

S. & S. M. HAMBLIN.  
File-Cutting Machine.

No. 159,756

Patented Feb. 16, 1875.

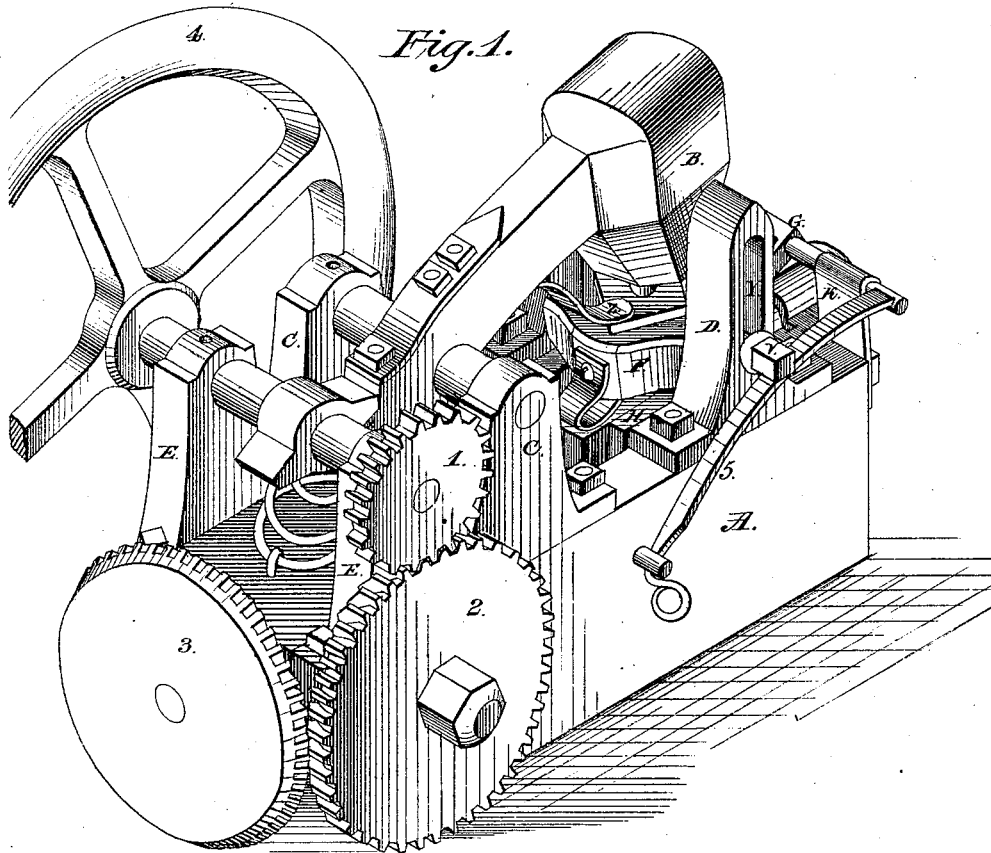


Fig. 1.

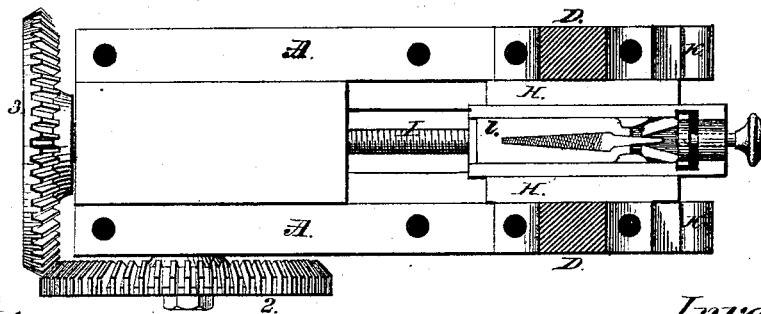


Fig. 2.

Attest:

John Blackburn  
William Driscoll

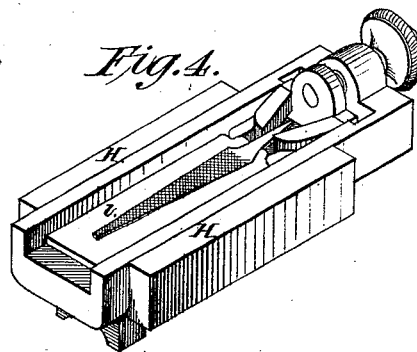
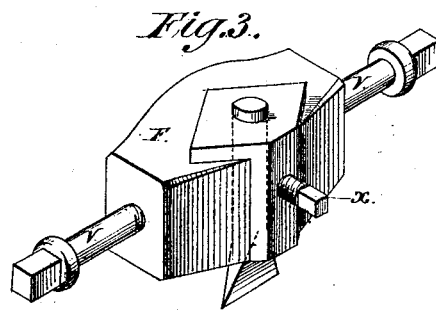
Inventor:

Silvanus Hamblin  
Stephen M Hamblin

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# UNITED STATES PATENT OFFICE

SILVANUS HAMBLIN AND STEPHEN M. HAMBLIN, OF PAWTUCKET, RHODE ISLAND, ASSIGNORS OF TWO-THIRDS THEIR RIGHT TO LEWIS S. JUDD AND ALEXANDER WINSOR, OF FAIRHAVEN, MASSACHUSETTS.

## IMPROVEMENT IN FILE-CUTTING MACHINES.

Specification forming part of Letters Patent No. **159,756**, dated February 16, 1875; application filed August 14, 1874.

*To all whom it may concern:*

Be it known that we, SILVANUS HAMBLIN and STEPHEN M. HAMBLIN, of Pawtucket, Rhode Island, have invented certain new and useful Improvements in Machines for Cutting Files, termed "File-Cutters;" and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a perspective view of the machine; Fig. 2, a bird's-eye view, with the toothed wheel 1 and caps *c c* and *E E* removed; Fig. 3, the head-block, showing the form of plunger *F* and chisel; and Fig. 4, the shoe *H*, showing the holder *l*, operated by the screw *I*.

*A* is a bed or block, made of cast-iron, having a way in the center for the shoe *H* to slide in, which shoe is operated by a screw attached to gear-wheel 3, which is operated by gears 1 and 2, which receive their motion from balance-wheel 4 when operated by hand. *G* is a binder, (with the spring 5,) attached to catches *K K*, for binding the blank while being cut.

Spring *Z*, attached to the hammer *B*, forces the chisel upon the blank before the hammer *B* strikes. The cross-head, Fig. 3, is secured by set-screws *V V* to standards *D D*. *C C* are standards for holding shaft for hammer. *E E* are standards for holding shaft for balance-wheel 4 and gear 1. The chisel in plunger *F* in Fig. 4 is secured in cross-head by set-screw *X*, the cross-head being adjustable in slots *Y Y* by the set-screws *V V*, thereby obtaining any angle desired.

What we claim as our improvement and invention, and desire to secure by Letters Patent, is—

The combination, substantially as herein shown and described, of the feed-screw *I*, and gear-wheels 1, 2, and 3, hammer *B*, provided with spring *Z*, cross-head *F*, for carrying or supporting the chisel, binder *G*, and shoe *H*, as and for the purpose set forth.

SILVANUS HAMBLIN.  
STEPHEN M. HAMBLIN.

Witnesses:

JOHN BLACKBURN,  
WILLIAM DRISCOLL.