G. A. Mitchell.

Leather Working.

No. 28,887. Patented Jun. 26, 1860.

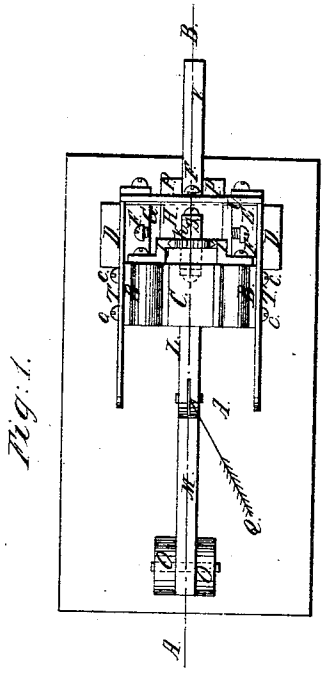


Fig. 1.

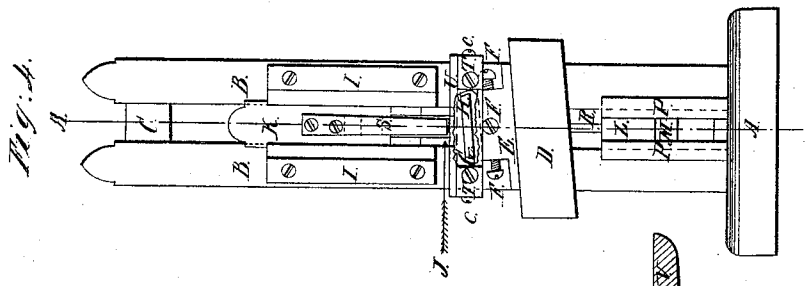


Fig. 4.

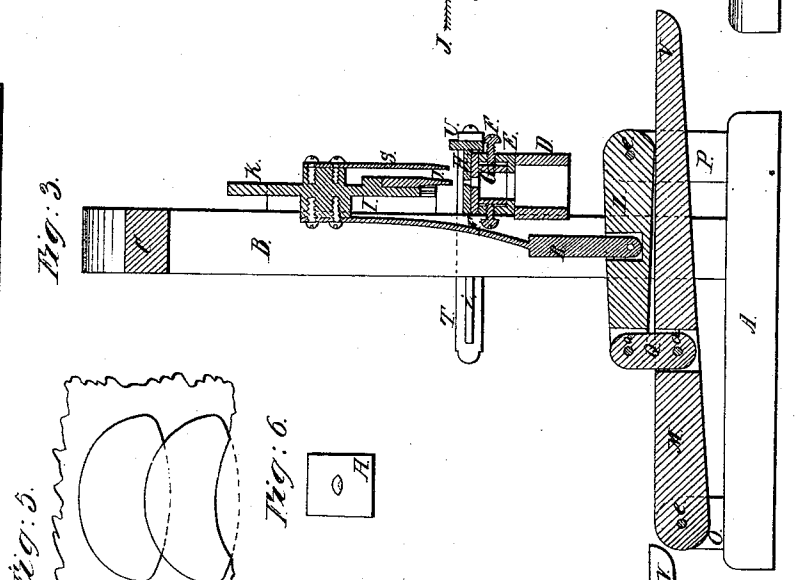


Fig. 3.

Fig. 5.

Fig. 6.

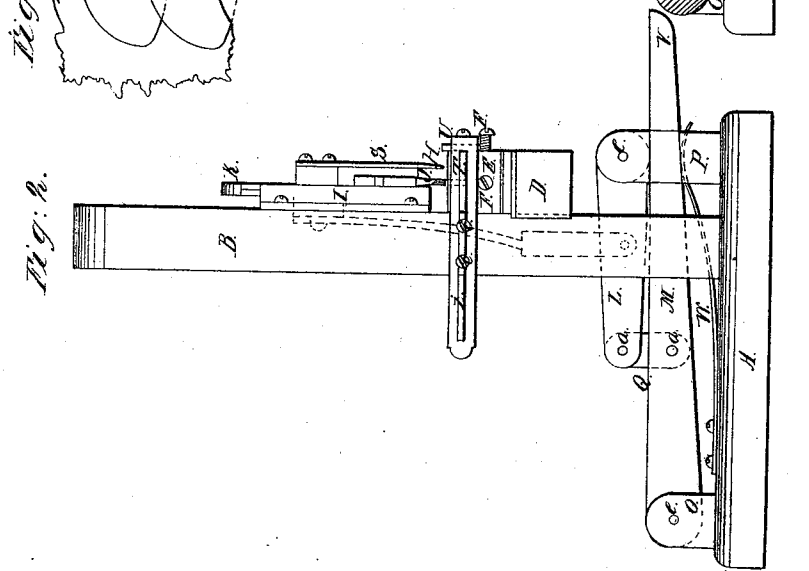


Fig. 2.

Witnesses:

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UNITED STATES PATENT OFFICE.

GEO. A. MITCHELL, OF TURNER, MAINE.

MACHINE FOR CUTTING BLANKS FOR SHOE-TIPS.

Specification of Letters Patent No. 28,887, dated June 26, 1860.

To all whom it may concern:

Be it known that I, GEORGE A. MITCHELL, of Turner, in the county of Androscoggin and State of Maine, have invented a new and useful Machine for Cutting Metal Blanks for Shoe-Tips from Sheets of Metal; and I hereby declare that the following specification, in connection with the accompanying drawings, constitute a lucid, clear, and exact description of the construction and use of the same.

In referring to the said drawings, Figure 1 denotes a plan or top view; Fig. 2, a side elevation; Fig. 3, a central and vertical section on line A, B, of Figs. 1 and 4; Fig. 4, an end elevation; Fig. 5, a piece of sheet metal with two of the blanks cut by my machine; Fig. 6, a plan of the die, disconnected from the machine.

Invention: The nature of my invention consists, in so constructing a double die holder, and the die and follower as to give a shearing stroke or cut, and in combining therewith a guide to gage the sheet metal thereto, and a stamp, all so arranged as to guide the plate, and stamp and cut the blank for the tip, all at one operation, in the manner substantially hereinafter seen.

Construction: To enable persons skilled in the art to which my invention appertains to construct and carry out the same, I will describe it as follows: I construct a bed piece seen at A, into which I frame and secure two posts seen at B, united near the top by cross bar seen at C. A suitable block seen at D, is firmly secured to posts B, and to the top of which is secured the outer die holder E, to be made of iron; and provided with screws F, passing through, and threaded to each of its four sides, for holding a secondary die holder G, adjustably therein, and in any desired position. This secondary die holder is channeled dovetailing to receive, and hold the cutting die H, at its upper surface.

Two iron ways or tracks seen at I, are secured to the posts, and in which a metal plunger seen at K, is fitted to freely slide or move, up and down and be guided therein. To correctly direct the cutter J, into the cutting die H, this die and its double holder G and E, is set on an incline plane, seen at Fig. 4, so that the cutter J, will give a shearing stroke or cut, to the metal plate for the blank, for the tip.

In front of cutter J, I secure a stamp S to plunger K, which stamps the next succeeding tier of blanks on the metal plate sheet so that just after one blank is cut, another in the next tier, is stamped by the same movement, as will be seen in Fig. 3, of the drawings.

The plunger K, is connected to lever L, by rod R, and the lever M, is connected to lever L, by plate Q, and pins *a*, these levers being suspended in stands O, and P, by pins *e*, thus constituting a compound and very powerful lever, the foot of the operator being placed on lever M, at V, for the operation of the machine.

The levers L, and M, plunger K, cutter J, and stamps S, are kept up by spring W, under lever M.

I construct a guide U, and secure it firmly to two side bars T, which are secured to posts B, by screws *c*, and made adjustable, back and forth by slots *i*, so that a wide sheet of metal can be put in, and a row of blanks cut from its edge and then the guide U, moved sufficiently toward the cutter J, and set by screws *c*, and then another tier of blanks is cut from the edge of the plate, seen at Fig. 5, and so on *ad infinitum*.

Cutting these blanks is but one of the processes in making boot and shoe tips. These blanks after being cut as within described in this machine are transferred to another machine invented by me which swages or shapes them to fit the toes of boots and shoes. These tips being patented to me and the stamp S is for affixing the date of patent to plate before the tip is shaped.

Operation: The operation of my within described machine is so obvious from the description of its construction, as not to require more description on that point.

What I claim as my invention, and desire to secure by Letters Patent is—

The double die holder E, and G, and cutting die H, in combination with cutter J, stamp S, and guide U, to cut and stamp the blank at one operation essentially in the manner, and for the purposes fully set forth, and described.

GEORGE A. MITCHELL.

Witnesses:

MANDEVILLE T. LUDDEN,

HORACE M. BEARCE.