Oct. 25, 1932. E. W. PHILLIPPE 1,884,201

BURIAL VAULT LATCH

Filed Aug. 31, 1931

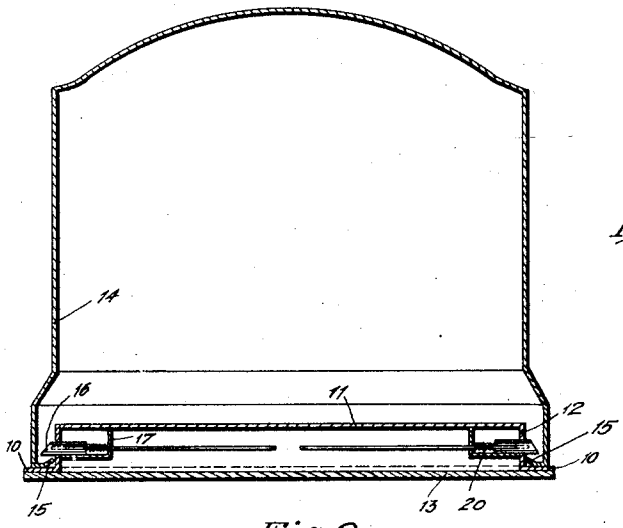


Fig. 2

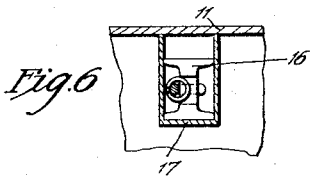


Fig. 6

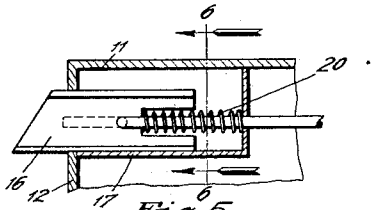


Fig. 5

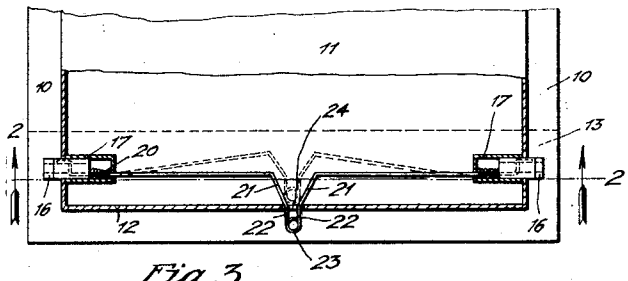


Fig. 3

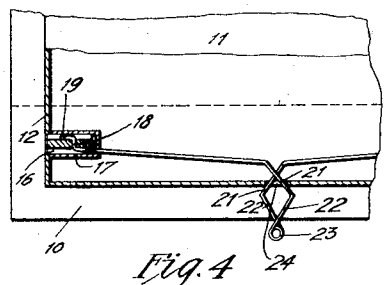


Fig. 4

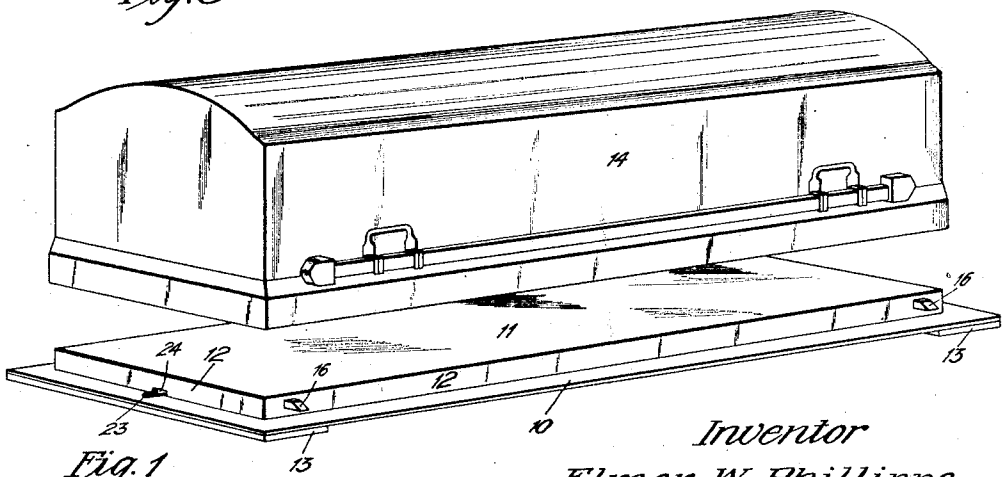


Fig. 1

Inventor

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by Owen & Hague Attys.

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UNITED STATES PATENT OFFICE

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BURIAL VAULT LATCH

Application filed August 31, 1931. Serial No. 560,329.

My invention relates to improved means for locking the top portion of a burial vault to the base portion.

My object is to provide a locking device of this class in which the top portion may be temporarily locked to the base portion but easily unlocked to release therefrom, and yet may also be permanently locked to the base portion in such a manner that it cannot be unlocked.

A further object is to provide an improved means for connecting two locking bolts together and for operating them simultaneously, which connecting means is of simple, durable and inexpensive construction and may be readily and easily assembled without tools.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawing, in which:

Figure 1 shows a perspective view illustrating a burial vault having my improved locking device applied thereto, the top portion being raised above the base portion.

Figure 2 shows a vertical, transverse, sectional view of same with the top portion resting upon the flange of the base portion and the locking bolts in locked position, and taken on the line 2—2 of Figure 3.

Figure 3 shows a horizontal sectional view through one end of the burial vault with the locking bolts in locked position. The dotted lines show the locking bolt handle pushed into the base portion for permanently locking.

Figure 4 shows a similar view with the handle portion pulled outwardly to hold the locking bolts in unlocked position.

Figure 5 shows an enlarged, detail sectional view through a portion of the base and the guide for the locking bolts, and illustrating the structure of the locking bolt and the spring rod for connecting it to the handle; and

Figure 6 shows a sectional view on the line 6—6 of Figure 5.

Referring to the accompanying drawing, I have used the reference numeral 10 to indicate the outer flange of the base portion. The central part of the base portion is formed with a raised platform 11, there being upright sides 12 between the flange and platform. On the under surface of the flange 10 at the ends thereof I have provided cross braces 13 permanently secured to the flange for reinforcing purposes.

The top portion of the vault is indicated generally by the numeral 14, and its lower edge portion is of a size substantially larger than that of the top of the platform 11 and the lower edge is bent inwardly at 15 to form a locking flange and to rest upon the top of the flange 10.

At each end of the base there is a locking device consisting of a pair of locking bolts and means for operating them. Each locking bolt comprises a body portion 16 substantially in the form of an I-beam, as shown in Figure 6, its outer end being inclined downwardly and outwardly and its central portion being formed with an opening extended transversely through it. This slide bolt is slidably supported in a housing 17 fixed to the wall 12 of the base portion.

The means for connecting two of the slide bolts together and for operating the slide bolts comprises a rod made of spring wire. At each end portion of the rod is a part 18 bent at right angles to the rod, and a part 19 at the end of the part 18 and parallel with the body of the rod. The rod is connected to the locking bolts 16 by extending the end 19 through the opening in the bolt and then forcing the rod through the opening until the part 18 is in the opening in the bolt and the part 19 is lying against the side of the bolt opposite from the side against which the body portion of the spring rod is resting.

I have also provided an extensible coil spring 20 on the rod, one end engaging the casing 17 and the other the locking bolt, to assist in sliding the locking bolt outwardly.

At the central portion of the spring rod I form two lateral extensions spaced apart from each other and each comprising a part 21 which extends laterally from the main

part of the spring rod and converge toward each other. At the ends of the parts 21 the rod is formed with two parallel portions 22, spaced apart from each other and the center of the rod is formed into a coil 23. Formed in the adjacent end wall 12 of the base portion is an opening 24 of a size to substantially fit the parts 22 of the rod when in their normal position, as shown by solid lines in Figure 3, and when in this position the locking bolts will be in their extended positions, as shown in Figure 3.

When it is desired to withdraw the locking bolts and to hold them in unlocked position, the operator simply grasps the outer end of the handle formed by the parts 22 and 23 and pulls it outwardly until it assumes the position shown in Figure 4, and when in this position the angular portions of the spring wire between the parts 21 and 22 will be in overlapping positions and form a handle portion somewhat larger than the opening 24 through which it is extended, so that the locking bolts are yieldingly held in unlocked position. The handle, however, may be pushed inwardly readily and easily by the operator's hand to a position for holding the bolts in their locked positions.

In addition to this, for permanently holding the locking bolts in locked position the operator may simply push the handle inwardly through the slot 24 to a position shown by dotted lines in Figure 3, and then move it downwardly below the slot 24, and when in this position the handle cannot be reached for unlocking purposes.

In practical operation it is sometimes desirable that the vault top portion be simply rested upon the base portion without being locked thereto. At other times it is desirable that the top portion be temporarily locked to the base portion, and at other times it is desirable that the top portion be permanently locked to the base portion.

With my improvement, and when the handle is moved to the position shown in Figure 4, then the top is in its unlocked position when resting upon the base portion and the handle is moved to position shown by solid lines in Figure 3. Then when the top portion is placed in position resting upon the base portion, it will be automatically locked thereto and the flange 15 of the top portion will then rest upon the handle, thus keeping the lower edge of the top portion slightly spaced apart from the flange 10 of the base portion. When in this position the vault may be carried by means of the handles on the top portion and the base will be firmly locked to it. However, if it is desired to raise the top portion, the operator simply inserts a hook or other device under the top portion and engages the loop 23 of the handle and draws the handle outwardly to position shown in Figure 4.

When, however, it is desired to permanently lock the top member to the base portion, the operator simply pushes the handles inwardly to the position shown in Figure 3, whereupon the lower edge of the top portion will then move downwardly and rest upon the flange 10, thus preventing any access to the handle so that the locking bolts cannot be moved to open position.

I claim as my invention:

1. A latch device comprising a base having a slot formed therein, two slide bolts mounted in the base, and means for operating the slide bolts comprising a spring wire rod connected at its ends to the slide bolts, a handle at its central portion projected through said slot, the parts of the rod adjacent to the handle being inclined at angles converging toward the handle and designed to engage the sides of the slots in such manner that as the handle is moved through the slot in an outward direction the slide bolts will be withdrawn and when the handle is moved inwardly through the slot the slide bolts will be moved outwardly to locking postion.

2. A latch device comprising a base having a slot formed therein, two slide bolts mounted in the base, and means for operating the slide bolts comprising a spring wire rod connected at its ends to the slide bolts, a handle at its central portion projected through said slot, the parts of the rod adjacent to the handle being inclined at angles converging toward the handle and designed to engage the sides of the slots in such manner that as the handle is moved through the slot in an outward direction the slide bolts will be withdrawn and when the handle is moved inwardly through the slot the slide bolts will be moved outwardly to locking position, said handle and spring rod members being also so shaped and constructed that the handle member may be forced through the slot and then laterally, out of line with the slot to provide a non-releasable latch.

3. A latch device comprising a base having a slot formed therein, two slide bolts mounted in the base, and means for operating the slide bolts comprising a spring wire rod connected at its ends to the slide bolts, the central portion of the spring rod being formed with a handle portion projected through said slot, the portions of the spring rod on opposite sides of the handle being normally substantially parallel and at right angles to the body of the rod, the portion of the rod adjacent the said parallel portions being normally inclined at converging angles from the body of the rod to said parallel portions, the said parallel and converging portions of the rod engaging the sides of the slot, for the purposes stated.

Des Moines, Iowa, August 24, 1931.

ELMER W. PHILLIPPE.