H. F. KEIL.

COMBINED LOCK FACE AND ESCUTCHEON.

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3 SHEETS—SHEET 2.
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 Combined Lock-Face and Escutcheon, of which the following is a specification, the same being a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to locks, and it has for its object to provide a lock the working parts of which may be inserted in a notch in the stile of a door, and which may be adapted to different thicknesses of doors, and by which the notch in the stile of the door may be kept closed.

With this object in view, the invention consists in certain novel features of construction and combination and arrangement of parts, all of which will be hereinafter described, and specifically pointed out in the part of this specification, and in which—

Figure 1, represents a plan view of the metal blank; Fig. 2, is a similar view of the blank with orifices for screws, latch-bolt, and knob-spindle; Fig. 3, is a plan view of the blank with spindle bearings; Fig. 4, is a partial side elevation of a door with a notch cut in the stile; Fig. 5, is a partial side elevation of a thick door with the lock applied thereto; Fig. 6, is a front elevation, and Fig. 7, is a plan view of the same; Fig. 8, is a side elevation of a thin door with the lock applied thereto; Fig. 9, is a front elevation of the same; Fig. 10, is a plan view showing one side of the plate screwed down; and Fig. 11, is a similar view showing both sides of the spring frame screwed down in working position.

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

Referring particularly to the drawings A denotes a door of any ordinary or suitable construction, and a, indicates a notch in the stile of the same.

B is a spring frame, preferably made of sheet metal, and ordinarily consisting of a body portion having flanges b² at one end, and serving to form a lock-face, and also comprising two relatively long extensions or wings, b, b’, respectively located at each end of the said body portion, the said wings serving in use as escutcheon plates.

The spring frame forming the combined lock-face and escutcheons is ordinarily first blanked out, as shown in Fig. 1, and apertured, as in Fig. 2, to provide orifices d, for 60 screws; D, for the knob spindle f; and D’, for the latch-bolt e. The spindle bearings C are then preferably attached, as shown in Fig. 3. The blank is then ordinarily formed up, the body B being bent on the lines b², b³, so as to form a substantially U-shaped part but wider at the open than at the closed end, where right angles are formed at the corners, and an obtuse one at one side by the flanges b², and the flanges b³ are preferably bent 70 downward, on the lines, b³, and b⁴, at right angles to the plane of the wing b, thus extending inwardly which latter is also ordinarily bent outward a little on the line b⁴, as is shown in the drawings. The working 75 parts E of the lock are then secured to the lock-face or body B, and the spindle f and knobs F are afterward attached to the resilient frame.

A lock made in the above manner is of very simple construction, the parts being completely assembled for purposes of shipment; and the same may be readily applied in position to doors of different thicknesses, the working parts of the lock being inserted in a notch in the stile of the door (which is kept entirely closed) and the escutcheons being screwed fast to the door without requiring the dismemberment of any of the parts of the lock.

In Figs. 5, 6, and 7, the lock is shown as applied to a door of practically the same width as the lock-face, the working parts E of the lock being inserted in the notch formed in the stile of the door, and the escutcheon plates b, b’, being screwed to the sides of the door. This lock is adapted to be placed on doors of varying thicknesses ranging from the width between the escutcheons or wings b’, and the inner edges of the flanges b², and the width between the escutcheons or wings b and b”,

In applying the lock to relatively thick doors, recesses a” may be cut in the notch a of the door in order to permit the free insertion of the flanges b² within the said notch, in which case the free end of the escutcheon or wing b is bent inwardly so as to lie parallel with the escutcheon or wing b’, as shown in Figs. 6 and 7, and the escutcheon 110 plates or wings b, b’, will lie flat against the sides of the door, the flanges b² being entered.
within the side recesses a' of the notch a so as to be concealed from view.

In cases where the lock is to be applied to relatively thinner doors, as in Figs. 8 to 11 inclusive, the escutcheon plate b' is ordinarily first screwed down, as shown in Fig. 10 and afterward the plate b is fastened to the door as represented in Fig. 11, the notch being closed or concealed by the flanges b (the edges of which rest against the sides of the said door), and the lock frame or case lying snugly against the sides and front edge of the door. It will be observed that the triangular flanges b are inwardly bent and extend at right angles from the frame, and that the side of the adjacent frame is bent at the end of the flanges so that the outer part of the same will be in alinement with the inner edge of the said flanges.

Having thus described and ascertained the nature of my said invention and in what manner the same is to be performed, it being kept in mind that in law the substitution of equivalents works no variation in the substance of the same, I would have it understood that what I claim as my invention is—

1. A resilient frame consisting of one piece of sheet metal to rest against the sides and front edge of a door, and having flanges extending at right angles from the same, and constructed and arranged to support the working parts of a lock adapted to be inserted in a notch in the stile of said door, to adapt the frame to different thicknesses of doors and to keep the notch in the door stile closed.

2. A resilient frame to rest against the sides and front edge of a door, and having flanges, and constructed and arranged to support the working parts of a lock adapted to be inserted in a notch in the stile of said door, the said frame having spindle bearings attached thereto and extending transversely outside of the same, to adapt the frame to different thicknesses of doors and to keep the notch in the door stile closed.

3. A blank for a combined lock-face and escutcheons, comprising a yoke-shaped piece consisting of a central body portion having at one end of the same a pair of flanges and having a relatively long wing located at each end of the said body portion.

4. A resilient frame consisting of one sheet of metal to rest against the sides and front edge of a door formed with a notch, and having flanges, to adapt the frame to different thicknesses of doors and to keep the notch in the door stile closed, the ends of said frame being adapted to serve as a pair of escutcheons.

5. A resilient frame consisting of one piece of sheet metal to rest against the sides and front edge of a door, and having triangular flanges inwardly bent and extending at right angles from the frame, and constructed and arranged to support the working parts of a lock adapted to be inserted in a notch in the stile of said door, to adapt the frame to different thicknesses of doors and to keep the notch in the door stile closed.

6. A resilient frame consisting of one piece of sheet metal to rest against the sides and front edge of a door, and having triangular flanges inwardly bent and extending at right angles from the frame, the side of the frame being bent at the end of the flanges so as to be in alinement with the inner edges of the said flanges, the said frame being constructed and arranged to support the working parts of a lock adapted to be inserted in a notch in the stile of said door, to adapt the frame to different thicknesses of doors and to keep the notch in the door stile closed.

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 2d day of November, 1905.

HENRY FRANCIS KEIL

Witnesses:

F. A. WURZBACH,
WM. J. GRAHAM.