

No. 667,987.

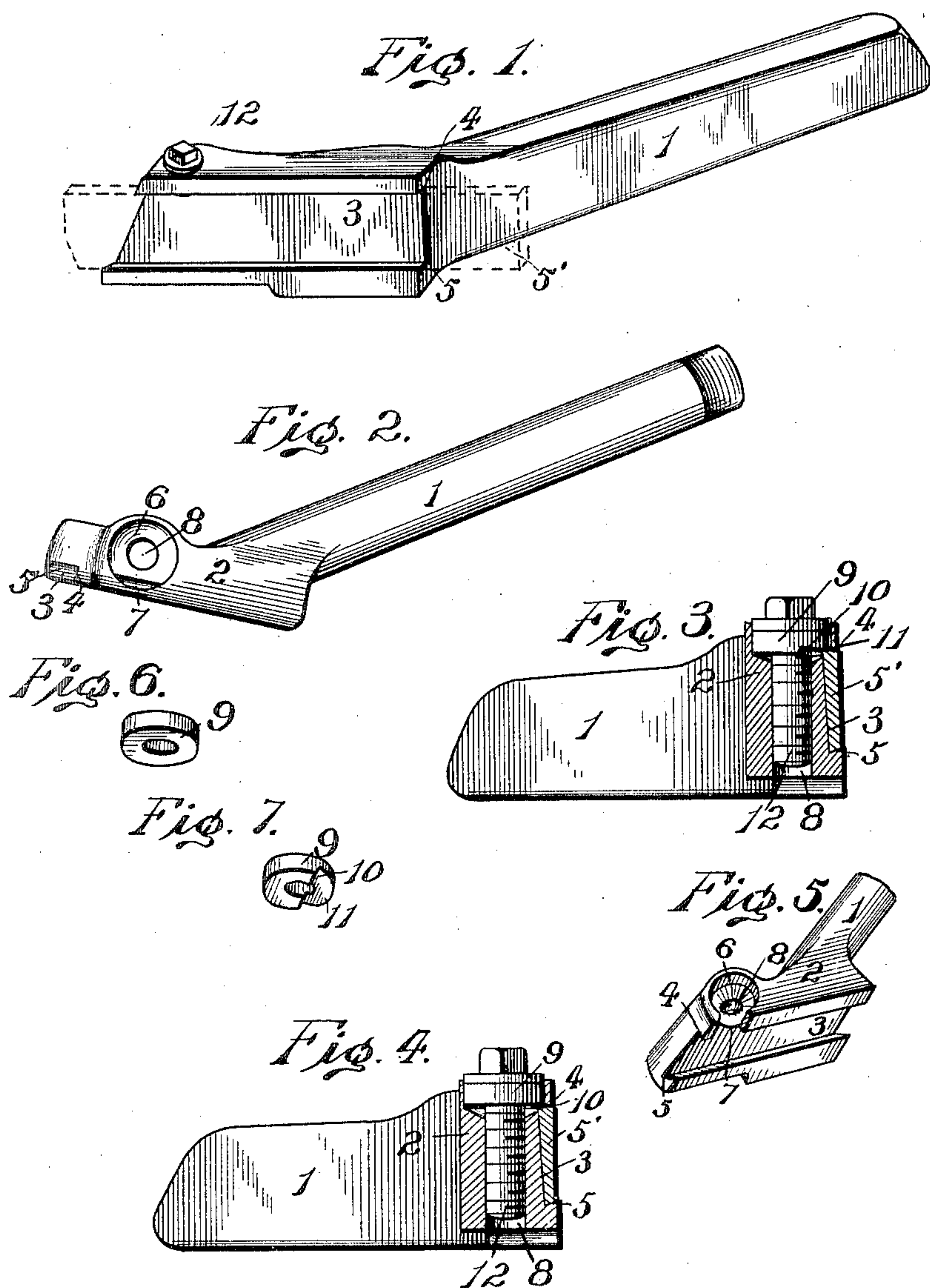
Patented Feb. 12, 1901.

C. P. MINGST.

CUTTING TOOL.

(Application filed Nov. 5, 1900.)

(No Model.)



Witnesses

E. W. Stark
Sarah V. Lockwood

Inventor
Charles P. Mingst
by
Frank C. Gore
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES P. MINGST, OF EVANSVILLE, INDIANA.

CUTTING-TOOL.

SPECIFICATION forming part of Letters Patent No. 667,987, dated February 12, 1901.

Application filed November 5, 1900. Serial No. 35,498. (No model.)

To all whom it may concern:

Be it known that I, CHARLES P. MINGST, a citizen of the United States, residing at Evansville, county of Vanderburg, and State of Indiana, have invented certain new and useful Improvements in Cutting-Tools, of which the following is a specification.

My invention relates to cutting-tools for use on lathes and other metal-working machines.

The object of the invention is the provision, in a cutting-tool of the inserted-blade type, of novel means for clamping or holding the inserted blade so that its rigidity is insured.

The invention contemplates the provision of a clamping or clenching device of improved construction adapted to secure the blade by direct engagement therewith, thus obviating the necessity of employing a split holder.

The invention consists of certain novel features and improved constructions, more fully set forth hereinafter and recited in the appended claims.

In the accompanying drawings, Figure 1 is a perspective view, the inserted blade being shown in dotted lines; Fig. 2, a plan view with the collar and screw removed; Fig. 3, a cross-section showing a notched collar; Fig. 4, a similar view showing a plain collar; Fig. 5, a detail perspective of the head, partly broken away; and Figs. 6 and 7, detail views of the different forms of collars.

The shank of the tool is shown at 1 and the head at 2, the latter being provided with a seat 3 for the blade, which has its lips 4 and 5 of the usual undercut construction to insure the more perfect retention of the blade 5', inserted in the seat. The top of the head is provided with a circular recess or pocket 6, which is made to extend somewhat below the plane of the lip 4, and as a portion of said recess is cut into the said lip and down in the seat below it the opening 7 is provided. A screw-threaded aperture 8 extends through the head below the recess and is arranged concentric to the latter.

The numeral 9 designates a collar which fits into the recess and has a portion 10 received in the opening 7 and bears on the upper edge of the blade. This collar can be made perfectly plain on both sides, as illustrated in Figs. 4 and 6, or it can be notched

at 11 on its under surface, where it projects into the opening 7, as shown in Figs. 3 and 7. The latter construction is the preferred one, because the notched portion takes over the upper edge of the blade and insures a firmer clamping action.

The numeral 12 designates a clamping-screw which passes through the collar and into the screw-threaded aperture. Having loosened the screw and inserted the blade, the screw is turned down on the collar, whereupon the latter binds or clamps down on the upper edge of the blade and holds the same in place.

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

1. In a cutting-tool, the combination with a blade-holder having a seat for the blade and lips to engage the blade, said holder being provided with a recess having a portion thereof extending into one of the lips and into the blade-seat, of a collar in said recess extending into the said portions thereof, and adapted to engage the edge of the blade, and a clamping-screw extending through said collar and threaded into the holder.

2. In a cutting-tool, the combination with a holder having a seat for the blade and lips for engaging the blade, and provided with a circular recess in its top which extends below the plane of the upper lip and extends laterally into said lip, thereby providing an opening, of a circular collar seated in said recess and having a portion of its periphery projecting into said opening adapted to engage the upper edge of the blade, and a clamping-screw passing through said collar and threaded into the holder, said screw being adapted to clamp the collar down on the blade.

3. In a cutting-tool, the combination with a blade-holder having lips for engaging the blade and provided with a recess having a portion extending into one of the lips and seat, thereby providing an opening therein, of a collar fitted in said recess and having a portion extending into the opening aforesaid and provided with a notch or cut on its under side for engagement with the blade, and a clamping-screw passing through the collar and threaded into the holder.

4. In a cutting-tool, the combination with

a holder having a seat for the blade and lips
for engaging the blade, and provided with a
circular recess having a portion extending
into one of the lips and into the seat, thereby
5 providing an opening therein, of a circular
collar seated in the recess and having a por-
tion received in the opening; said collar hav-
ing a transverse notch on its under side in
said portion, for engagement with the blade,
10 and a clamping-screw passing through the

collar and threaded into the holder, which is
adapted for clamping the collar down on the
blade.

In testimony whereof I hereunto affix my
signature in presence of two witnesses.

CHARLES P. MINGST.

Witnesses:

ESTHER WILKINS;

ARTHUR F. FUNKHOUSER.