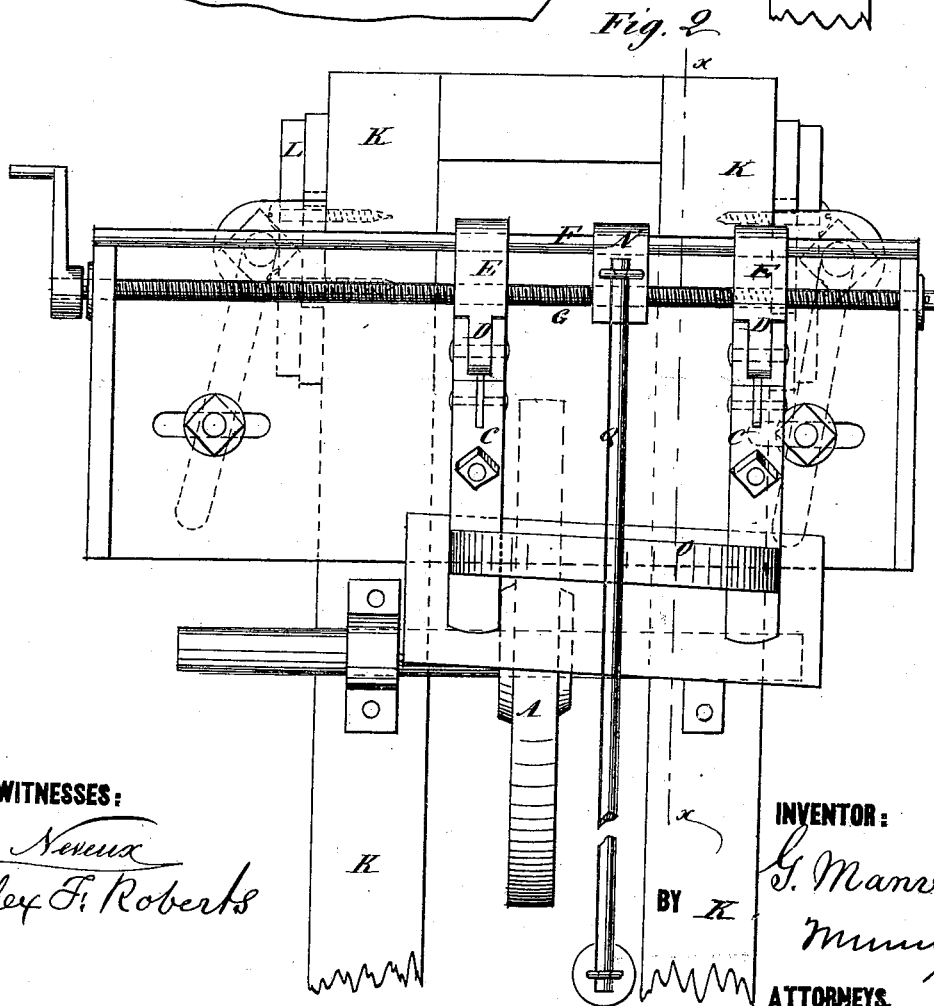
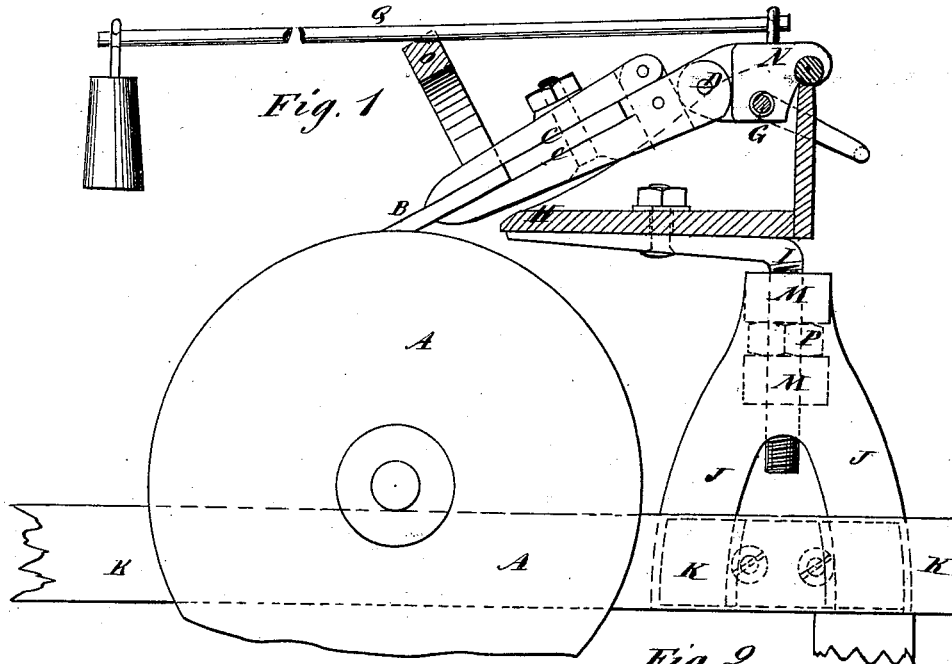


G. MANVEL.
Planer-Cutter Sharpener.

No. 167,920.

Patented Sept. 21, 1875.



WITNESSES:

C. Novice
Alex F. Roberts

INVENTOR:

G. Manvel
Minny

BY *K*

ATTORNEYS.

UNITED STATES PATENT OFFICE,

GARRY MANVEL, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN PLANER-CUTTER SHARPENERS.

Specification forming part of Letters Patent No. **167,920**, dated September 21, 1875; application filed May 28, 1875.

To all whom it may concern:

Be it known that I, GARRY MANVEL, of Rochester, in the county of Monroe and State of New York, have invented a new and Improved Planer-Cutter Grinder, of which the following is a specification:

The invention will first be fully described in connection with drawing, and then pointed out in the claims.

Figure 1 is a sectional elevation of my improved cutter-grinder, taken on the line $x x$ of Fig. 2. Fig. 2 is a plan view.

Similar letters of reference indicate corresponding parts.

A is the grindstone, and B the cutter to be ground, the cutter being fastened in clamps C, which are jointed at D to the traversing supports E on the guide-rest F and the feed-screw G of a table, along the edge of which the clamps run at H for gaging the cutter to the stone, said table being mounted on the vertically-adjustable standards I, which are mounted on the standards J, which are clamped to the sides of the bed-frame K by clamps L, so that they can be swung forward or backward at the top to shift the tool forward or backward relatively to the stone to vary the

bevel of the tool. The vertical adjustment by the standards I regulates the amount to be ground off. The gage H insures the grinding of the edge straight. Q is a weighted lever for pressing the cutter on the stone. The weight may be shifted along to vary the pressure. The lever is connected to a traversing block, N, and rests on a bridge, O, which rests on the clamps. The standards I are supported and adjusted by the lugs M of the standards J and the adjusting-nuts P.

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

1. The clamps C, jointed at D to the traversing supports E, combined with a table that supports said clamps at H, and rests upon adjustable standards I J, as and for the purpose described.

2. The combination of weighted lever Q, traversing block N, and bridge O, with the clamps C D, and the traversing supports E, as and for the purpose specified.

GARRY MANVEL.

Witnesses:

A. P. THAYER,
T. B. MOSHER.