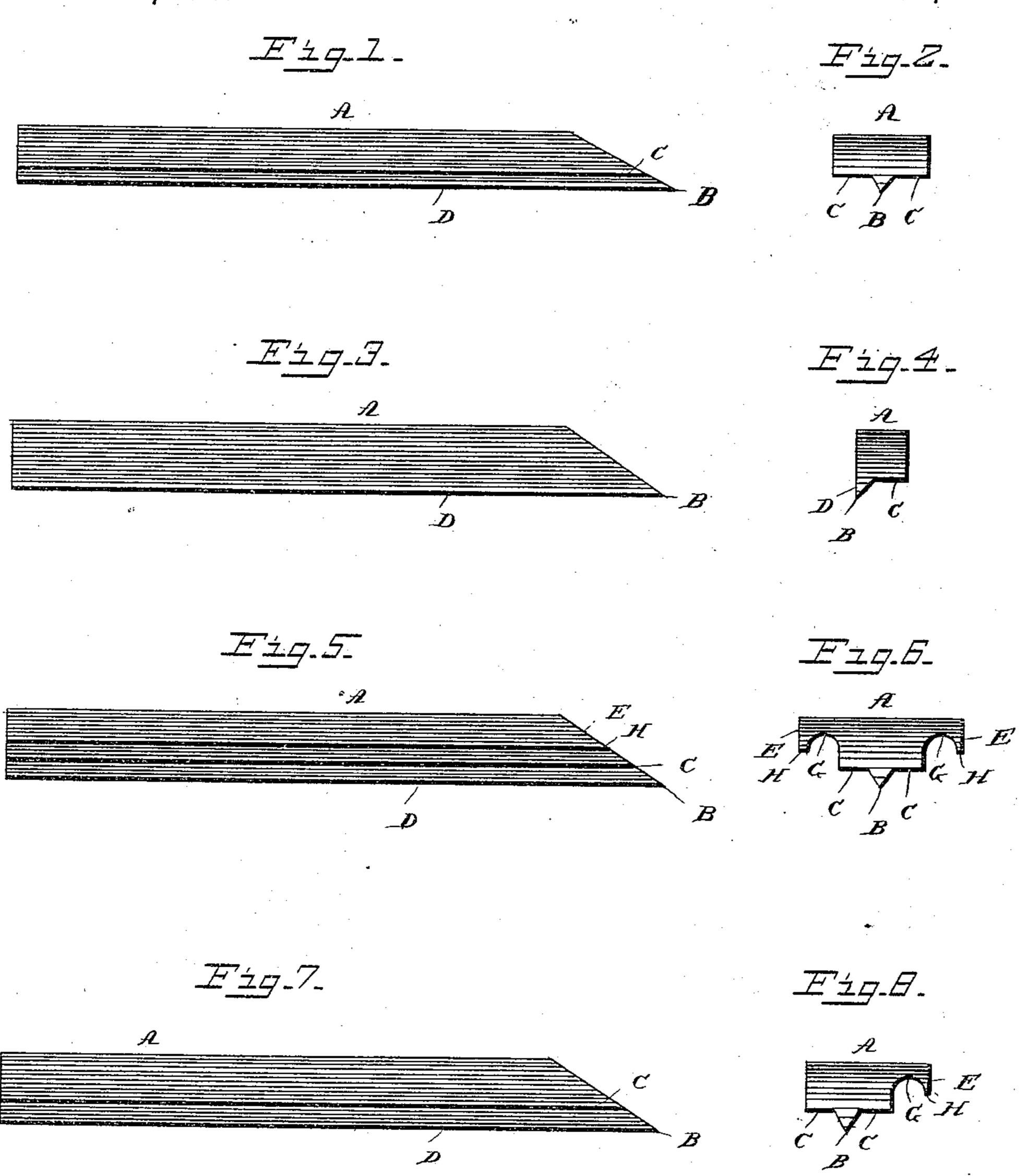
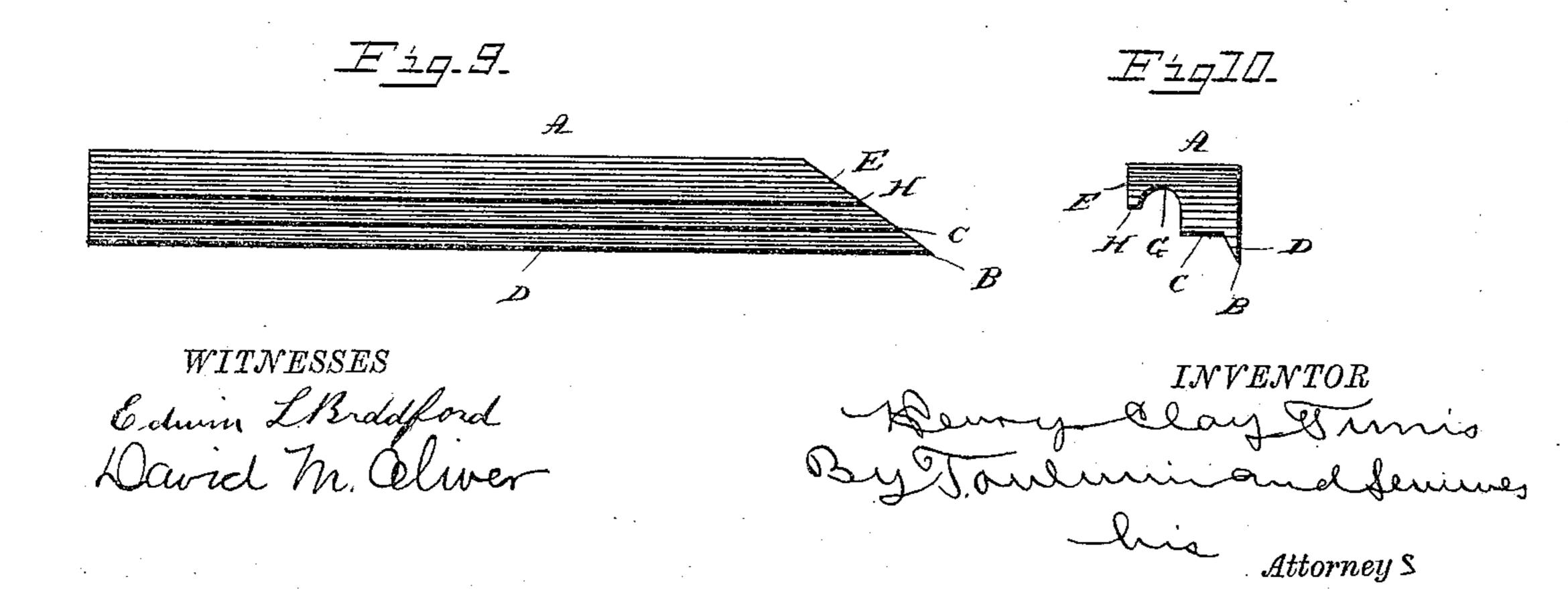
H. C. TUNIS.

CUTTER FOR MOLDING MACHINES.

No. 337,353.

Patented Mar. 2, 1886.





IJNITED STATES PATENT OFFICE.

HENRY C. TUNIS, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE TUNIS GANG FLOORING MACHINE COMPANY, OF SAME PLACE.

CUTTER FOR MOLDING-MACHINES.

SPECIFICATION forming part of Letters Patent No. 337,353, dated March 2, 1886.

Application filed September 8, 1885. Serial No. 176,594. (No model.)

To all whom it may concern:

Be it known that I, Henry Clay Tunis, a citizen of the United States, residing at Baltimore and State of Maryland, have invented certain new and useful Improvements in Tools for Planing-Machines, of which the following is a specification, reference being had therein

to the accompanying drawings.

In the accompanying drawings, forming a 10 part of this specification, and on which similar letters of reference indicate the same or corresponding features, Figure 1 is a side elevation of the dividing, double-rabbeting blade; Fig. 2, an end view of that blade; Fig. 3, a 15 side elevation of the dividing and single rabbeting blade; Fig. 4, an end view of that blade; Fig. 5, a side elevation of the dividing, doublerabbeting, and double-beading blade; Fig. 6, an end view of that blade; Fig. 7, a side ele-20 vation of the dividing, double-rabbeting, and single-beading blade; Fig. 8, an end view of that blade; Fig. 9, a side elevation of the dividing, single-rabbeting, and single-beading blade; and Fig. 10, an end view of that blade.

25 The letter A designates my improved blade, the same being constructed preferably of bar steel, cut off in lengths to suit the purpose. These blades, or the bars from which they are constructed, are provided on one side with a 30 longitudinal rib, the cross-section of which approximates the shape of the letter V. On the reverse side the blades or bars are flat. By beveling the blades from the flat side a projecting V-shape or tapering point, B, is 35 produced at the same time that the cuttingedges C are produced. This describes the form of blade shown in Figs. 1 and 2, which is used to divide boards longitudinally, and to rabbet their surfaces in such manner as to 40 leave resulting tongues, as more fully set out in Letters Patent granted to me July 28, 1884, and this blade in the present specification I denominate a "dividing and double-rabbeting blade."

The blade shown in Figs. 3 and 4 is constructed from a bar flat on one side and provided on the other with a rib, D, the location of which is at the edge of the bar, and the cross-section of which is approximately half
by Shaped. The bevel of the blade is the same

as that already described, whereby the pro-

jecting half-V-shaped point is formed, and a straight single-rabbeting cutting-edge is also formed. This blade is located upon the cutter-head so as to divide the boards longitudi- 55 nally and to form one rabbet, so as to leave a single resulting tongue. This blade is denominated a "dividing and single-rabbeting blade."

The blade shown in Figs. 5 and 6 agrees 60 with that shown in Figs. 1 and 2, except that the bar is longitudinally grooved near either edge, the cross-section of the groove being approximately semicircular, and the outer edge, E, of the bar reduced in thickness, 65 whereby, when the blade is beveled off from the flat side the bead-cutting edges G will be formed, and the projecting points H made shorter than the remaining cutting-edges and point of the blade. This blade is denomi- 70 nated a "dividing double-rabbeting and double-beading blade."

In Figs. 7 and 8 the blade represented is constructed like that last described, save that only one edge is ground. This blade is de-75 nominated a "dividing double-rabbeting and

single-beading blade."

It is to be observed that in operating these bits the cylinder is revolved in such direction as to cause the flat or bevel side of the bits to 80 advance forward, the result of which is that the bits do not become heated, as they do when revolved in the opposite direction.

It is further to be observed that my improved bits are beveled from the flat side, so 85 that they may be kept sharp by simply grinding them from that side, the advantage of which is the avoiding of the use of sharpening tools or means agreeing in shape with the configuration of the irregular side of the bit. 90 This is a great saving of time and expense when it is necessary to sharpen the bits.

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

1. A cutting tool or blade having a side thereof so irregularly configurated that an oblique section through it will produce a projecting dividing point, V-shaped or half-V-shaped in cross-section, and another or other 100 cutting-edges.

2. A cutting tool or blade having a side

thereof so irregularly configurated that an oblique section through it will produce a projecting dividing-point, V-shaped or half-Vshaped in cross-section, and another or other

5 straight and curved cutting-edges.

3. A cutting tool or blade having a side thereof provided with a longitudinal rib or raised surface, whereby a projecting dividingpoint V-shaped or half-V-shaped in crossro section and another or other cutting edges are produced by sharpening the tool obliquely to its longitudinal axis.

4. A cutting tool or blade having a side thereof provided with a rib or raised surface running longitudinally about midway its width, whereby a projecting dividing-point

V-shaped or half-V-shaped and other cuttingedges are produced by sharpening the tool

obliquely to its longitudinal axis.

5. A cutting tool or blade having a side 20 thereof provided with a rib or raised surface V-shaped or half-V-shaped in cross-section, and running longitudinally, whereby a projecting dividing-point and another or other cutting edges are produced by sharpening the 25 tool obliquely to its longitudinal axis.

In testimony whereof I affix my signature in

presence of two witnesses.

HENRY C. TUNIS.

Witnesses:

EDWIN L. BRADFORD.