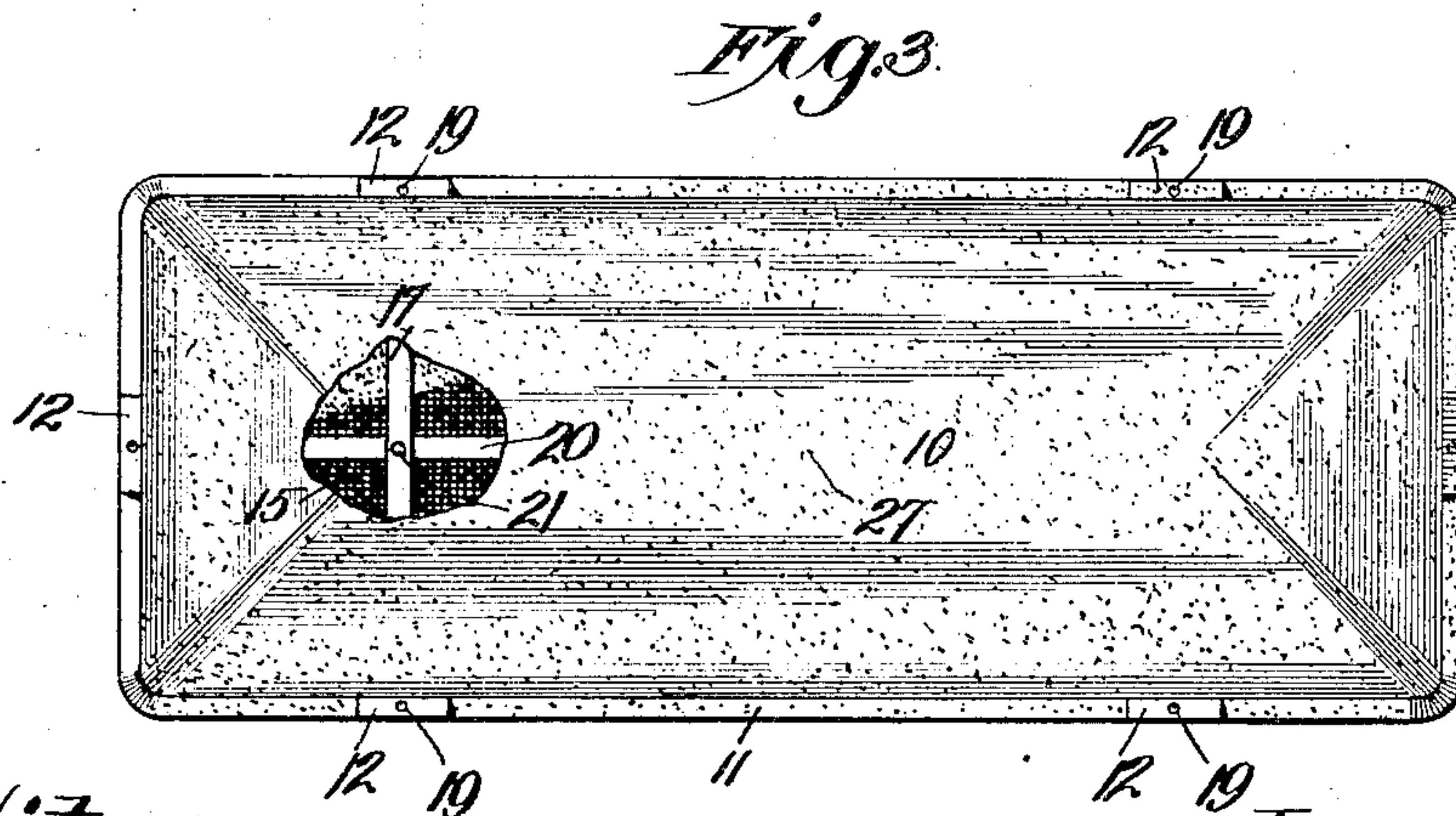
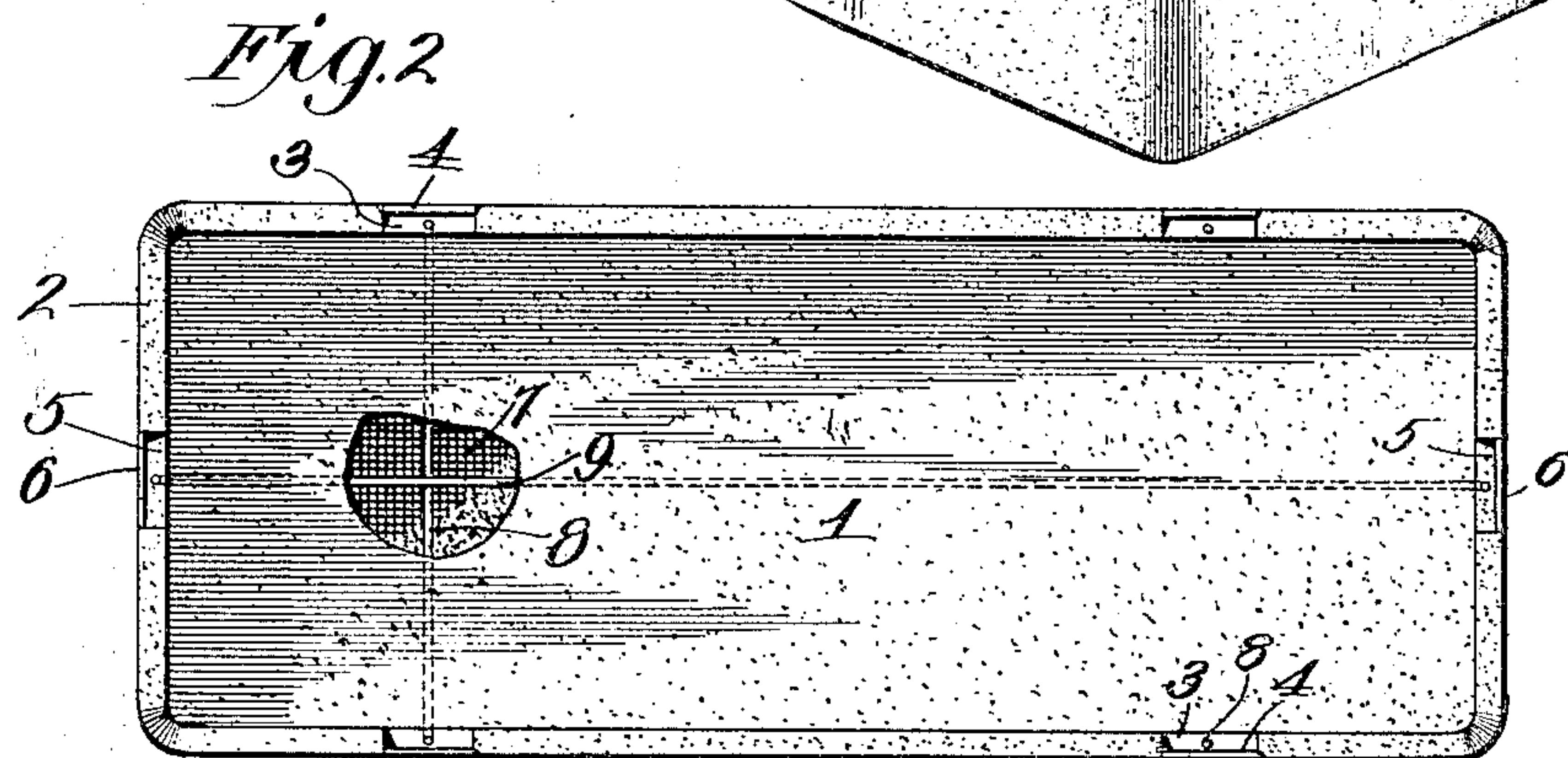
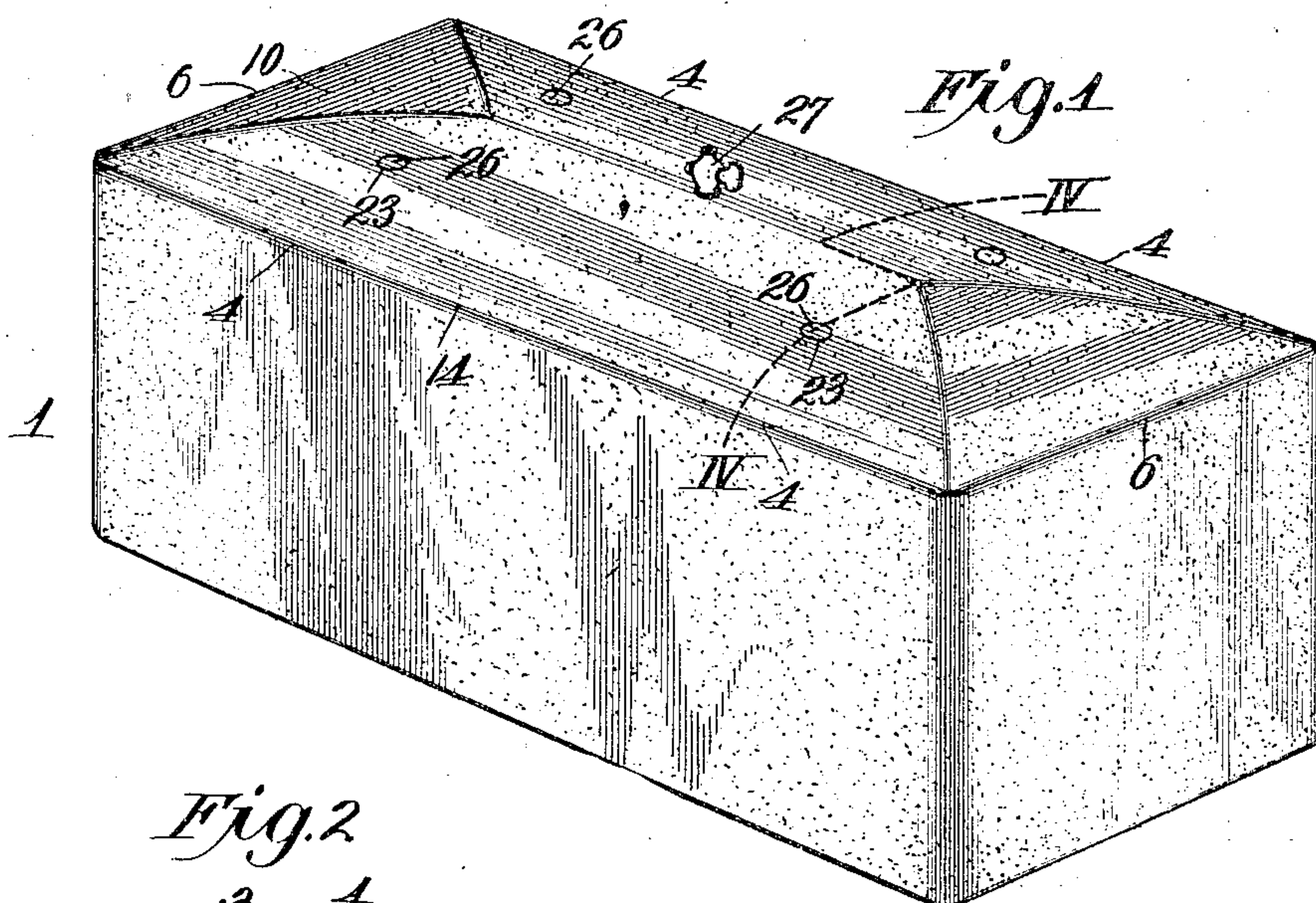


C. K. HAW.
BURIAL VAULT.
APPLICATION FILED OCT. 17, 1908.

917,943.

Patented Apr. 13, 1909.

2 SHEETS—SHEET 1.



Witnesses
Frank R. Glor
H. B. Rodgers.

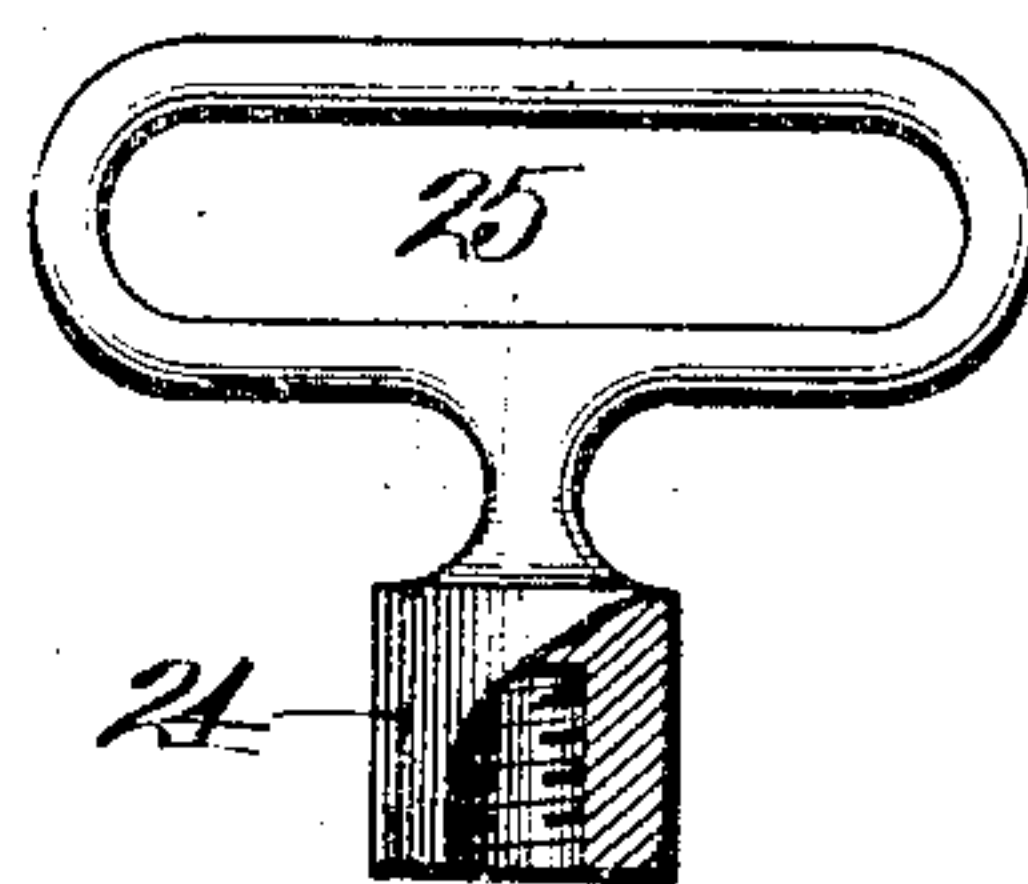
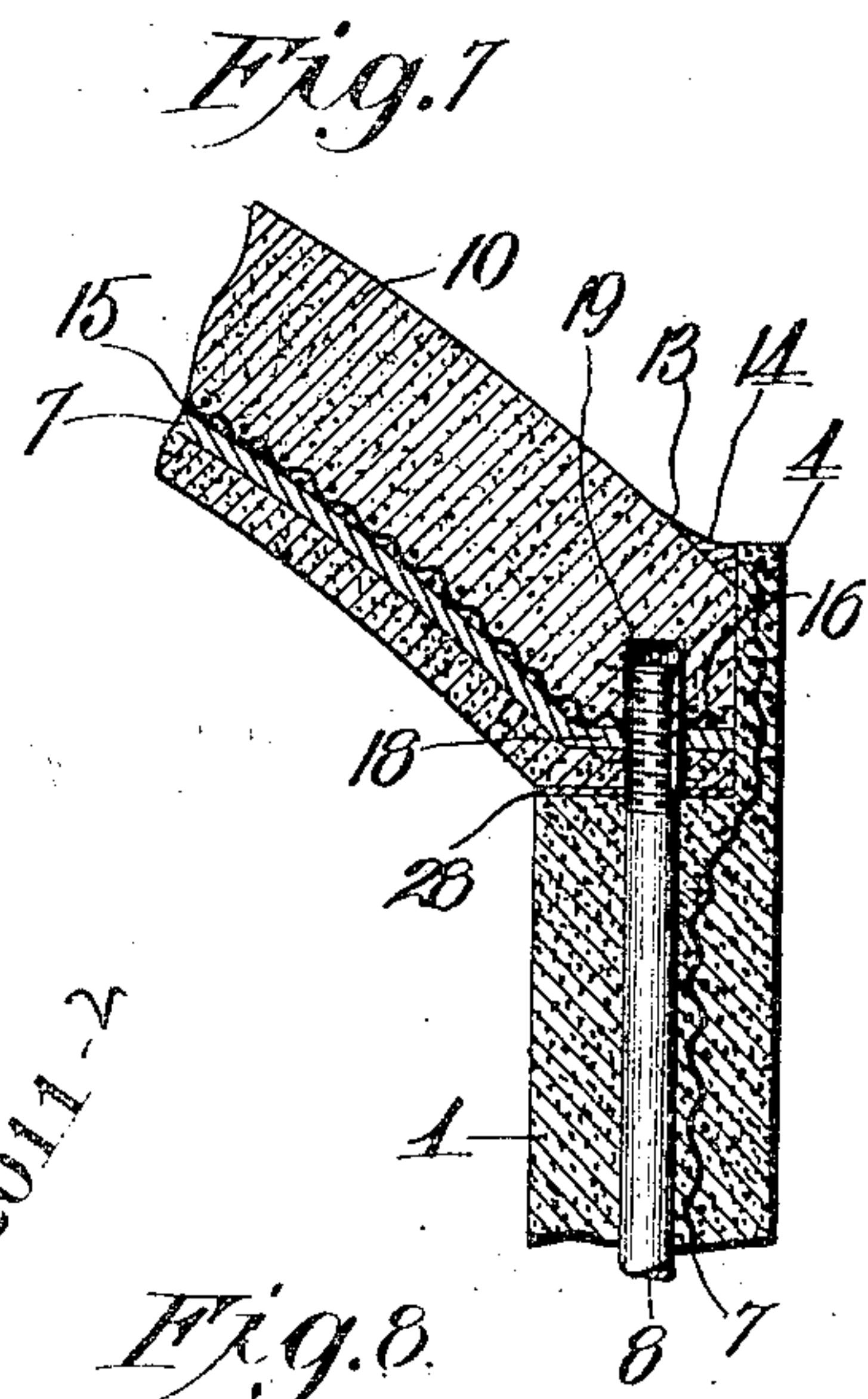
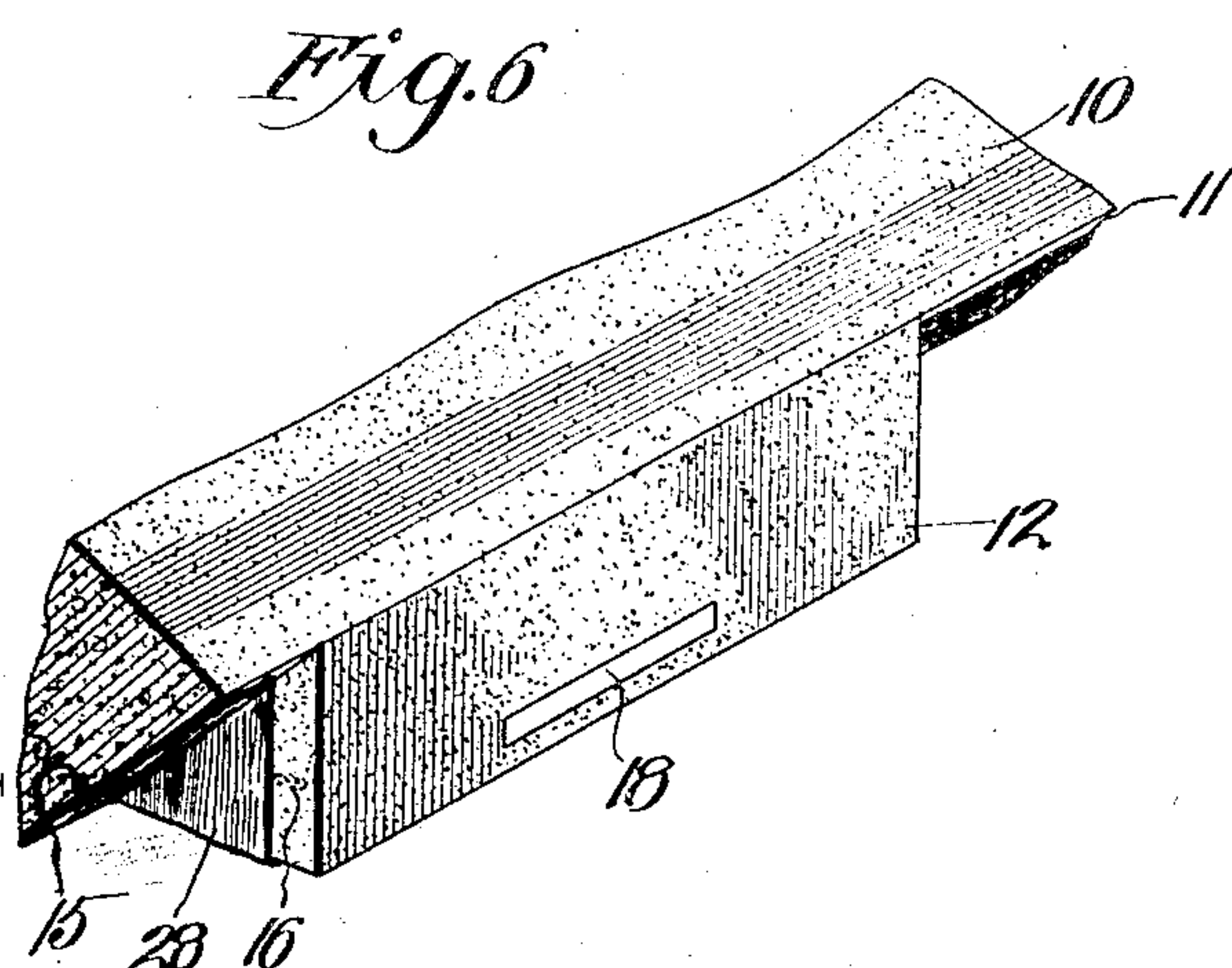
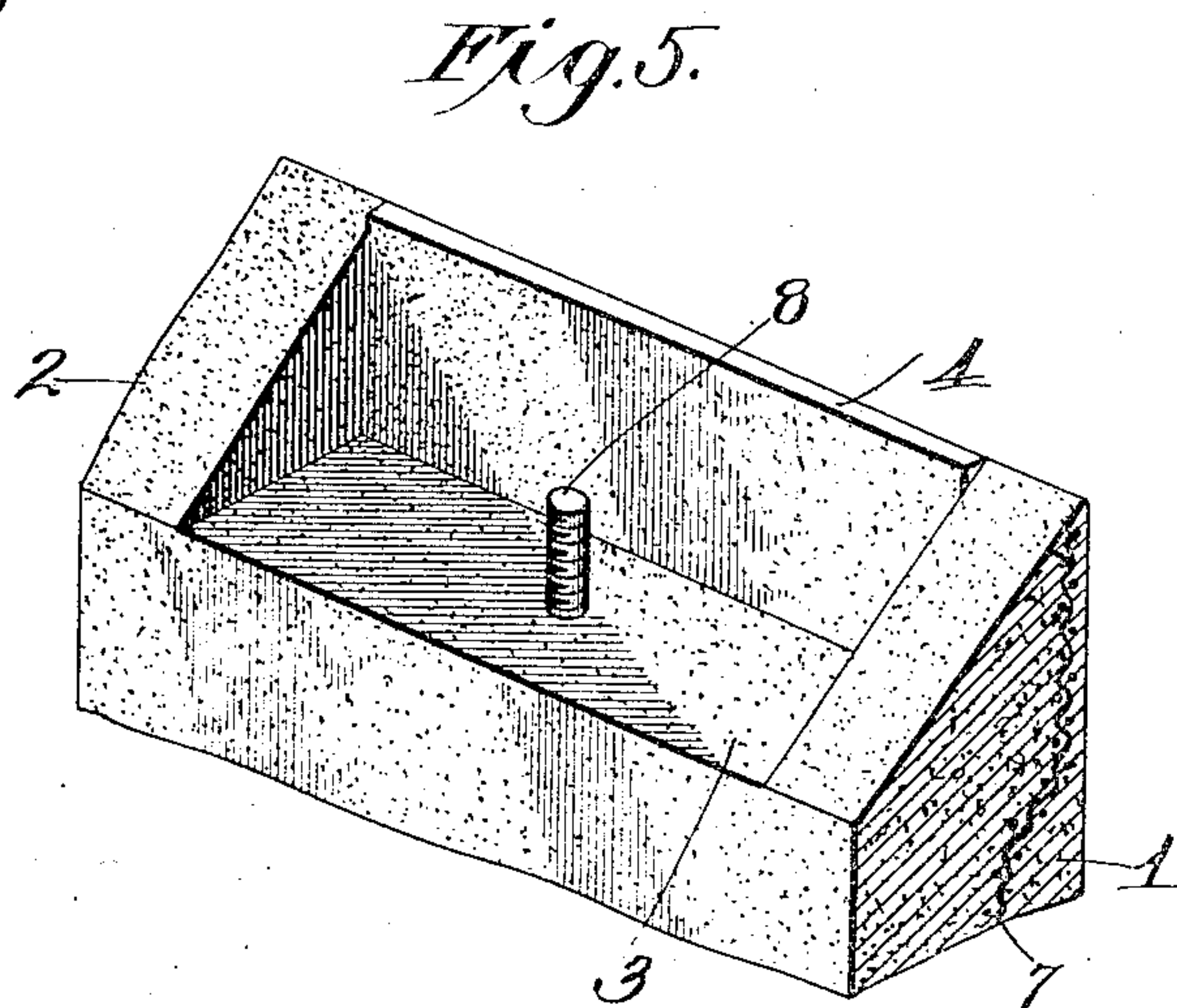
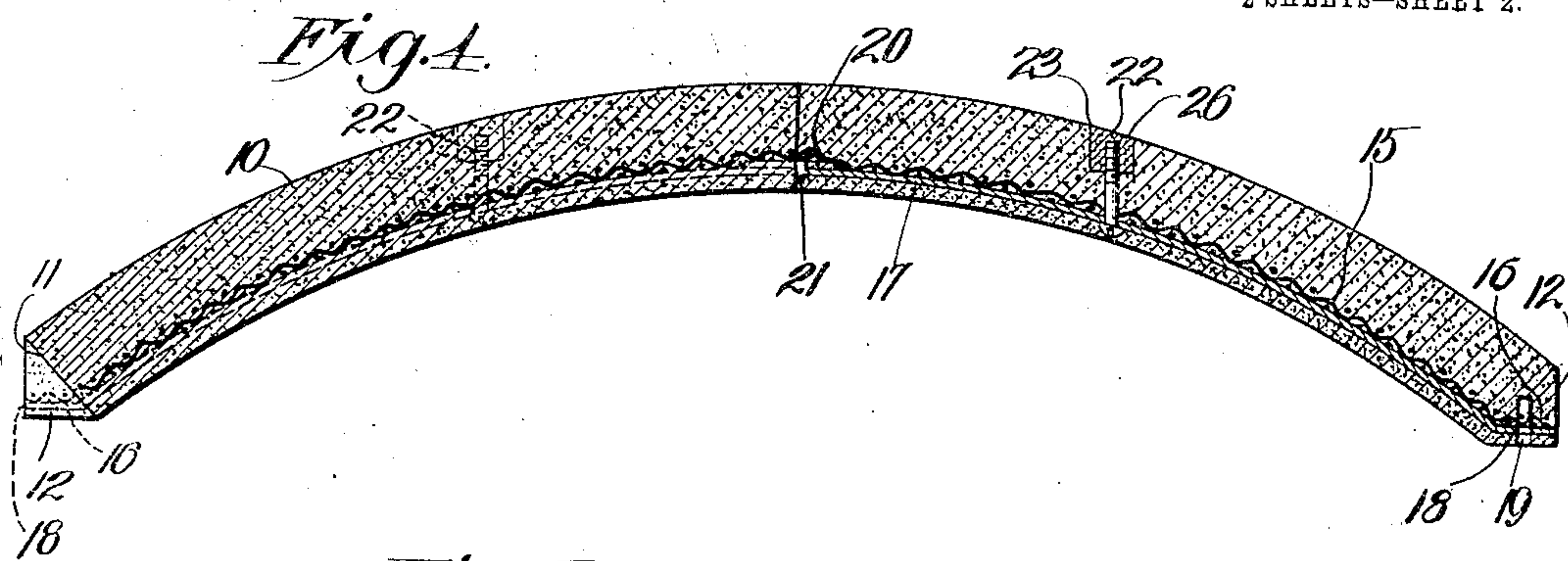
Inventor
C. K. Haw
By George H. Sharp, Atty.

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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

CHARLES K. HAW, OF KANSAS CITY, KANSAS.

BURIAL-VAULT.

No. 917,943.

Specification of Letters Patent.

Patented April 13, 1909.

Application filed October 17, 1908. Serial No. 458,283.

To all whom it may concern:

Be it known that I, CHARLES K. HAW, a citizen of the United States, residing at Kansas City, in the county of Wyandotte and State of Kansas, have invented certain new and useful Improvements in Burial-Vaults, of which the following is a specification.

This invention relates to burial vaults and analogous structures, and has for its object to produce a vault practically indestructible and impervious to air and moisture.

A further object is to produce a vault comprising a body portion and a cap each having means to which handles may be easily and conveniently attached to facilitate the lowering of such portion and cap, in the order named, into a grave.

With these general objects in view, the invention consists in certain novel and peculiar features of construction and organization as hereinafter described and claimed; and in order that it may be fully understood reference is to be had to the accompanying drawings, in which—

Figure 1, is a perspective view of a completed vault embodying my invention. Fig. 2, is a top plan view of the body portion of the vault with the bottom broken away to disclose certain reinforce rods and flexible foraminous metal reinforcement forming a part of the vault. Fig. 3, is an inverted-plan view of the cap of the vault, the same being also broken away to disclose certain reinforcing parts. Fig. 4, is an enlarged cross section of the cap taken on the line IV—IV of Fig. 1. Fig. 5, is an enlarged detail perspective view of a part of the body portion to show one of the pockets therein. Fig. 6, is an enlarged perspective view of a portion of the cap. Fig. 7, is an enlarged section taken in the same plane as part of the section line IV—IV but including a part of the body portion of the vault as well as the cap. Fig. 8, is an enlarged side view of one of the handles, partly broken away, for lowering the body portion and the cap into a grave.

In the said drawings, 1 indicates a hollow oblong box which forms the body portion of the vault, said body portion being formed of concrete or equivalent material reinforced as hereinafter explained. The upper edges of its walls are pitched upwardly and outwardly at 2, to form a flaring mouth and at suitable

points the walls are provided in their upper edges with pockets. The side walls are preferably each provided with a pair of pockets numbered 3, the bottoms of the pockets being preferably flush with the inner or lower margins of the beveled or tapering upper edges 2, the inner faces of the outer walls 4 of the pockets being preferably vertical as shown clearly in Figs. 5 and 7. The end walls are preferably each provided with only a single pocket located centrally, said pockets being of identical form as the side wall pockets and numbered 5, the outer walls of said pockets being numbered 6.

The body portion above described is provided with a flexible foraminous metal reinforcement 7 or its equivalent which extends through the bottom and the walls including the walls of the pockets, as shown in Fig. 7. The bottom and side walls are braced against collapse by the transversely arranged U-bolts 8, the bridge portions of the bolts extending through the bottom and the arms upwardly through the side walls and into the pockets above the bottoms of which they project some distance, as shown clearly in Figs. 5 and 7. The bottom and end walls are also braced against collapse by longitudinally arranged U-bolt 9, the bridge portion of which extends through the bottom and the arms outwardly through the end walls and into the pockets 5, above the bottoms of which they project a suitable distance.

The cap 10 of the vault, also formed of concrete or equivalent material, is of arch-form and is of slightly less width and length than the body portion. It is by preference of the same thickness as the walls and bottom of the body portion and its edges converge downwardly at 11 at the same angle as the edges 2 of the body portion so that said edges shall fit snugly together when the cap is fitted upon the body portion as shown in Fig. 1. The cap is formed on its side and end edges with triangular-shaped lugs 12, adapted to fit in the pockets of the side and end walls of the body portion, the vertical or outer faces of the lugs being adapted to fit flatly against the inner vertical faces of the outer walls of said pockets.

It will be noticed that when the cap is fitted against the body portion with its lugs 12 in the pockets a shallow annular channel will be formed by the upper surface of the cap and the upper edge of the body portion, in the vertical plane of the joint between said

parts, said channel being numbered 13 and adapted to be filled, for the purpose of closing such joint to the passage of air and water, with melted brimstone, cement or equivalent substance 14, as shown.

Embedded in the cap and extending substantially from side margin to side margin and end to end thereof, is a flexible foraminous metal or equivalent reinforcement 15, provided with extensions 16 embedded in the lugs 12. The cap is also braced by a pair of transverse plates 17 in the vertical plane of the lugs 12, said plates 17 terminating in extensions 18 which project through the lugs as shown most clearly in Figs. 4, 6, and 7, it being noticed by reference to the last-named figure, that the lugs are provided with sockets 19 in their undersides and that the reinforcement extensions 16 and 18 are perforated so as not to obstruct said sockets which are for the purpose of receiving the projecting threaded portions of the U-bolts 8.

20 indicates a longitudinally extending plate also embedded in the cap and by preference riveted as at 21 to plates 17 at the points where it crosses the latter and said bolt 20 is of identical construction with plates 17 at its ends that is to say, it is formed with extensions corresponding to extensions 18 occupying the end lugs 12, the reinforcement also having similar extensions embedded in the end lugs, and said extensions of the gauze and plates 20 are likewise perforated to continue the sockets of said end lugs receiving the upwardly projecting threaded ends of the arms of the U-bolt 9. Each transverse reinforcement plate 17 is provided at equal distances from its center with a pair of bolts 22 which project upward through the reinforcement 15 and into pockets 23 formed in the upper side of the cap, said bolts corresponding in diameter and in the pitch of their threads to the threaded ends of the bolt 8.

After a casket has been placed in the body portion of the vault, a set of handles 24 are screwed upon the upper ends of the arms of the U-bolts 8, said handles being provided with slots 25 for the reception of the straps, not shown, commonly employed in lowering caskets into graves, so that by means of such straps the body portion of the vault may be lowered. The straps are then withdrawn and the handles removed from said U-bolts and fitted in pockets 23 on the bolts 22, the straps are then employed to lower the cap down upon the body portion. The straps are then again withdrawn from the handles and the latter removed from the bolts 22. The groove hereinbefore referred to formed by and between the body portion and the cap, is then filled with the molten brimstone or equivalent material, as shown clearly at 14, the same hardening and closing the joint between the body portion and the cap to the passage of air or moisture. The

pockets 23 hereinbefore referred to, are then filled with molten brimstone, cement or equivalent material 26 to protect the bolts 22 from corrosion and to provide a hermetical seal at such points.

If desired the cap may be provided with a valve-controlled pipe 27, at a suitable point through which a fluid may be introduced into the vault, when completed, for embalming purposes or through which the air may be evacuated from the vault.

The entire vault may if desired, be coated internally and externally with material known to the trade as petrific and possessing many times the strength and moisture-excluding properties of the best cement or cement mixtures known. In fact, the vault may be made entirely of petrific as the latter can be worked in precisely the same manner as cement and is of the same nature. Brimstone is preferably used as a seal to provide for the reopening of the vault if desired, but if the latter is to be permanently sealed petrific or an equivalent substance may be employed.

If desired an asbestos or equivalent gasket 28 may be arranged between the beveled edges of the body and cap, the said gasket being flexible in order that it shall be capable of bending around the lugs 12 and be interposed between the same and the bottoms and ends of the pockets of the body, it being of course understood that the gasket will be perforated to accommodate the U-bolts 8 and 9 projecting upwardly into said pockets.

From the above description it will be apparent that I have produced a reinforced artificial stone or equivalent vault, case, sarcophagus, or like structure and which can be made absolutely impenetrable by air or moisture, and which is obviously susceptible of modification without departing from the principle of construction involved.

Having thus described the invention what I claim as new and desire to secure by Letters Patent, is:—

1. An artificial stone vault, comprising a body portion consisting of a base, end walls and side walls, said walls having their upper edges flaring upwardly and outwardly and provided at suitable points with pockets, and an arched cap portion having its edge pitched downwardly and inwardly at substantially the same angle as the flaring edges of the body portion and engaging the same and provided with lugs projecting from said downwardly and inwardly pitched edge into the pockets of the body portion.

2. An artificial stone vault, comprising a body portion consisting of a base, end walls and side walls said walls having their upper edges flaring upwardly and outwardly and provided at suitable points with pockets, an arched cap portion having its edge pitched downwardly and inwardly at substantially

the same angle as the flaring edges of the body portion and engaging the same and provided with lugs projecting from said downwardly and inwardly pitched edge into the pockets of the body portion, and means for sealing the joint between the body and cap portions.

3. An artificial stone vault, comprising a body portion of box-shape with the upper edges of its walls pitched downwardly and inwardly and provided with pockets, a U-bolt embedded in the bottom and end walls of said body portion and projecting upward into certain of the pockets thereof, transversely arranged U-bolts embedded in the bottom and side walls of said body portion and projecting upward into the remaining pockets thereof, an arched cap having its edges beveled downwardly and inwardly and snugly engaging the beveled edges of the body portion and provided with lugs fitting in said pockets, having holes receiving the projecting ends of said U-bolts, and also provided with pockets in its upper side and with bolts projecting upward into said pockets.

4. An artificial stone vault, comprising a body portion of box-shape with the upper edges of its walls pitched downwardly and inwardly and provided with pockets, a U-bolt embedded in the bottom and end walls of said body portion and projecting upward into certain of the pockets thereof, transversely-arranged U-bolts embedded in the bottom and side walls of said body portion and projecting upward into the remaining pockets thereof, an arched cap having its edges beveled downwardly and inwardly and snugly engaging the beveled edges of the body portion and provided with lugs fitting

in said pockets, having holes receiving the projecting ends of said U-bolts, and also provided with pockets in its upper side and with bolts projecting upward into said pockets, and means for closing and sealing said pockets of the cap and joint between the latter and the body portion.

5. An artificial stone vault, comprising a body portion of box shape with the upper edges of its walls pitched downwardly and provided with pockets, a U-bolt embedded in the bottom and end walls of said body portion and projecting upward into certain of the pockets thereof, transversely-arranged U-bolts embedded in the bottom and side walls of said body portion and projecting upward into the remaining pockets thereof, an arched cap having its edges beveled downwardly and inwardly and snugly engaging the beveled edges of the body portion and provided with lugs fitting in said pockets, having holes receiving the projecting ends of said U-bolts, and also provided with pockets in its upper side and with bolts projecting upward into said pockets, and means for closing and sealing said pockets of the cap and the joint between the latter and the body portion, a metallic foraminous reinforcement embedded in the bottom and the walls of the body portion, and a metallic foraminous reinforcement embedded in the cap and its lugs.

In testimony whereof I affix my signature, in the presence of two witnesses.

CHARLES K. HAW.

Witnesses:

H. C. RODGERS,
G. Y. THORPE.