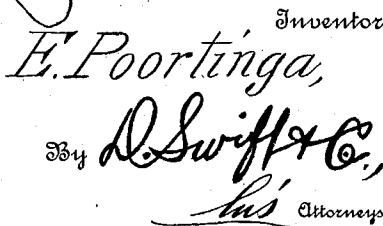


APPLICATION FILED FEB. 5, 1913.

Patented Nov. 25, 1913.

2 SHEETS—SHEET 1.



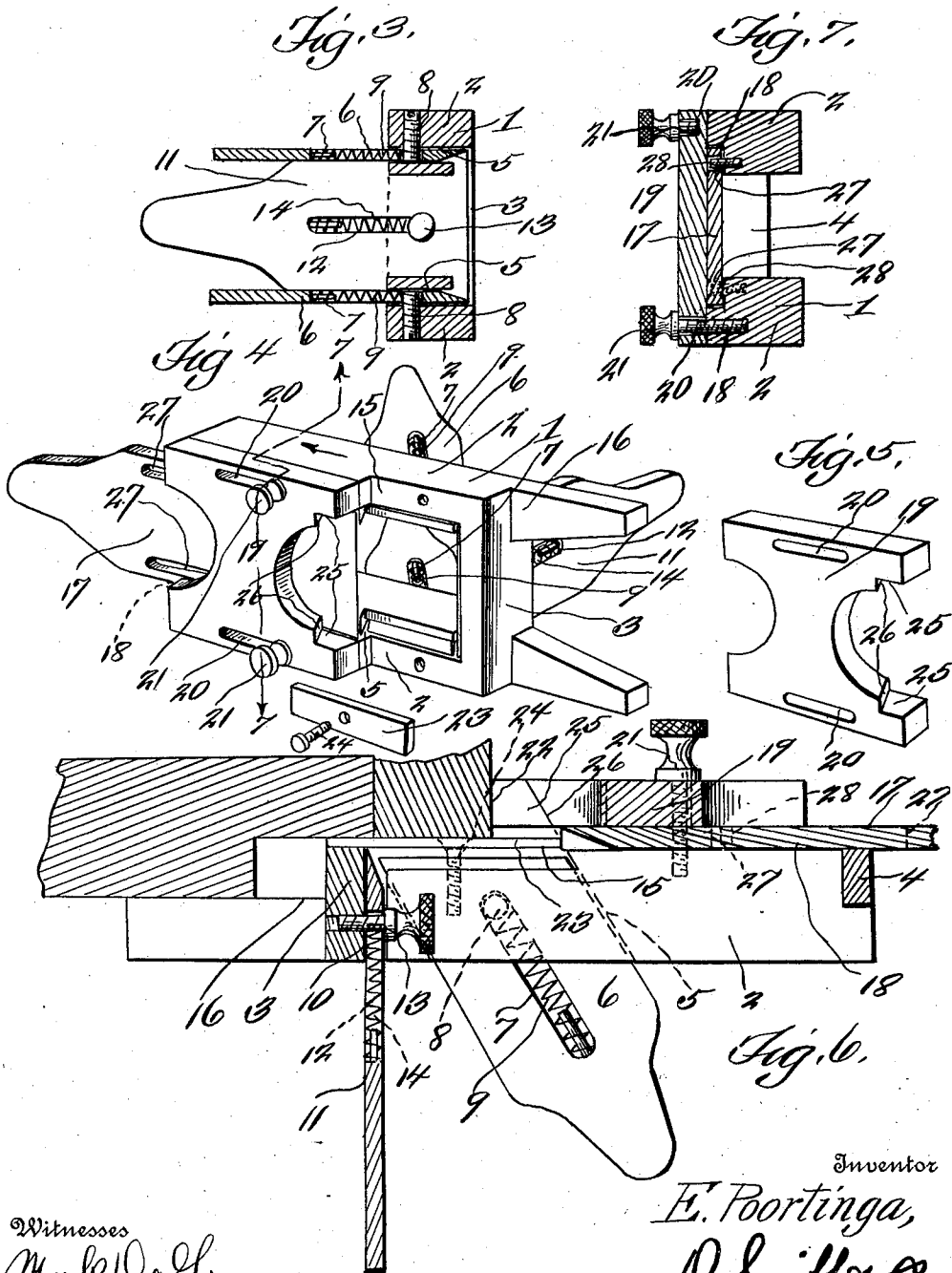
Witnesses
Mark De Grange
Francis T. Bowell

E. POORTINGA.
MORTISING TOOL.
APPLICATION FILED FEB. 5, 1913.

1,079,719.

Patented Nov. 25, 1913.

2 SHEETS—SHEET 2.



Witnesses
Mark DeGrange,
Francis J. Bowell

Inventor
E. Poortinga,
By *D. Swift & Co.*
his Attorneys

UNITED STATES PATENT OFFICE.

EELKE POORTINGA, OF RAYMOND, MINNESOTA.

MORTISING-TOOL.

1,079,719.

Specification of Letters Patent.

Patented Nov. 25, 1913.

Application filed February 5, 1913. Serial No. 746,401.

To all whom it may concern:

Be it known that I, EELKE POORTINGA, a citizen of the United States, residing at Raymond, in the county of Kandiyohi and State of Minnesota, have invented a new and useful Mortising-Tool; 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.

This invention relates to a new and useful mortising tool, adapted for making or cutting mortises for hinge leaves, lock keeper plates and the like.

An object of the invention is the provision of a frame so shaped as to fit the door jamb, and provided with two knives yieldably mounted for cutting transverse cuts in the door jamb, and a vertical knife for cutting a vertical cut in the door jamb, in order to form a rectangular mortise or recess to receive a lock keeper plate or the like.

Another object of the invention is to provide the frame of the device with an adjustable member or plate, whereby the device may be placed adjacent the door jamb so as to cut a mortise of a different width.

Another object of the invention is the provision of a series of plates interchangeable, for varying the depth of the mortise.

In practical fields it may be found necessary to subject the mortising tool to alterations, to which the patentee is entitled, provided the alterations fall within the scope of what is claimed.

The invention comprises further features and combination of parts, as hereinafter set forth, shown in the drawings and claimed.

In the drawings: Figure 1 is a view in perspective, showing the improved tool applied to a door jamb, whereby a mortise or recess may be cut, for receiving a hinge leaf, a lock keeper plate or butt or the like. Fig. 2 is a sectional view on line 2—2 of Fig. 1. Fig. 3 is a transverse sectional view on line 3—3 of Fig. 1. Fig. 4 is a perspective view looking at the rear face of the mortising tool. Fig. 5 is a detail view of the plate adapted to be adjusted, for varying the position of the tool relative to the door jamb, whereby a different width of mortise may be cut. Fig. 6 is a sectional view, showing the mortising tool as applied to a door jamb, whereby a different width of mortise or recess may be cut. Fig. 7 is a sectional view on line 7—7 of Fig. 4.

Referring more particularly to the drawings, 1 designates an elongated angular frame consisting of the side plates 2 and the end plates 3 and 4. The side plates are provided with guide openings 5 extending upon angles relative to the side plates to receive the cutting members or chisels 6. These cutting blades or chisels are provided with slots 7, through which pins 8 extend adapted for limiting the cutting blades or chisels in their outward movement. Interposed between each pin 8 and one end of each slot 7 is a spring 9, in order to hold the cutting blades or chisels in their outward positions. The cutting blades or chisels 6 are designed for cutting the transverse cuts, whereby a mortise may be properly made.

The elongated angular frame at one end adjacent the plate 3 is provided with guides 10 to receive the cutting blade, member or chisel 11, which is adapted for cutting a vertical cut in the door jamb, so as to join the transverse cuts. This cutting blade or chisel 11 is formed with a slot 12, through which a headed pin 13 extends, for not only anchoring the cutting blade or chisel 11 in place, but also for limiting the said blade in its outward position. A spring 14 is interposed between one end of the slot 12 and the pin 13, in order to hold the cutting blade or chisel in its outward position.

As shown in Fig. 1, side plates are constructed with recesses 15 and 16, adapted to conform and fit the transverse contour of the door jamb. The recesses 15 are of a depth corresponding to the thickest lock keeper plate or hinge leaf, and the cutting blade or chisel 17 (which is mounted in the guides 18) is so arranged relative to the recesses 15 as to cut a mortise of a depth corresponding to the thickest keeper plate or hinge leaf, as shown in Figs. 1 and 2. An adjustable plate or member 19 is provided for holding the cutting blade or chisel 17 in place. The plate or member 19 is provided with slots 20, through which the thumb screws 21 (which are threaded into the side plates) extend, for not only guiding the plate or member 19 when adjusted, but also for holding said plate or member 19 in adjusted position. This plate or member 19, is as a rule, arranged in order to engage the outer face of the door jamb, as at 22, whereby the mortise or recess may be cut.

In order to diminish the width of the mortise, the plate or member 19 may be adjusted

as shown in Fig. 6, and when it is desired to diminish the width of the mortise, it is the design of the invention to utilize plates 23 (which are secured in the recesses 15 by the screws 24), so as to alter the depth of the recesses 15. In other words, by utilizing the plates 23, the elongated angular frame will be held farther from the door jamb, in order that the knife, blade or chisel 17 will not cut too deep a mortise. In this way a mortise or recess may be made in order to receive a keeper plate of a smaller thickness. When the plate or member 19 is adjusted for making a mortise of less width, the cutting ends of the blades or chisels 6 engage or are received by the recesses 25 of the said plate 19, which recesses 25 are beveled at 26. To further guide the cutting blade or chisel 17, the same is provided with slots 27, through which the pins 28 extend.

In cutting a mortise in a door jamb, the tool is placed, as shown in Fig. 1, after which each one of the blades or chisels 6 and 11 are struck with the proper force, in order to make the horizontal and vertical incisions or cuts, and subsequently, the blade or cutting knife 17 is struck with a hammer or the like, in order to cut out the depth of mortise.

It will be ascertained from the foregoing in conjunction with the accompanying illustrations that there has been devised an essentially new and useful, simple, inexpensive and desirable form of mortising tool, and one which has been found practical.

The invention having been set forth, what is claimed as new and useful is:—

1. In a mortising tool, an elongated angular frame having upper and lower diagonally disposed guides, knives yieldably mounted therein for cutting upper and lower horizontal cuts of the mortise, said frame at one end having vertical guides, a knife yieldably mounted therein to make a vertical cut in the door jamb, one face of the frame having horizontal guides, a cutting member or blade mounted in said horizontal guides adapted for cutting out the mortise, said frame having two pairs of recesses adapted to fit the transverse contour of the door jamb, one pair of said recesses corresponding to the depth of the mortise to be cut, said upper and lower guides and said vertical guides being arranged so that the knives held therein move in intersecting paths.

2. In a mortising tool, an elongated angular frame having upper and lower diagonally disposed guides, knives yieldably mounted therein for cutting upper and lower horizontal cuts of the mortise, said frame at one end having vertical guides, a knife yieldably mounted therein to make a vertical cut in the door jamb, one face of the frame having horizontal guides, a cutting member or blade mounted in said horizontal guides adapted for cutting out the mortise, said frame having two pairs of recesses adapted to fit the transverse contour of the door jamb, one pair of said recesses corresponding to the depth of the mortise to be cut, means adapted to be fastened in the recesses corresponding to the depth of the mortise to be cut, whereby the depth of said mortise may be varied, said upper and lower guides and said vertical guides being arranged so that the knives held therein move in intersecting paths.

3. In a mortising tool, an elongated angular frame having upper and lower diagonally disposed guides, knives yieldably mounted therein for cutting upper and lower horizontal cuts of the mortise, said frame at one end having vertical guides, a knife yieldably mounted therein to make a vertical cut in the door jamb, one face of the frame having horizontal guides, a cutting member or blade mounted in said horizontal guides adapted for cutting out the mortise, said frame having two pairs of recesses adapted to fit the transverse contour of the door jamb, one pair of said recesses corresponding to the depth of the mortise to be cut, means adapted to be fastened in the recesses corresponding to the depth of the mortise to be cut, whereby the depth of said mortise may be varied, and means adjustably arranged on said frame for holding the frame so positioned relative to the door jamb as to vary the width of the mortise, said upper and lower guides and said vertical guides being arranged so that the knives held therein move in intersecting paths.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

EELKE POORTINGA.

Witnesses:

A. A. BENNETT,
J. H. DALE.