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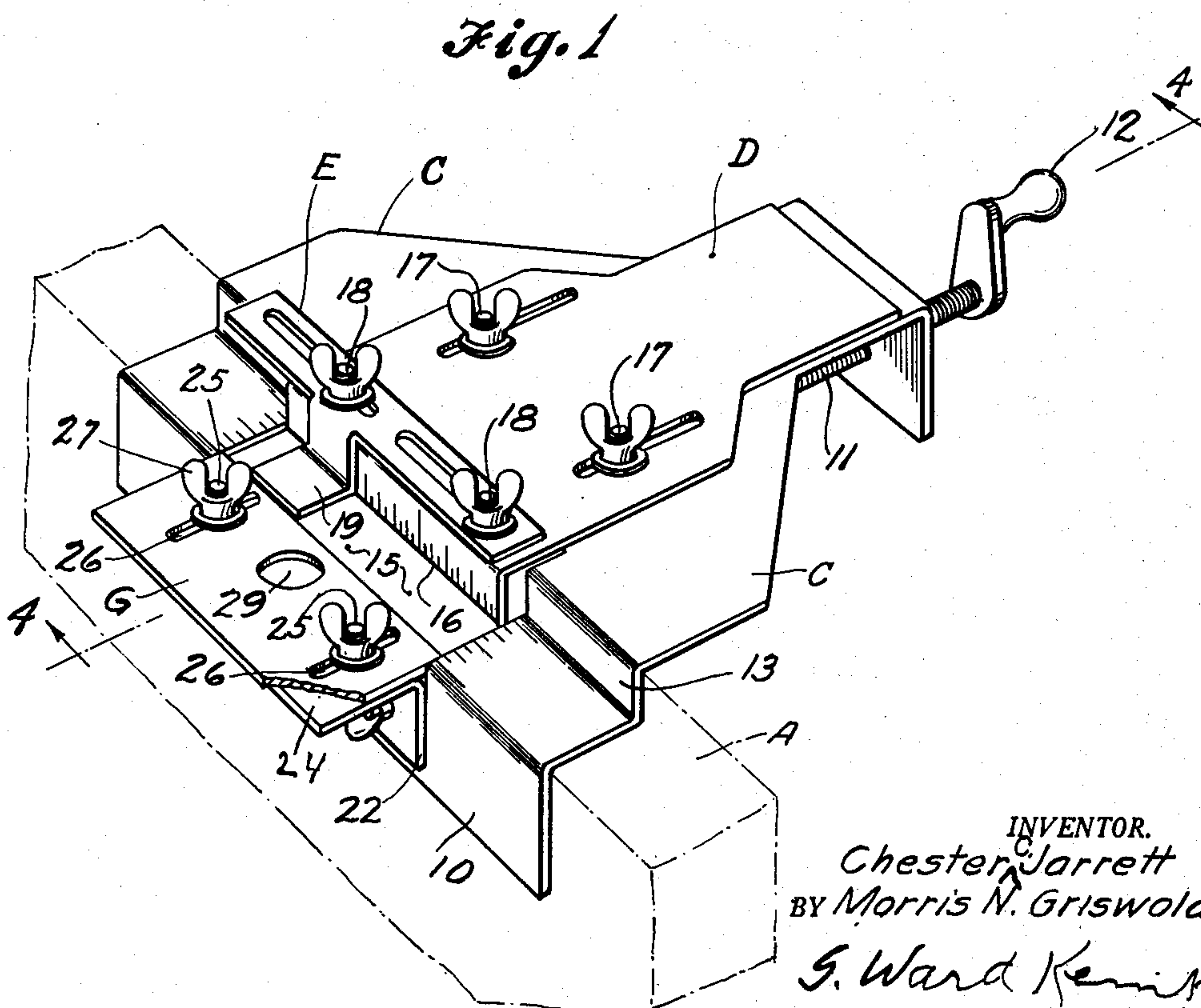
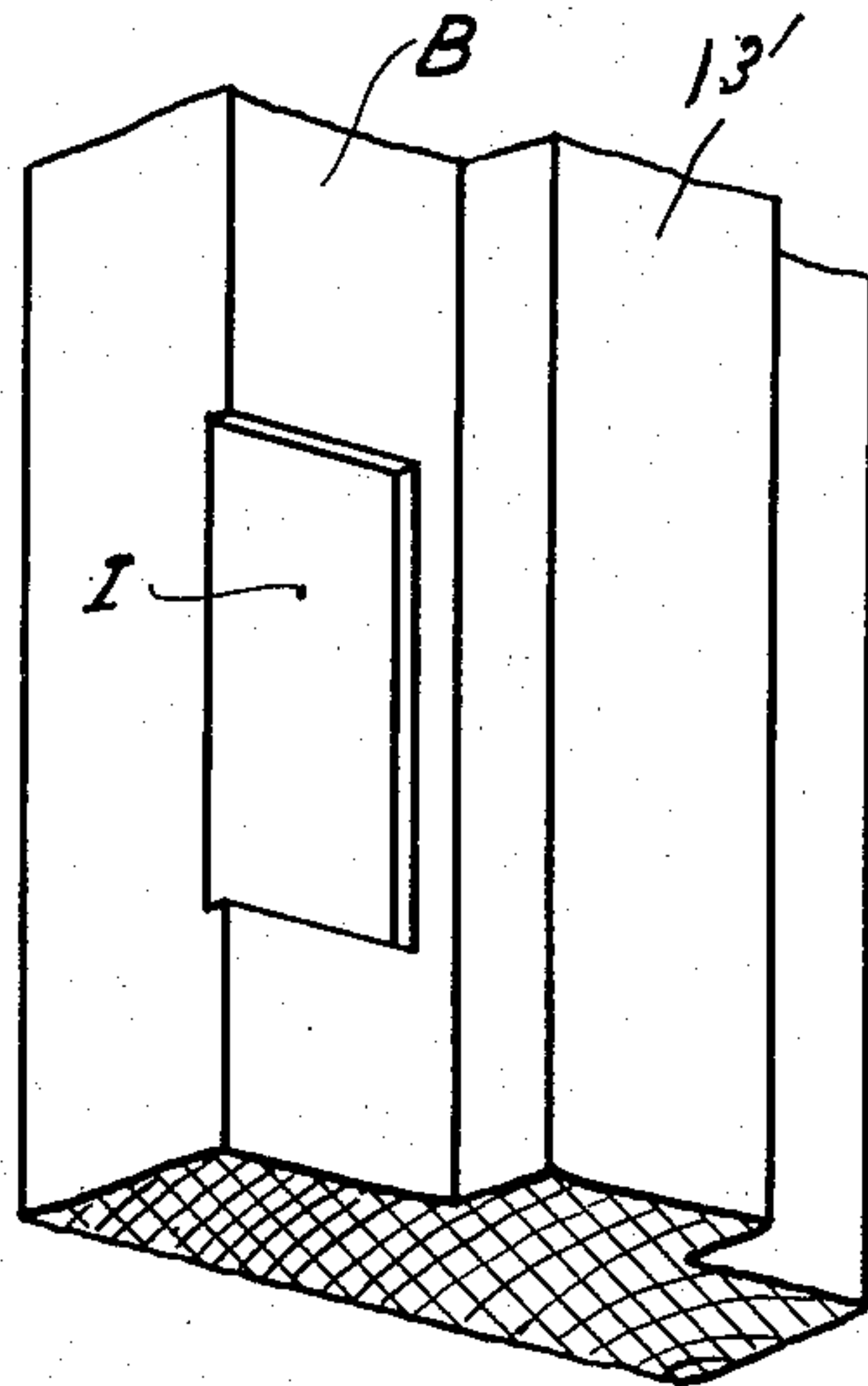
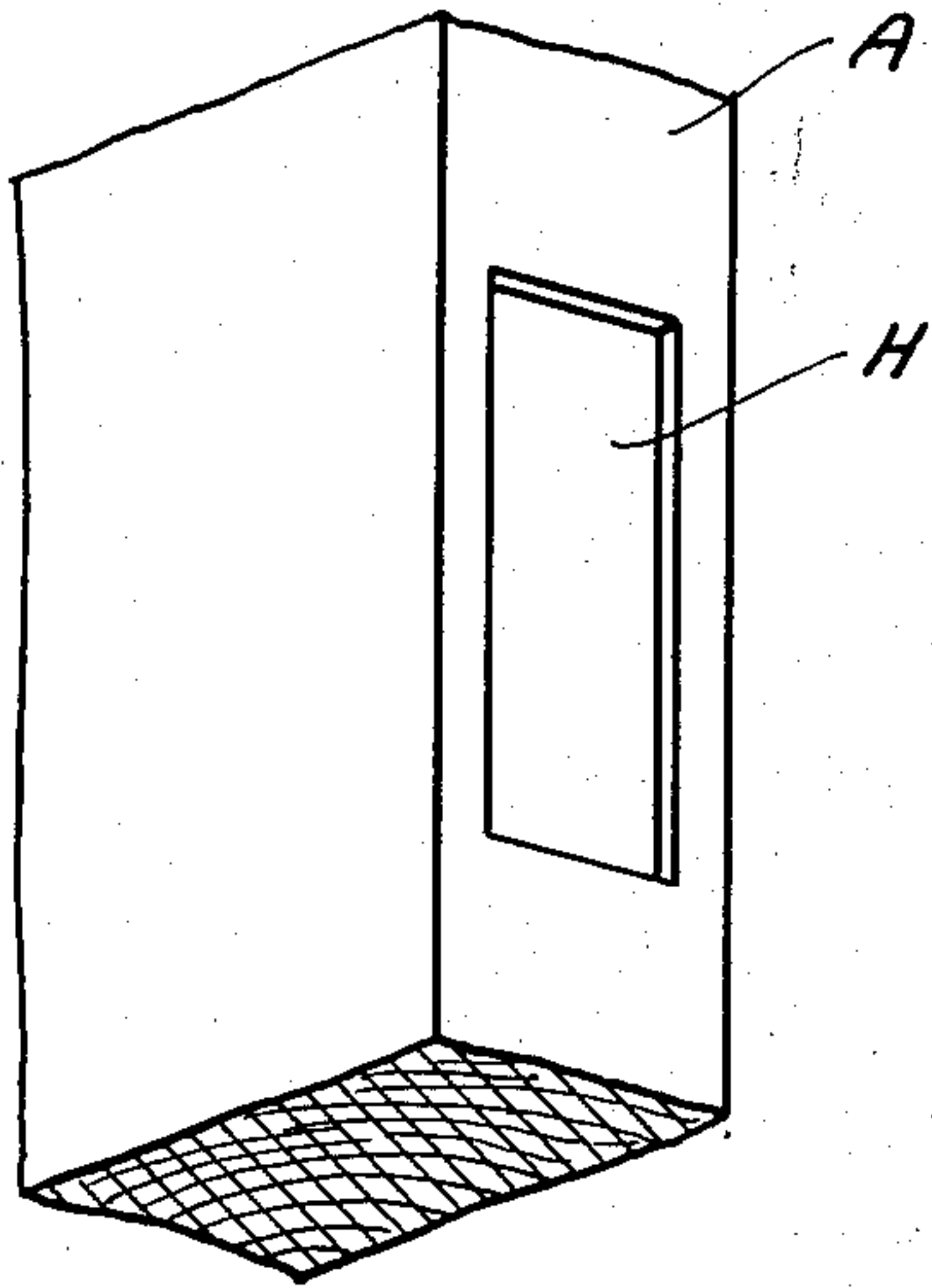
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2,659,159

JIG FOR MORTISING DOORS AND JAMBS

Filed April 18, 1952

2 Sheets-Sheet 1



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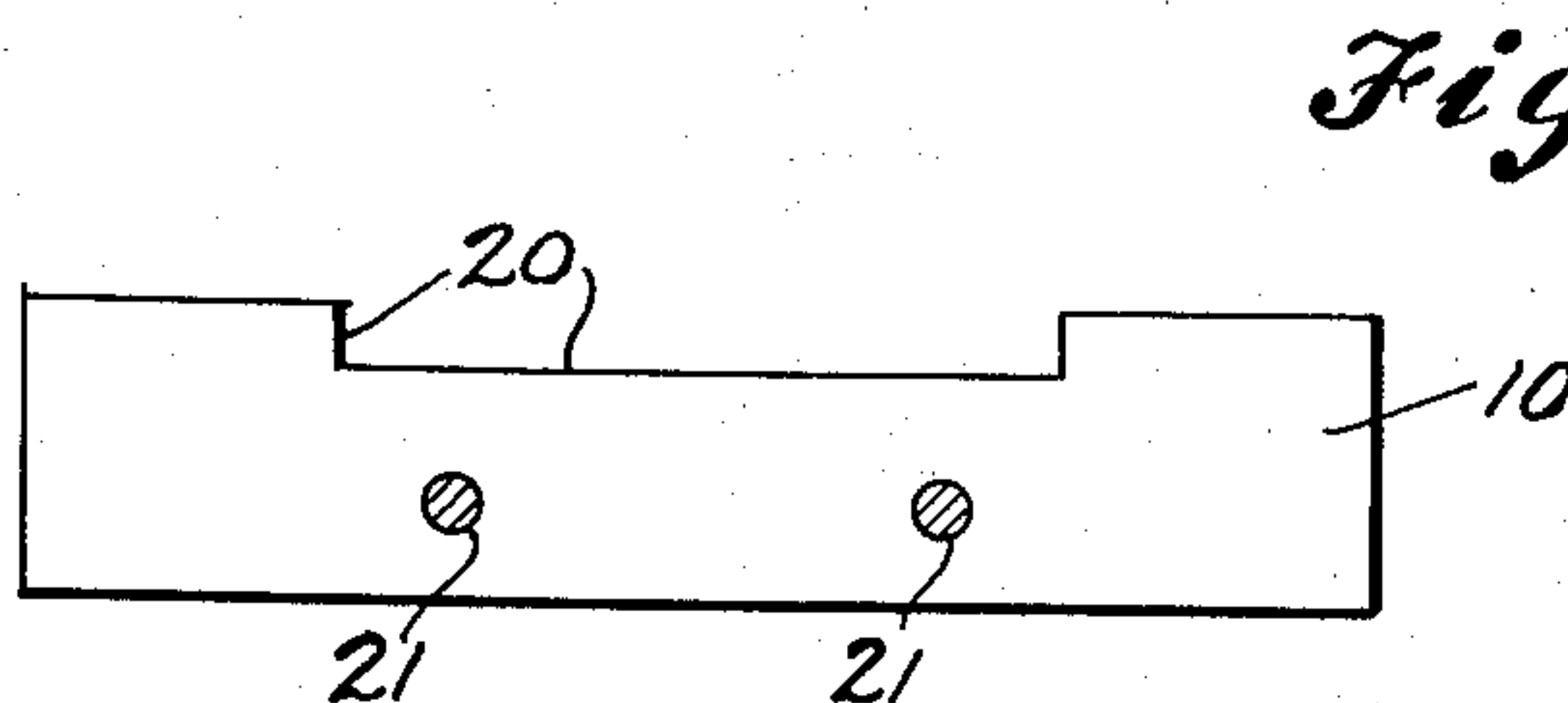
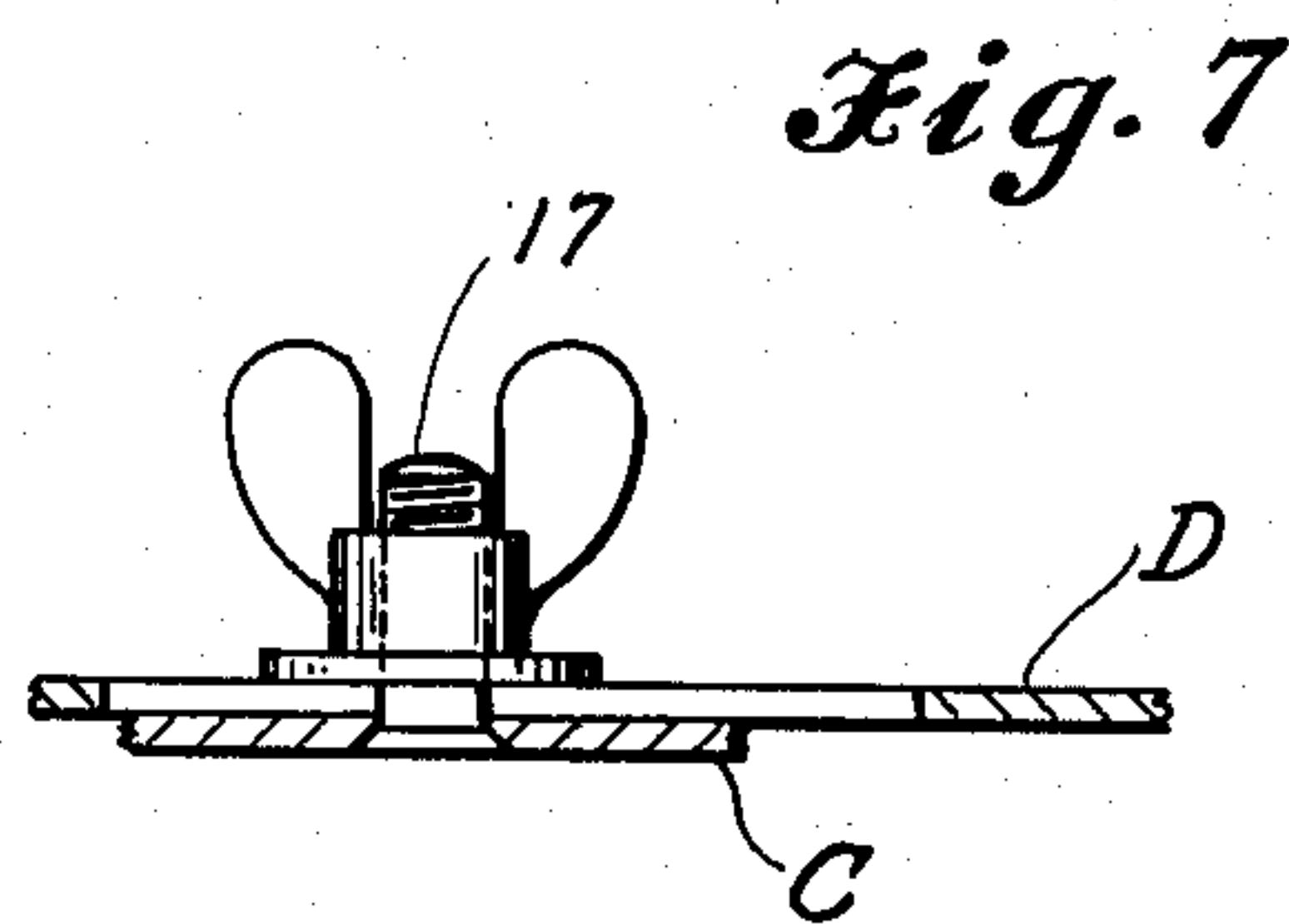
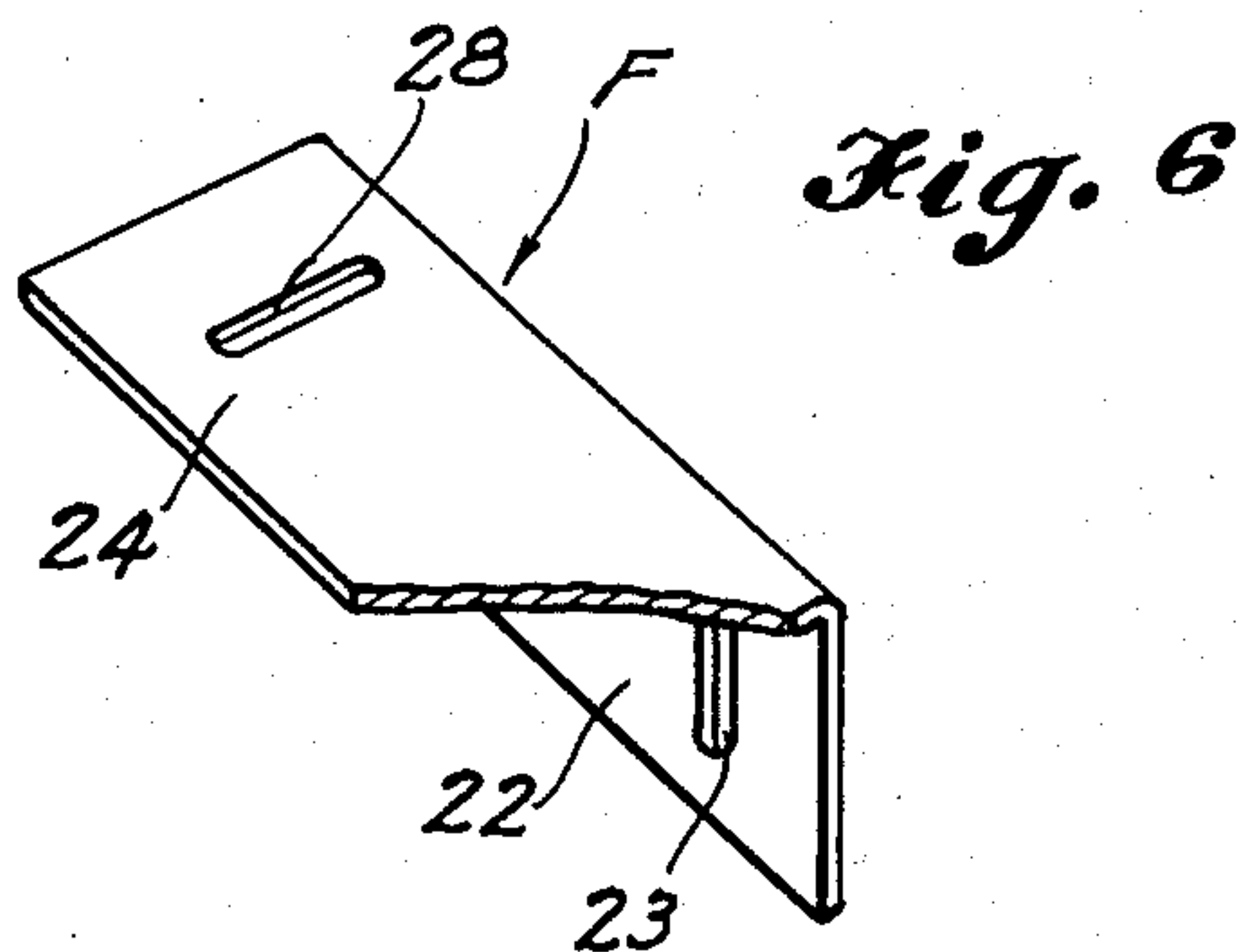
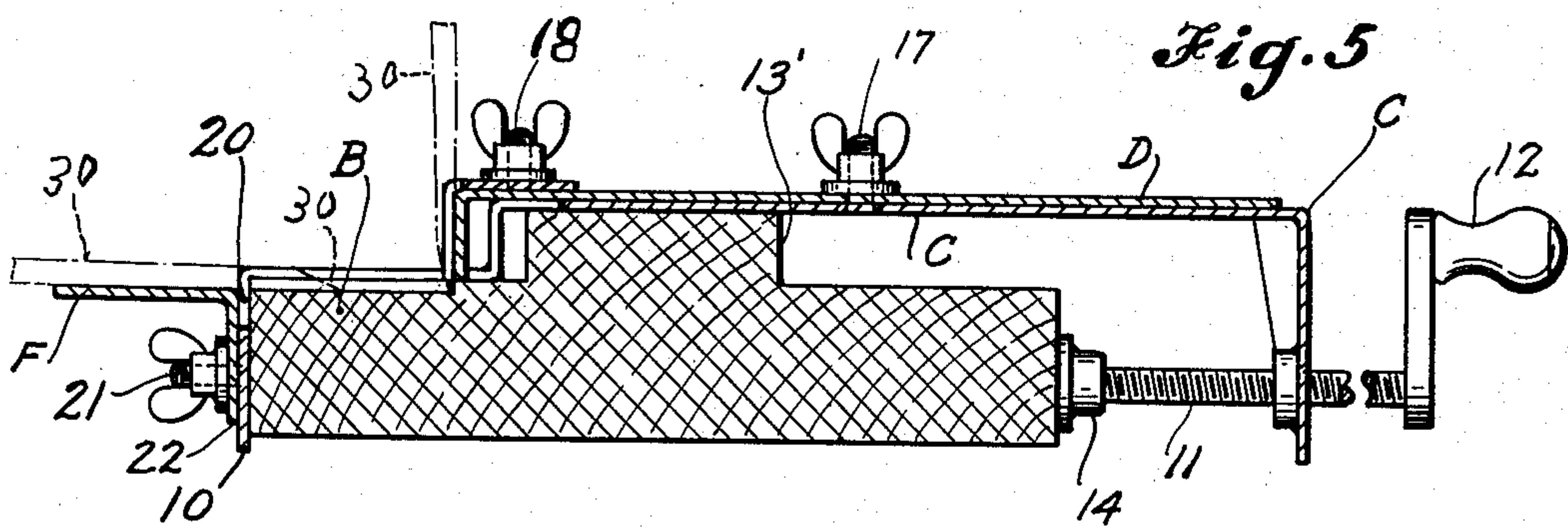
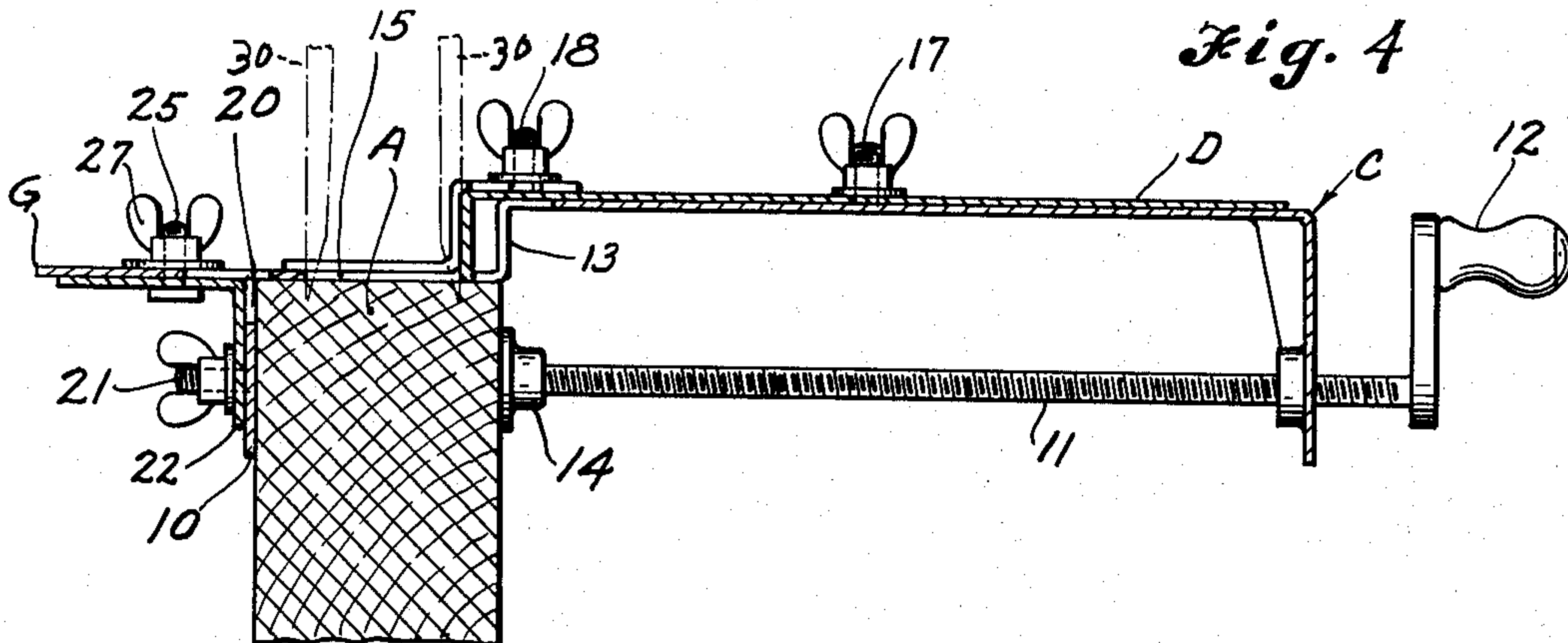
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JIG FOR MORTISING DOORS AND JAMBS

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2 Sheets-Sheet 2



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JIG FOR MORTISING DOORS AND JAMBS

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2 Claims. (Cl. 33—197)

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This invention relates to jigs for locating the positions of mortises with the lengths, widths and depths thereof, and for guiding tools for cutting the mortises, for doors and door jambs.

In the practice of mounting hinge butts to doors and jambs it is important to provide mortises which will enable the butts to fit snugly within the same and have solid and even surfaces in the bases of the mortises for supporting the doors, it is also important to provide mortises for disposition of lock plates for doors to fit therein snugly and uniformly.

It is therefore an object of this invention to provide an adjustable jig or device for locating and limiting the dimensions of the mortises and for guiding and supporting tools for cutting the same. A further object is to provide a device which may be economically constructed, for adjustable connection to edges of doors and door jambs for locating and limiting the dimensions of mortises and for guiding tools for cutting the mortises, and a particular object is to provide such a jig or device, having a frame and clamp for adjustable connection over the edges of doors and jambs, with a movable plate on top of the frame for limiting the inner side of the mortise, and an adjustable flange for limiting the lengths of the mortises, with an adjustable plate for limiting the outer edge of the mortises, together with means for determining the depths of the mortises, such limiting means for the dual purpose of guiding and supporting tools for cutting the mortises.

With these and other objects to be hereinafter stated, we have illustratively exemplified our invention by the accompanying drawings, of which:

Figure 1 is a perspective view of the assembled device.

Figure 2 is a fragmentary view of a portion of the edge of a door with an enclosed mortise therein for a lock plate.

Figure 3 is a fragmentary view of a portion of a door jamb with a mortise across one side of the face thereof for a hinge butt.

Figure 4 is a section view of the device clamped over the edge of a door, taken on line 4—4 of Fig. 1.

Figure 5 is a section view of the device clamped across a door jamb, taken on the same line 4—4 of Fig. 1.

Figure 6 is a perspective view of a portion of a bracket for supporting tools, for cutting the base of a mortise, and for supporting a face plate, for determining the outer edge of a mortise.

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Figure 7 is a section view of fragments of the frame and top plate thereon with a stud bolt for binding the parts together.

Figure 8 is a front view of the binding jaw and notch along the top margin thereof for determining the depth of a mortise for hinge butts with studs for binding the bracket thereon.

Like characters on the different figures represent like parts. The letter A indicates a fragment of the edge of a door, and the letter B indicates the edge of a door jamb. The letter C indicates generally a relatively flat frame for adjustable connection over the edges of doors and jambs. Numeral 10 represents a down turned end of the frame for a jaw for binding against the outer side of the doors and jambs, and numeral 11 represents a clamp screw with a handle 12 on the inner end and a revolvable head 14 for binding against the inner sides of doors and jambs for retaining the device in desired positions along the edges. Numeral 13 indicates an offset in the frame for providing clearance over the usual stop 13' on the jambs. Inside of and adjacent to the jaw is provided an open area 15 of suitable dimensions for laying out mortises of largest dimensions.

The letter D indicates a top plate slidably disposed over the frame and guided thereon over threaded studs 17 extended from the frame through slots in the plate, with wing nuts for binding the plate in desired positions. The outer end of the plate is down turned to provide a shoulder 16 adjacent to the inner side of the area and adapted to limit the inner side of the area and provide a guide and support for down cutting tools such as chisels 30 for cutting the inner edges of the mortises, at such positions as the shoulder may be located by sliding the plate.

The letter E represents a strap member which is mounted upon said plate over the said shoulder on studs 18 projected from the plate through slots in the strap. The strap is slidable longitudinally and may be retained in any desired position by nuts on the studs. A flange 19 is extended forwardly from a lower portion of the strap across and adjacent to the area for determining one end of the mortises and for guiding and supporting cutting tools. The opposite end of the mortises being determined by the other end of the wall of the area, which also may guide and support down cutting tools.

In order to provide limiting guides for the outer edges of the mortises and depths thereof, the outer jaw 10 is provided with a notch 20 along the top thereof of length and depth equal

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to greatest lengths and depths of mortises to be cut. A bracket F is slidable vertically and supported on studs 21 extended outward from the jaw through slots 23 in the vertical leg 22 of the bracket, and may be held in predetermined elevation by binding nuts on the last described studs. In order to determine the outer line of limit of a closed mortise such as shown in Fig. 2 for a door lock, a face plate G is mounted for slidable disposition on the top of the arm 24 and the arm elevated to bring the face plate level with the margin of the door and then moved inward over the same to location desired for the outer side of the mortise, and may be then secured to the arm by any suitable bolts indicated as 25 through slots 26 and 28 with wing nuts 27, to provide a guide and support for a tool for cutting the outer side of the mortise.

In order to determine the depth of the mortise for hinge butts as seen in Fig. 3, the face plate is disposed evenly with the inner face of the jaw and the bracket and face plate disposed at such elevation along the notch to conform with the thickness of the butts to be mounted, and thereupon a suitable cutting chisel may be operated horizontally and supported evenly across the face plate for providing a smooth seat for the hinge butts. In such last described operation it is preferable to connect the face plate to the arm by bolts extended downward with top heads even with the top of the face plate, to prevent obstructions to the tools. In cases where the face plate is not required for determining the outer edges of the mortises, it is generally preferable to remove the plate from the arm, and raise and fix the arm at the elevation across the notch to provide the support for the cross cutting tool, and in order to provide a depression deeper than the mortise for receiving a lock bolt, a circular opening indicated as 29 may be provided through the face plate for guiding a boring instrument.

Having described our invention, we claim as new for Letters Patent:

1. A device for locating mortises for hinge butts and locks on doors and door jambs and for supporting and guiding tools for cutting the mortises, comprising, a frame for adjustable connection upon edges of doors and jambs having an open area adjacent to the outer end of the frame for locating the mortises, a down turned jaw for disposition against the outer side of the doors and jambs and an adjustable clamp for binding against the inner sides for sustaining the device

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in desired positions on the doors and jambs, a top plate slidable laterally over the frame having a down turned shoulder adjacent to the inner edge of the area for determining the inner line of the mortises and for supporting and guiding tools for cutting along the line, a strap member slidably mounted over and across the outer end of the top plate having a flange extended forwardly across the area for determining one end of the mortise at varying positions and for guiding and supporting tools for cutting downward for the end of the mortise, a fixed wall at the opposite end of the area for determining such opposite end and for guiding and supporting a cutting tool, a notch provided along the top of the jaw of greatest depth for thickness exceeding the thickness of butts, a bracket disposed on the outer face of the jaw in vertical slidable relation for limiting the depth of the mortises, a face plate slidably disposed on top of the bracket for determining the outer edges of mortises for locks, and for guiding and supporting tools for cutting along such edges, the said bracket and face plate being for the dual purpose of supporting tools for cutting the bottoms of mortises for hinge butts.

2. A jig for locating mortises for doors and door jambs, including, a frame for disposition over edges of doors and door jambs, means for connecting the frame on predetermined spots, said frame having an aperture adjacent to the outer end thereof for locating the mortises and means for limiting the edges of the mortises including a plate slidably disposed over the frame and having a downturned shoulder for limiting the inner edges of the mortises and for supporting and guiding tools for cutting the same, a strap member slidably disposed across the outer end of the top plate above the shoulder having a flange extended forwardly across the aperture for determining one end of the mortises for limiting the lengths thereof and for a guide and support for cutting tools.

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