

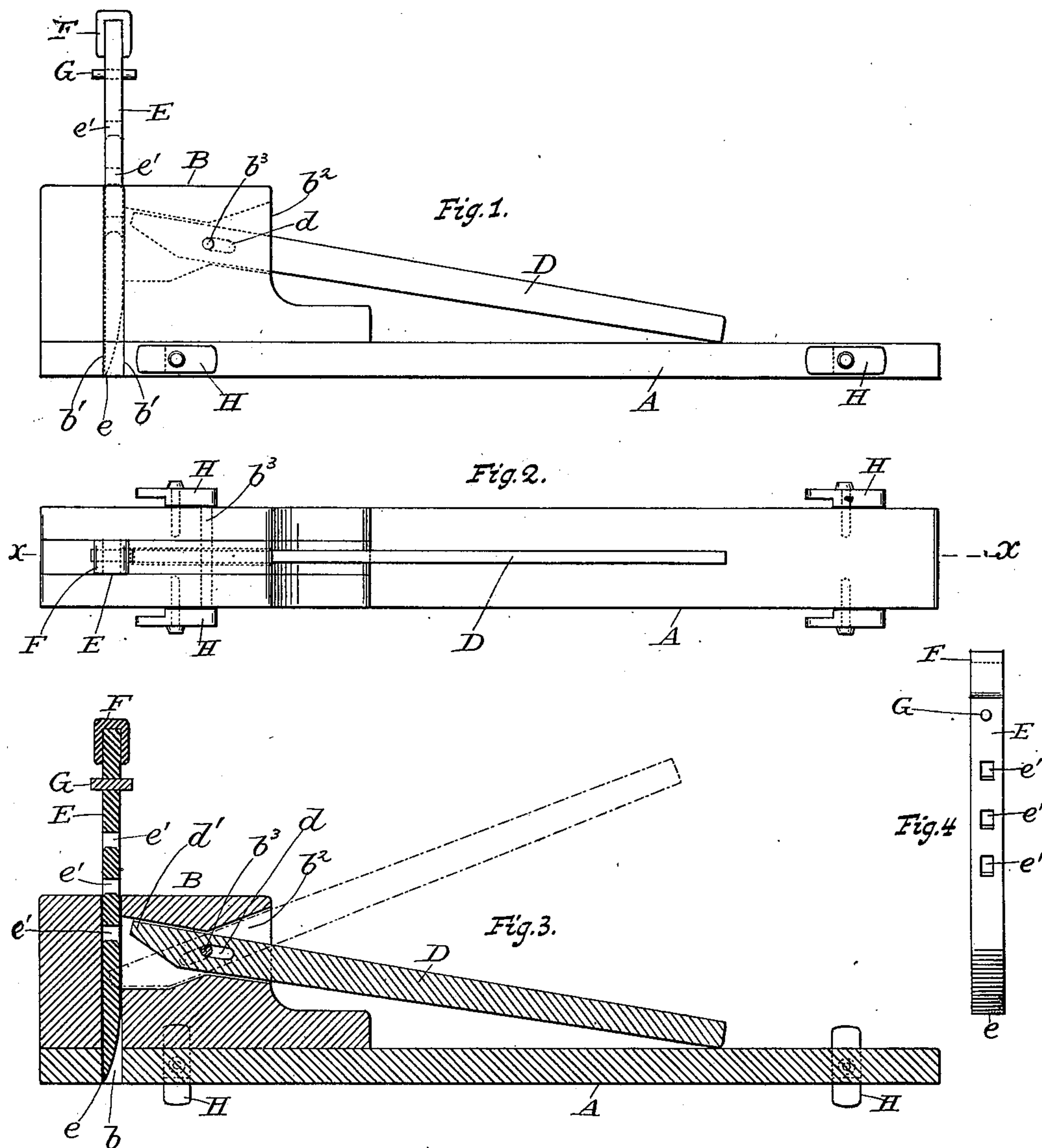
No. 652,945.

Patented July 3, 1900.

H. WITHERWAX.
MORTISING TOOL.

(Application filed Apr. 10, 1900.)

(No Model.)



Witnesses,

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UNITED STATES PATENT OFFICE.

HENRY WITHERWAX, OF GUILDERLAND, NEW YORK.

MORTISING-TOOL.

SPECIFICATION forming part of Letters Patent No. 652,945, dated July 3, 1900.

Application filed April 10, 1900. Serial No. 12,344. (No model.)

To all whom it may concern:

Be it known that I, HENRY WITHERWAX, a citizen of the United States, residing at the town of Guilderland, in the county of Albany and State of New York, have invented certain new and useful Improvements in Mortising-Tools; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to mortising-tools adapted to be used in mortising the framework of buildings, and has for its object to provide means for quickly and accurately forming the heads of a mortise. This I accomplish by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a device embodying my invention. Fig. 2 is a plan view of the same. Fig. 3 is a vertical longitudinal section taken on line X X of Fig. 2. Fig. 4 is a side elevation of a mortising-chisel.

As illustrated in the drawings, A represents a base supporting a head-block B, which is provided with a vertical slot b , extending through the head B and the base A, as shown in Fig. 3. The head B is also provided with a recess b^2 , adapted to contain the forward end of a lever D, and is cut away to conform to the sweep of said lever. This lever is fulcrumed on a transverse pin b^3 , secured to the head-block B and passing through the slot d , formed in the lever D. A chisel E, having a beveled edge e and preferably provided with transverse apertures e' , is arranged vertically in the slot b . The upper end of the chisel E is provided with a head F and with a transverse pin G.

Pivoted gage-blocks H may, if desired, be secured to the base A, and one end of said blocks may be reduced so that when said blocks are arranged in a vertical line and placed against the side of the beam the chisel E may be adjusted at the desired distance from the edge of the beam to be mortised. The side of the head-block B is provided with gage-marks b' , as shown in Fig. 1, which indicate the vertical walls of the slot b , and consequently the line traveled by the edge of the chisel E. The beam to be mortised is first marked on its side with vertical lines

indicating the location of the heads of the mortise to be formed through the top of said beam. This device is then placed upon the top of the beam so that the gage-marks b' shall coincide with the vertical lines drawn on the side of the beam. The gage-blocks H may then be arranged vertically, so that the lower portion of said blocks will bear against the side of the beam, and the chisel E will then be located at the line indicating the head of the mortise. When the reduced end of the gage-block H is placed against the side of said beam or timber, the chisel E is set at a greater distance from the edge of the beam than if the full end of the gage-block H be used. When the tool has been so placed that the chisel E is at the line desired to form the head of the mortise, the chisel is then driven into the beam by means of a sledge until the chisel is forced through the beam, removing the portions of the timber left by the auger and leaving a clean and smooth wall for the head of the mortise. The tool is then reversed and the flat side of the chisel E is brought in coincidence with the line indicating on the side of the timber the other head of the mortise, and the chisel is again forced through the timber the same as before. The irregular portions of the sides of the mortise which have been left by the auger may then be readily removed. When the chisel E is driven into the beam, it will naturally wedge there, and the lever D is then moved inward on the pivot b^3 by means of the slot d until the forward end d' of the lever D enters one of the transverse slots e' , formed in the chisel E. A sufficient pressure is then brought to bear upon the outer end of the lever D to force said chisel upward. The stop G prevents the chisel E from being forced so far downward that the forward end of the lever D cannot enter the top opening e' of the chisel.

I do not desire to be limited to a chisel having the transverse openings e . Any other construction which will enable the forward end d' of the lever D to obtain a sufficient hold on the chisel E to raise it when desired may be used without departing from my invention.

What I claim is—

1. In a mortising-tool, the combination with a head having a vertical slot, of a chisel mov-

able in said slot and provided with a stop to limit the downward movement of the same, and a lever having a pivotal and limited longitudinal movement in said head, substantially as shown and described.

5 2. In a mortising-tool, the combination with a head provided with a vertical slot, of a chisel having transverse apertures formed therein, and a lever fulcrumed in said head and movable lengthwise therein by means of a slot and adapted to enter the apertures formed in said chisel, substantially as shown and described.

3. In a mortising-tool, the combination with a head having a vertical slot, of a chisel extending above said head and movable in said slot, and a lever having a pivotal and limited longitudinal movement, and adapted to engage with the side of said chisel and raise the same, substantially as shown and described.

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

HENRY WITHERWAX.

Witnesses:

ROBERT W. HARDIE,
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