

No. 887,817.

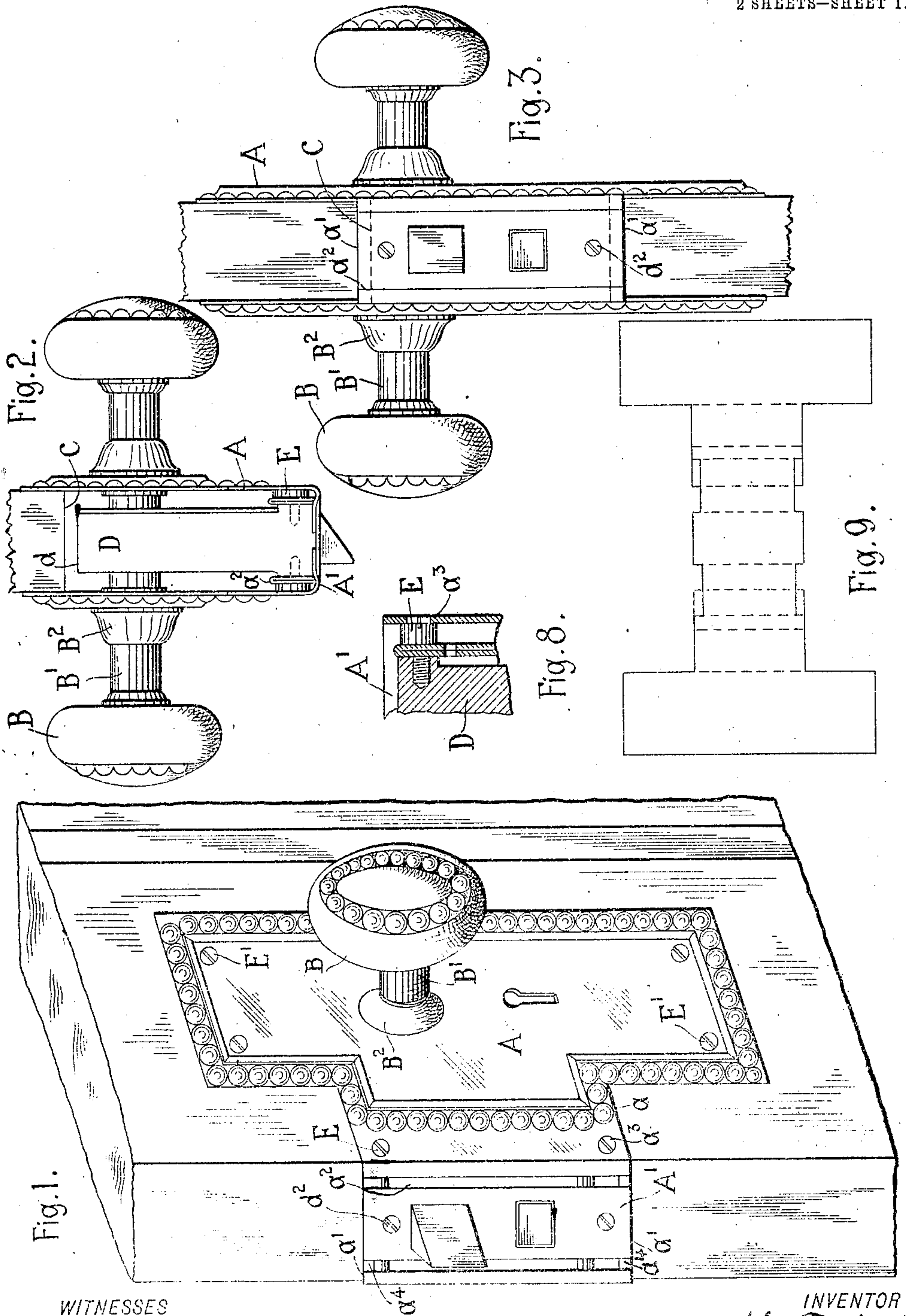
PATENTED MAY 19, 1908.

H. F. KEIL.

LOCK.

APPLICATION FILED APR. 10, 1906.

2 SHEETS—SHEET 1.



WITNESSES  
*S. Rinsbaum*  
*S. Herzog*

INVENTOR  
*H. F. Keil*  
BY *J. D. Fowler*  
ATTORNEY

No. 387,817.

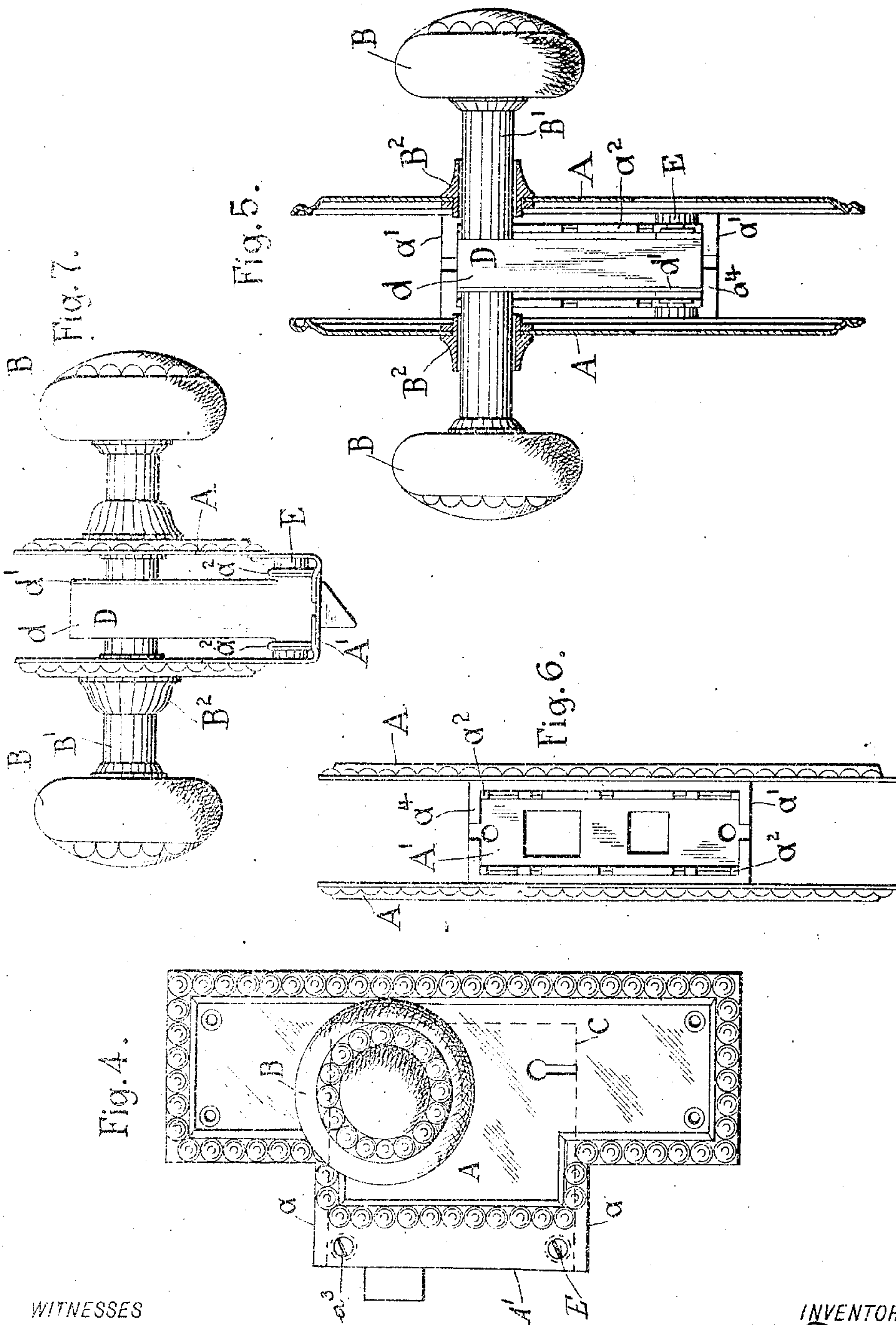
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*S. Birnbaum*  
*S. Herzog*

INVENTOR

*H. F. Keil*  
BY *L. O. Fowler*  
ATTORNEY



# UNITED STATES PATENT OFFICE.

HENRY FRANCIS KEIL, OF BRONXVILLE, NEW YORK.

## LOCK.

No. 887,817.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed April 10, 1906. Serial No. 310,929.

*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, having an expansible combined escutcheons and lock-face provided with means to expand the same, 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 my lock fitted to a thick door; Fig. 2 is a plan view of the lock, Fig. 3 is a front view of the same; Fig. 4 is a side elevation; Fig. 5 is a vertical section through the handle; Fig. 6 is a rear view with the lock case removed; Fig. 7 is a plan view of another lock in which my invention is embodied; Fig. 8 is a view in detail of the means for adjusting the expansion of the lock-face and Fig. 9 is a view of a portion of the blank from which the device is formed up, the lines on which it is bent being shown or indicated by dotted lines.

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

Referring particularly by letter to the drawings A, A', denote my combined escutcheon plates and lock-face which rests against the sides of a door and extends around its front edge and preferably overlaps the notch C, and which is preferably made of sheet metal. The combined escutcheon

plates A and lock-face A', is of unitary construction, so far as its function 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 Figs. 1 to 6, or whether it is composed of a plurality of plates rigidly fastened together, as illustrated in Fig. 7. B designates the knobs, and B', the shanks of the same which preferably inclose the spindle or lock-rod and ordinarily pass through the preferably loose hubs or roses B<sup>2</sup>, ordinarily 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'.

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, and the top and bottom edges a, a', (or, as it were, notch overlapping edges a of the escutcheon plates A and, extensions thereof projecting toward the lock-face, and edges a' of the lock-face A) being of greater dimensions or size than the opening or recess C in the door, overlap the same as shown in Figs. 3 and 4, 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', 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, or any lateral displacement thereof, or the bending or the straining of any of the parts, inasmuch as the length of the frame A A' being greater in distance than the dimensions of the notch C the said edges a, a', rest against the sides and front edge of the door and tend to resist any lateral movement of the lock-case caused by any strain or pull on the handles B,—the lock-face A', also serving to support the lock-case. The lock casing is formed at its forward portion with preferably solid projecting lugs or abutments made with orifices for the screws E and d<sup>2</sup>, and ordinarily of greater thickness



than the rest of the casing so as to extend outwardly from the sides thereof as shown in Figs. 2 and 7.

The combined escutcheons and lock-face not only forms 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 thereby inserting the lock in the notch or recess cut out of the stile and then screwing the escutcheons to the sides of the door in the proper applied position by means of 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 a simple means for adapting my combined escutcheons and lock-face, to be used for doors of different thicknesses which preferably consists in making the same so as to be expansible and adjustable 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  $a^2$  of the same ordinarily lying between the lock-case and constructed and arranged to be expanded by the said screws and the heads of the screws E. Two strips  $a^4$  are cut out 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, and lying at right angles to the folds at the upper and lower extremities of the lock face. The shanks of the screws E work in threaded holes in the sides of the lock-case and may be operated by a tool inserted in the orifices  $a^3$ , formed in the extensions of the escutcheons, by which means the adjustability or degree of expansion of the lock-face may be regulated.

In case the combined escutcheons and lock-face is applied to a narrow door, as in Fig. 5, the seam between the folds  $a^2$ , will be closed, but in the event of the structure being used in connection with and attached to a wide door, as in Fig. 1, the folds  $a^2$ , will be opened somewhat (the screws E having been unscrewed) and after the combined escutcheons and lock-face is adjusted in position, the screws E may be tightened so as to serve to hold, in connection with the escutcheon screws E', the entire structure rigidly upon the door.

I wish it 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.

What I claim as my invention is

1. In a lock, a combined escutcheons and

lock-face to rest against the sides of a door and extending around its front edge and of greater dimensions than and overlapping a notch in the door, a lock-case inclosed in and supported by the said structure and adapted to be inserted in said notch, and means whereby the lock-face may be expanded in width.

2. In a lock, a lock face extending over the entire edge of the door and having integral means whereby the said lock-face may be expanded in width, and means for adjusting the expansion of the said lock-face.

3. In a lock, a combined escutcheons and lock face to rest against the sides of a door and extending around its front edge and of greater dimensions than and overlapping a notch in the door, a lock-case inclosed in and supported by the said structure and adapted to be inserted in the said notch, the said lock-face being formed with folds or plaits in the same lying between the lock-case and the escutcheons.

4. In a lock, a combined escutcheons and lock-face to rest against the sides of a door and extending around its front edge and of greater dimensions than and overlapping a notch in the door, a lock case inclosed in and supported by the said structure and adapted to be inserted in said notch, the said lock face being formed with folds or plaits in the same, and means to adjust the said folds or plaits.

5. A combined escutcheons and lock-face adapted to rest against the sides of a door and extending around its front edge, and means whereby the said lock-face may be expanded.

6. A combined escutcheons and lock-face adapted to rest against the sides of a door and extending around its front edge, and means whereby the said lock-face may be expanded, and means whereby the expansibility of the lock-face is adjusted.

7. In a lock, a combined escutcheons and lock face to rest against the sides of a door, and extending around its front edge, and of greater dimensions than and overlapping, a notch in the door, and a lock case inclosed in and supported by the said structure and adapted to be inserted in said notch, a strip being cut from the top and bottom edges of the lock face, and bent over so as to lie behind the central portion of the lock face, and contiguous to, and above and below, the said lock case.

8. In a lock, a combined escutcheons and lock face to rest against the sides of a door, and extending around its front edge, and of greater dimensions than, and overlapping, a notch in the door, the lock face having a fold near each side edge thereof and a lock case inclosed in and supported by the said structure and adapted to be inserted in said notch, a strip being cut from the top and bottom edges of the lock face, and bent over so as to



lie behind the central portion of the lock face, and contiguous to, and above and below, the said lock case and to also lie respectively above and below the said folds and also the notch in the door.

9. A blank for a combined escutcheons and lock face consisting of a central narrow portion and respectively wider portions located on each side thereof, the said narrow portion having slits or cuts in the same whereby strips may be bent over from the top and bottom edges of the said part.

10. A combined escutcheons and lock face consisting of a central narrow portion, the lock face having a fold near each edge thereof extending inwardly, and also formed with strips cut from the top and bottom edges and bent over so as to lie behind the lock face and above and below the said folds, and the said structure also having wider portions or escutcheons respectively located on each side of the said lock face.

11. A combined escutcheons and lock face adapted to rest against the sides of a door, and extending around its front edge, means whereby the said lock face may be expanded consisting of a fold, and means whereby the expansibility of the lock face is adjusted, consisting of a screw head located between the fold and the escutcheon, the latter having an orifice to register with the screw head but smaller in size than the same.

12. In a lock, a combined escutcheons and lock face to rest against the sides of a door and extending around its front edge and of greater dimensions than and overlapping a notch cut in the door, a lock case inclosed in and supported by the said structure and adapted to be inserted in said notch, means whereby the lock face may be expanded in width consisting of a fold located in the lock face, and means to present a practically unbroken edge of the lock face at right angles to the said fold at the upper and lower extremities of the lock face.

13. In a lock, an escutcheon, a lock face, a lock case supported thereby, a fold or plait formed in the lock face whereby it may be

expanded in width located on one side of the casing, a screw placed adjacent to the front of the lock case and engaged therewith, the head of which lies at the inner face of the escutcheon adjacent to a smaller concentric orifice in the escutcheon, whereby the screw may be operated from the exterior of the escutcheon to exert pressure against both the lock case and the escutcheon.

14. In a lock, a lock casing formed with solid abutments projecting laterally therefrom at the front portions thereof, and of greater thickness than the rest of the casing, in combination with an escutcheon adapted to abut the said abutments, and screws to attach the parts together.

15. In a lock, a lock casing formed with solid abutments projecting laterally therefrom and of greater thickness than the rest of the casing, and having threaded orifices formed in the sides of the same, in combination with a plate extending around the front and sides of the lock casing and having orifices to register with the threaded orifices of the casing, and screws to attach the parts together.

16. In a lock, a lock face plate having a strip cut from the top and bottom edges of the same, and bent over so as to lie behind the lock face plate.

17. In a lock, a lock casing having a latch, a lock face plate, expansible folds formed in the same, strips to lie above and below the folds to present a practically unbroken upper and lower edge of the lock face plate, whereby the entire front of the lock face is closed by said folds, strips and latch, whether the lock face is either in a closed or contracted, or in an open or expanded relation.

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 second day of April 1906.

HENRY FRANCIS KEIL.

Witnesses:

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