No. 654,155. Patented July 24, 1900.

C. H. HISER & E. N. LUPFER.

GRAVE VAULT.

(Application filed Nov. 23, 1899.)

(No Model.)

Fig. 1

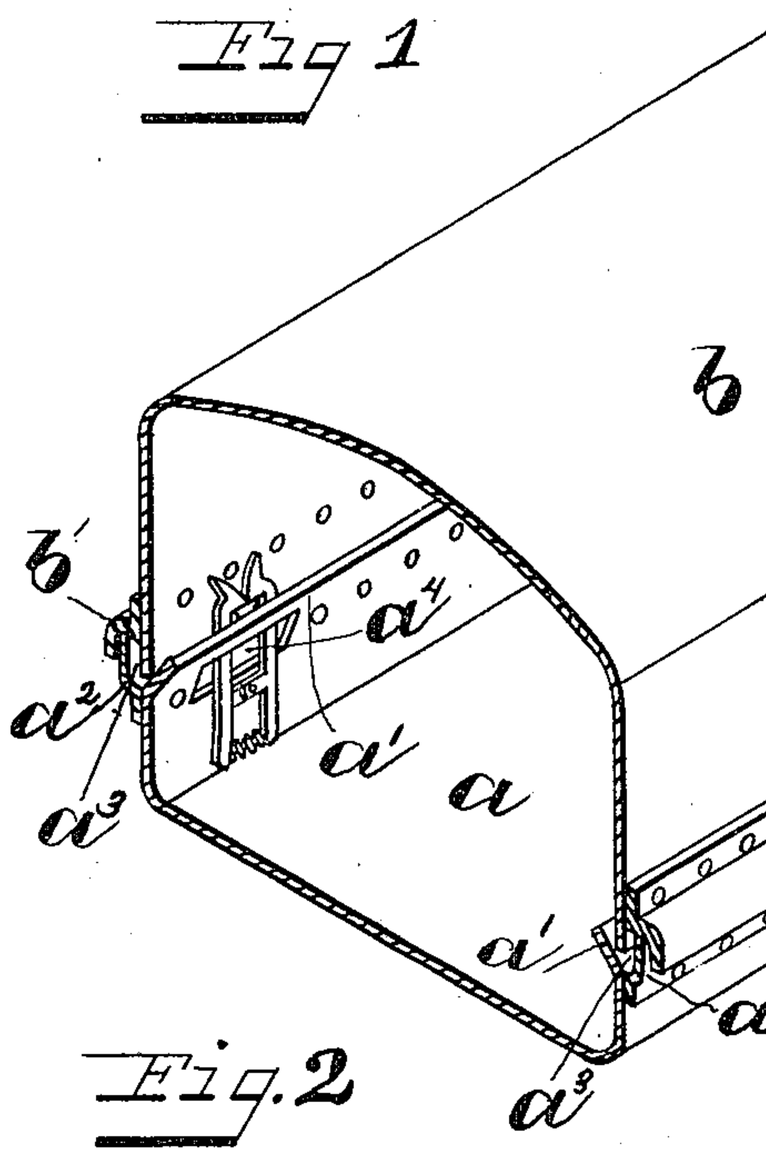


Fig. 2

Fig. 7

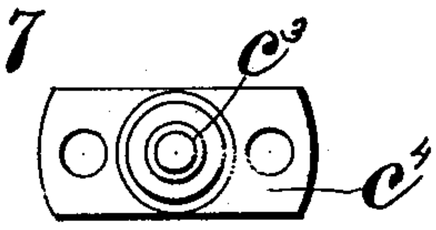


Fig. 8

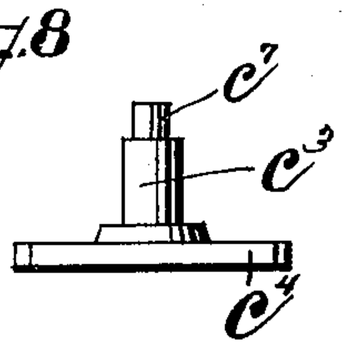


Fig. 5

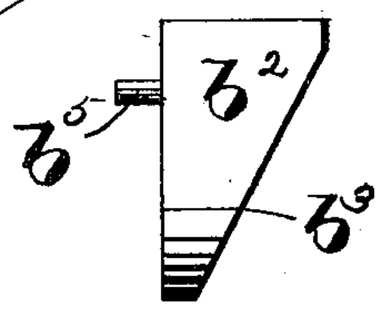


Fig. 6

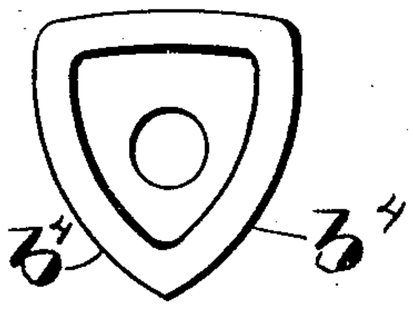


Fig. 3

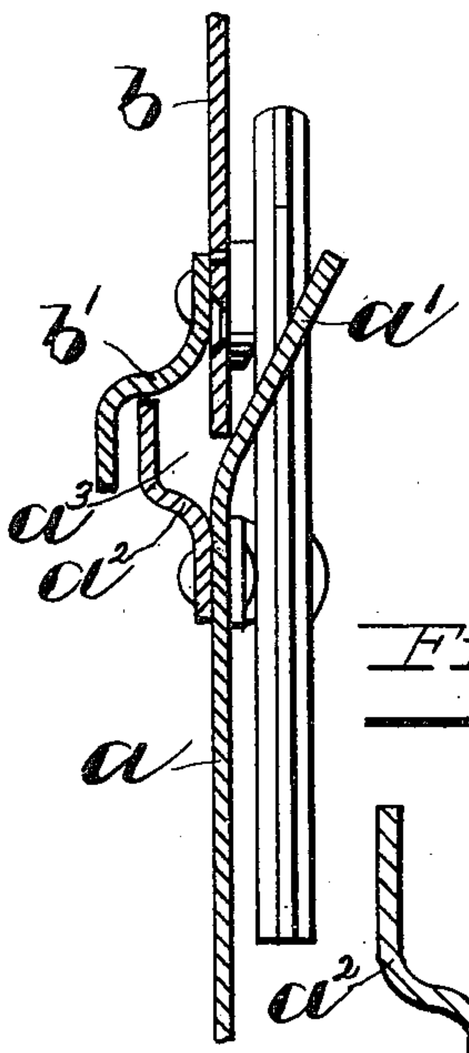
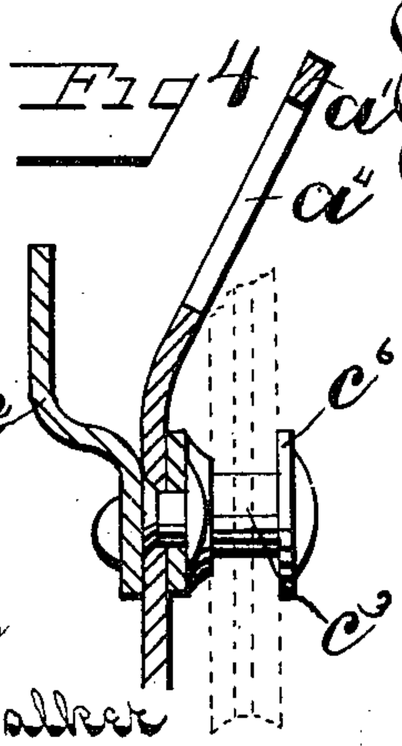
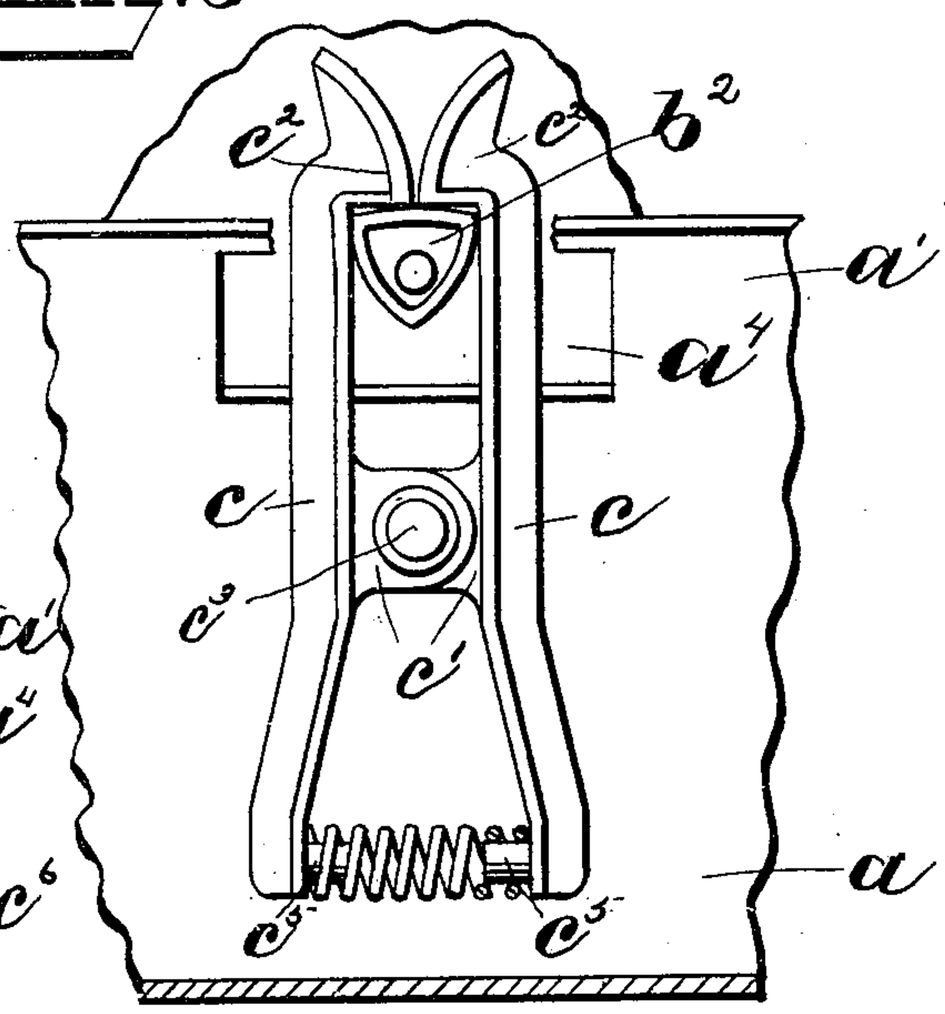


Fig. 4





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UNITED STATES PATENT OFFICE.

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GRAVE-VAULT.

SPECIFICATION forming part of Letters Patent No. 654,155, dated July 24, 1900.

Application filed November 23, 1899. Serial No. 738,236. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. HISER and EDGAR N. LUPFER, citizens of the United States, residing at Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Grave-Vaults, of which the following is a specification.

Our invention relates to improvements in metallic grave-vaults or portable vaults; and it particularly relates to that class of portable vaults known as "burglar-proof grave-vaults," which are formed with internal automatic locking devices which when once locked cannot be unlocked or tampered with from the outside.

Our invention consists in constructions and combinations hereinafter described and claimed.

In the accompanying drawings, which form a part of this specification, Figure 1 is a sectional perspective view of a vault embodying our invention. Fig. 2 is a sectional view in detail, showing the locking device. Fig. 3 is a detail view, also partly in section, of the locking device with some of the parts broken away. Fig. 4 is a detail view in section, showing the arrangement of the upper part of the base of the vault with the sealing or cement groove, also showing the manner of attaching the locking device. Figs. 5, 6, 7, and 8 are detail views of parts of the same.

Like parts are represented by similar letters of reference in the several views.

a represents the base of the vault, and *b* the removable top or cover. These parts may be formed of any well-known and suitable material, but are preferably constructed from sheet-steel. The top edge of the base *a* is inturned or drawn inwardly to form an inclined flange, as shown at *a'*, which extends entirely around the top of said base, and attached to the outside of the upper edge of this base is a flange a^2, which, with the inclined flange *a'*, forms a pocket or groove a^3, extending entirely around the upper edge of said base.

The sides of the top *b* are preferably formed straight and are made of the same width as the extreme width of the lower part of the base proper *a*, so that when this top *b* is placed on the base the sides of said base and the sides of the top are in a straight line, except, of course, that part of the base which forms the inclined flange *a'*, this flange being adapted to form a support and guide for the lower edge of the top or cover to its seat and holding the same against movement, thus insuring the cover having a firm seat upon the base. Just above the lower edge of the cover there is secured an overhanging flange *b'*, which extends entirely around said cover and is adapted to rest, when the cover is in place, on the flange a^2 and overlap the same, as shown clearly in Fig. 1, with the lower edge of the cover projecting into the groove or pocket a^3.

To provide for automatically locking the base and top together, we secure at proper intervals on the cover beveled three-cornered lugs b^2—that is to say, they are inclined on one side on what might be termed a "longitudinal" plane, as shown at b^3, and they are inclined on two sides to what might be termed a "transverse" plane, as shown at b^4 b^4.

The locking device consists of two interengaging locking-bars *c c*, having the interengaging lugs *c'* and the beveled hook-shaped ends c^2.

The locking-bars *c* and *c* are pivoted together through the lugs *c'* by a stud c^3, preferably provided with a base c^4, which is riveted firmly to the side of the vault-base. The lower ends of the bar are further provided with projections c^5, which tend to press the lower ends of the locking-bar *c c* apart and the upper hooked ends c^2 thereof together. To further provide a guide for the locking-bars and also an additional guide for the top or cover of the vault, we form in the inclined flange *a'* an opening a^4, through which the locking-bars *c c* project, the sides of the opening through said inclined flange being adapted to form guides for the locking-bars and hold them against lateral movement, and thus insure their alinement one with the other, while at the same time they are free to move to or from each other.

The lugs b^2, by reason of the beveled side b^3, will also contact with the sides of the opening a^4, and thus assist in forcing the top to a firm seat upon the base and also assist in holding the same against lateral movement.

The beveled three-cornered lugs b^2 are preferably provided with pins or projections b^5, which fit into corresponding openings in the side of the vault, so that a single rivet will hold the same firmly in place. The studs c^3, which support the locking-bars, are preferably riveted to the sides of the vault in line with flange a^2, the flange being afterward riveted to said vault, as shown in Fig. 4, so as to cover the rivets which support the locking device, and thus prevent any tampering with the locking device from the outside. The flange b' is also placed over the rivets which support and fasten the lugs b^2 in a similar manner.

In operation, the top and base being separated, the groove a^2, formed by the inclined flange a' and the flange a^2, is filled with cement or other similar sealing material. The top or cover is then lowered onto the base and is guided by the inclined flange so that its lower edge projects into the groove a^2 and contacts with the flange a' simultaneously with the contacting of the upper edge of the flange a^2 with the horizontal part of the flange b^2, thus completely closing the groove a^2 and forming a closed cement opening which effectually seals the casket at this point, the closing of the casket having a tendency to force the cement from the inclined flange into this closed groove a^2, and thus completely fill the same. At the same time the lugs b^2 will pass down between the beveled hook-shaped end c^2 of the locking device, thus forcing the same against the spring c^6, and when completely inclosed the spring will force the parts together, thus firmly engaging the lugs b^2 and securely locking the casket.

In Figs. 4, 7, and 8 we have shown details of the studs c^3, showing the preferable way of forming the same so as to readily assemble the locking device, the stud c^3, and shoulder projection c^7, adapted to receive the washer c^6. This stud being formed of malleable iron or similar material, parts are readily attached by riveting the part c^7 on the washer c^6, at the same time allowing perfect freedom of the parts in operation.

Having thus described our invention, we claim—

1. In a grave-vault such as described, a base, an upward inwardly-inclined flange formed by extending the sides of the base, a series of openings in said flange, in combination with the top or cover and locking devices extending through said openings, said flange and the locking devices extending through said openings forming a double guide longitudinally and laterally for said cover, substantially as and for the purpose specified.

2. In a grave-vault such as described, a base, an upward inwardly-inclined flange formed by extending the sides of the base, a series of openings in said flange, an upward outwardly-extending flange fixed to the upper portion of the sides of the base forming with said upward inwardly-inclined flange a groove as described, in combination with the top or cover the lower edge of said cover resting on said upward inwardly-inclined flange, a downward outwardly-extending flange having a shoulder therein, fixed to the lower portion of the sides of said cover, said shoulder being above the lower edge of said cover and resting on said upward outwardly-extending flange, said interengaging flanges being adapted to form a closed cement-channel, parallel bars with hook-shaped ends, pivoted together in pairs and to the sides of the base and extending through the openings in said upward inwardly-inclined flange, a spring to press the hook-shaped ends together, beveled lugs or projections fixed to the sides of the cover to engage said hook-shaped ends of the bars to lock the parts of the vault together, said upward inwardly-inclined flange and the bars of the locking device extending through the openings therein forming a double guide longitudinally and laterally to seat the cover on the base, substantially as described.

In testimony whereof we have hereunto set our hands this 20th day of November, A. D. 1899.

CHARLES H. HISER.
EDGAR N. LUPFER.

Witnesses:
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