

(No Model.)

J. H. KARNES.  
AX.

No. 561,000.

Patented May 26, 1896.

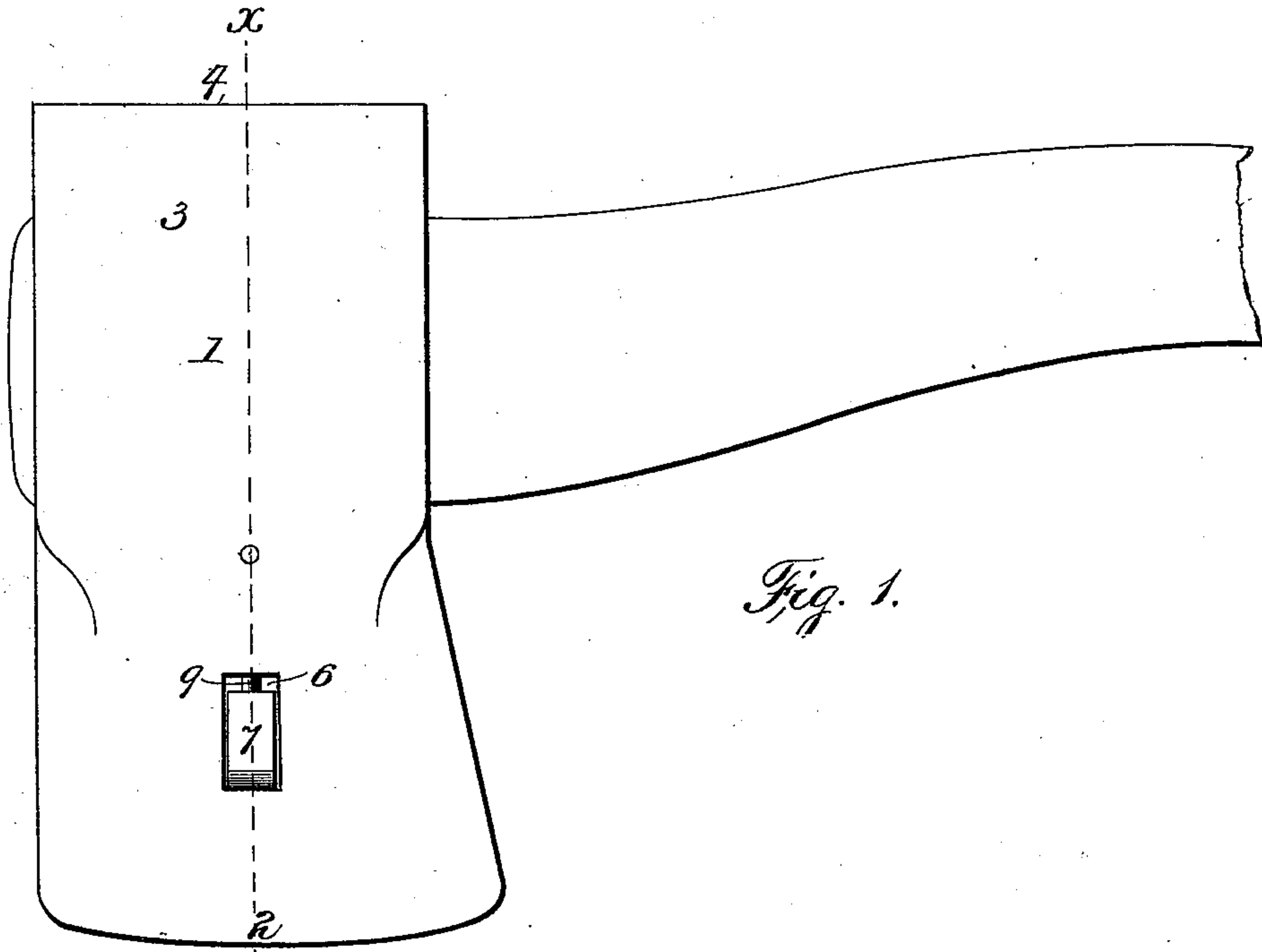


Fig. 1.

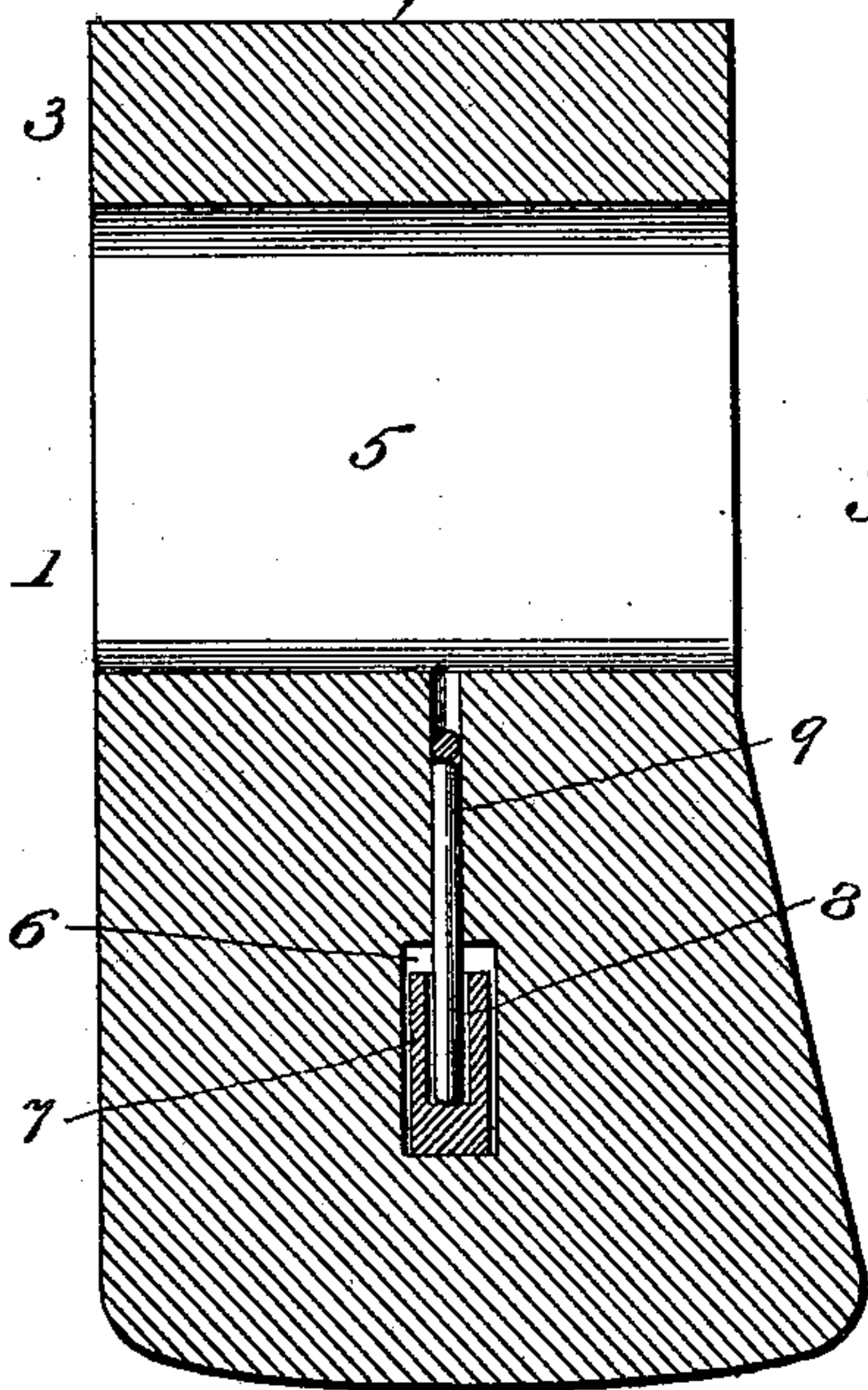


Fig. 2.

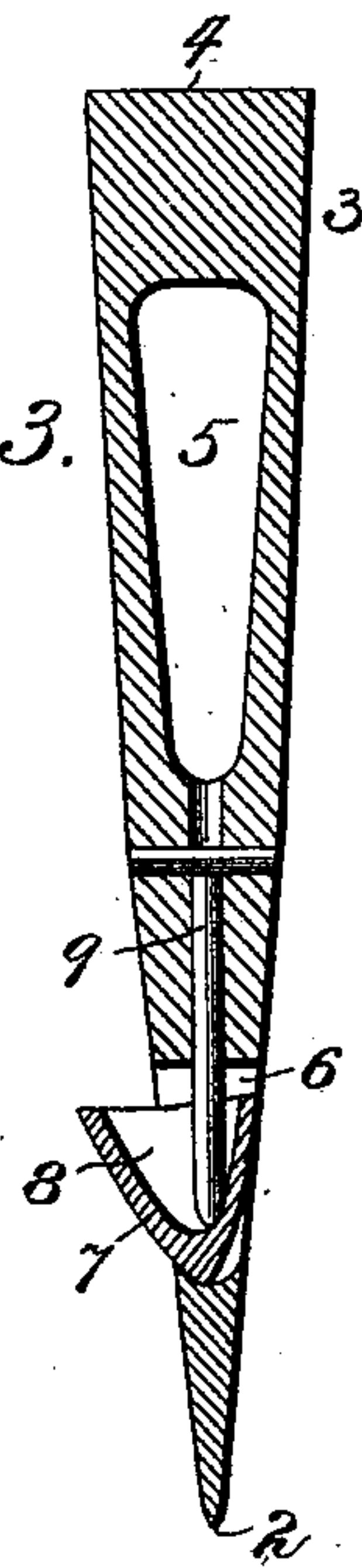


Fig. 3.

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# UNITED STATES PATENT OFFICE.

JOHN H. KARNS, OF FINDLAY, OHIO.

## AX.

SPECIFICATION forming part of Letters Patent No. 561,000, dated May 26, 1896.

Application filed February 15, 1896. Serial No. 579,359. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. KARNS, a citizen of the United States, and a resident of Findlay, in the county of Hancock and State of Ohio, have invented certain new and useful Improvements in Axes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to improvements in axes; and its object is to provide an improved attachment for the ax by which the chips cut by the ax are thrown away from the scarf, thereby rendering the ax more efficient in use and also enabling it to be more easily withdrawn from the cut.

The invention consists in the novel construction and combination of parts herein-after fully described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of an ax with my improvements applied thereto. Fig. 2 is a central longitudinal section of the same. Fig. 3 is a transverse section on the line  $x x$ , Fig. 1.

In the said drawings, the reference-numeral 1 designates an ax of any ordinary or suitable construction; 2, the bit thereof; 3, the head; 4, the poll, and 5 the eye. Intermediate the poll and bit the head is formed with a slot or aperture 6, the lower edge of which is grooved or concaved to receive the rounded lower end of a wedge 7. This wedge is formed with a recess 8, in which is located a rod 9, attached to the ax-head, which bears against the lower end of the wedge, so as to hold it in the slot, yet permit it to oscillate therein, the grooved edge of the slot serving as a fulcrum. In use, as the ax is driven into the wood the inner side of the wedge will strike the scarf of the wood, forcing the wedge outward, when its

other side will throw the chip cut away from the ax. By this means the scarf will be cleared of the chips, thereby facilitating the operation of cutting. At the same time the ax will not stick in the cut, so that it can be easily withdrawn after the cut. The attachment may be applied to any of the axes in ordinary use and will not interfere with the grinding of the same.

I do not limit myself to the particular construction above described, as it may be considerably varied without departure from the principle of my invention.

Having thus fully described my invention, what I claim is—

1. As an improved article, an ax formed with a slot or aperture having seated therein an oscillating wedge wider at the top than the body of the ax, and its point directed toward the cutting-blade; substantially as described.

2. The combination with an ax having a slot or opening in its head of the oscillating wedge fulcrumed in said slot and adapted to project beyond either side of the head and having its point directed toward the cutting-blade; substantially as described.

3. The combination with an ax having a slot or opening in its head, the lower edge of which is grooved or concaved, of the recessed oscillating wedge wider at the top than the body of the ax, located in said slot with its lower end fulcrumed in said groove, and the rod attached to the ax-head and located in the recess in the wedge; substantially as described.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN H. KARNS.

Witnesses:

C. M. FELLABAUM,  
SILAS E. HURIN.