(Model.)

# E. PARKER.

## Key.

No. 234,057. Patented Nov. 2, 1880.

Fig. 1.

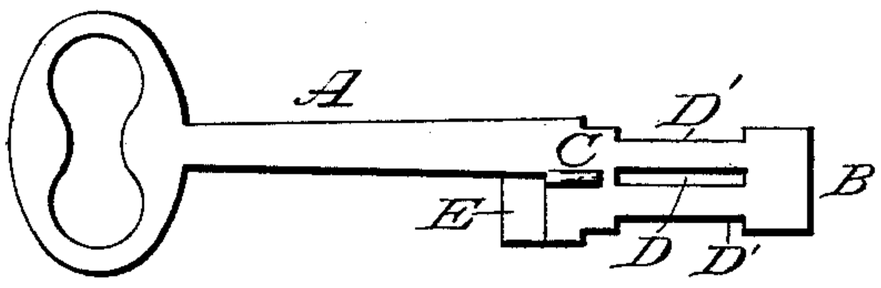


Fig. 2.

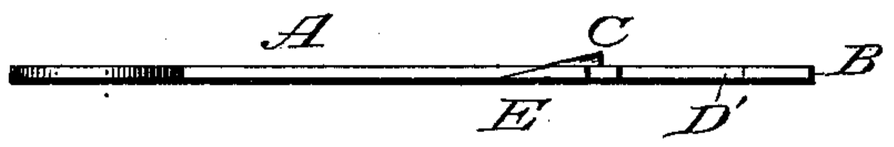


Fig. 3.

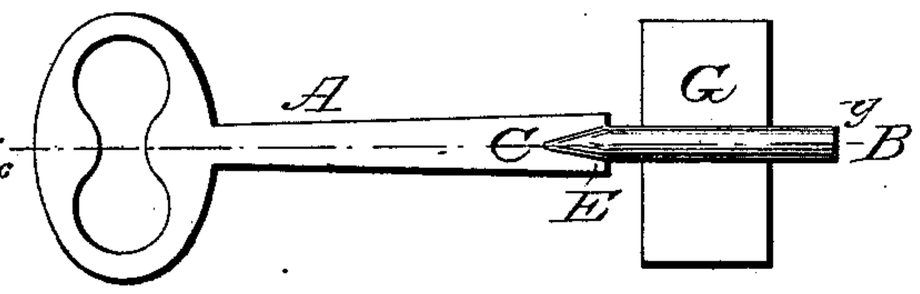


Fig. 4.

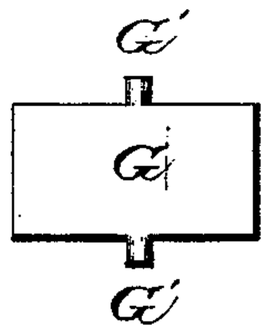


Fig. 5.


Witnesses:

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# UNITED STATES PATENT OFFICE.

EMERY PARKER, OF NEW BRITAIN, CONNECTICUT.

## KEY.

SPECIFICATION forming part of Letters Patent No. 234,057, dated November 2, 1880.

Application filed March 15, 1880. (Model.)

*To all whom it may concern:*

Be it known that I, EMERY PARKER, of New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Lock-Keys; and I do hereby declare that the following is a full, clear, and exact description of the invention, whereby a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

My improvement relates to a new form of lock-key, such as is used for doors, drawers, &c.

The object of my invention is to provide a cheaper, stronger, and more easily constructed key than has heretofore been in use.

My improved key is intended to be made entirely of sheet or plate metal, but in a much more complete and durable form than has heretofore been known, and it also admits of the use of a double bit extending out on each side of the stem, which is a form used with many kinds of locks.

In the accompanying drawings, Figure 1 shows a flat-side view of a blank cut out from sheet metal, from which the handle and stem of my improved key is formed. Fig. 2 is an edge view of the same. Fig. 3 shows a side view of my improved key when finished. Fig. 4 is a side view of the bit detached from the key in the form in which it is struck or cut out from the sheet metal. Fig. 5 is a cross-section through the key on the line *x y* of Fig. 3.

A is that part of the blank which forms the ring and handle. This part remains flat when the key is finished.

B is the part which forms the stem of the key. This part is bent into a cylindrical form around a suitable mandrel, or in any other convenient manner.

C′ is a stud or projection struck up from the plate to form the shoulder C upon the finished key.

D is a slot through the blank for the reception of the bit. The edges of the blank are also recessed at D′, so that when the stem is formed by being bent round there will be a similar slot upon the opposite side.

The slot D and the projection C can be made in the blank when flat; but they are preferably made when the middle portion has been bent to the proper curve for the stem, as their form will not then be disturbed by the bending.

E is a chamfered portion of the blank brought down to an edge, so that it will lie close to the flat part forming the handle when it is turned over against it, as shown in Fig. 3.

G is the bit. This is struck or cut out from sheet or plate metal, and is provided with the two projections or ears G′ G′, which lie within the stem when the key is finished and prevent the bit from moving out of its proper position. The bit is placed in the slot D, and the stem bent round so as to inclose the projections G′ G′, which holds the bit firmly in its place.

When the part of the blank which forms the cylindrical stem B is bent to its proper form the lower edges meet, except where they inclose the bit. The projection C is bent slightly downward by the curving of the stem, so that its top comes in line with the top of the part A and forms the shoulder C of the finished key. The angles shown at C in Fig. 1 meet at the bottom and form the projection C of the finished key. The thin edge at E lies along the flat side of the part A, so as to form a close joint. This arrangement makes a nice finish at the junction of the flat handle A and the cylindrical stem B, the sides of the cylinder curving inward to the handle, as shown in Fig. 3.

My improved key can be made by hand or be struck into its proper form by dies and suitable machinery. It may be made of any plate metal, but is particularly adapted to keys which are formed from sheet-steel.

By causing the bit G to pass through slots in both sides of the stem I make a much stronger and more durable key than has heretofore been made from sheet metal.

One side of the bit can be removed to be flush with the exterior of the stem, leaving the part in the slot, so as to obtain a key having practically but a single bit with all the strength of my improved construction.

What I claim as my invention is—

1. In a lock-key formed of sheet metal, the projections G′ upon the bit, in combination with the hollow cylindrical sheet-metal stem, whereby said bit is secured in the stem, substantially as described.

2. A key of sheet metal having a separate bit passing entirely through the stem and secured therein by means of projections G′, around which the slotted stem is bent to secure it, substantially as described.

EMERY PARKER.

Witnesses:
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