

E. PARKER.

Improvement in Dies for Making Key-Blanks.

No. 128,650.

Patented July 2, 1872.

Fig. 1.

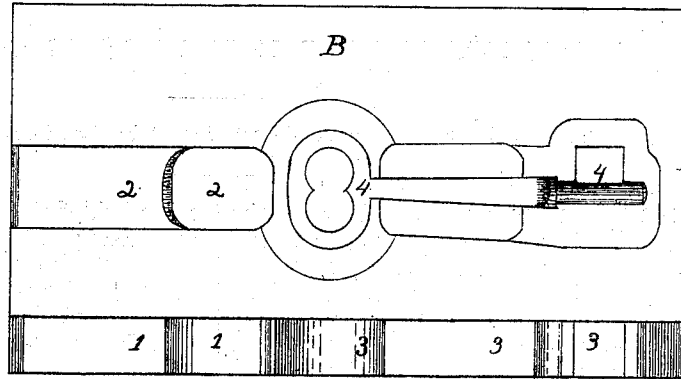


Fig. 2.

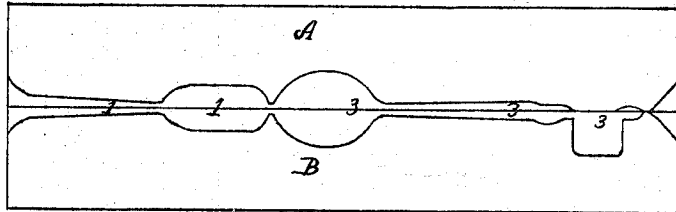


Fig. 3.

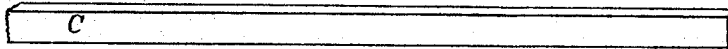


Fig. 4.

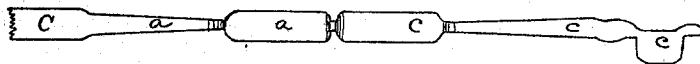


Fig. 5.

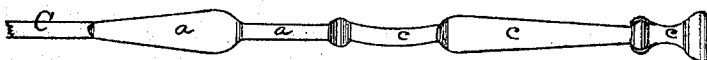
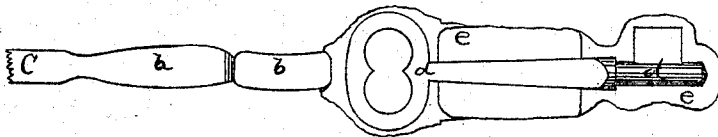


Fig. 6.



Witnesses.

Nancy C. Parker
Leonard Doig

Inventor.

Emory Parker

UNITED STATES PATENT OFFICE.

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:

HENRY E. RUSSELL, 2d,
LEONARD DOIZ.