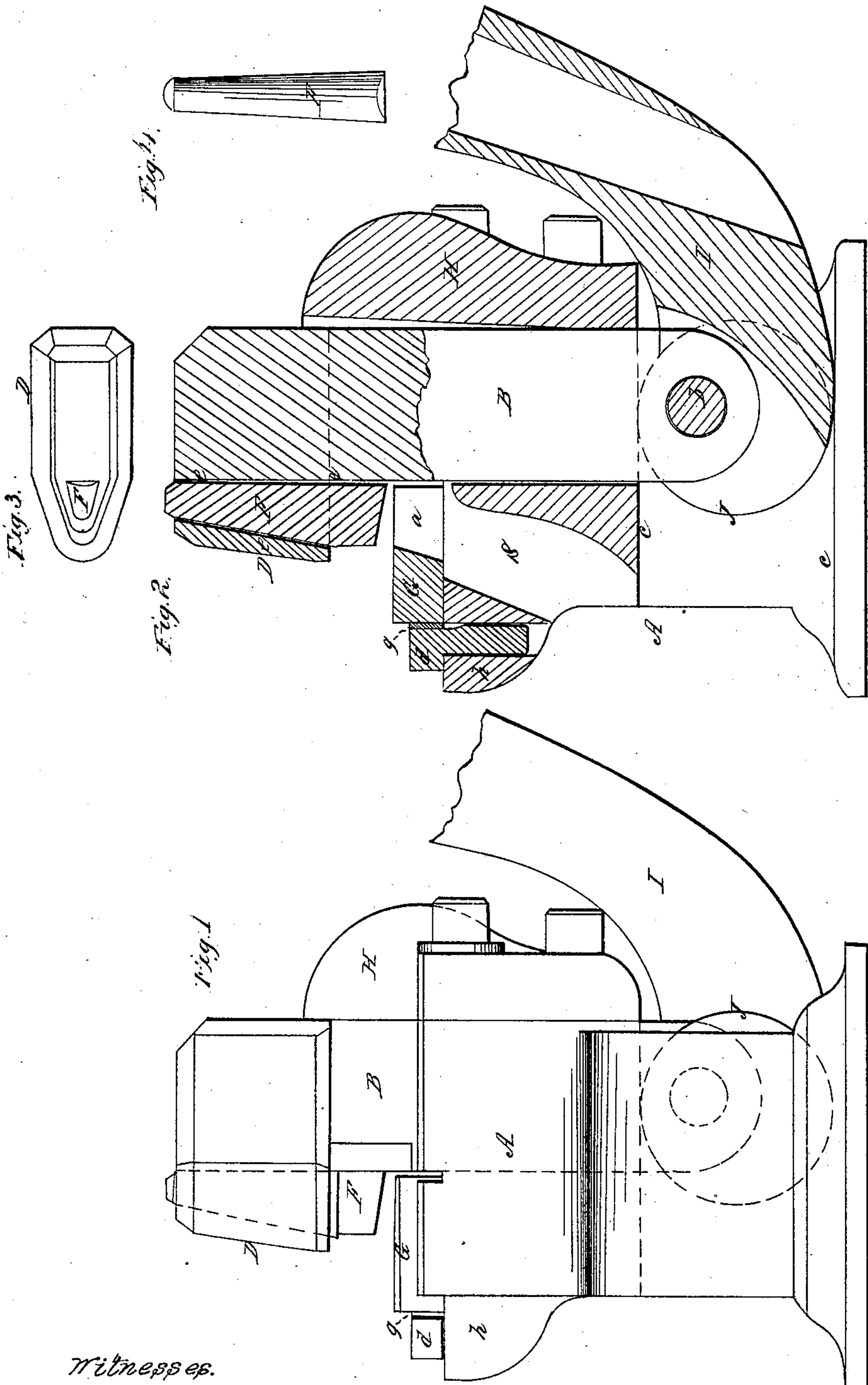


*A. R. Silver.*

*Saw Gummer.*

*N<sup>o</sup> 84,514.*

*Patented Dec. 1, 1868.*



*Witnesses.*  
*A. V. Campbell.*  
*John Campbell.*

*Inventor.*  
*A. R. Silver.*  
*Wm. Stewart & Co.*



# United States Patent Office.

A. R. SILVER, OF SALEM, OHIO, ASSIGNOR TO HIMSELF AND JOHN DEMING, OF SAME PLACE.

Letters Patent No. 84,514, dated December 1, 1868.

## IMPROVEMENT IN SAW-GUMMERS.

The Schedule referred to in these Letters Patent and making part of the same.

*To all whom it may concern :*

Be it known that I, A. R. SILVER, of Salem, in the county of Columbiana, and State of Ohio, have invented a new and useful Improvement in Die-Holders for Saw-Gummers; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation of one side of a saw-gummer, constructed with my improved die-holder.

Figure 2 is a vertical section, taken longitudinally and centrally through the improved machine.

Figure 3 is a top view of the die-holding head.

Figure 4 is a front view of the die.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to an improved mode of constructing the heads or holding-portions for the male dies of machines for gumming saws, particularly to those machines wherein the dies are required to be applied to overhanging heads upon vertically-reciprocating bars or slides, as shown in Letters Patent granted to L. A. Dole, September 9, 1856.

The nature of my invention consists in the formation of a die-holding head upon one end of a sliding bar, with a tapering socket in that portion of the head which overhangs a female die, adapted for receiving and firmly retaining in place a tapering die for gumming saws, said head being so formed as to admit of the use of metal which will afford all the strength required to resist the strain upon it in the operation of gumming, as will be hereinafter explained.

To enable others skilled in the art to understand my invention, I will describe its construction and operation.

In the accompanying drawings, A represents the frame or bed of a saw-gummer, adapted for receiving and supporting the devices required in the operation of gumming saws.

B is a bar, which is received in said frame, and held in place by a back plate, H, and which receives vertical-reciprocating movements from an eccentric head, J, on the end of a lever, I. This bar is pivoted at b

to lever I, whose eccentric head, J, is moved between horizontal faces c c of frame A, as shown in fig. 2.

The horizontal table of frame A, upon which the female die G is supported, is constructed with a dovetail recess, to receive and firmly hold down in place said die G, and also with an offset, h, which is perforated to receive a pin, d.

Between the flattened head of this pin d and the end of the female die, a wedge, g, is driven, which keeps this die in place beneath the male die F, and over a chip-hole, S.

Having described one form of machine to which my invention is applicable, I will now describe the improved mode of constructing the head for holding the male die.

To the upper end of the vertically-sliding bar B, a piece of metal is welded, and so shaped, by bending and hammering, as to form upon this bar an enlarged head, D, having a long tapering socket, e, on that portion of the head which is over the opening a, through the female die, as clearly shown in fig. 2. Such socket is made with reference to the size and tapering form of the shank of the male die F, so that the die will be firmly held therein, without any other fastening than is afforded by the friction of a long bearing, after the die-shank is driven into its place.

The socket extends vertically through the head D, and flares downward, as shown, so that, by driving the female die out a short distance, and striking with a hammer upon the male die, this latter die can be taken out through the chip-hole S.

A die-holding head, thus formed upon the bar B, will afford a long and substantial bearing, which will hold the male die rigidly in place under heavy pressure, and also allow of a ready removal of the die when required.

What I claim as my invention, and desire to secure by Letters Patent, is—

The saw-gummer bar B, herein described, constructed with the head D, in which is a die-socket, e.

Witnesses:

E. W. FAWCETT,  
N. A. MORLAN.

A. R. SILVER.