

(No Model.)

A. A. DOVEY.
EXTENSION KEY.

No. 517,038.

Patented Mar. 27, 1894.

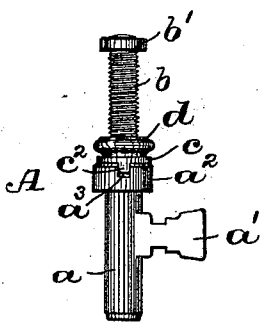


Fig. 1

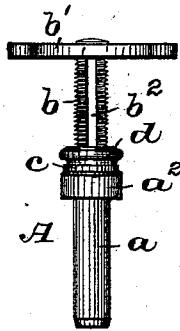


Fig. 2

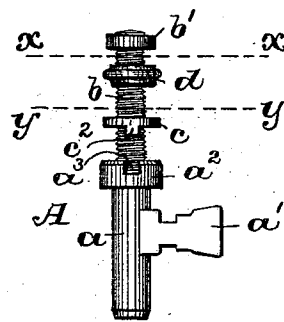


Fig. 3

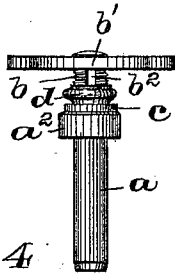


Fig. 4

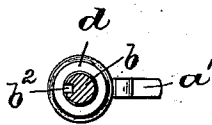


Fig. 5

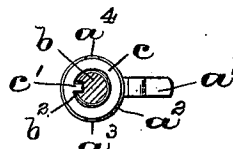


Fig. 6

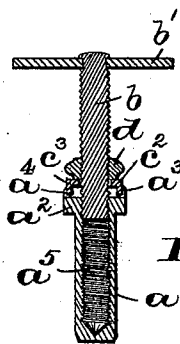


Fig. 7

WITNESSES:

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UNITED STATES PATENT OFFICE.

ALBERT A. DOVEY, OF NEWARK, NEW JERSEY.

EXTENSION-KEY.

SPECIFICATION forming part of Letters Patent No. 517,038, dated March 27, 1894.

Application filed June 12, 1893. Serial No. 477,260. (No model.)

To all whom it may concern:

Be it known that I, ALBERT A. DOVEY, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Extension-Keys; and I do hereby declare the following to be 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, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a novel form of extension key, whereby the same is adapted for use on doors, different in thicknesses, thus doing away with keys of different lengths, and also affording a great convenience in that, by shortening the key it can be conveniently carried in the pocket.

This object of my invention I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my novel form of extension key, with its screw-threaded shank screwed out and locked in this position whereby the key is adapted for insertion in a lock secured in a door of great thickness. Fig. 2 is an edge view of the key with the screw-threaded shank locked in the same position as shown in Fig. 1. Fig. 3 is a view similar to that illustrated in Fig. 1, with the lock-nut on said screw-threaded shank screwed up to near the handle portion on said shank and the washer provided with holding tongues disengaged from recesses in that portion of the key provided with the locking tongue. Fig. 4 is a view similar to that illustrated in Fig. 2 with the screw-threaded shank screwed down into the main portion of the key to considerably shorten the same. Fig. 5 is a horizontal section on line *x* in Fig. 3, and Fig. 6 is a horizontal section on line *y* in Fig. 3. Fig. 7 is a vertical section of the parts illustrated in Fig. 2.

Similar letters of reference are employed in each of the above described views to indicate corresponding parts.

In said drawings, the letter A designates my novel form of extension key, which consists

essentially of the main body-portion *a* having the usual form of locking tongue *a'* and is preferably provided at the top with an enlargement *a²* having the recessed or cut-away portions *a³* and *a⁴* in its opposite sides. Said body-portion *a* is socketed and is provided with a screw thread *a⁵*, as will be clearly seen from Fig. 7. Into this body-portion *a* is screwed a shank *b* provided at the top with any suitable form of handle portion *b'*. Said screw-threaded shank *b*, as will be seen more especially from Fig. 2, may be provided with a longitudinally arranged slot *b²*. Loosely arranged upon said screw-threaded shank *b* is a holding collar *c*, which, as will be seen from Fig. 6, is provided with an inwardly extending tongue, which projects into said slot or groove *b²*, while at the same time said collar is provided with the downwardly projecting lips *c²* and *c³* adapted to be made to fit into said recessed or cut-away portions *a³* and *a⁴* in the enlargement *a²* of the main-portion of the key, as will be clearly evident from Figs. 1 and 7. On said screw-threaded shank *b* and above the collar *c* I have arranged a jam-nut *d* which, as will be seen from Figs. 1, 2 and 7, can be screwed down upon the upper surface of said collar *c*, thereby causing a firm holding engagement of said collar *c* with the enlargement *a²*, and the screw-threaded shank *b* can not be turned within the screw-threaded socket *a⁵*, in the body-portion of the key. When it is desired to adjust said screw-threaded shank *b*, in order to shorten the key, said jam-nut is run upon the threaded shank *b*, to any desirable position as illustrated in Fig. 3; said collar *c* is then withdrawn from holding engagement with the recesses *a³* and *a⁴* in the enlargement *a²* of the key, and slid upwardly, as will be seen from said Fig. 3, which permits the screw-threaded shank *b* to be screwed down into the screw-threaded socket *a⁵*, and said shank can be securely locked or held in this adjusted position by the collar *c* and the jam-nut *d* in the manner as herein above described, and as will be clearly seen from Fig. 4.

By this novel arrangement and combination of parts, I have devised a key, the operating portion for causing the turning of the key being adjustable, whereby the key can be

lengthened or shortened to suit different thicknesses of doors, and when shortened can be more conveniently carried in the pocket.

The construction is simple and very durable in use.

Having thus described my invention, what I claim is—

1. The herein described extension key, consisting essentially of a main portion *a* having a screw-threaded socket, and recesses *a*³ and *a*⁴, a screw-threaded shank in said socket, a collar *c* provided with tongues *c*² and *c*³ adapted to fit into said recesses *a*³ and *a*⁴, and a jam-nut *d* on said shank, substantially as and for the purposes set forth.

2. The herein described extension key, con-

sisting essentially of a main portion *a*, having a screw threaded socket, and recesses *a*³ and *a*⁴, a screw-threaded shank in said socket, and a slot or groove *b*² in said shank, a collar *c* provided with tongues *c*² and *c*³ adapted to fit into said recesses *a*³ and *a*⁴, and a tongue *c*¹ adapted to fit into and slide in said slot or groove *b*², and a jam-nut *d* on said shank, substantially as and for the purposes set forth.

In testimony that I claim the invention set forth above I have hereunto set my hand this 8th day of June, 1893.

ALBERT A. DOVEY.

Witnesses:

WM. H. CAMFIELD, Jr.,

FREDK. C. FRAENTZEL.