

G. D. LEWIS.
Door-Keys.

No. 146,536.

Patented Jan. 20, 1874.

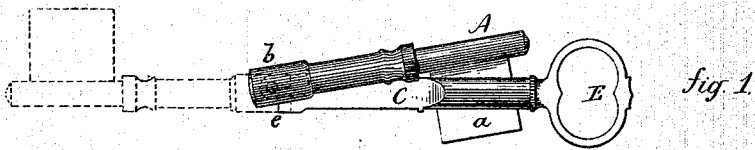


fig. 1

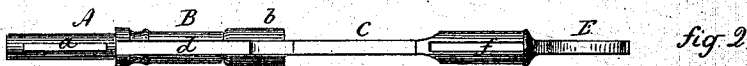


fig. 2

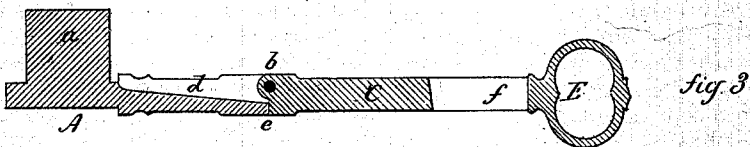


fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

GEORGE D. LEWIS, OF NORWICH, CONNECTICUT, ASSIGNOR TO THE NORWICH LOCK MANUFACTURING COMPANY, OF SAME PLACE.

IMPROVEMENT IN DOOR-KEYS.

Specification forming part of Letters Patent No. **146,536**, dated January 20, 1874; application filed December 27, 1873.

To all whom it may concern:

Be it known that I, GEORGE D. LEWIS, of Norwich, in the county of New London and State of Connecticut, have invented a new Improvement in Door-Keys; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a side view of the key in a folded position, the broken lines denoting the same extended; Fig. 2, an edge view; and in Fig. 3, a longitudinal central section.

This invention relates to an improvement in folding keys, such as are known to the trade as "store-door keys"—that is, keys which are necessarily too long to conveniently carry in the pocket, the prime object of the folding being to shorten the key; and the invention consists in forming the bit end of the spindle with a groove upon the under side—that is, the side upon which the bit is arranged—combined with a spindle and bow, the two pivoted together, and the bow end constructed with a mortise between the bow and the joint, into which the bit, when folded, will set, the flat portion of the spindle, between the mortise and joint, entering the groove in the spindle, as more fully hereinafter described.

A is the bit end, the bit *a* formed thereon in the usual or any convenient manner, the spindle B extending from the joint *b*, also of usual or other convenient form. Upon the under or bit side a groove, *d*, is formed, the extreme end slitted to receive the extension or spindle C, the two being pivoted together, as at *b*, the thickness of the part C of the spindle corresponding to the groove *d* in the bit end, and formed with a shoulder, *e*, so that when fully

extended, as in Fig. 3, the said shoulder will come to a bearing. E is the bow upon the extreme end of the part C, also of the usual or any suitable form. That portion of the spindle next adjoining the bow is made thicker, as seen in Fig. 2, and through that portion a mortise, *f*, is formed to receive the bit. From the extended portion in Fig. 3 the bit end is turned over, the bit entering the mortise *f*, as seen in Fig. 1, the groove in the bit end passing on to the flat portion of the spindle C, shortening the length of the key when thus folded by so much as the length of the bit end. As that portion of the key which occasions the greatest objection to carrying in the pocket is the bit, that difficulty is overcome by the bit extending into the mortise in the spindle, which serves as a cover or protection for the bit.

This construction being in two parts, both simple and cheap in themselves, enables me to produce a cheaper key than the common folding keys, and stronger than the usual construction, because no slit is made for one part to fold into the other; hence the tendency to spread one part by the turning of the other is avoided, and while being practically as strong as a solid key is much lighter.

I claim as my invention—

The herein-described folding key, consisting of the two parts A and C, the said part A provided with the bit *a* and groove *d*, with the part C pivoted therein, and the said part C constructed with a mortise, *f*, between the bow and the joint to receive the bit when folded, the whole constructed to be folded or extended, substantially as described.

GEO. D. LEWIS.

Witnesses:

LORD WESTON,
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