

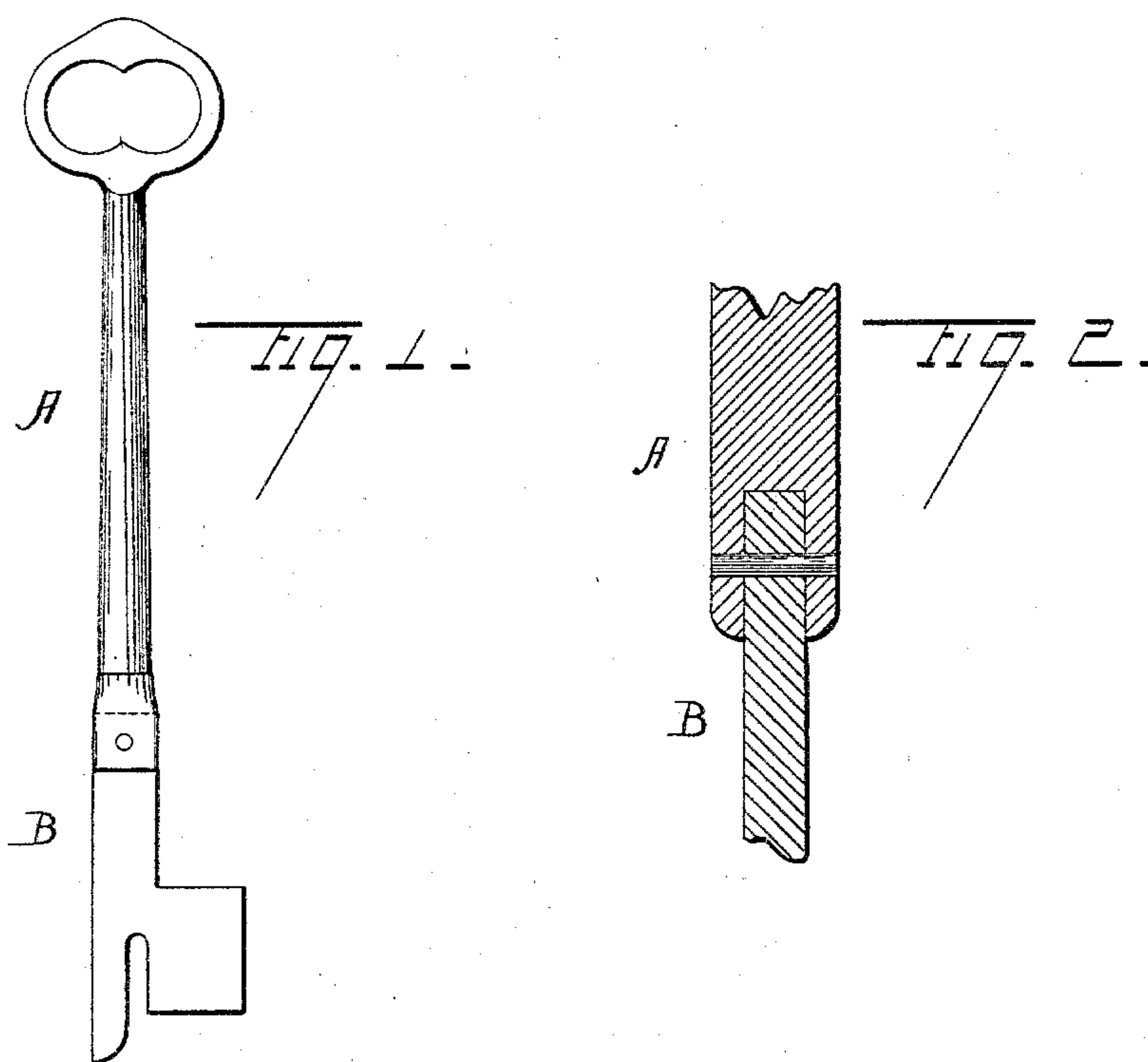
(No Model.)

J. F. WOLLENSAK.

KEY.

No. 323,479.

Patented Aug. 4, 1885.



WITNESSES

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# UNITED STATES PATENT OFFICE.

JOHN F. WOLLENSAK, OF CHICAGO, ILLINOIS.

## . KEY.

SPECIFICATION forming part of Letters Patent No. 323,479, dated August 4, 1885.

Application filed April 28, 1885. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN F. WOLLENSAK, a citizen of the United States, residing at Chicago, Illinois, have invented certain new and useful Improvements in Keys, of which the following is a specification.

In the accompanying drawings, Figure 1 is a side view of my improved key, and Fig. 2 an edge view of a section thereof, A representing the handle and B the blade.

My improved key belongs to that class of keys which are known among locksmiths and dealers as long flat keys for store-door rim-locks—that is, keys for thick doors provided with rim-locks, and in which the blade enters a flat instead of a round hole in the lock.

In the manufacture of this class of keys it has generally been common to make them of two parts, so that the blade could be folded into the handle like the blade of a pocket-knife.

This form of key is heavy and expensive, and the joint is liable to wear or become loose so that it will not hold the bit in line with the handle, which is necessary to the full insertion of the key in the lock of a thick door. Flat keys have also been made of one piece of sheet metal, of uniform thickness throughout their whole length; but, being necessarily thin in order to fit the lock, these keys are lacking in strength and stiffness in the shank, and so are soon liable to become twisted or bent and thus rendered useless. Such keys have also been made of one kind of cast metal, with a flat blade and a thickened handle. If made of solid steel these keys are very expensive and difficult to make, owing to the fact that they cannot be stamped, cast, or conveniently made by machinery, as their form and thickness is not uniform throughout, and when made of other metal—such, for instance, as malleable iron—the bit has been found too weak when cut to fit the lock, so that, thus made, they have been found very objectionable, and are now fast going out of use.

In making my improved key I stamp the bit or blade out of sheet steel, and I make the handle thickened and of any suitable metal that possesses the requisite strength and thickness. The handle is preferably provided with jaws and holes for a rivet, and the bit or blade with cor-

responding holes at the respective ends which are to be connected together. This end of the blade is preferably made square—that is, not rounded—and the slot in the handle of corresponding shape, so that no folding, turning, or shutting can take place. The parts are put in position and riveted or otherwise secured rigidly together, and thus form a key with a flat steel blade or bit and a handle of any desired material.

My improved key differs from the first class mentioned and described above in that the parts do not fold together. It differs from the second class in that it is composed of two pieces not necessarily of the same kind of metal, and is not of uniform thickness throughout its whole length, and in that its shank is stiff and so not liable to be bent or twisted. It differs from the third class in that it may be composed of two kinds of metal, and in that it presents no difficulty in the way of swaging, casting, stamping, or forming the key by machinery.

The essential idea of my invention is the making of a long key for store-door rim-locks having a flat steel bit and a strong stiff enlarged rigid shank or handle, and, as it is apparent that these two parts—the bit and handle—may be connected together in other ways than the one above described, I do not wish to be understood as limiting myself to this form of connection or to other special details of construction.

I claim—

1. As a new article of manufacture, a long key for store-door rim-locks, comprising a flat steel bit or blade and a strong, stiff, thickened shank or handle rigidly connected together, substantially as described.

2. As a new article of manufacture, a long key for store-door rim-locks, comprising a flat steel bit or blade cut off square at one end and a strong, stiff, thickened shank or handle slotted at one end in shape to correspond with and receive such square end of the blade, and a connector rigidly securing the two together, substantially as described.

JOHN F. WOLLENSAK.

Witnesses:

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