

(No Model.)

W. M. MORTON.

TOOL FOR BLIND NAILING OR SCREWING.

No. 359,224.

Patented Mar. 8, 1887.

Fig. 1.

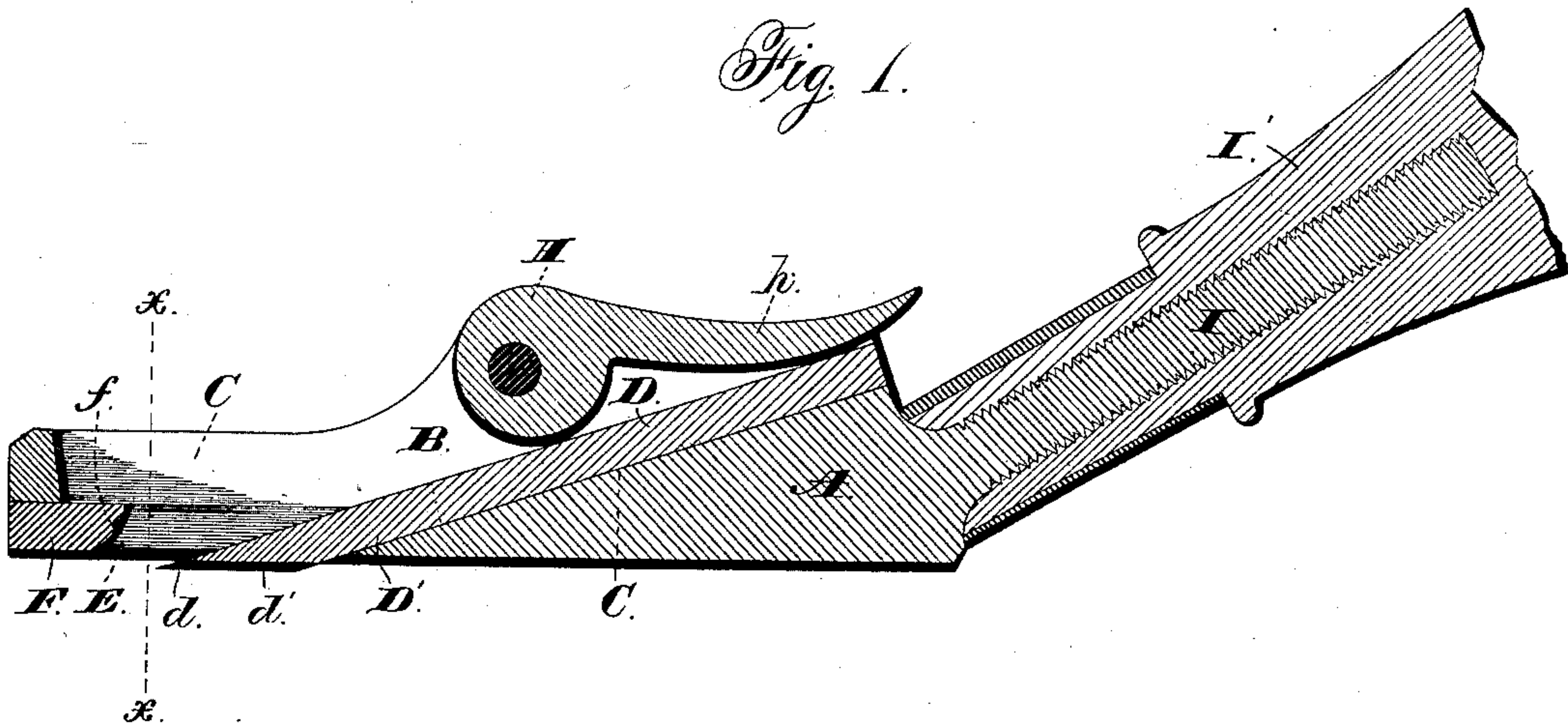


Fig. 2.

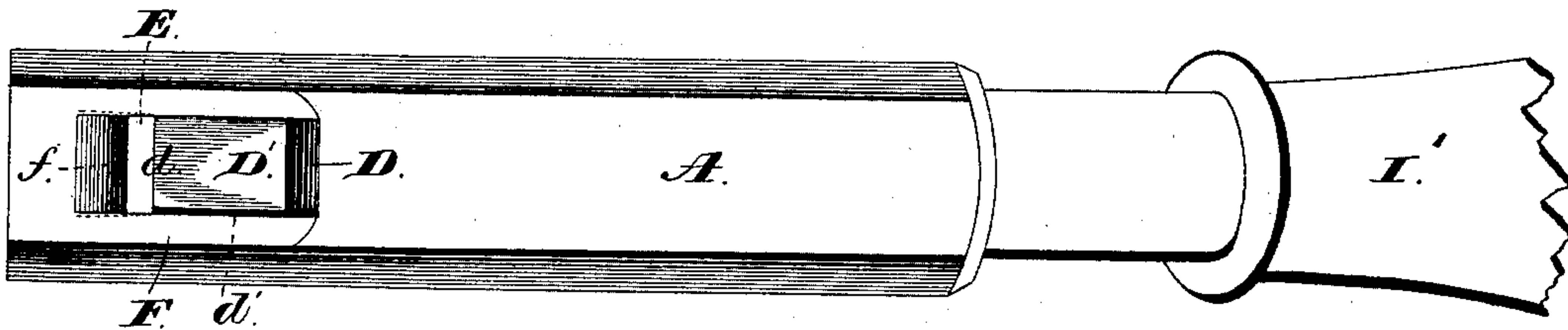


Fig. 3.

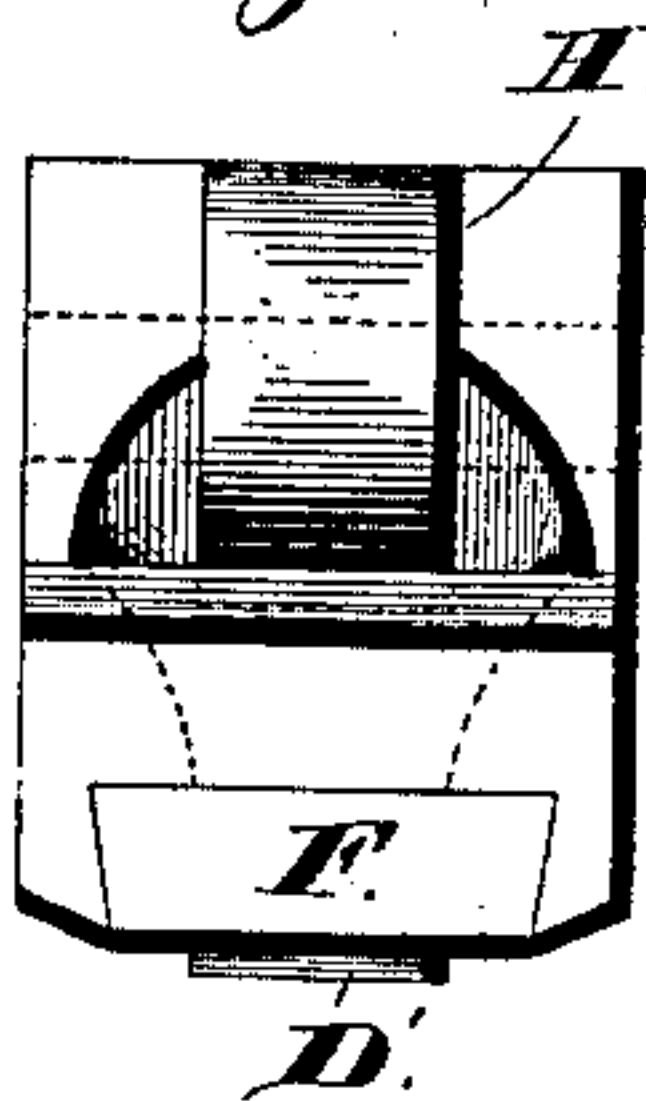


Fig. 4.

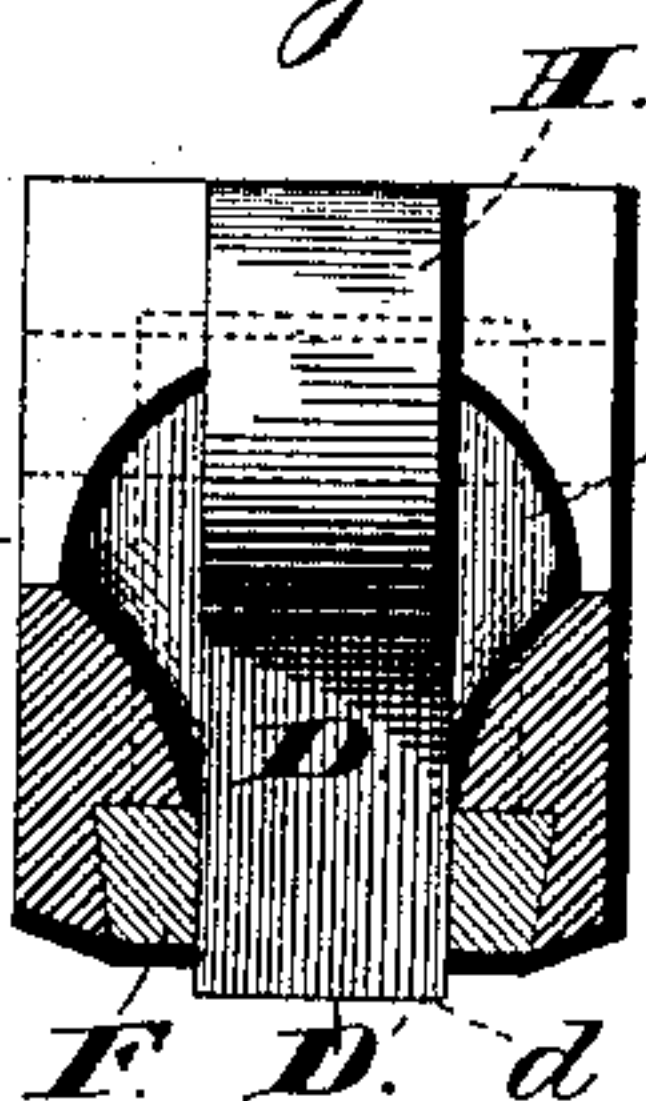
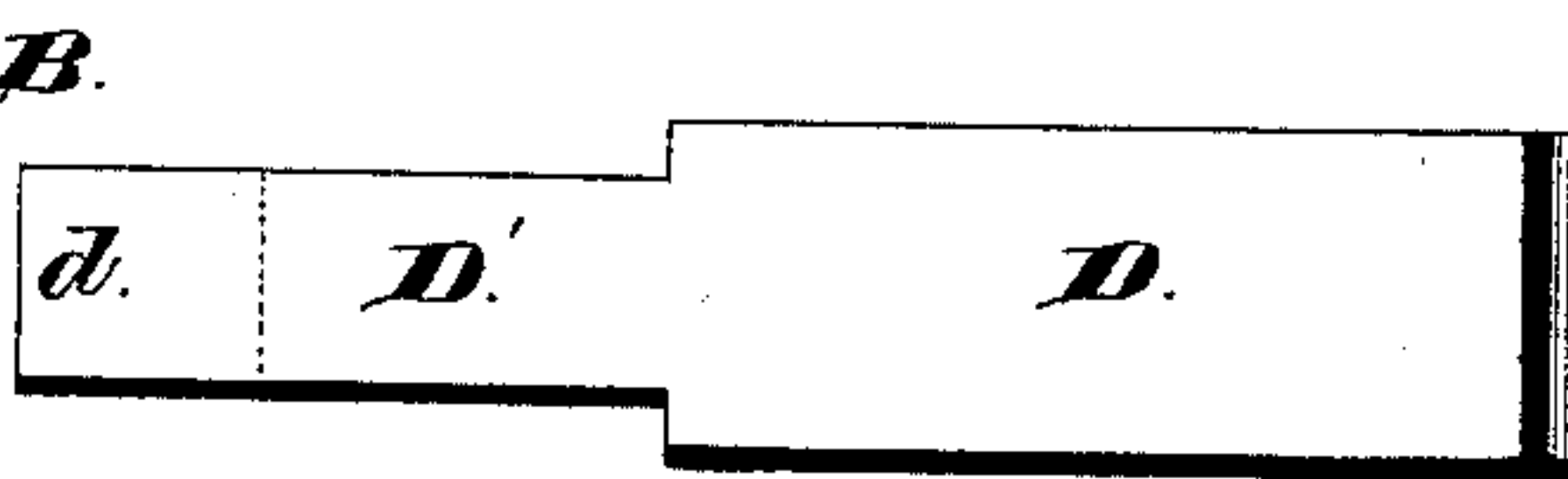


Fig. 5.



Witnesses:

Jas. C. Hutchinson.
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UNITED STATES PATENT OFFICE.

WILLIAM M. MORTON, OF MINNEAPOLIS, MINNESOTA.

TOOL FOR BLIND NAILING OR SCREWING.

SPECIFICATION forming part of Letters Patent No. 359,224, dated March 8, 1887.

Application filed April 29, 1886. Serial No. 200,595. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM M. MORTON, of Minneapolis, in the county of Hennepin, and in the State of Minnesota, have invented
5 certain new and useful Improvements in Tools for Blind Nailing or Screwing; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

10 Figure 1 shows a vertical longitudinal section of my tool; Fig. 2, a bottom plan view of the same; Fig. 3, a front end view of the same; Fig. 4, a transverse sectional view of the tool on line *x x* of Fig. 1, and Fig. 5 a detail plan
15 view of the cutting-blade removed.

Letters of like name and kind refer to like parts in each of the figures.

The object of my invention is to provide an improved tool for use in blind nailing or screw-
20 ing; and to this end my invention consists in the tool and in the construction, arrangement, and combination of the parts thereof, as hereinafter specified.

In the drawings, A designates the main portion or body of the tool, preferably made of metal, having its bottom made flat with beveled edges, as shown. The upper portion of this body is hollowed out longitudinally, as
25 shown in the drawings, from a point near the front end thereof rearward, the sides of such longitudinal hollow or groove B being rounded, so as to flare outward and upward.

Near the front end of the tool-body is the elongated longitudinal opening C, extending
35 down through the body, as shown. The sides of this opening flare upward and outward, so as to form a dovetail, for a purpose to be described. The face of the rear end of this opening is inclined upward and rearward at an acute angle to the lower face of the body A,
40 and the rear end of the hollow or groove B is similarly inclined, so as to form a continuation of the incline of the opening end. There is thus formed an inclined way or bed, C, for the reception of the cutter D, whose lower end is beveled on its under side, as shown, so as to form a sharp cutting-edge, *d*, the face of such bevel *d'* being in a plane parallel to that of the bottom or lower face of body A.

50 The under side of the portion of the body

at the front end of opening C is provided with a dovetail groove, E, whose sides form continuations of the sides of the opening. Thus a dovetail way or groove is formed, in which fits the slide F, which I call the "mouth-
55 piece," such slide having its inner or rear end forked or slotted to embrace the lower reduced end, D', of the cutter D. The sides of the opening in this mouth-piece are at their lower edges made quite sharp and fit close to the sides 60 of the tongue or reduced portion of the cutter-blade. The forward end of the opening in the mouth-piece is rounded on its under side, as shown at *f*.

On the body, over the inclined cutter-blade 65 way C, is pivoted the cam H, which, by means of the lever-arm *h*, can be swung on its pivot, so as to engage, press down upon, and hold the cutter, as shown in Fig. 1; or it can be, as desired, swung up, so as to release the cutter 70 for removal or adjustment. The mouth-piece is to be made of steel, hardened and shaped so as to make, in connection with the sides of the cutter D, a shearing cut.

With this construction, the parts being in 75 position, as shown in Fig. 1, if the tool be placed on a board or wooden surface and pushed forward the lower or cutting end of cutter D will cut into the wood and lift a sliver which, as the tool is pushed forward, slides 80 upward over the top of the cutter through the opening in the mouth-piece. The sharp or square lower edges at the sides of the opening in the mouth-piece cause the sides or edges of the sliver to be clearly and squarely cut, so 85 that when the sliver is replaced it will fit accurately and closely the place from which it was lifted, and there will be no ragged and rough edges to show where the sliver has been 90 glued down in place.

The front end of the opening in the mouth-piece is preferably made a little wider than the rest of the opening, so that as the tool is drawn backward after a sliver has been raised the sliver, drawing outward and downward 95 through the front portion of the opening, will not catch or pull. The sides of the longitudinal groove or hollow B, being rounded, as described and shown, cannot catch or bind upon the sides of the sliver, to prevent its free pas- 100

sage upward or downward through the opening in the body. Said body is provided with a shank or tang, I, upon which is screwed or otherwise fastened the handle I', of any desired form.

5 With the cutter and mouth-piece made removable, as shown and described, obviously a number of corresponding mouth-pieces and cutters of different widths for raising slivers of different desired widths can be provided to be interchangeably used with the same body, A. In such case the handle can, if desired, be made hollow, to receive and hold the set of such mouth-pieces and cutters.

15 If desired, I contemplate making the mouth-piece stationary or fixed to the body permanently, and instead of making it forked, as shown and described, making it extend to the rear of the cutting-blade end. It will then be a slotted instead of a forked piece, and the cutter will extend down through the slot.

The operation of my tool is briefly as follows: It having been decided where a nail or screw is to be driven, and the cutter having been adjusted to project the proper distance below the bottom of the tool-body and fastened by the cam, the tool is placed on the wooden surface and pushed forward. A clearly and cleanly cut sliver is thus raised, and passes up through the opening in the tool-body as the tool moves forward. The sliver having been raised sufficiently, the nail or screw is driven home, the tool drawn back, and the sliver glued down in place over the nail or screw head, completely concealing the same. With the tool-body beveled at the sides of its bottom, as shown and described, the tool can, as it is started in operation, be tipped to either side, so as to start the sliver with a sharp point and not square across its end. A sliver thus made with a sharp point is even less apt to show when laid back and glued than where its end is cut square. Instead of being beveled, of course, the sides of the body bottom can be rounded for the same purpose—that is, to allow of rocking the tool as the sliver is started.

My tool as described can obviously be used to great advantage not only in blind nailing

and screwing, but also in covering up checks in wood.

The check can be straddled with the tool and a piece be taken out, and another piece, taken from another piece of wood by the same tool, can be fitted accurately into the place over the check, covering such check up quickly and neatly.

Having thus described my invention, what I claim is—

1. In combination with the body of the tool and the inclined cutter thereon, the removable mouth-piece having portions on opposite sides of the cutter made sharp at their lower edges, so as to shear, in connection with the cutter, substantially as and for the purpose specified.

2. In combination with the body of the tool and the cutter thereon, adapted to cut and lift a sliver, the mouth-piece held in a dovetail groove in the body and having an opening through which the cutter projects, and shear-edges on each side of and close to the cutter, substantially as and for the purpose shown.

3. In combination with the body A, having the inclined support for the cutter, and the cutter-blade opening with shear-edges at its sides, the inclined cutter projecting down through and filling such opening from side to side and having its lower end beveled on a plane parallel to the bottom of the plane body A, so as to form a cutting-edge, substantially as and for the purpose specified.

4. In combination with the plane body, the inclined cutter-blade having its lower end beveled on its under side on a plane parallel to the bottom of the body and the mouth-piece embracing the sides of the cutter-blade and provided with shear-edges close against the sides of the cutter, substantially as and for the purpose shown.

In testimony that I claim the foregoing I have hereunto set my hand this 31st day of March, 1886.

WILLIAM M. MORTON.

Witnesses:

J. E. STARR,

J. FRED SMITH.