(No Model.)

2 Sheets—Sheet 1.

A. GERARD.

BURGLAR PROOF SAFE.

No. 246,748. Patented Sept. 6, 1881.

Fig. 1.

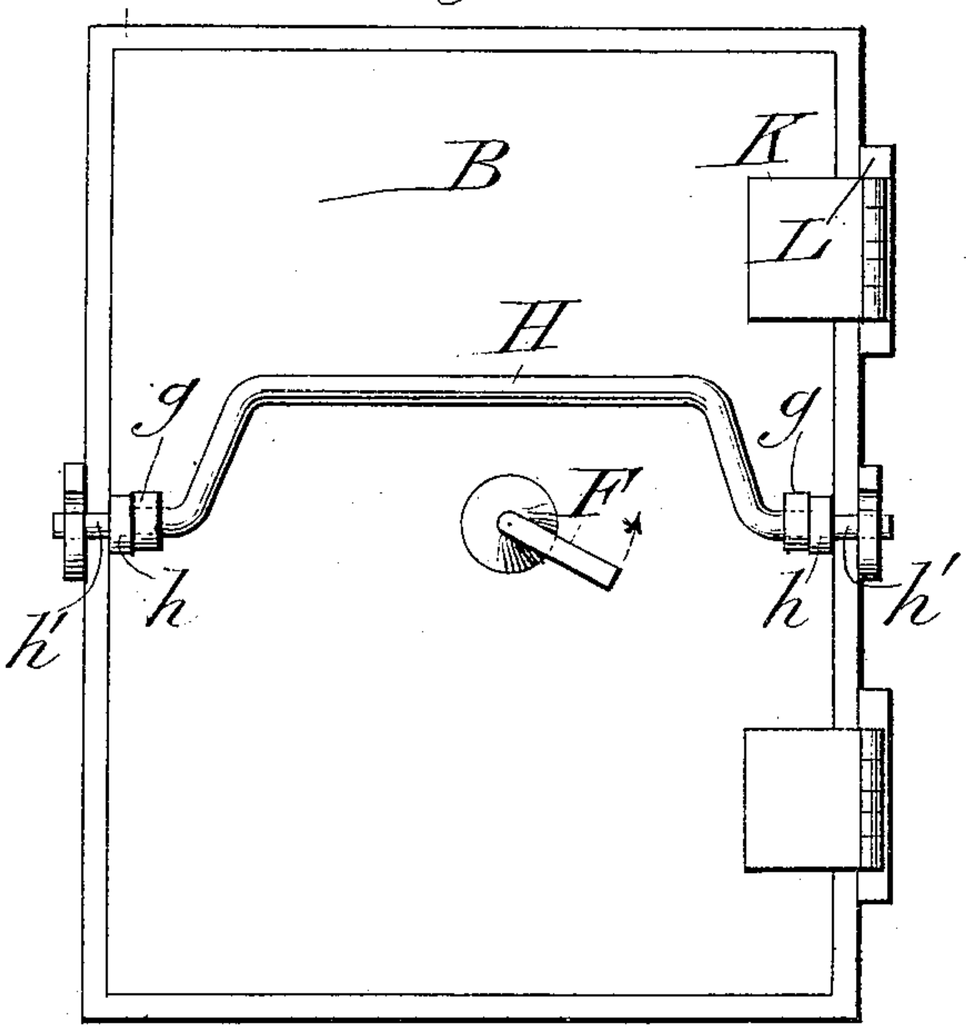


Fig. 2.

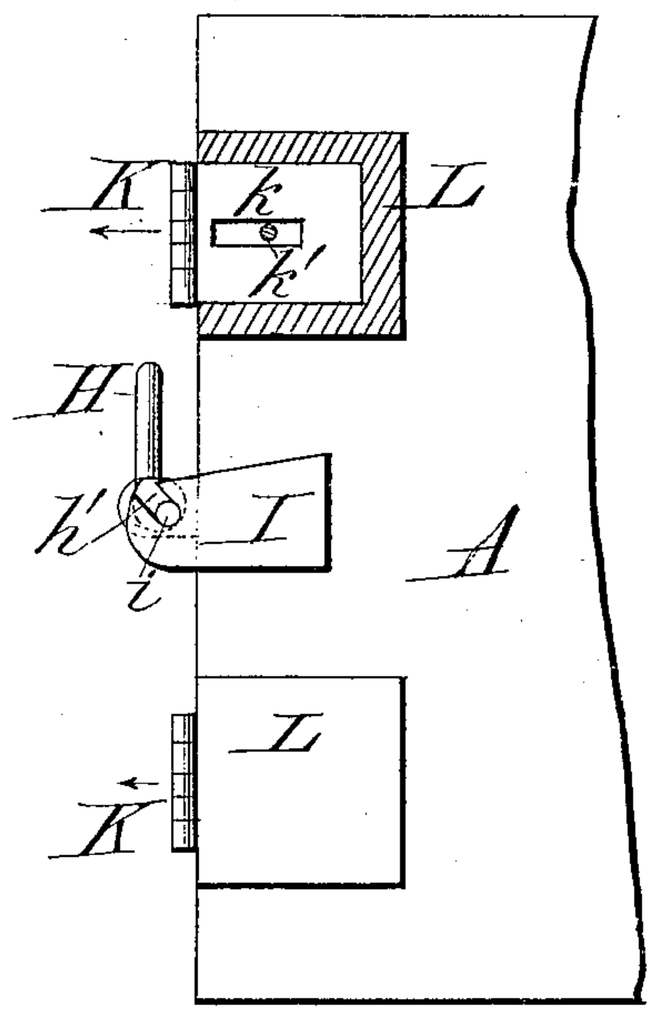
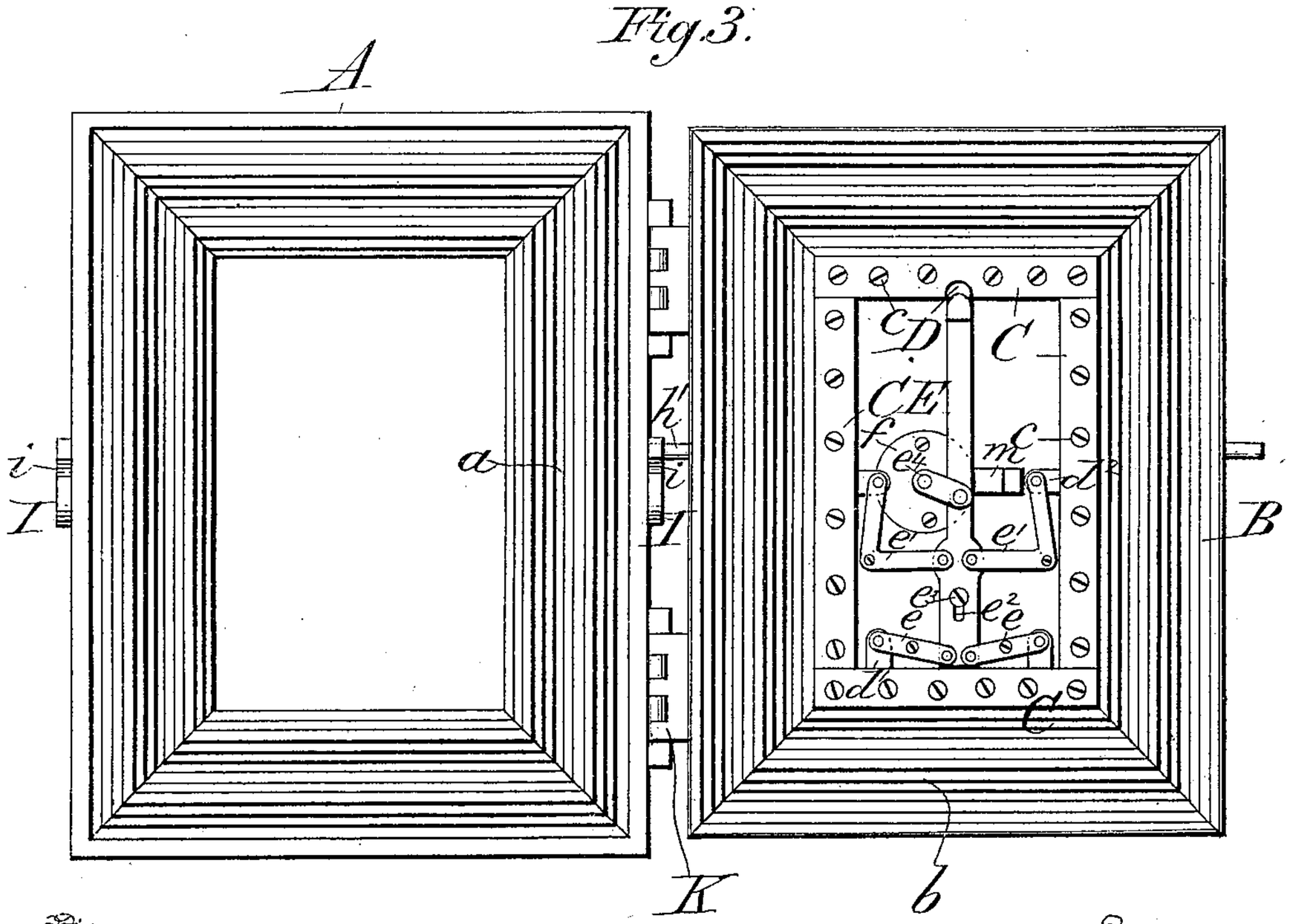


Fig. 3.



Witnesses:

F. H. Schott.

A. R. Brown

Inventor

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(No Model.) 2 Sheets—Sheet 2.

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BURGLAR PROOF SAFE.

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Fig. 4.

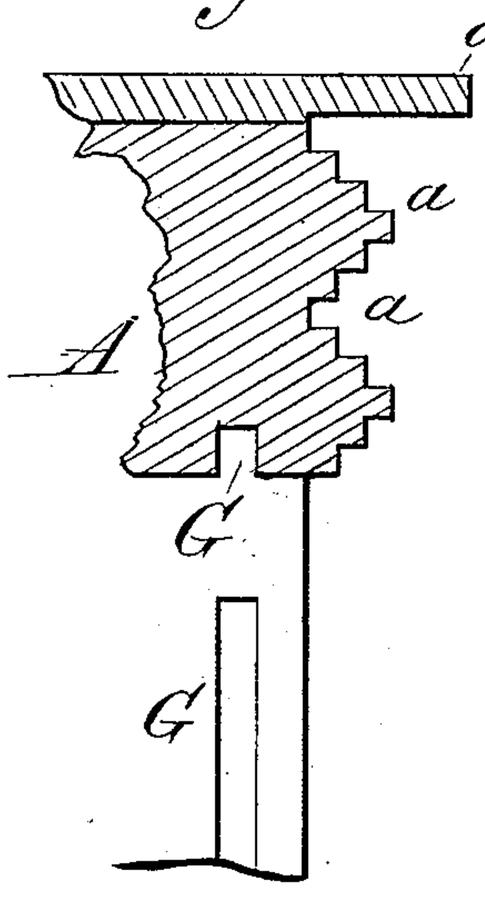


Fig. 5.

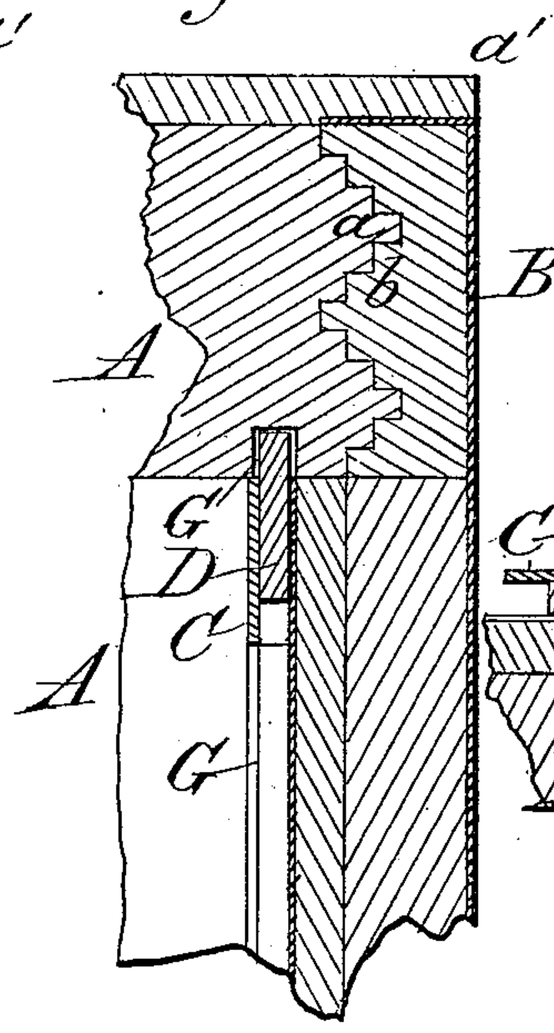


Fig. 6.

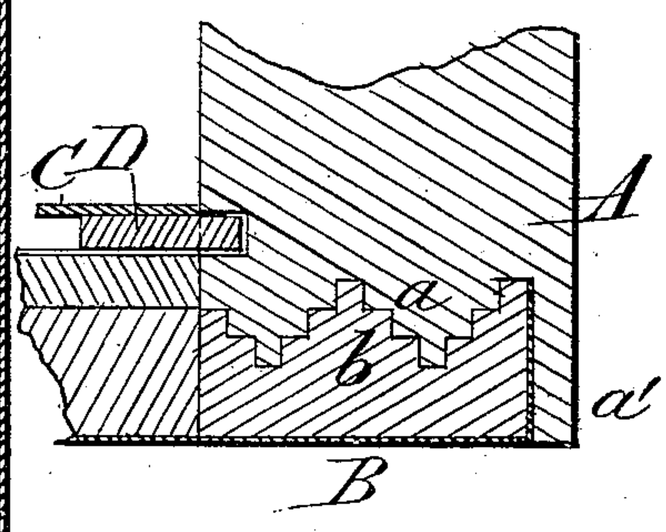


Fig. 7.

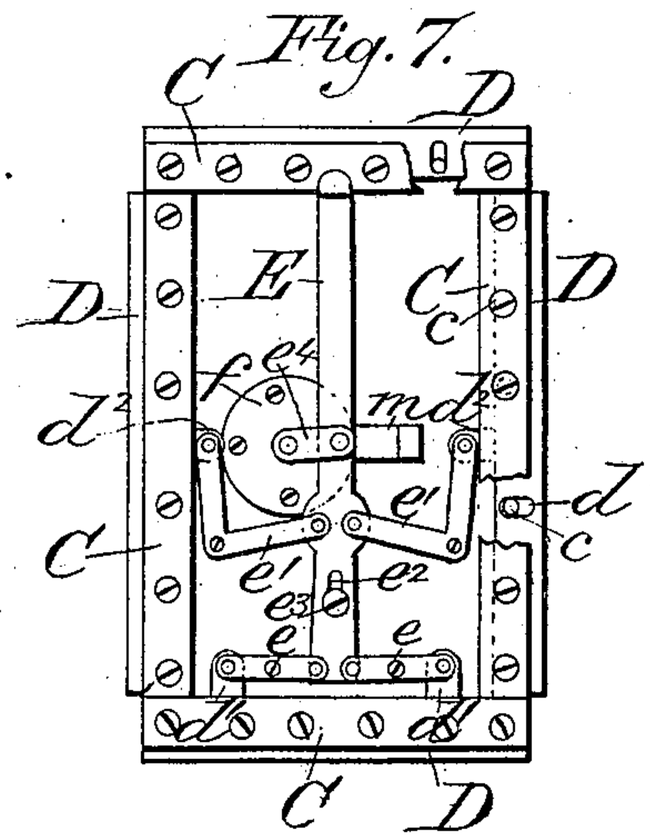
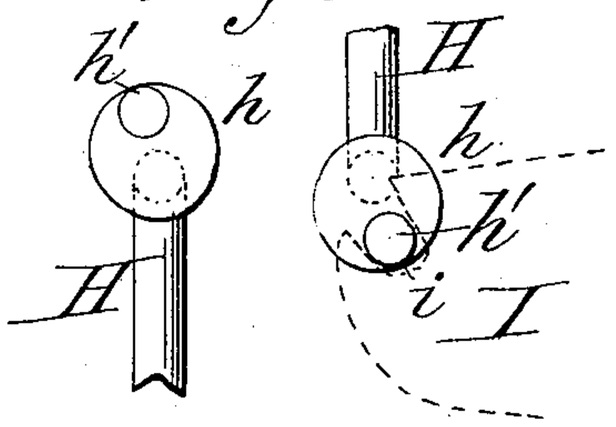


Fig. 8.



Witnesses:

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A. R. Brown.

Inventor

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UNITED STATES PATENT OFFICE.

ALONZO GERARD, OF DALLAS, TEXAS.

BURGLAR-PROOF SAFE.

SPECIFICATION forming part of Letters Patent No. 246,748, dated September 6, 1881.

Application filed June 6, 1881. (No model.)

To all whom it may concern:

Be it known that I, ALONZO GERARD, of Dallas, in the county of Dallas and State of Texas, have invented certain new and useful Improvements in Burglar-Proof Safes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to burglar-proof safes, the object being to provide a safe with non-explosive seams; and the invention consists in the construction and arrangement of parts, as hereinafter more fully set forth.

In the annexed drawings, which fully illustrate the invention, Figure 1 is a front view of the safe closed. Fig. 2 is a side view, partly in section. Fig. 3 is a view of the safe opened. Figs. 4, 5, and 6 are sectional details. Fig. 7 is an inner view of a portion of the door, showing the locking-plates thrown outward. Fig. 8 shows a detail view of the eccentric-shaft.

Similar letters indicate corresponding parts in the several views.

The safe A is constructed of the usual materials and in such a way that at its front, between the inner and outer walls, on all sides, is a series of projecting shoulders or tongues and grooves, *a*, which correspond with similar projections and depressions, *b*, on the inner face of the door B, which fits flush within the outer projecting rim, *a'*, of the safe. When the door of the safe is closed and secured these interlocking projections and depressions form a close seam, into which it is impossible to introduce an explosive to a sufficient distance to have any injurious effect upon the joint.

On the inner projecting face of the door B, at each edge, are secured the oblong rectangular plates C, which are attached by screws *c*. These plates are so secured to the door as to leave a space between them and it for the reception of the movable bolting-plates D, which are slotted at *d* for the passage of the bolts or screws *c*. The bolting-plates D are actuated through a suitable handle by the main vertical lever E. This lever is attached rigidly to the upper transverse bolting-plate, or may be formed as a part of the same. It is connected with the lower transverse bolting-plate by means of the pivoted links *e e* and the lugs *d' d'* at the top of said plate, and is also connected with the vertical side bolting-plates by the pivoted bell-crank levers *e' e'*, (two or more in number,) which are attached to lugs d^2 on the side plates. The main lever E is slotted at e^2 for engagement with the guide-pin e^3, and is connected at the center by a link, e^4, with the shaft of the crank lever or handle F, arranged on the outer side of the door, the said shaft passing through the door and through a circular bearing-plate, *f*, secured to its inner side. By turning the handle F down the sliding plates D are actuated by the main lever E and its connections so as to project on all sides, and when the door is closed will enter the grooves G G, which are formed in the safe immediately back of the projecting shoulders *a*.

To the outer side of the door are attached bearings *g g*, in which is journaled a double-crank shaft, H, which carries at each end an eccentric, *h*, having a pin, *h'*, which pins, when the door is closed, are adapted to enter a notch, *i*, in a lug, I, that is secured to the safe at each side.

The door B is attached to the safe by hinges K, which slide in recesses or casings L, formed on the side of the safe. These hinges are slotted at *k* to engage with pins *k'*, by which their movement is limited. When the door of the safe is opened the hinges K move slightly outward, but when the door is closed they slide inward, and by turning the crank-shaft H upward, so as to bring the pins *h'*, by the action of the eccentrics *h*, into engagement with the notches *i*, the hinges will be forced into their casings until the outer surface of the door is flush with the rim of the safe. When the door is closed the double-crank shaft H is turned till the pins *h' h'* are engaged with the notches *i i*. The handle F is then turned down so as to cause the sliding plates D D to project into the grooves G G, and any suitable locking device may be operated to throw a bolt on the inner

face of the door between the lug *m* and levers *e'*, which will prevent the shaft H and handle F from being operated to unfasten the door. In unfastening the door this operation is reversed.

One or more bolts and lugs, *m*, may be employed, as desired.

By this construction the joint formed by closing the door into the safe is of such a nature that it is impossible to introduce gunpowder or other explosive for the purpose of forcing the safe. The manner in which the sliding hinges are arranged enables the door to close flush with the safe, and thus assists in securing a close joint.

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

1. The combination, with a safe having grooves G G, of a door provided with oblong rectangular plates C, secured at the edges thereof, sliding plates D, arranged under said fixed plates and adapted to enter the grooves in the inside of the safe, a vertical main lever, E, attached to the upper sliding plate, and connected, by pivoted levers *e e'*, with lugs on the side and bottom sliding plates, and having link e^4 and crank-handle F, whereby said sliding plates are actuated through their attached levers, substantially as specified.

2. The combination of the safe A, having notched lugs I I and casings L L, the door B, provided with bearings *g g* and sliding hinges K K, having slots *k*, engaging with pins *k'* in the casings L, and the double-crank shaft H, having eccentrics *h h* and pins *h' h'*, engaging with the notched lugs I, substantially as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ALONZO GERARD.

Witnesses:
A. C. ARDREY,
L. J. N. LENWAY.