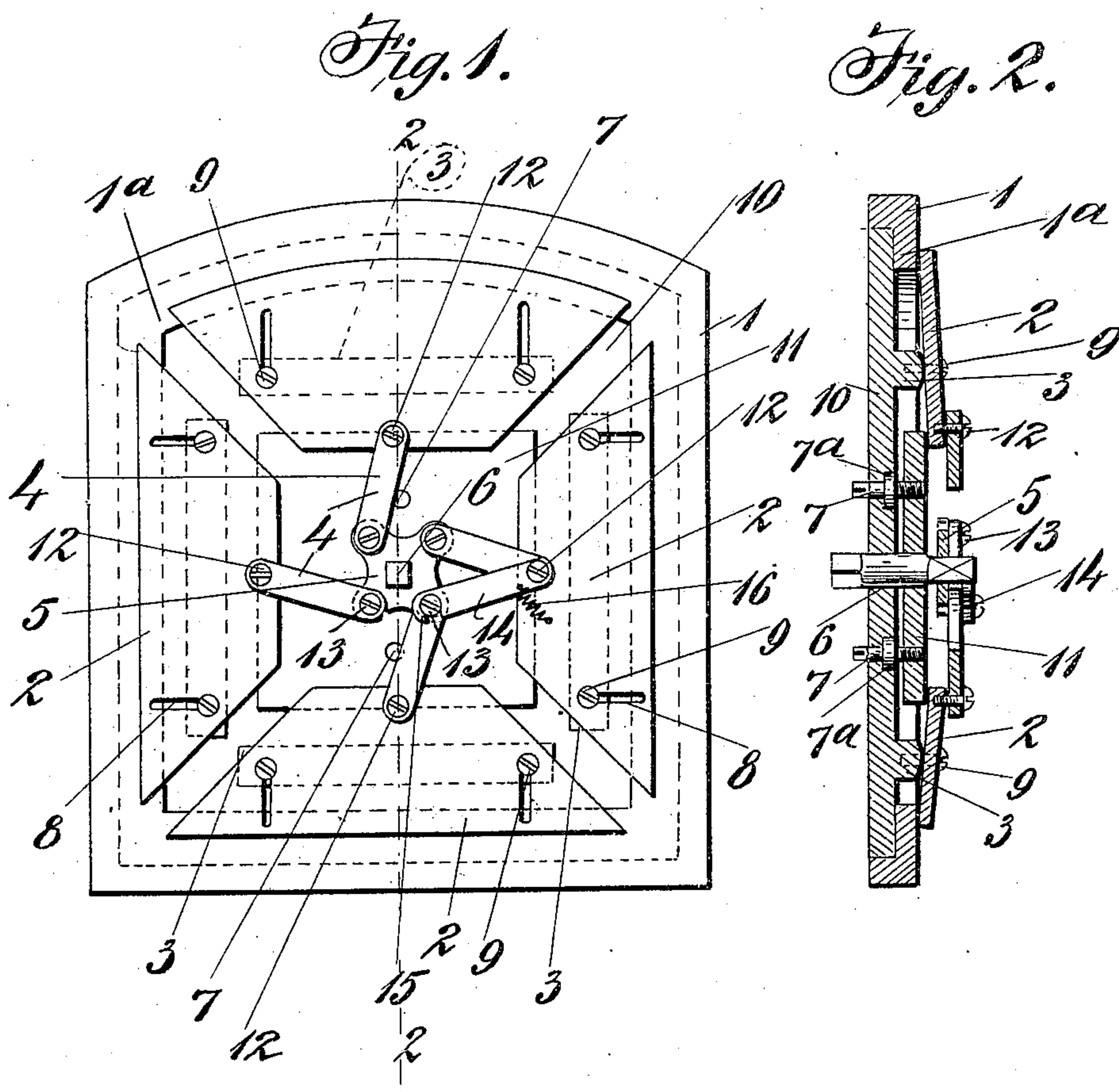


T. F. KELLY.
VAULT CLOSURE.
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914,424.

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UNITED STATES PATENT OFFICE.

THOMAS F. KELLY, OF GALION, OHIO.

VAULT-CLOSURE.

No. 914,424.

Specification of Letters Patent.

Patented March 9, 1909.

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To all whom it may concern:

Be it known that I, THOMAS F. KELLY, a citizen of the United States, residing at Galion, in the county of Crawford and State of Ohio, have invented certain new and useful Improvements in Vault-Closures, of which the following is a specification.

This invention is a closure particularly adapted for grave vaults, and has for its object to provide a locking closure which will effectively seal the vault and which may, if desired, be locked so that it cannot be opened.

The invention is capable of application to other purposes than that herein described, and may be used effectively for closing boxes or receptacles of various kinds.

The invention is illustrated in the accompanying drawings, in which—
Figure 1 is an inside elevation showing the closure and the lock mechanism therefor, in closed position. Fig. 2 is a section on the line 2—2 of Fig. 1.

Referring specifically to the drawings, 1 is the door frame which receives the door plate 10, which latter seats against a flange 1^a at the back, making the front of the plate flush with the front of the frame, which prevents the insertion of a tool under the door plate to force the same off. The door plate is held in position in the frame by means of four plates 2 arranged diametrically opposite and having ends cut off diagonally so that when contracted the plates will come together to a size smaller than that of the doorway. These plates are slidable radially upon or across the tops of extensions or ribs 3 on the back of the door plate, and are guided and held in position by means of bolts 9 which extend through slots 8 in said plates 2, and which guide the plates respectively for radial movement. When the plates are extended the outer edges thereof lap the flange 1^a of the door frame and consequently hold the door plate in position.

The sliding plates 2 are moved in and out by means of a turning bolt 6 which extends through the door plate at the center and which is squared on its outer end to receive a wrench or the like. At its inner end it carries a plate 5 to which one end of links 4 is eccentrically connected by pins 13 the other ends of the links being connected by

pins or screws 12 to the plates 2 respectively. When the bolt 6 is turned the plates 2 will be extended or retracted in consequence of the toggle action. In order, also, to cause the door plate 10 to bind tightly against the flange 1^a, and thus to form a substantially air-tight joint, the plates 2 are capable of being pressed against the rear side of the flange with a powerful leverage. This is effected by means of a square plate 11 which is located within or behind the door plate and which is supported by two or more screw bolts 7 which extend through the door plate and which have collars 7^a so that they cannot be removed. The edges of this plate bear under the inner edges of the plates 2, and when the screws 7 are turned in proper direction the plate 11 is forced in or back against the inner edges of the plates 2 and so turn said plates on the ribs 3, or rather the bolts 9, as fulcrums, causing the outer edges of said plates 2 to bind tightly against the inside flange 1^a and thereby draw the door plate 10 into close contact with the opposite side of said flange. This forms a very tight joint and takes up any looseness which would otherwise exist.

The closure may be opened by turning the bolt 6 in proper direction to retract the plates 2, but in the event that it is desired to close the door or vault permanently, against any possibility of being opened except by breaking the vault, it may be done by means of a locking latch 14 which is mounted on one of the pins 12 and which has a hook 15 at the end adapted to engage over one of the pins 13, at the opposite angle to the adjacent link 4. This latch has a spring 16 tending to engage the same with said pin 13, which is made long enough for the purpose. The latch 14 is of such length that it will engage said pin 13 when the parts are in closed position, as shown in Fig. 1. In using the latch it will, when the parts are in open position, rest upon the pin 13, but when said pin in consequence of the turn of the bolt 6 is brought to the closed position said latch will by means of the spring 16, as well as by its own weight, snap down over the pin 13 and thereby effectively prevent any backward turn or movement of the bolt 6, consequently making it impossible to open the closure by any means.

The strength and completeness of the closure are obvious, as well as the simplicity of the means for locking the same.

The invention avoids the use of locks or
5 other complicated closing devices.

I claim:

1. A closure comprising a door frame and door plate fitting therein, a plurality of plates slidable radially in guides on the
10 back of the door plate and adapted when extended to engage at their outer edges behind the door frame, a central bolt operatively connected to the plates, to advance or retract the same, and means to exert
15 pressure on said plates forwardly at their outer edges, to bind the door plate against the frame, comprising a pressure plate bearing against the inner edges of said sliding plates, and a plurality of screws arranged
20 around said central bolt and extending

through the door plate and bearing against said pressure plate.

2. A closure comprising a door frame, a door plate fitting the same, a series of plates slidable in guides on the back of the door plate and extensible beyond the edge thereof to engage behind the frame, a turning bolt extending through the door plate, a crank disk on the bolt pins and links connecting the disk to the plates, and a latch
25 carried by one of the plates and engageable with one of the pins, to prevent reverse turn of the bolt after the plates are moved to locking position. 30

In testimony whereof I affix my signature, 35
in presence of two witnesses.

THOMAS F. KELLY.

Witnesses:

H. M. KELLEY,
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