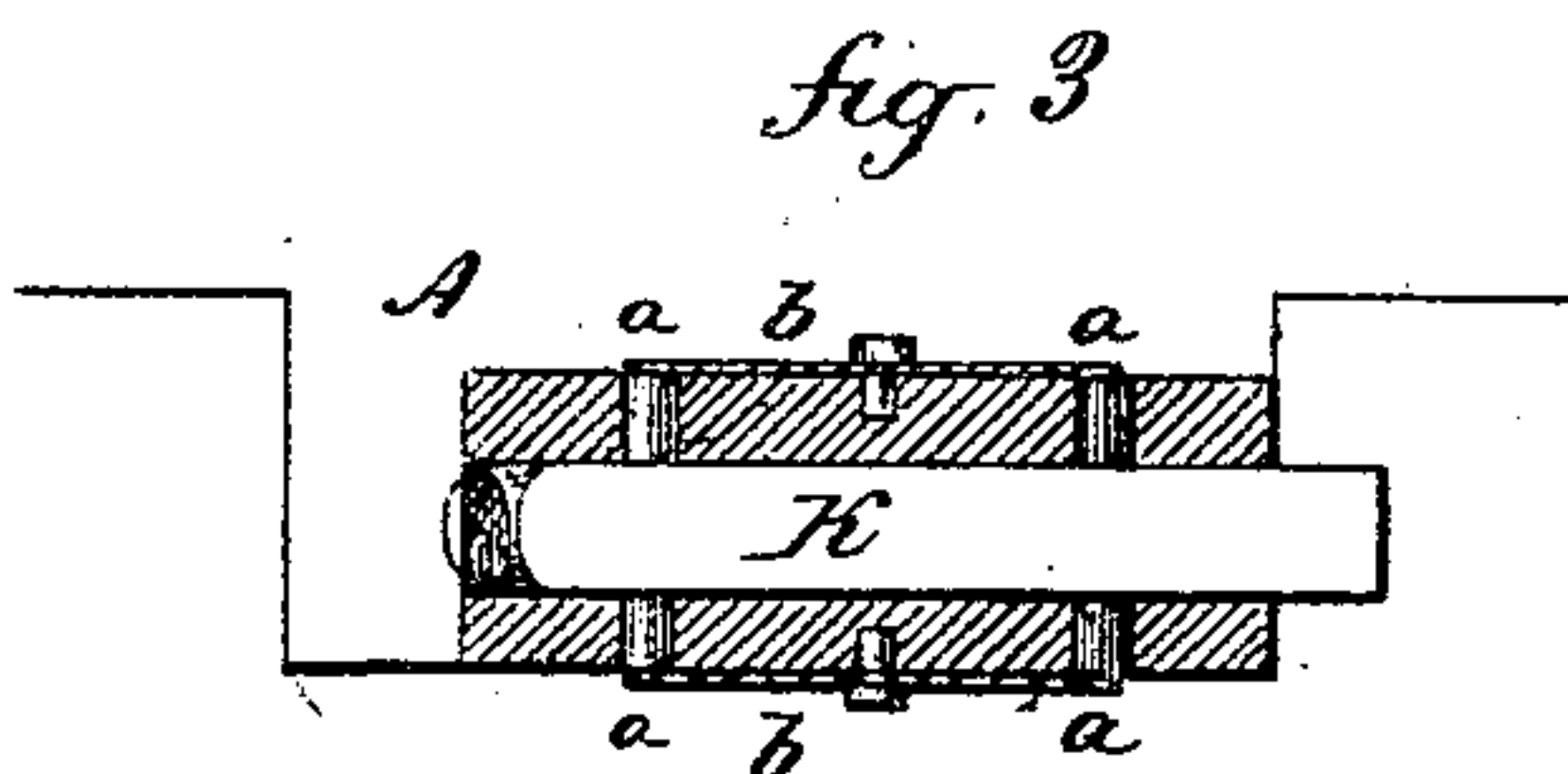
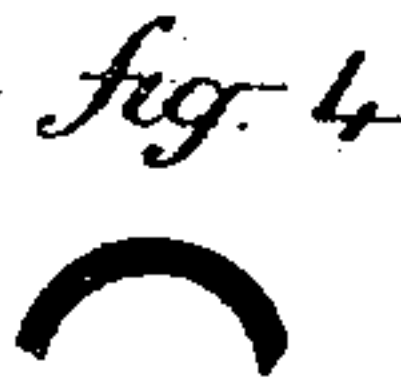
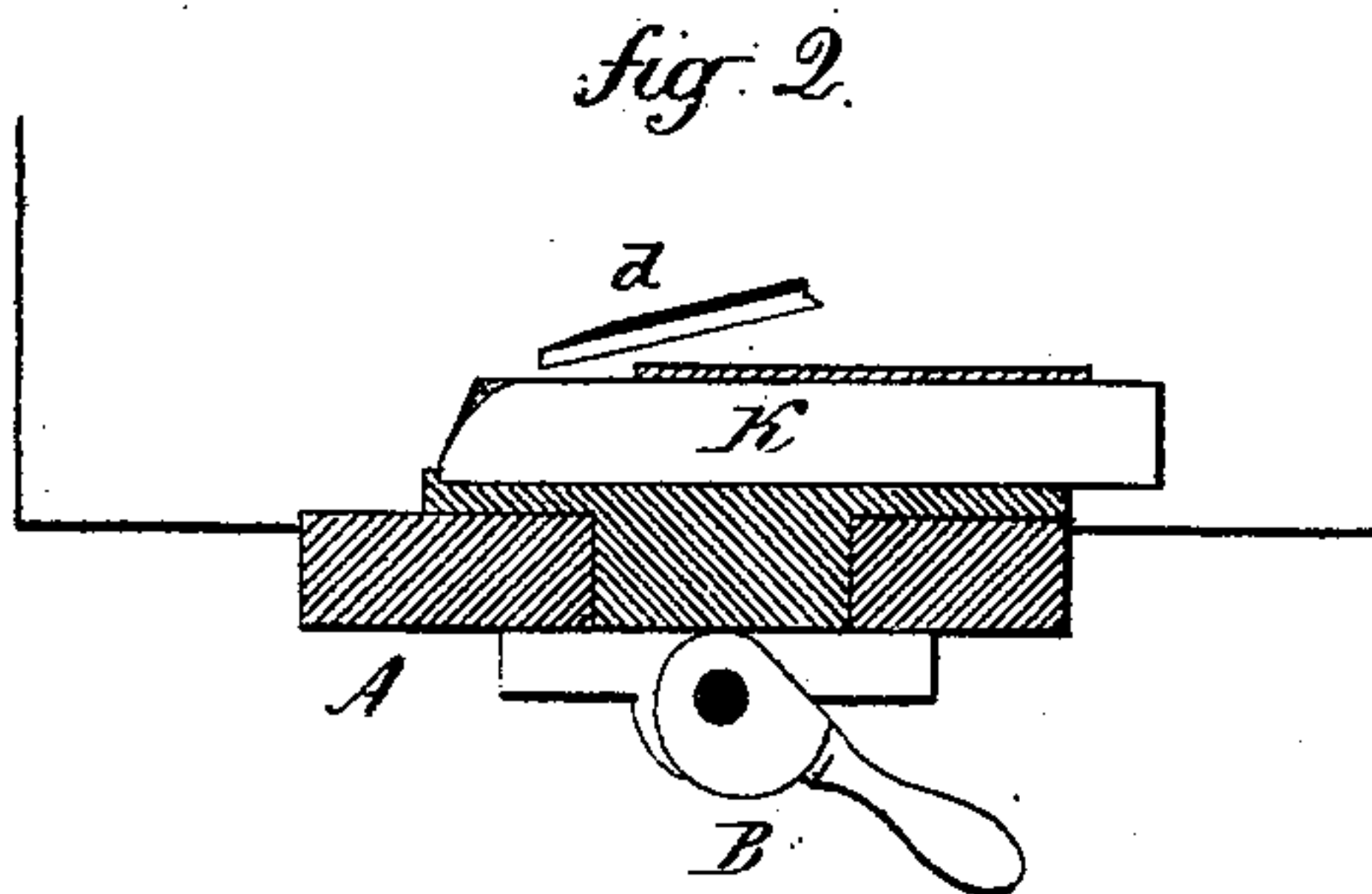
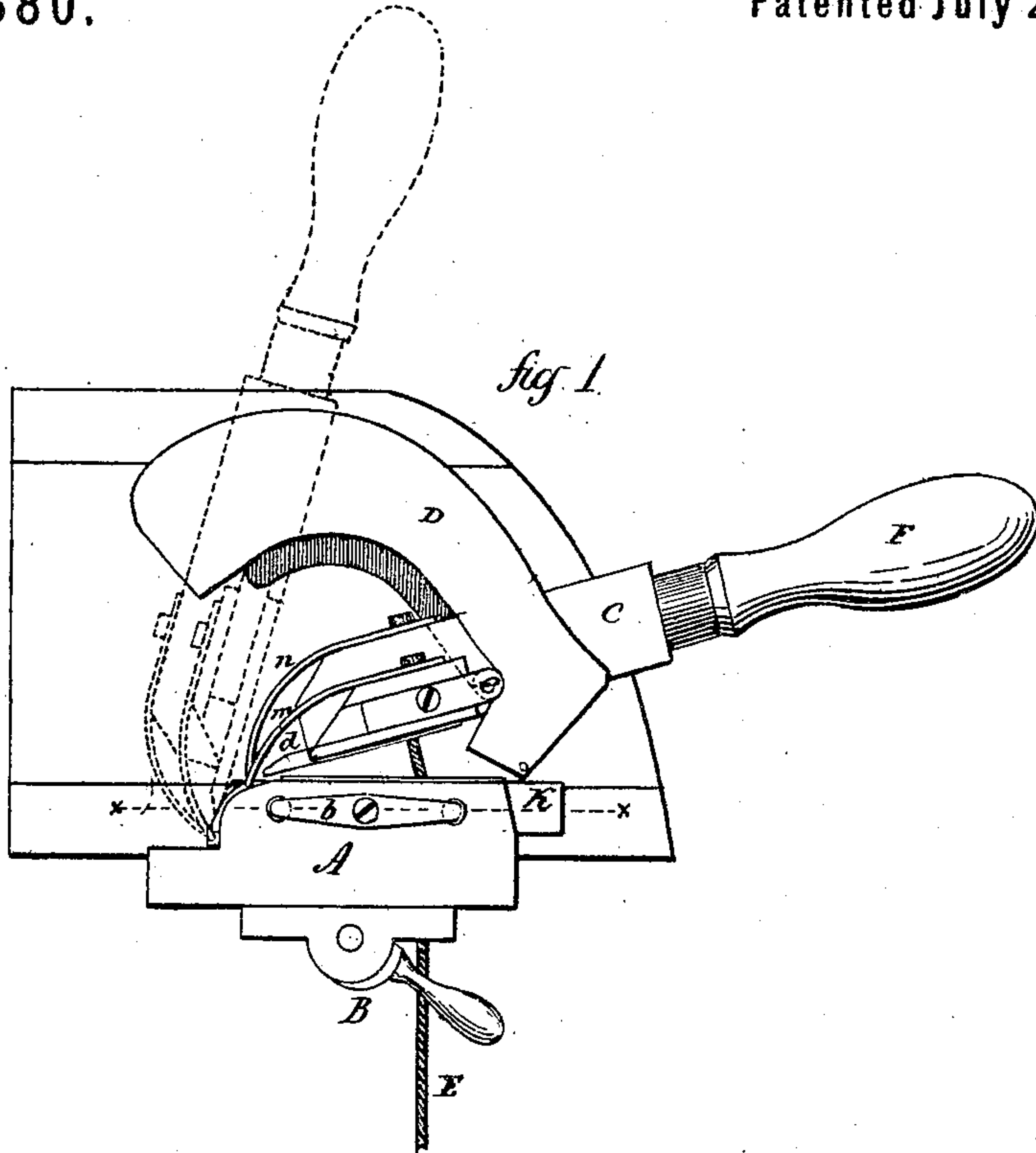


M. PRATT.

Machines for Shaping Piano Keys.

No. 141,380.

Patented July 29, 1873.



Witnesses
W. Shumway
A. J. Tibbitts

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 Inventor
 By Atty.
John O. Earle

UNITED STATES PATENT OFFICE.

MILON PRATT, OF DEEP RIVER, CONNECTICUT.

IMPROVEMENT IN MACHINES FOR SHAPING PIANO-KEYS.

Specification forming part of Letters Patent No. **141,380**, dated July 29, 1873; application filed May 23, 1873.

To all whom it may concern:

Be it known that I, MILON PRATT, of Deep River, in the county of Middlesex and State of Connecticut, have invented a new Improvement in Device for Shaping Piano-Keys; and I do hereby declare the following, when taken in connection with the accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a front view; Fig. 2, a longitudinal vertical section; Fig. 3, a longitudinal transverse section on line *x x*; and in Fig. 4, a section of the cutter.

This invention relates to an improvement in devices for finishing the ends of keys of musical instruments, commonly termed "sharps"—that is to say, the keys by means of which the flats and sharps are struck. The exposed ends of these keys are rounded—that is, the corners taken off, as seen in the key K, Figs. 2 and 3. This has usually been done by some grinding process, and doing which requires a great amount of skill in order to make the keys uniform. The object of this invention is to simplify the process; and it consists in a device for holding the key, combined with a movable cutter guided over the end of the key in said holding device to dress the end of the key into the desired form.

A is the bed or support for the key, beneath which a cam, B, is arranged to clamp the key in position, as seen in Fig. 2. A recess is formed in the bed to receive the key, as seen in Fig. 3, and, to insure the proper position of the key therein, I arrange studs *a a* with a spring, *b*, upon the outside bearing thereon to force the said studs against the key upon opposite sides, and thus insure its proper cen-

tral position. Above the bed and upon a suitable holder, C, the cutter *d* is arranged. This cutter is, in transverse section, formed of the shape seen in Fig. 4, the concave side corresponding to the curvature required for trimming the end of the key. The cutter-holder is made to traverse in the required path by a guide, D, within which trunnions *e* on the holder work, and also by fingers *m n* on the forward end of the holder in advance of the knife, which travel over the curved end of the bed, as seen in Fig. 1, the cutter-holder held down upon this last-named guide by means of a weight, spring, or other device attached to the holder through a cord, E, or its equivalent. The cutter-holder is provided with a handle, F, by means of which to operate it.

The key is placed in the bed and clamped, as before described, and as seen in Fig. 1; then the operator, taking hold of the handle F, raises it, carrying the holder and cutter over to the position denoted in Fig. 1, the guide D and fingers *m n* carrying the cutter in the proper path, so that as the cutter passes over the end of the key it will cut or dress that end of the key into the desired form, leaving it smooth and finished in the most perfect manner, and every succeeding key of precisely the same form, so that the required skill in the usual process is unnecessary.

I claim as my invention—

In combination with the bed and clamping device for holding the key, the cutter-holder C, carrying the cutter *d* and guided in its proper path, substantially as set forth, and for the purpose specified.

MILON PRATT.

Witnesses:

JOHN W. MARVIN,
S. H. JENNINGS.