

(No Model.)

2 Sheets—Sheet 1.

L. W. GOOLD & F. BARTLEET.

LOCK TRIMMING.

No. 466,341.

Patented Jan. 5, 1892.

Fig. 4.

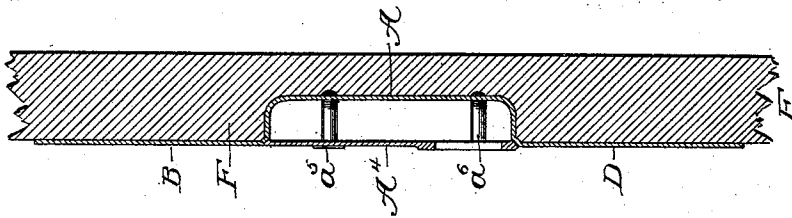


Fig. 3.

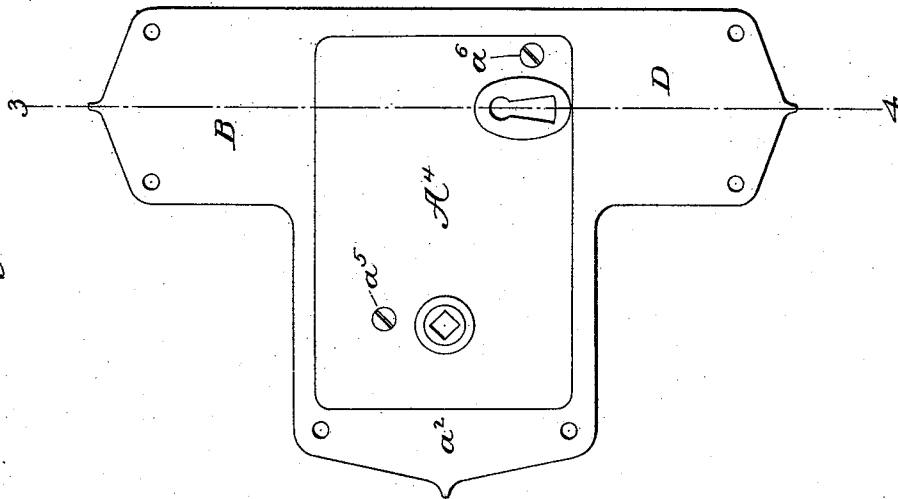


Fig. 1.

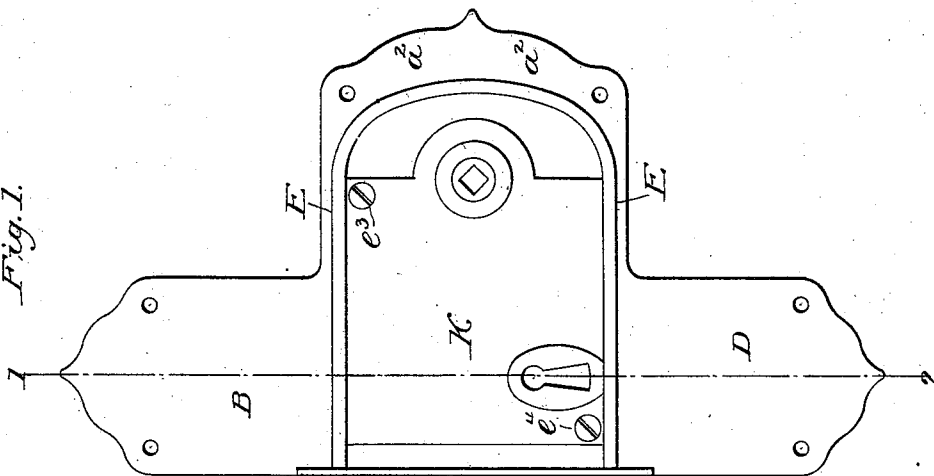
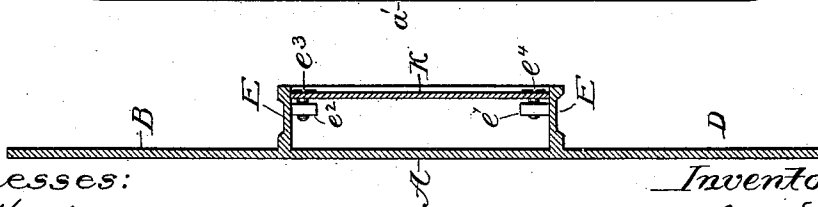


Fig. 2.



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Fig. 6.

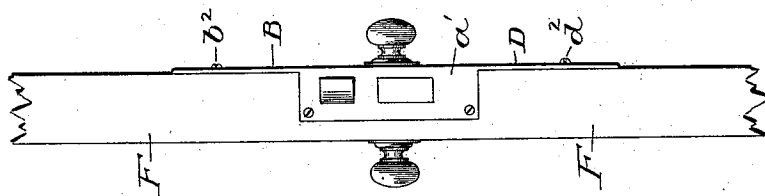


Fig. 5.

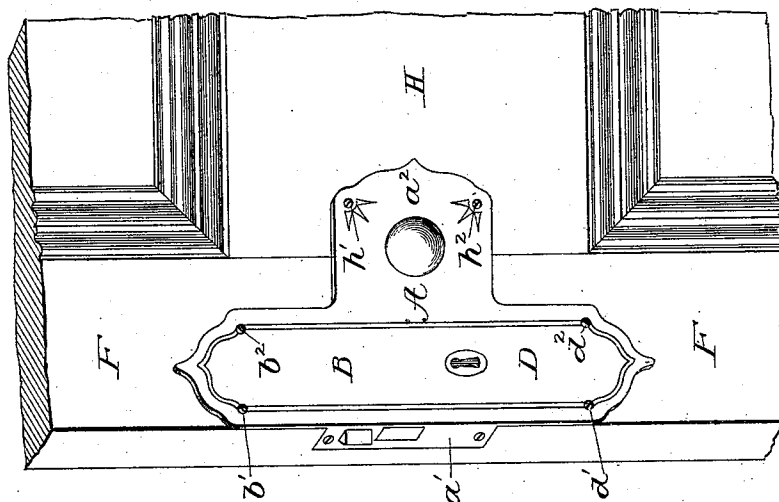
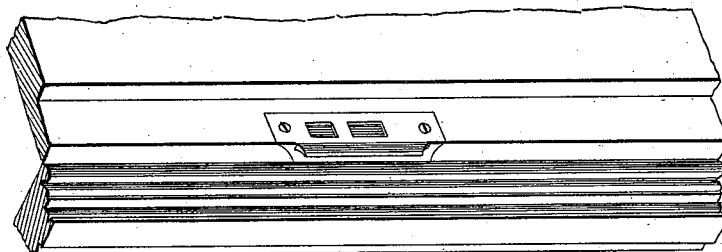


Fig. 7.



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UNITED STATES PATENT OFFICE.

LEWIS WM. GOOLD, OF KINGS HEATH, AND FRANK BARTLEET, OF
BIRMINGHAM, ENGLAND.

LOCK-TRIMMING.

SPECIFICATION forming part of Letters Patent No. 466,341, dated January 5, 1892.

Application filed January 28, 1889. Renewed September 23, 1890. Serial No. 365,878. (No model.) Patented in England
December 8, 1887, No. 16,897.

To all whom it may concern:

Be it known that we, LEWIS WILLIAM GOOLD, architect, of Kings Heath, in the county of Worcester, and FRANK BARTLEET, accountant, of 25 Claremont Road, Sparkbrook, Birmingham, in the county of Warwick, both in England, and subjects of the Queen of Great Britain, have invented certain new and useful Improvements in the Casing and Fixing of Locks to Doors, (for which we have obtained a patent in Great Britain, No. 16,897, dated December 8, 1887;) and we do hereby declare that the following is a sufficient description of the invention to enable those skilled in the art to carry the same into practical effect.

Our invention has for its object improvements in the casing and fixing of locks to doors, and applies more particularly to those locks known as "rim-locks," which are fixed upon and project from the face of the door, thereby forming a projection which is most objectionable and unsightly, as the rim and constructional parts of the locks are exposed to view. Such locks are much used on account of the prevailing tendency for economy by using doors so thin that they would be materially weakened by the insertion of a mortise-lock. Further objections to the rim-lock are to be found in the fact that it is necessary to have a key long enough to pass through the whole thickness of the door, so as to allow of entering the lock from the outside, so that, when in accordance with the prevailing custom the key is left in the lock on the inside, the depth of the lock and the length of the key form a projection which has a tendency to catch in the garment of those passing through the door. Again, the bolt-box of the rim-lock renders necessary the cutting away of the architrave of the door, and is secured with screws which are so placed that the thrust of the door, when being forced open from the outside, is in that direction most suitable for withdrawing them.

Now by our invention the lock is set flush with the face of the door, however thin it may be, without materially weakening it, while at the same time a finger-plate is formed in the most serviceable position of the door,

this being a combination of great utility in the case of cheap doors, which doors have hitherto not been usually provided with finger-plates. This arrangement also allows of a much shorter key being used and a catch-plate in place of the old box, which does not necessitate the cutting away of the architrave, and is fixed by screws, which are so placed that the thrust is against their side instead of their head.

As our invention relates particularly to the casing, a great advantage is gained by the option of the use of any class of mechanism or furniture.

In order that our invention may be clearly understood and more easily carried into practice, we have appended hereunto two sheets of drawings, upon which we have fully illustrated our improvements.

Figure 1 is an elevation of the back of the casing of the lock, the internal mechanism of which is not shown, as it is not affected by our improvements. Fig. 2 is a section through same on line 1 2. Fig. 3 is a front elevation of a lock, showing a modification by which the mechanism can be reached without removing the lock and plate from the door. Fig. 4 is a section of same on line 3 4, but also showing it fixed to a portion of the door. Fig. 5 is a front view of a portion of the door having our lock fixed thereon. Fig. 6 is an end elevation of same. Fig. 7 is a view of the catch-plate fixed complete.

Referring to Sheet 1 of the drawings again, the plate A forms the outside casing of the lock, to which the rim or casing E and inside mechanism is fixed, the portion a' of the said plate being twined round with a sharp angle to form the one end of the lock through which the bolts pass, and this may be additionally strengthened by a further strip of metal down the side or front. The plate A is provided with an extension B above the lock and a similar extension D below, and is also extended at a^2 for some distance past the rim E. A portion of the face of the door is cut away to receive the lock, which is inserted and fixed flush, as shown by Figs. 5 and 6, the extension B being fixed by the screws b' and b^2 to the portion of the stile F above the

lock, and the bottom extension D by the screws d' and d^2 to the portion of the stile F, below the lock, thereby materially strengthening the stile F where cut away, the extension a^2 being secured to the lock-rail II by the screws h' and h^2 , thereby tying in the stile F to the lock-rail II and strengthening it where weakened by the cutting away of the tenons, and not only firmly fixing the lock, but providing a lock combined with a finger-plate on the extreme edge of the door and enabling a thick common lock to be inserted within the thickness of a thin door without in any wise weakening it. In place of having the mechanism and rim of the lock fixed upon the back of the front plate A, we may stamp or otherwise form a recess in the said plate, as shown by A in Figs. 3 and 4, in which case the cover-plate A^1 is screwed on from the outside to the back part A by the screws a^5 and a^6 , and the whole of the mechanism is also secured to the part A of the other plate, which in this case forms the back of the lock.

To prevent the screws which hold in the cover-plate K, Fig. 1, from passing through and showing upon the face of the finger-plate A, we provide the ears e' and e^2 , Fig. 2, which are riveted into the rim E and which receive the ends of the screws e^3 and e^4 , for securing the cover-plate K in position. We may finish or ornament the finger-plate A in any desired

way or form it of any class of suitable material. For instance, the metal plate A may be cased in ornamental brass, the edges of which would be returned and pressed round the edges of the plate, or the plate may be enameled in any desired color.

We are aware that locks have been let into the face of doors, also that doors containing locks have been strengthened by similar plates to A; but

What we claim is—

As an improved article of manufacture, the plate A, of a single piece of metal, having the sides of the casing E formed integral therewith to receive the locking mechanism and formed with top and bottom extensions B and D, extension a^2 at right angles to the extensions B and D in the same horizontal plane, the right-angled portion a' , perforated for the passage of the bolts, and with interior ears e' and e^2 within said casing, the whole adapted to operate substantially as and for the purpose set forth.

In testimony that we claim the foregoing as our own we affix our names in the presence of two witnesses.

LEWIS WM. GOOLD.
FRANK BARTLEET.

Witnesses:

GEORGE WATERS,
ALFRED NORTH.