

No. 882,067.

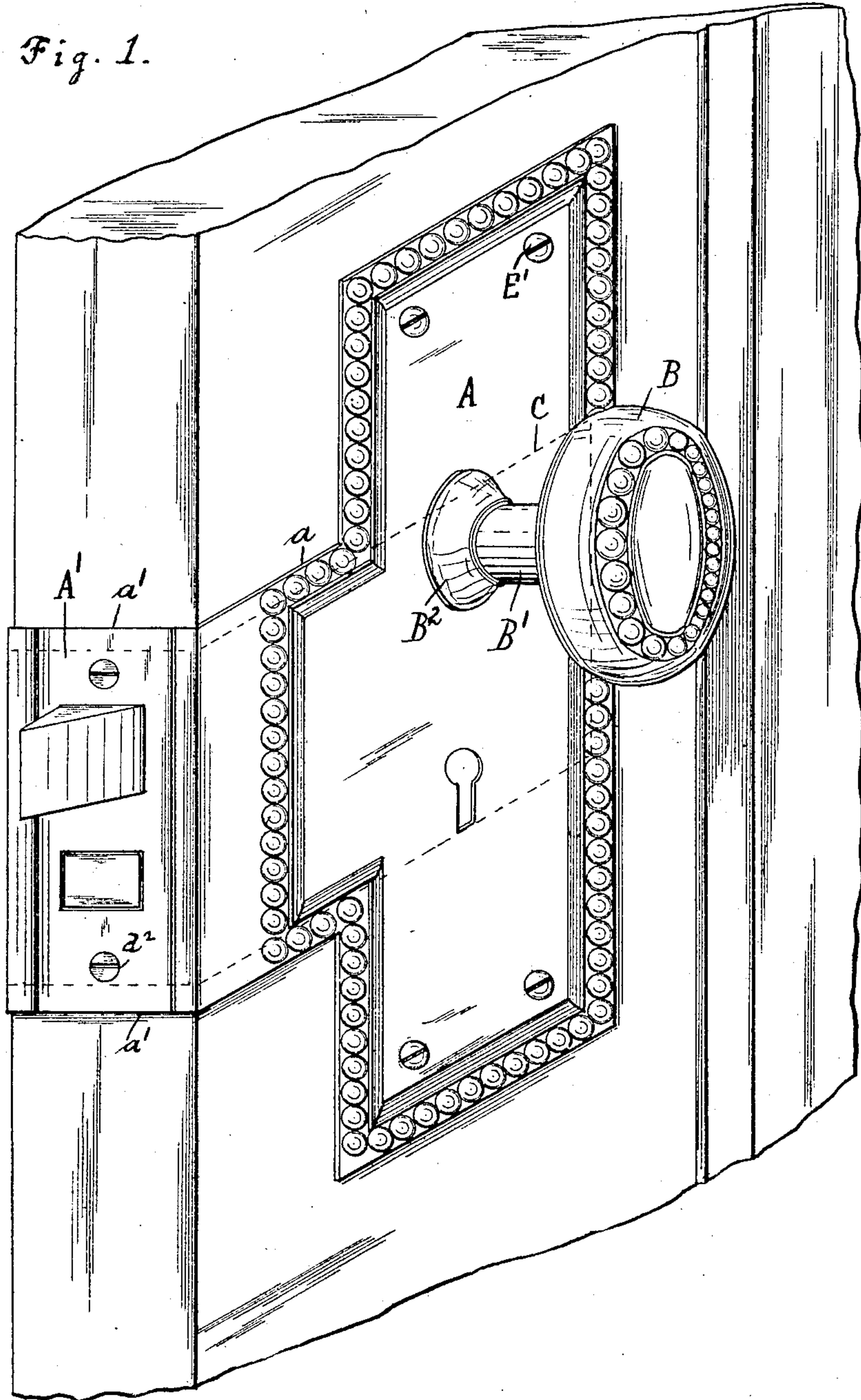
H. F. KEIL.  
LOCK.

PATENTED MAR. 17, 1908.

APPLICATION FILED MAY 14, 1908.

2 SHEETS—SHEET 1.

Fig. 1.



Witnesses  
S. Herzog  
Rob. Schwarz

H. F. Keil Inventor  
By his Attorney J. O. Fowler

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2 SHEETS—SHEET 2.

Fig. 2.

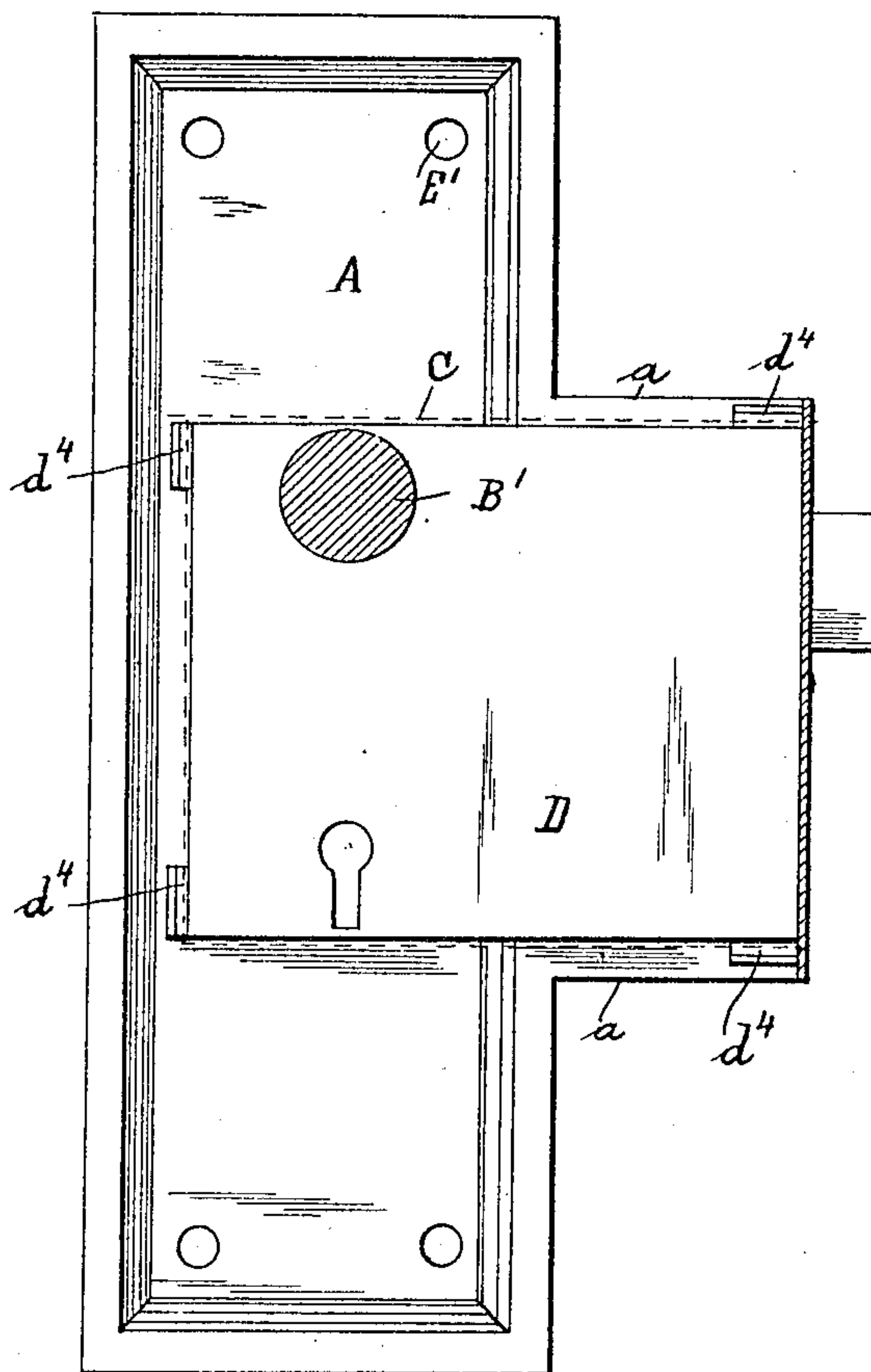
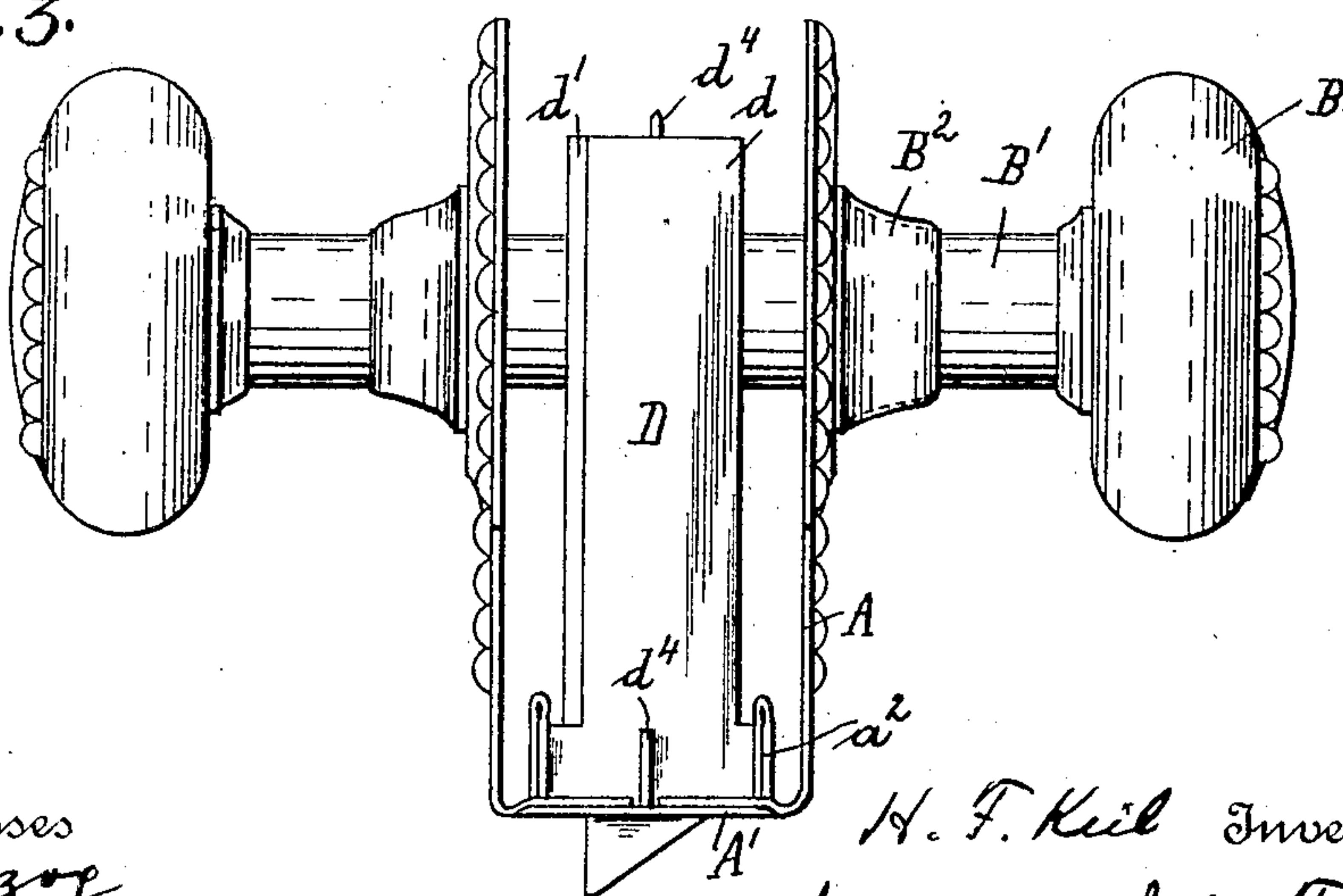


Fig. 3.



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S. Herzog  
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# UNITED STATES PATENT OFFICE.

HENRY FRANCIS KEIL, OF BRONXVILLE, NEW YORK.

## LOCK.

No. 882,067.

Specification of Letters Patent.

Patented March 17, 1908.

Application filed May 14, 1906. Serial No. 316,655.

*To all whom it may concern:*

Be it known that I, HENRY FRANCIS KEIL, a citizen of the United States of America, and a resident of Bronxville, in the county of Westchester and State of New York, have invented a certain new and useful Lock, of which the following is a specification, the same being a full, clear, and exact description of the invention, such as will enable those skilled in the art to which it appertains to make and use the same.

My invention relates to appliances for securing in position doors and like movable articles, and in particular to locks and latches adapted to be inserted in a notch or recess in the stile of a door and having a combined escutcheons and lock-face, and which embody certain novel features of construction and combination and arrangement of parts, of simple construction and efficient in operation, all of which will be hereinafter described and fully illustrated in the drawings.

To attain the desired end, this, my invention consists in the construction, arrangement and operation of parts herein set forth.

In order to enable the invention to be fully understood I will proceed to explain the same by reference to the drawings, illustrative of one embodiment of the invention, which accompany and form a part of this specification, and in which

Figure 1 represents a perspective view of a lock constructed according to this invention; Fig. 2 is a side elevation of another lock in which the invention is embodied, the escutcheon plate being removed; Fig. 3 is a plan view of the said lock.

Like letters of reference indicate like parts in all the views.

Referring particularly by letter to the drawings A, A<sup>1</sup> denote my combined escutcheons and lock-face which rests against the sides of a door and extends around its front edge and overlaps the notch C, and which is preferably made of sheet metal. The combined escutcheon plates A and lock-face A<sup>1</sup> is of a unitary construction, so far as its functions in supporting within the same the lock-case D (which contains a suitable lock or latch mechanism) and in serving as a covering for the notch or recess is concerned, may be considered as an entirety no matter whether it is integral and is made of a single piece of metal, as shown in Fig. 1, or whether it is composed of a plurality of plates rigidly fastened together.

B designates the knobs and B<sup>1</sup> the shanks of the same which may, as shown in Fig. 3, pass through the preferably loose knob roses B<sup>2</sup> carried by the escutcheon plates and rest against the sides of the lock-case D which is a complete article of itself consisting of the body *d* and cap *d*<sup>1</sup> and is supported within the combined escutcheons and lock-face by means of screws *d*<sup>2</sup> inserted into the front of the lock-case through the lock-face A<sup>1</sup>. The lock-case D is inserted into a recess, notch or mortise C formed in the edge of the door preferably by simply sawing a piece out to the depth of the lock case, and the top and bottom edges *a*, *a*<sup>1</sup> (or, as it were, notch overlapping edges of the escutcheon plates, extensions thereof projecting toward the lock face, and edges *a*<sup>1</sup> of the lock-face) being of greater dimensions or size than the opening or recess in the door, overlap the same, and thereby entirely cover or frame in the mortise and conceal any possible poor cutting out of the door, in the event of the same being carelessly or hastily done. The top and bottom edges *a*, *a*<sup>1</sup> also serve to afford resistance flanges or borders or stops, in order to prevent any danger of the lock from being pulled out of its position to any degree, the lock case being also provided with retaining means as hereinafter described. The combined escutcheons and lock-face not only form a protection to the wood of the door, but the said structure is very readily applied and quickly attached to the door by simply slipping the combined escutcheons and lock-face over the edge of the door and then screwing the escutcheons in place by the screws E<sup>1</sup>.

This invention is applicable to all kinds of doors to which mortise or rim locks can be attached, and is manifestly applicable to both locks and latches, or a combination of the two.

I provide simple means for adapting my combined escutcheons and lock-face to be used for doors of different thicknesses, which preferably consist in making the same so as to be expansible as regards the width of the lock-face as, in the present embodiment, by forming the same with a plaited or folded lock-face, the folds or plaits *a*<sup>2</sup> of the same being freely expansible and ordinarily lying between the lock-case and the extensions of the escutcheons. In case the combined escutcheons and lock-face is applied to a narrow door the seam between the folds *a*<sup>2</sup> will be closed, but in the event of the structure



being used in connection with and attached to a wide door, the folds will be opened somewhat when the combined escutcheons and lock-face is forced on the edge of the door in order that the expanded lock-face may register with and conform to the edge of the door, the lock case, in the meantime, being held in the center of the notch, as by the pin  $d^5$ , Fig. 1. Two strips  $a^4$  are cut from the top and bottom edges of each of the folds or plaits  $a^2$ , which strips are bent toward each other so as to lie behind the lock-face and to present a practically unbroken edge of the lock face adjacent to, and above and below, the said folds.

In some cases I construct the combined escutcheons and lock-face of such a width, when formed up, as will conform to a standard thickness of a door, and to that end the escutcheons are then permanently held a certain distance apart by the lock face, which is fixed in width and not laterally expandible.

I sometimes construct the knob roses  $B^2$  so as to be hollow or shell-like in form, as in Fig. 3, the bores of the same being larger in size than the diameter of the knob shanks, and the said knob roses being in this case loosely carried by the escutcheon plates. The orifices  $A^3$  formed in the escutcheon plates are also larger than the knob hubs encircled by the same, and the knob shanks are constructed and arranged to respectively lie adjacent to and to bear directly against the lock hub or disk on each side of the same. In other cases I construct the knob roses  $B^2$  so as to be fixed on the escutcheons. That is to say they may be integral, *i. e.* the knob roses and escutcheons, or else the hubs may consist of separate pieces rigidly attached to the escutcheons by any suitable means. The orifices  $A^3$  formed in the escutcheon plates are larger in diameter than the lock rod  $b^4$  and the said shanks are in this case constructed and arranged to bear directly against the escutcheon plates.

I ordinarily provide lock sustaining means formed on or applied to the lock-case D either on the body  $d$  thereof, or on the cap  $d^1$ , or on both, such as ribs, fins or pins which are forced into and engage with the wood forming the boundaries of the notch by the act of pushing the lock in position, whereby resistance points are secured or obtained which prevent the lateral displacement of the escutcheons or lock-case by reason of any undue strain or pull on the knob. These engaging means or resistance points may be made in any suitable manner as for example they may consist of enlarged or flaring portions or fins formed on and extending outward from the front ends of the lock cap  $d^1$ , or they may be made in the form of ribs  $d^4$  projecting from the top and rear face of the

body  $d$  of the lock-case D, as illustrated in Figs. 2 and 3; or they may, if preferred, consist of prongs or pins as  $d^5$  extending outward from the rear face or the back of the lock, as shown in Fig. 1.

I wish 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.

In this application I only claim a combined escutcheons and expansible lock face in connection with a lock supported thereby and having retaining means, as the other features of the structure disclosed herein and not claimed, are claimed in my co-pending application for patent No. 310,929.

What I claim as my invention is:—

1. A combined escutcheons and lock face constructed and arranged to be driven upon a door, to rest on the sides, and extending around the front edge of, and of greater dimensions than and overlapping a notch cut in the stile of the door, a lock case supported by the lock face and formed with retaining means to engage the notch of the door to hold the central part of the lock face rigidly in position, and means intermediate the lock casing and an escutcheon consisting of a fold free to expand, whereby when the center part of the lock face is held in the notch by the said retaining means, the lock face may be expanded in width between the lock casing and the escutcheon on the side where the fold is located, by the act of driving the combined escutcheons and lock face on a thick door.

2. A combined escutcheons and lock face constructed and arranged to be driven upon a door, to rest on the sides, and extending around the front edge of, and of greater dimensions than and overlapping a notch cut in the stile of the door, a lock case supported by the lock face and formed with retaining means to engage the notch of the door and to hold the central part of the lock face rigidly in position, and means intermediate the lock casing and the escutcheons consisting of two folds free to expand, whereby when the center part of the lock face is held in the notch by the said retaining means, the lock face may be expanded in width equally on both sides between the lock casing the escutcheons by the act of driving the combined escutcheons and lock face upon a thick door.

In testimony of the foregoing specification I do hereby sign the same in the city of New York, county and State of New York this twenty-fourth day of April, 1905.

HENRY FRANCIS KEIL.

Witnesses:

F. A. WURZBACH,  
CHAS. H. ARENDT.