

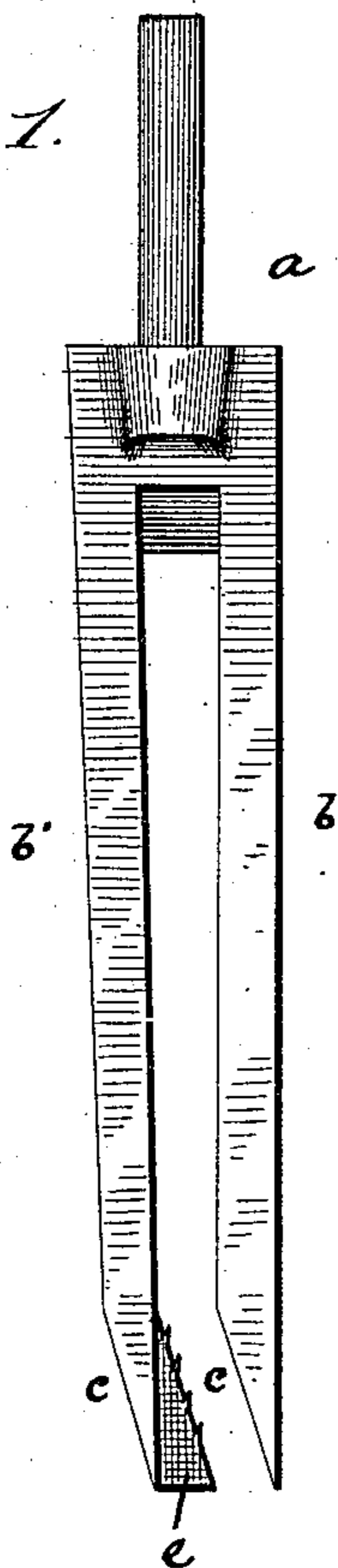
(No Model.)

A. KAPPLER.  
MORTISING BIT.

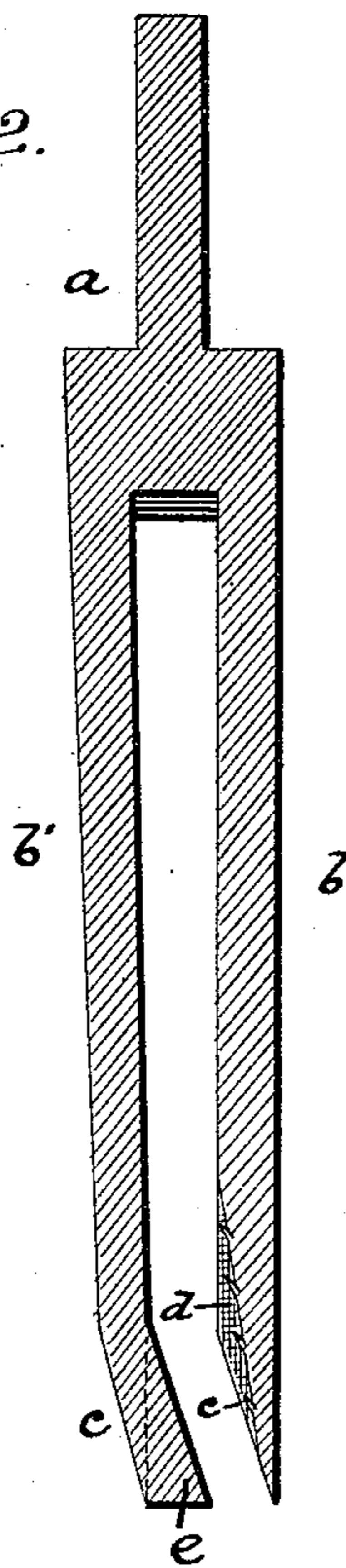
No. 414,978.

Patented Nov. 12, 1889.

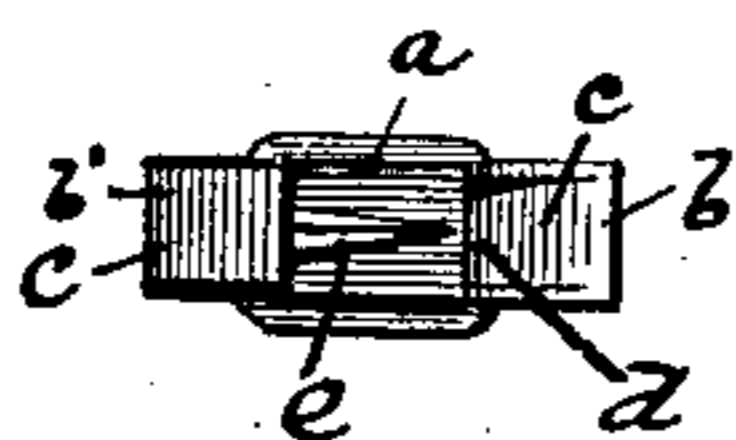
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses

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# UNITED STATES PATENT OFFICE.

ANTHONY KAPPLER, OF WILKES-BARRÉ, PENNSYLVANIA.

## MORTISING-BIT.

SPECIFICATION forming part of Letters Patent No. 414,978, dated November 12, 1889.

Application filed June 20, 1889. Serial No. 314,956. (No model.)

*To all whom it may concern:*

Be it known that I, ANTHONY KAPPLER, a citizen of the United States, residing at Wilkes-Barré, in the county of Luzerne and State of Pennsylvania, have invented certain new and useful Improvements in Mortising-Bits, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 represents a side elevation of my improved mortising-bit; Fig. 2, a longitudinal sectional view, and Fig. 3 a bottom view.

The object of the present invention is to produce a bit of simple construction which will effectually remove the chips from the mortise as fast as they are cut, as will be more fully hereinafter set forth.

In the drawings annexed, *a* designates a suitable shank provided with two depending chisels *b b'*, both of which are beveled on their rear sides, as at *c*, and provided with cutting-edges. The former chisel or bit *b* is preferably hollowed out longitudinally upon its rear side a short distance and provided with serrations, as shown at *d* in Fig. 2. Formed upon the front straight side of the bit *b'* is a triangular web or fin *e*, which extends about half-way across the space between the two bits and has its lower edge sharpened. The inclined edge of this fin may be serrated, if desired, to facilitate the removal of the chips from the mortise. The space between the two chisels preferably widens toward the top to prevent clogging of the cut chips. To prevent binding in the mortise, I prefer to make the rear chisel *b'* slightly narrower than the front chisel.

It will be perceived that in operation the

chips as fast as cut become practically bound or clamped between the two chisels, the lower chips pressing the higher ones up out of the way, and the fin or web insuring the withdrawal of all the chips when the bit is withdrawn.

After the mortise is started the front chisel does all the work of cutting, the rear chisel, with its triangular cutter or fin, serving simply to withdraw the cut material and keep the mortise at all times free.

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

1. A mortising-tool consisting of two separated vertical chisels *b b'*, sharpened at their lower ends and beveled upon their rear lower sides, a vertical cutting-fin being formed upon the front side of the rear chisel *b'*, the cutting-edge of this fin extending approximately half-way across the space between the two cutting-edges of the chisels, as and for the purpose set forth.

2. A mortising-tool consisting of a pair of vertical chisels *b b'*, separated from each other by a space which widens toward the top of the chisels, the rear one of these chisels being provided with a vertical triangular cutting-fin *e* upon its front side, the cutting-edge of this fin extending approximately half-way across the space between the cutting-edges of the chisels, as described.

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

ANTHONY KAPPLER.

Witnesses:

N. D. SAFFORD,

J. F. STEINHAEUER.