(Model.)

A. WEED.

Chisel Holder for File Cutting Machines.

No. 237,350. **Patented Feb. 1, 1881.**

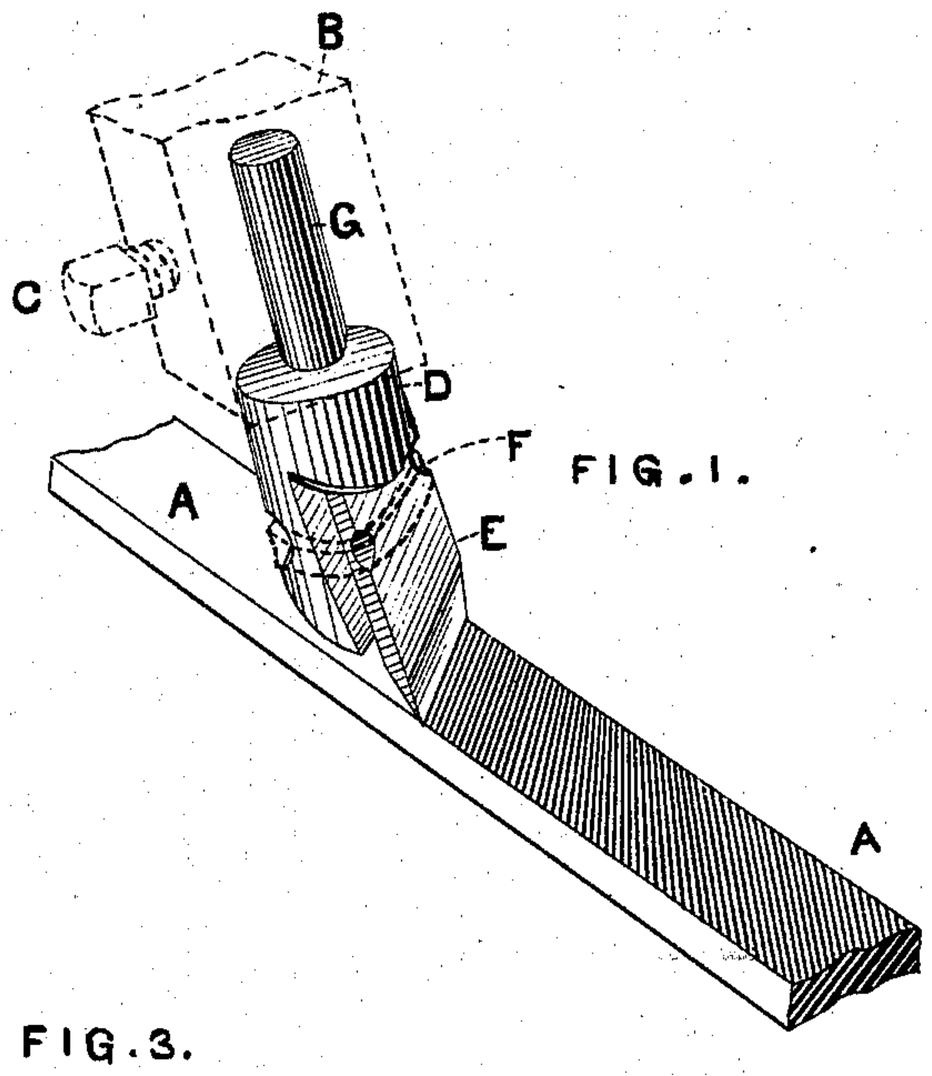


FIG. 1.

FIG. 3.

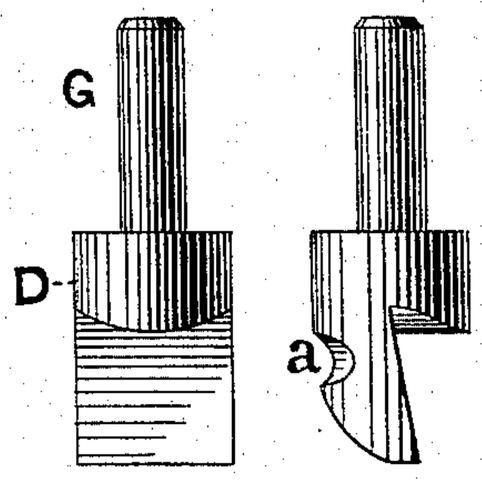


FIG. 4.

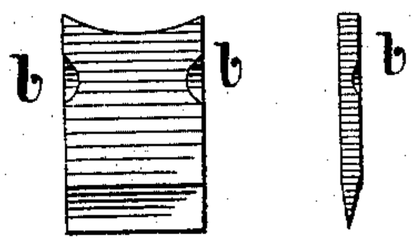
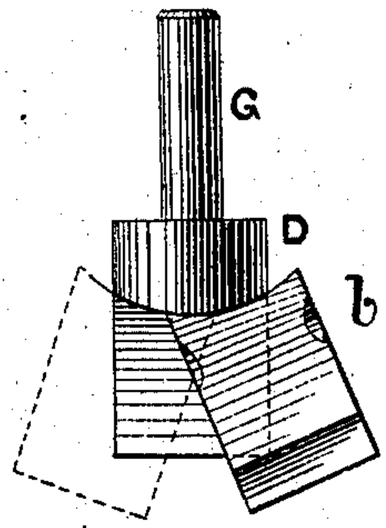


FIG. 2.



WITNESSES.

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ALFRED WEED, OF PHILADELPHIA, PENNSYLVANIA.

CHISEL-HOLDER FOR FILE-CUTTING MACHINES.

SPECIFICATION forming part of Letters Patent No. 237,350, dated February 1, 1881.

Application filed April 15, 1880. (Model.)

To all whom it may concern:

Be it known that I, ALFRED WEED, of Philadelphia, in the State of Pennsylvania, have invented certain new and useful Improvements in Chisel-Holders for File-Cutting Machines, whereof the following is a specification, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of my improved chisel-holder, showing the chisel in position to deliver a blow upon the file-blank. Fig. 2 is a front elevation of the same, showing the chisel in different adjustments upon the face of the holder. Fig. 3 represents front and side elevations of the holder, and Fig. 4 front and side elevations of the chisel.

The objects of my invention are to permit the delivery of an inclined cut of the chisel while the plunger which carries it is in a vertical position, to cause the edge of the chisel to tip slightly upward and outward during its cut, and to enable the chisel to level itself on striking the file-blank.

In Fig. 1, A represents the file-blank, and B the lower end of the plunger. The stem G of the chisel-holder D fits snugly into the foot of the plunger, and is secured there by the set-screw C. The chisel E rests against the inclined face of the holder, with its concave upper edge fitting closely to the convex shoulder of the latter, and is retained in position by an elastic attachment, preferably a band of rubber, indicated by the dotted lines at F in Fig. 1.

By the insertion of fixed wedges behind the chisel, or by placing proper set-screws in the back of the holder, any desired inclination may be given to the chisel; but I prefer to incline the face of the holder at about the angle shown.

The top of the chisel may be made convex and the shoulder concave, if desired.

Notches *b b* in the chisel and *a* in the back of the holder prevent the rubber band from slipping off.

The operation of my improved device is as follows: The plunger B being actuated in the usual manner, a series of rapid blows or cuts is delivered upon the file-blank, the latter being moved forward by the well-known devices. At or about the completion of each cut the elastic attachment yields, and the cutting-edge of the chisel tips slightly upward and outward in the direction in which it is already inclined. The result of this movement is to imitate the motion of a skillful workman's hand and to produce a slight burr, throwing out the file-tooth instead of merely cutting it in. When the plunger rises the elastic attachment draws the chisel back into place, ready for the next cut.

By the lateral revolution of the holder-stem G in the foot of the plunger the teeth may be cut at any angle to the blank, while the adaptation of the upper end of the chisel to the shoulder of its holder by correspondingly convex and concave bearing-surfaces enables the former to level itself to the file-blank, thus avoiding uneven cutting.

I claim—

1. The combination of the chisel with the inclined face of the chisel-holder, whereby an oblique cut may be delivered with a vertical plunger, substantially as described.

2. The combination of the chisel, the inclined face of the holder, and the elastic retaining-band, whereby the edge of the chisel is permitted to tip during the cut, substantially as and for the purpose specified.

3. The combination of a loosely-attached chisel having a curved upper end with a correspondingly-curved shoulder upon its holder, for the purpose set forth.

ALFRED WEED.

Witnesses:
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