

JOSEPH E. CRISP.

Improvement in File-Cutting Machines.

No. 127,854.

Patented June 11, 1872.

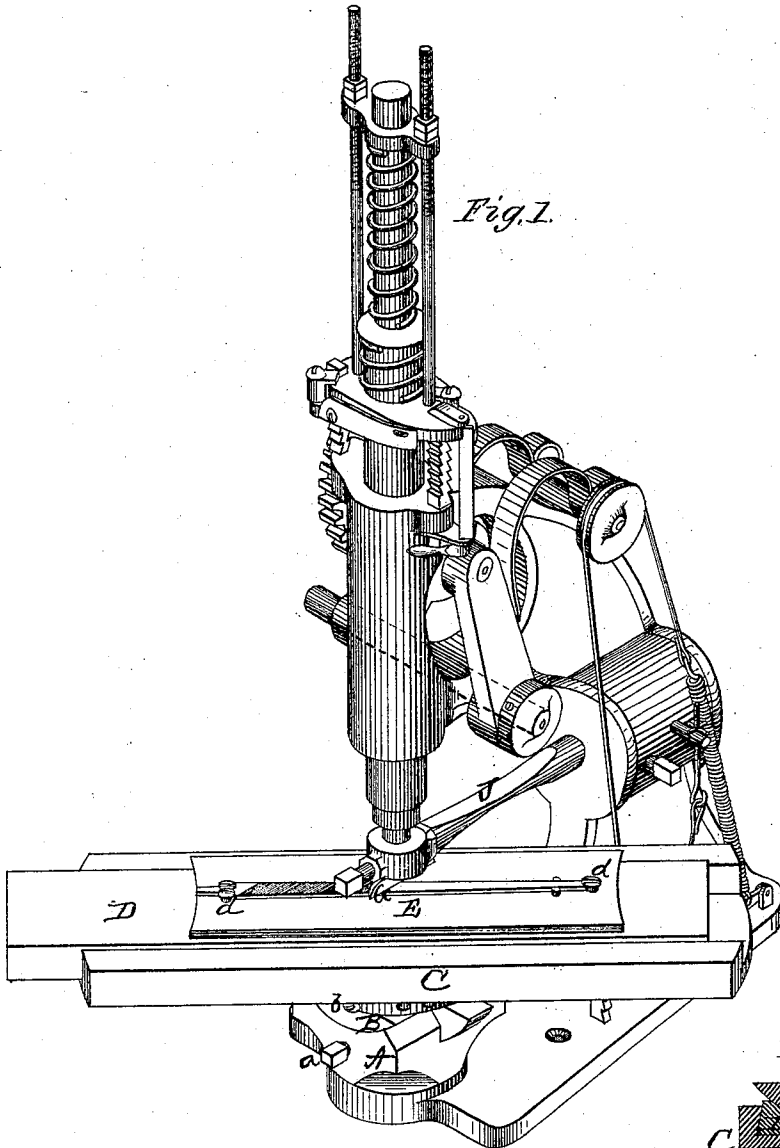


Fig. 1.

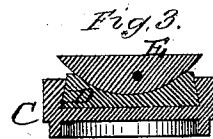


Fig. 3.

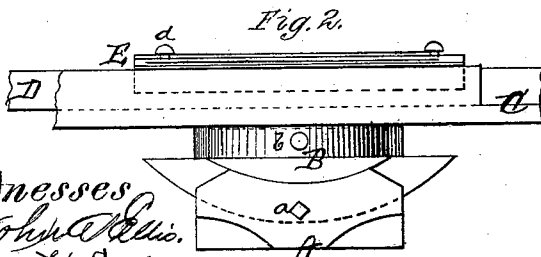


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JOSEPH E. CRISP, OF CHARLESTOWN, MASSACHUSETTS.

IMPROVEMENT IN FILE-CUTTING MACHINES.

Specification forming part of Letters Patent No. 127,854, dated June 11, 1872.

SPECIFICATION.

To all whom it may concern:

Be it known that I, J. E. CRISP, of Charlestown, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in File-Machines; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon which form a part of this specification.

The nature of my invention consists in the construction and arrangement of the mechanism of a "file-machine," in which the teeth of the file are produced by the blow of a hammer on a chisel and the file-blank fed or moved by said blow, in proportion to the force thereof, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 represents a perspective view, and Figs. 2 and 3 are detached views of the same.

A represents the foundation-block, the base of which may be attached to or below any power-hammer. The top of this block is made concave to fit the bottom of a block, B, which is held in position by a set-screw, *a*. The top of the block B is turned to fit a circular flange on the under side of a bar, C, fastened to the block B by a set-screw, *b*. This bar C may thus be turned around on its center and set in any direction, while by the block B it may be set at any angle from the horizontal that may be desired. In the upper side of the bar or block C is a longitudinal groove, in which the block D slides parallel with the block C. This block D should be very heavy. At right angles with the length of the block, and into the upper side thereof, is turned the table E,

which holds the file to be cut by means of set-screws *d d*. The radius of the concavities in the blocks A and D should commence at the point of the chisel G, which is held in position by the spring-bar J, attached to the frame of the hammer or to the foundation-block A. This spring-bar is so constructed that at the same time as it will yield to the downward blow of the hammer it will also spring sideways, according to the inclination of the bed. The spring-bar J can be moved so as to center the file and insure the cut being equally deep on each side of the file.

The operation is as follows: The file is attached to the table E; then the block or bar C is set to any angle desired from the chisel G; also the block B. Then, with the edge of the chisel resting lightly on the file, it is struck by the hammer, which drives the chisel into the file, making one tooth; and at the same time the bar J allows the chisel to move down the incline of the block, carrying with it the block D and table E, with the file, a distance in proportion to the force of the blow from the hammer; and in the removal of the hammer the bar J returns to its first position in readiness for another stroke from the hammer, and so on.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the blank-supporting device, consisting of the parts A, B, C, D, and E, the spring-arm and chisel, and the hammer, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JOSEPH E. CRISP.

Witnesses:

HENRY W. BRAGG,
GEO. H. LONG.