

E. PARKER.
Improvement in Dies for Making Key-Blanks.
No. 128,650. Patented July 2, 1872.

Fig. 1.

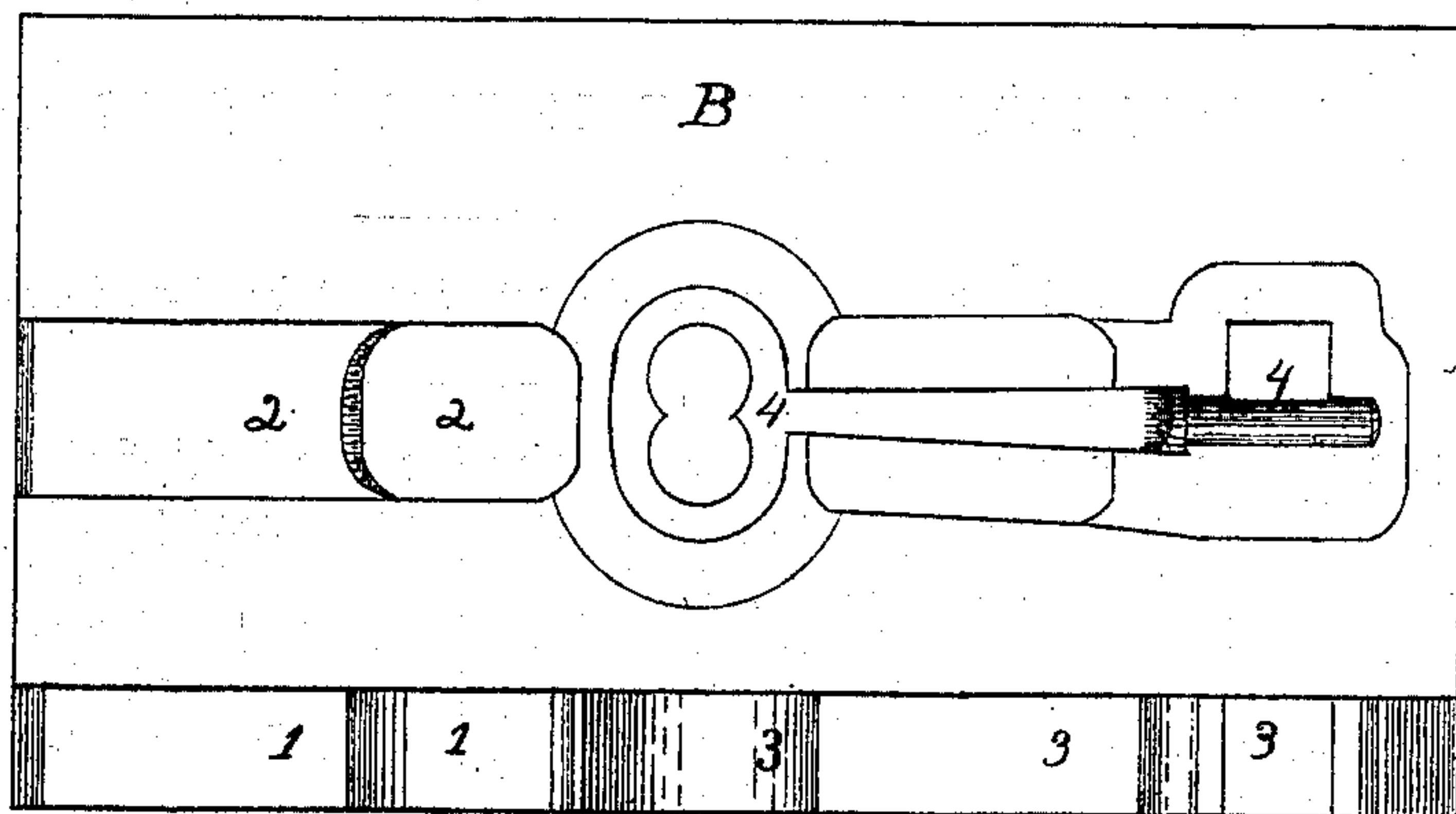


Fig. 2.

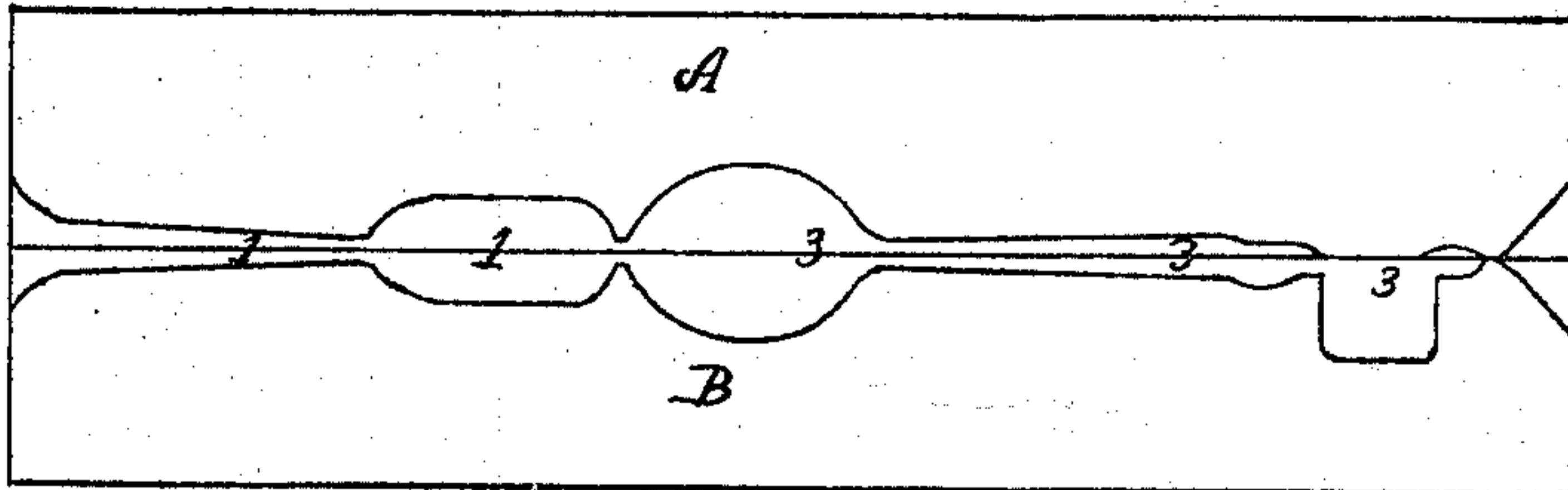


Fig. 3.

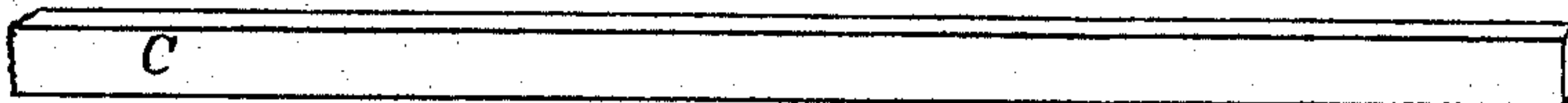


Fig. 4.



Fig. 5.

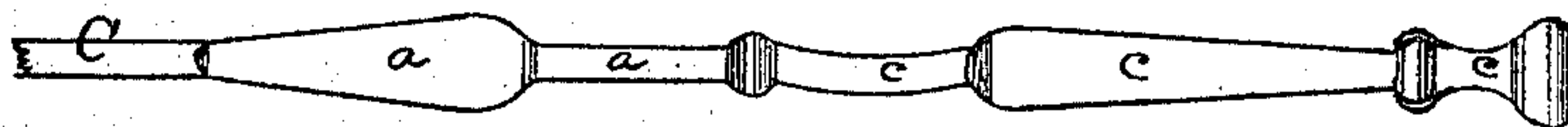
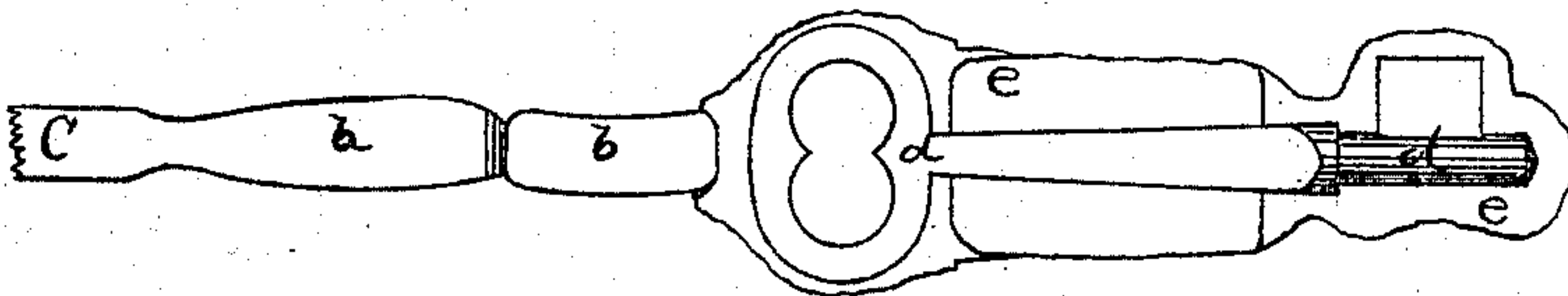


Fig. 6.



Witnesses.

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EMERY PARKER, OF NEW BRITAIN, CONNECTICUT.

IMPROVEMENT IN DIES FOR MAKING KEY-BLANKS.

Specification forming part of Letters Patent No. 128,650, dated July 2, 1872.

I, EMERY PARKER, of New Britain, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in the Art of Making Key-Blanks, of which the following is a specification:

The invention consists in the art of making key-blanks from a rod of metal by the employment of the dies described, which produce a succession of forms, hereinafter described.

In the accompanying drawing, Figure 1 shows a face view of one of the die-blocks employed in practicing this invention; Fig. 2, a side view of said die-blocks; Fig. 3, a view of the rod from which the blanks are formed; and Figs. 4, 5, and 6 are side, edge, and side views, showing the various forms that the metal assumes upon being subjected to the several dies.

The die-blocks A and B are placed in any of the ordinary devices for operating dies in the usual manner. The rod C, preferably of rectangular form, is heated and placed between the die 1 edgewise—that is, with its broadest sides in a vertical position. The die-blocks are then forced together, when the die 1 swages the rod C into the form shown at the left, and designated *a* in Figs. 4 and 5. The rod C is then held flatwise and the swaged portion *a* is placed between and operated upon by the die 2, forming said portion into the shape shown at the left, and designated *b* in Fig. 6. The rod C is then held edgewise and the swaged portion *b* placed between the die 3, while at the same time a portion of the rod C not yet operated upon is placed between the die 1. The operation of the dies 1 and 3 will then form the metal into the forms shown in Figs. 4 and 5, that portion formed by the die 3 being designated *c* and shown at the right. The portions *a* and *c* thus swaged, (the rod C

being held flatwise,) are placed between and operated upon by the dies 2 and 4, throwing the metal into the form shown in Fig. 6, the portion thereof formed by the die 4 being designated *d* and shown at the right. The result of the last operation of die 4 is (by merely trimming or shearing off the fin *e*) a finished key-blank. Extending from and surrounding the die 4 is a shallow recess, to make room for the surplus metal or fin of the key-blank. By arranging the dies 1 and 3 upon one line and the dies 3 and 4 upon another, as shown, the four successive operations of the dies (after the first key-blank is swaged) are performed by only two blows of the die-blocks. It will be observed that that portion of the rod which forms the shank of the key-blank is compressed first in one direction and then in a transverse direction, successively, by each of the respective dies, whereby the metal is so drawn as to remove a large share of the surplus stock, which would otherwise remain at said point. If desired, a key-blank might be formed from the rod C by the use of dies 3 and 4 only, but by such use a greater portion of metal would be thrown into the fin around the shank and consequently involve a waste of stock. It is not necessary, in order to practice this invention, to arrange the dies in pairs of 1 3 and 2 4, as described, but it is preferable to do so.

I claim as my invention—

The progressive formation of key-blanks from a rod of metal by the employment of the dies 1, 2, 3, and 4, substantially as described, producing the succession of forms, substantially as specified.

EMERY PARKER.

Witnesses:

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