No. 866,214. PATENTED SEPT. 17, 1907.

A. J. PERKS.

METALLIC BURIAL VAULT.

APPLICATION FILED AUG. 4, 1906.

3 SHEETS—SHEET 1.

Fig. 1.

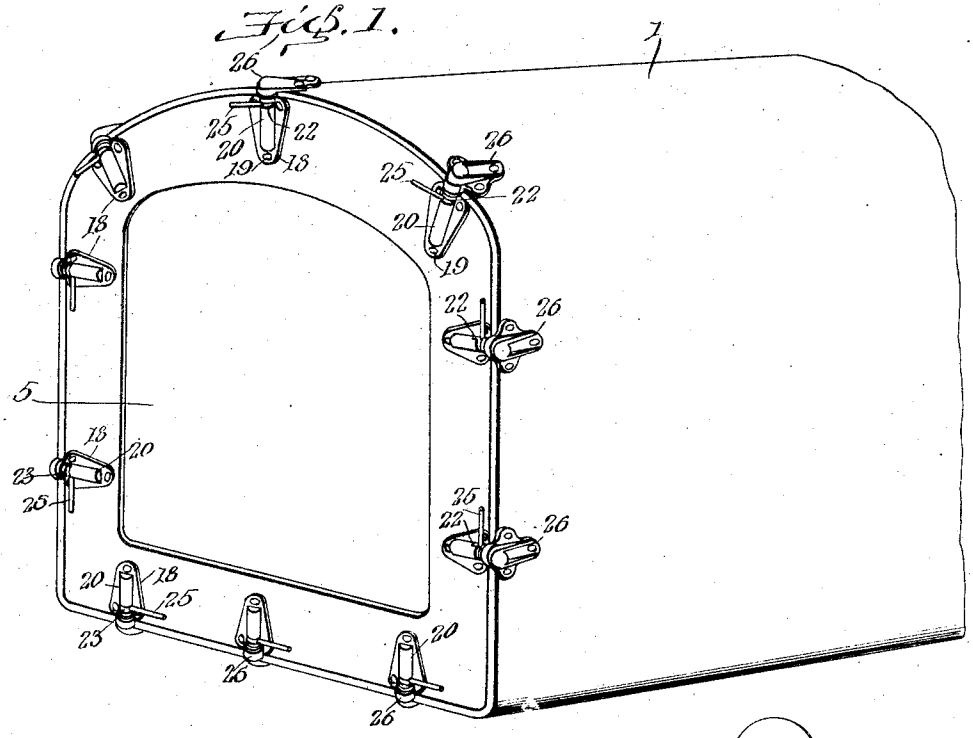


Fig. 5.

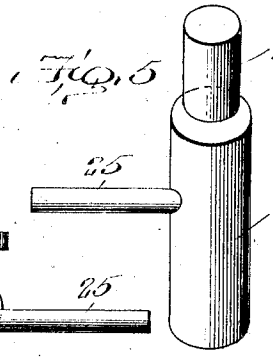


Fig. 6.

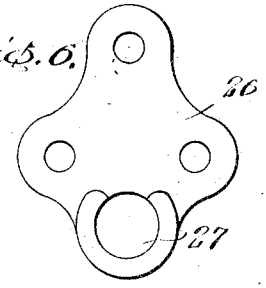


Fig. 4.

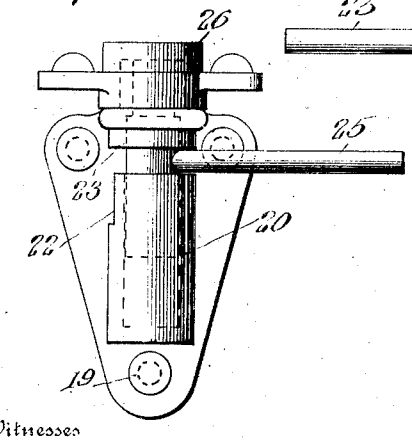
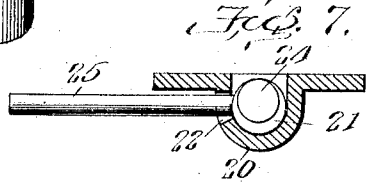


Fig. 7.



Witnesses

G. Howard Walmsley.

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METALLIC BURIAL VAULT.

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3 SHEETS—SHEET 2.

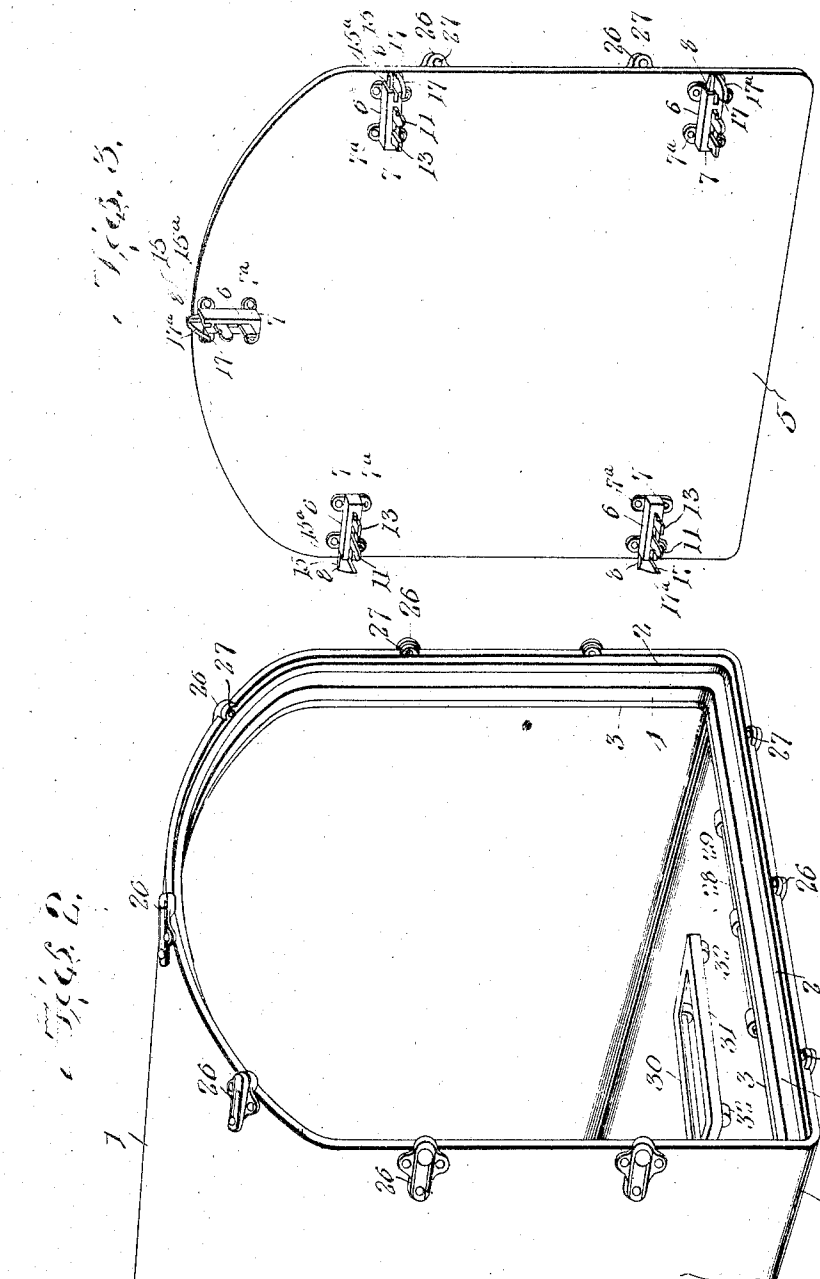


Fig. 2.

Witnesses

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3 SHEETS—SHEET 3.

Fig. 8.

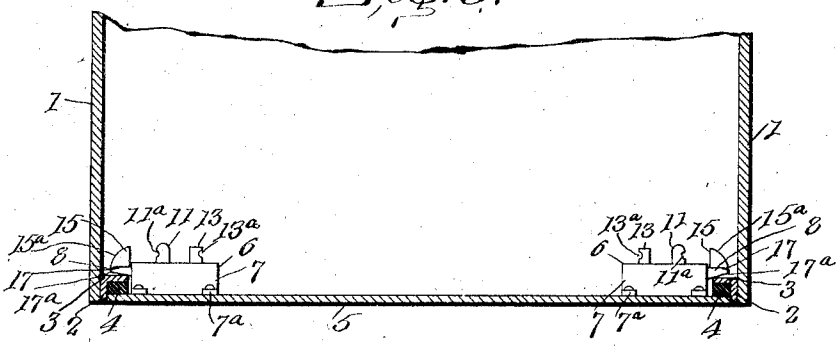


Fig. 9.

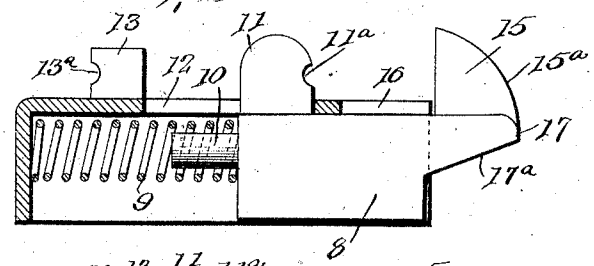


Fig. 10.

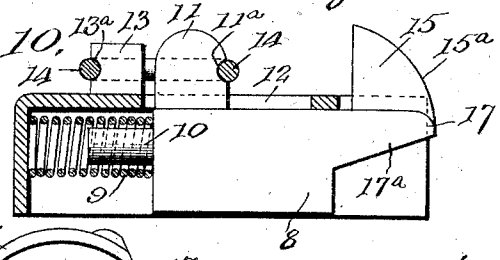


Fig. 11.

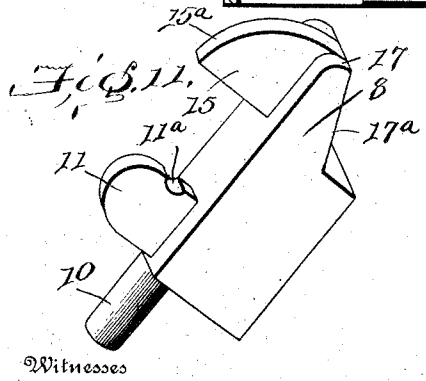
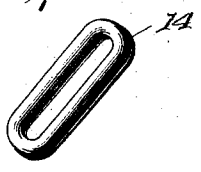


Fig. 12.



Witnesses

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Attorney

UNITED STATES PATENT OFFICE.

ALBERT J. PERKS, OF SPRINGFIELD, OHIO, ASSIGNOR TO THE CHAMPION CHEMICAL COMPANY, OF SPRINGFIELD, OHIO, A CORPORATION OF OHIO.

METALLIC BURIAL-VAULT.

No. 866,214. Specification of Letters Patent. Patented Sept. 17, 1907.

Application filed August 4, 1906. Serial No. 329,211.

To all whom it may concern:

Be it known that I, ALBERT J. PERKS, a citizen of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Metallic Burial-Vaults, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to metallic burial vaults, and more particularly to that class of vaults having an end opening which is adapted to be closed and locked to hermetically seal the same, and the object thereof is to provide such a vault in which the door or end closure may be easily inserted and locked in place and to provide a locking means and a clamping means adapted to cooperate, and which will be efficient, simple in construction and correspondingly inexpensive in production.

With these objects in view my invention consists in the construction herein described, and more particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of the end portion of the vault, showing the door clamped in place; Fig. 2 is a similar view, with the door removed; Fig. 3 is a perspective view of the door, showing the locking devices on the inner face thereof; Fig. 4 is a plan view of the clamping device; Figs. 5 and 6 are details of the clamping device; Fig. 7 is a transverse section, taken through said clamping device; Fig. 8 is a transverse section, taken through the door and end portion of the vault, showing the locking devices in place; Fig. 9 is a longitudinal section of the locking device, with the bolt extended; Fig. 10 is a similar view, with the bolt retracted; Fig. 11 is a detail view of the bolt itself; and Fig. 12 is a detail view of the retaining latch.

In these drawings, the vault is indicated at 1. Within this vault and a short distance from the end thereof is secured an annular flange 2, preferably formed by riveting, or otherwise firmly securing, an angle bar 3 to the inner edge of the vault. A packing 4, of rubber or other suitable material, is placed against the outer face of this flange and is adapted to receive the inner face of the door, as will be hereinafter described.

The door 5, which is of metal or other suitable material, is shaped to fit snugly within the end of the vault and to bear at its inner edges against the packing 4, resting upon the flange 2. Secured at intervals around the inner edge of the door are locking devices 6 which are so constructed that when the door is placed in position in the vault, the bolts of said locking devices will be retracted to allow them to pass the flange 2 and, as soon as they have passed the same, released to engage the inner edge of the flange, thus locking the door securely in place. This locking device may be of any suitable construction, but I prefer that shown in the drawings, in which 7 is a casing of metal provided with flanges 7^a having bolt holes for securing the same to the door, and also provided with a sliding bolt 8 and a spring 9 engaging the lug 10 at the rear end of said bolt and confined between said bolt and the end of said casing. A pin or lug 11 is carried by the bolt 8 and extends through a slot 12 in the wall of the casing 7 and affords means for retracting said bolt against the pressure of the spring 9. The lug 11 is preferably formed with a recess 11^a in the forward edge thereof, and the casing 7 is provided at the rear of the slot 12 with a lug 13 having a similar recess 13^a in the rear edge thereof. In order to secure the bolt 8 in its retracted position, against the pressure of the spring 9, I provide a link 14 of sufficient length to pass over the lugs 11 and 13 when the bolt 8 is in the extreme rearward position and adapted to engage the recesses 11^a and 13^a in the said lugs to retain the bolt in a retracted position after the rearward pressure has been removed, the lug 11 having a movement within the link equal to the combined depth of the two recesses 11^a and 13. The edge of the nose 17 of the bolt 8, which engages the flange 2, is beveled as shown at 17^a, preferably at an angle of about 12°, and the edge of said nose opposite said beveled edge is provided with a lug or projection 15, adapted to enter the slot 16 in the casing 7 when the bolt is in its retracted position. The lug 15 has its forward edge beveled or inclined, as shown at 15^a and extended to the forward end of the nose 17 which is of such length as to be flush with the forward end of the casing 7 when the lug 11 is in the foremost position permitted by its movement within the link 14. Thus when the door 5 is placed in position, with the bolts 8 of the locking devices in their extended positions, the inclined face 15^a of the lug 15 on the bolt 8, engages the edge of the flange 2, and as the door is moved inward the pressure of the flange against the inclined face of the lug forces the bolt back against the pressure of the spring, thereby permitting the bolt to pass the flange. As soon as the end of the nose 17 of the bolt passes the flange the spring again forces the bolt forward and causes the beveled face 17^a of the nose to engage the inner edge of the flange and thus lock the door against outward movement. While I have described a link for retaining the bolt in its retracted position, it is obvious that a wire or other flexible substance might be passed around the lugs for that purpose.

In order to clamp the door 5 tightly against the packing 4 to form an air-tight joint, I provide clamping means on the outer face of the door, which may be of any suitable construction, but preferably that shown in the drawings, in which 18 is a metal plate

provided with bolt holes 19 for securing the same to the face of the door and having a guideway 20 adapted to receive the sliding bolt 21. The guideway 20 is provided near its forward end with a longitudinal slot 22 near the junction of said guideway with the plate 18, and a transverse slot 23 at the forward end of said longitudinal slot and at substantially right angles thereto. The bolt 21 has its forward end reduced, as indicated at 24, and eccentric to the axis of rotation of the bolt. A pin 25 is secured to said bolt and extends through the slots in the guideway 20. Metal ears 26, having recesses 27 therein, are securely bolted to the forward end of said vault in positions corresponding to the location of the clamping devices 18, and in such a manner that the recess 27 projects beyond the forward edge of the vault.

With the parts as herein described and both the locking device and the clamping bolts in their normal positions, the end piece or door 5 is inserted in the end of the vault. When the inclined face 15^{a} of the lug 15 carried by the bolt 8 of the locking device 6 comes in contact with the flange 2 within the vault, it is forced back and retracts the spring-pressed bolt 8 of the locking device, thereby permitting the bolt to pass the flange and the beveled face 17^{a} of said bolt to engage upon the inner edge of the flange and lock the door securely in place. The bolt 21 of the clamping device 18 is in its retracted position with the pin 25 in the slot 22 and has the cutaway portion of the forward or eccentric end of the bolt turned toward the outside. With the bolt in this position, it is slipped forward into the recess 27 and the pin 25 thrown downward, thereby turning the bolt to bring the eccentric 24 to bear against the edge of the recess 27, thereby forcing the end piece or door inward against the packing 4. As the door is forced inward, the beveled edge of the spring-pressed bolt 8 slips over the flange 2 and grips the same to take up the slack and hold the door in the position to which it is forced by the clamps. The bevel on the sliding bolt 8 is at such a slight angle that the outward pressure of the door, when the clamps are released, is not sufficient to force the bolt back against the pressure of the spring 9, but grips firmly on the edge of the flange and holds the door in the position to which it has been advanced.

On the bottom of the vault and within the flange 2 I arrange a rod 28 upon which are mounted rollers 29 adapted to receive the end of the casket as it is entered into the vault and form a guideway for the same. Within the vault beyond the rollers 29 is a small truck 30 comprising a frame 31 mounted on rollers 32. As the casket is pushed into the vault over the rollers 29, the forward end is allowed to rest upon the truck 30 which supports it and guides it to the rear of the vault.

I wish it to be understood that I do not desire to be limited to the exact details of construction shown and described, for obvious modifications will occur to a person skilled in the art.

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

1. In a burial vault, the combination, with a body portion having an annular flange near one end thereof, of a removable door, means for adjusting said door relatively to said flange, a spring-actuated sliding bolt carried by said door and having its opposite faces beveled, one face to engage said flange and retract said bolt, and the other face to engage said flange and retain said door in its adjusted position, substantially as described.

2. In a burial vault, the combination, with the body portion having a projection therein, and a door adjustable relatively to said projection, of a locking device for said door comprising a housing having a slot therein, a bolt slidably mounted in said housing, a spring confined between said bolt and one end of said housing, a part carried by said bolt and extending through said slot, and a member adapted to be connected to said housing and to engage the part extending through said slot to retain said bolt in its retracted position, said bolt having an inclined face adapted to engage the projection on said body portion and to retract the bolt against the pressure of said spring.

3. In a burial vault, the combination, with the body portion having a projection therein, and a door adjustable relatively to said projection, of a locking device for said door comprising a housing having a plurality of slots therein, a bolt slidably mounted in said housing, a spring confined between said bolt and one end of said housing, a lug on said bolt extending through one of said slots in said housing, and means for engaging said lug to retain said bolt in its retracted position, and an inclined nose near the outer end of said bolt in alinement with the other of said slots and adapted to engage the projection on said body portion and retract said bolt against the pressure of said spring.

4. In a burial vault, the combination, with a body portion having a projection therein and a door adjustable relatively to said projection, of a locking device for said door comprising a housing having a slot therein, a lug on said housing, a bolt slidably mounted in said housing, a spring confined between said bolt and one end of said housing, a lug on said bolt extending through the slot in said housing, an inclined face on said bolt adapted to engage the projection on said body portion and retract said bolt against the pressure of said spring, and means for engaging said lugs to retain said bolt in its retracted position, substantially as described.

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

ALBERT J. PERKS.

Witnesses:
E. O. HAGAN,
EDWARD L. REED.