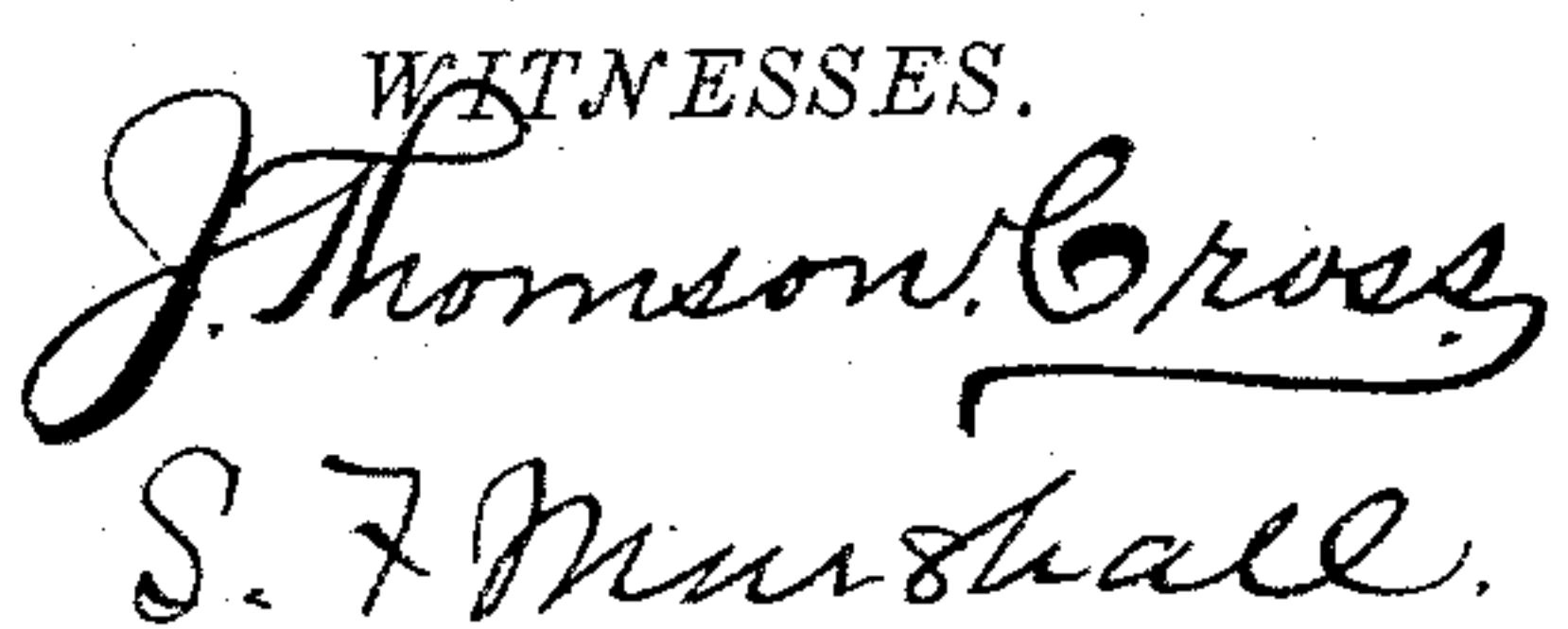


2 Sheets—Sheet 1.

## TOOL HOLDER FOR CUTTER HEADS.

Patented Aug. 14, 1888.



Samuel J. Shimer.  
by A. G. Heyman,  
Attorney,

(No Model.)

2 Sheets—Sheet 2.

S. J. SHIMER.

TOOL HOLDER FOR CUTTER HEADS.

No. 387,924.

Patented Aug. 14, 1888.

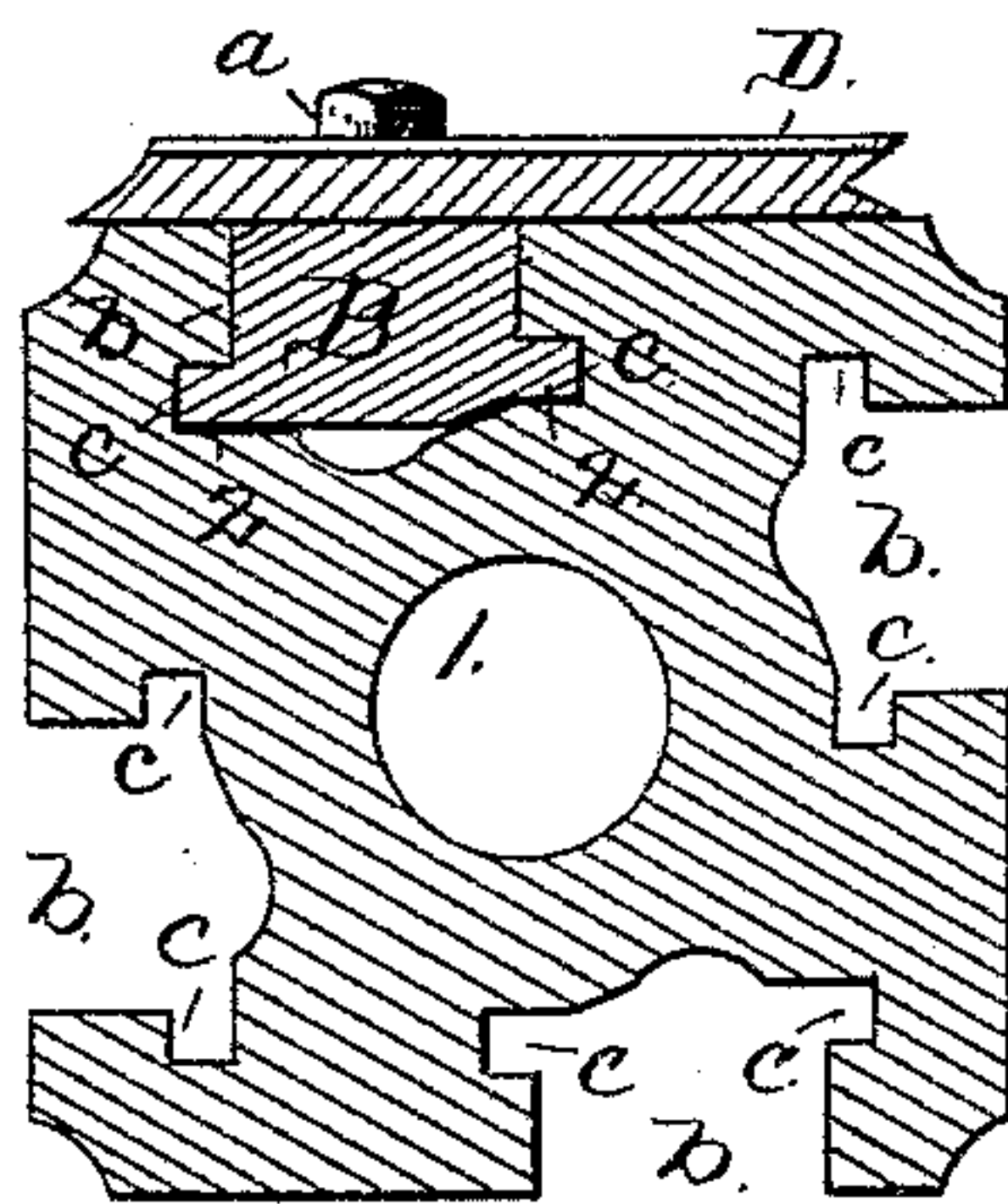


Fig-7.

Witnesses,  
*J. Thomson Cross*  
*S. C. Dallas.*

Inventor,  
*Samuel J. Shimer.*  
By *his* Attorney *A. G. Keyman.*



# UNITED STATES PATENT OFFICE.

SAMUEL J. SHIMER, OF MILTON, PENNSYLVANIA, ASSIGNOR TO SAMUEL J. SHIMER & SONS, OF SAME PLACE.

## TOOL-HOLDER FOR CUTTER-HEADS.

SPECIFICATION forming part of Letters Patent No. 387,924, dated August 14, 1888.

Application filed December 14, 1887. Serial No. 257,844. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL J. SHIMER, a citizen of the United States of America, residing at Milton, in the county of Northumberland and State of Pennsylvania, have invented a new and useful Tool-Holder for Cutter-Heads, of which the following is a specification.

My invention has relation to improvements in tool-holders for cutter-heads; and the object is to provide a tool-holder of the kind named, which is easily adjusted to the head, readily secured thereto, and conveniently adjusted therein and removed therefrom.

My invention is particularly applicable to secure beading-tools to the head; and it consists in the novel construction and combination of parts, as will be hereinafter fully specified, and specially pointed out in the claims made thereto.

In the accompanying drawings I have fully illustrated my invention, wherein Figure 1 is a side view of a cutter-head with my improved tool-holder applied and a beading-tool clamped in position. Fig. 2 is a view of the beading-tool. Fig. 3 is a view of the section of the clamp of the tool-holder which fits in the slot of the cutter-head. Fig. 4 is a view of the clamping-plate. Fig. 5 is a view of the clamping-screw, shown bottom face up. Fig. 6 is a perspective view of the parts assembled detached from the cutter-head. Fig. 7 is a transverse sectional view taken on the line X X of Fig. 1.

Reference being had to the drawings, A designates a cutter-head having a hole, 1, to receive a vertical spindle, and is formed with T-shaped slots *b* in its respective faces to receive the body-section of the clamping devices. I have shown the cutter-head as being of the pattern and style of that shown and described in my Letters Patent of the United States of America, No. 319,933, dated June 9, 1885; but it will be perceived that the tool-clamping means may with equal adaptability be used with any cutter-head having T-shaped slots to take the body-section of the clamp.

B designates the body-section of the tool-holding device. This consists of a piece of metal shaped with side flanges, 2, to engage in the grooves *c* of the slot of the head, and a

stem or body part, 3, to fit in the stem of the T-shaped slot *b* of the cutter-head. At one end of the body-section, on the outer face, is formed a flange or jaw, 4, which has its ends extended, as at 5, to set over and on the face of the cutter-head adjacent to the slots therein, and is dovetailed to receive the dovetail flange of the tool, as at 6. At the other end of the face of the body-section is a flange, 7, having its ends extended to set over and on the face of the cutter-head, as at *d*, and having its lower or inner face flared off for the clamping-plate to set against, as at 8. At a proper location in the stem of the body part is a threaded hole, 9, to take the threaded clamping-bolt.

C designates the clamping-plate, which is formed with flaring edges 10 11, the upper one of which sets on the flared edge of the flange 7 and the lower one rests on the flange of the tool in the cutter-head. The ends of the clamping-plate are extended to reach over and set on the adjacent faces of the cutter-head and give clamping-surface to the plate. The clamping-plate is made to set a little flush in its bed, so as to give more pinch when screwed down on the knife or tool. In the clamping-plate is a plane bolt-hole, 12, made somewhat elongated in order that the clamping-plate may automatically assume the proper position when the clamping-bolt *a* is applied, or when a tool of different width from an old one is used. The clamping-bolt *a* has a threaded stem and engages the threads in the body-section, and is of such length that it can be screwed down with the under face of its head on the clamping-plate.

D designates the beading-tool, having its cutting end shaped to make the desired bead in the stock, and formed with flaring base-flanges 13, to set in the dovetail groove formed by the jaw on the body part of the clamp and the inner edge of the clamping-plate, as shown in Figs. 1 and 6 of the drawings.

The parts are assembled as follows: The section B is arranged in the slot of the head, then the tool is laid on the dovetail flange, the clamping-plate arranged in position, and the clamping-screw inserted and screwed down. The parts are then in operative aggroupment.

If at any time it is desired to change the



tools or to set them to a certain cut, the clamping-screw may be loosened and the tool removed or the adjustment made.

What I claim is—

5 1. The tool-holder herein described, consisting of the body-section B, formed with a stem, 3, having side flanges, 2, to set in a T-shaped slot, an outer projecting dovetailed jaw, 4, on one end, a projecting flange, 7, on the other  
10 end, and a threaded bolt-hole, 9, the clamping-plate 6, formed with flaring edges 10 11, to set flush in its bed formed by the jaw 4 and flange 7, and an elongated bolt-hole, 12, and the clamping-screw *a*, projected through the clamping-  
15 plate into the threaded hole of the stem to force the clamping-plate on the bit and under the jaw, substantially as described.

2. The combination, with a cutter-head

formed with T-shaped slots in its faces, of an adjustable tool-holder consisting of a body- 20 section, B, having a stem with side flanges to fit the T-shaped slots of the cutter-head, and having a projecting clamping-jaw, 4, on one end and a projecting flange, 7, on the other end, and a threaded bolt, 9, through its stem, 25 a clamping-plate, 6, formed with flaring edges, and an elongated bolt-hole, 12, a clamping-screw, *a*, to hold the parts together, and a cutter-tool between the jaw of the part B and the clamping-plate, substantially as described. 30

In witness whereof I have hereunto set my hand in the presence of two attesting witnesses.

SAMUEL J. SHIMER.

Attest:

W. H. BECK,  
GEO. S. SHIMER.