W. WILCOX.

Manufacture of Keys for Locks.

No. 134,577. Patented Jan. 7, 1873.

FIG. 1.

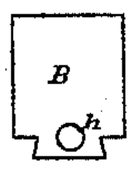


FIG. 2.

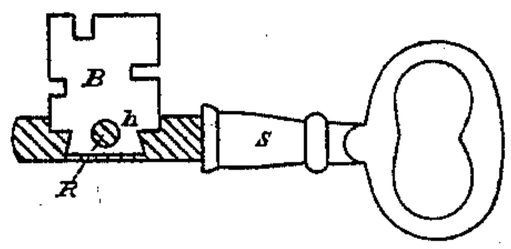
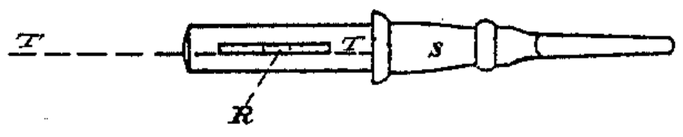


FIG. 3.



WITNESSES;

E. P. Auger.

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WILLIAM WILCOX, OF MIDDLETOWN, CONNECTICUT.

IMPROVEMENT IN THE MANUFACTURE OF KEYS FOR LOCKS.

Specification forming part of Letters Patent No. **134,577**, dated January 7, 1873.

To all whom it may concern:

Be it known that I, WILLIAM WILCOX, of Middletown, Middlesex county, State of Connecticut, have invented a certain new and useful Improvement in Bits for Lock-Keys. The following is a specification thereof:

The object of my invention is to produce a cheap and substantial bit for lock-keys when the bit and stem of the key are made of two or more distinct pieces and joined together in the process of manufacture. It consists of a piece of metal punched in a proper form for a bit and provided with a hole in or near that edge of it which is to be fastened to the stem of the key, so that when the bit is placed in the mold and the metal of which the stem is made is melted and cast into the mold a portion of the metal so cast will pass through the hole and, on cooling, form a neck or rivet, which serves to hold the bit firmly and permanently in its place.

To enable others to make and use my improvement, I will proceed to describe the same, referring to the drawing hereto annexed.

I first provide a bit, B, as shown in Figure 1, drilled or punched with a suitable hole, *h*, for receiving the metal when poured or cast into the mold, substantially as shown in R, Figs. 2 and 3, of which Fig. 2 is a sectional view of the finished key along the sectional plan T T in Fig. 3. The bit, after the metal is cast around it, is held in its place in the stem S of the key by the neck or rivet of metal R, which, when melted, passes entirely through the hole *h*, and effectually prevents the separation of the two parts B and S by any ordinary usage.

It will be readily seen that the neck or rivet is a great security toward keeping the parts of the key together and preventing trouble and annoyance from the loosening of the bit in the stem, or even its loss.

The usual mode of making lock-keys of two distinct pieces, so that they will remain firmly and permanently together, is expensive and laborious, as that edge of the bit around which the metal is cast in the mold requires first to be tinned, or treated with flux and solder, in such a manner that the melted metal of the stem will adhere or be soldered to the bit when cast around it, and so form one solid piece.

Bits for keys are sometimes made having the edge which enters the stem made dovetailing or of some similar form; but when so made they are liable to work loose and be lost.

What I claim, and desire to secure by Letters Patent, is—

The method herein described of manufacturing keys, consisting in perforating the bit B at *h* and then casting the stem S in one piece around the inner end of the bit, and forming, by said casting, the neck or rivet R, substantially as and for the purpose set forth.

WILLIAM WILCOX.

Witnesses:

E. P. AUGUR,

A. B. CALEF.