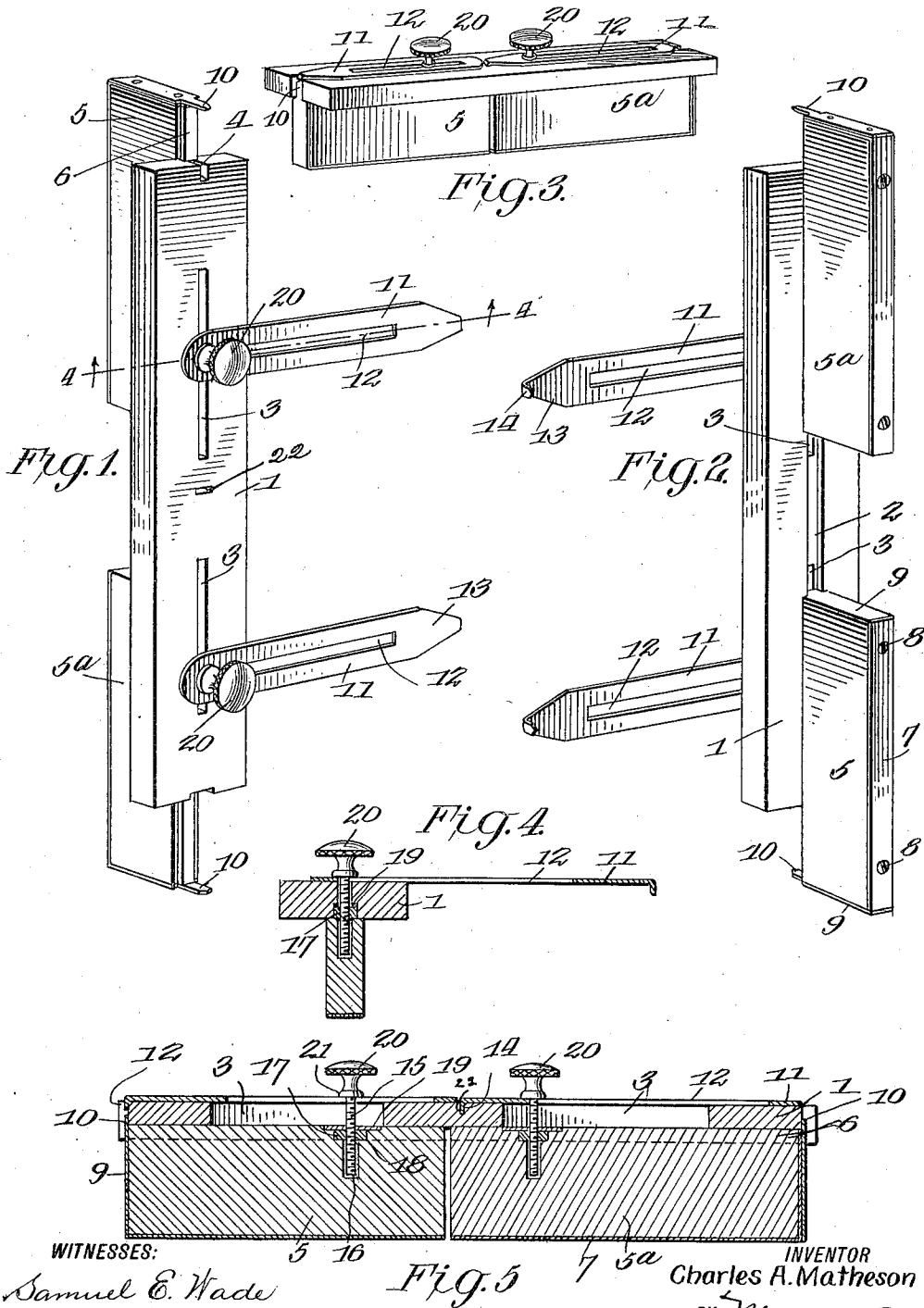


C. A. MATHESON.
CARPENTER'S GAGE.
APPLICATION FILED FEB. 24, 1911.

1,032,227.

Patented July 9, 1912.

2 SHEETS-SHEET 1.



WITNESSES:
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INVENTOR
Charles A. Matheson
BY *Wm. & Co.*

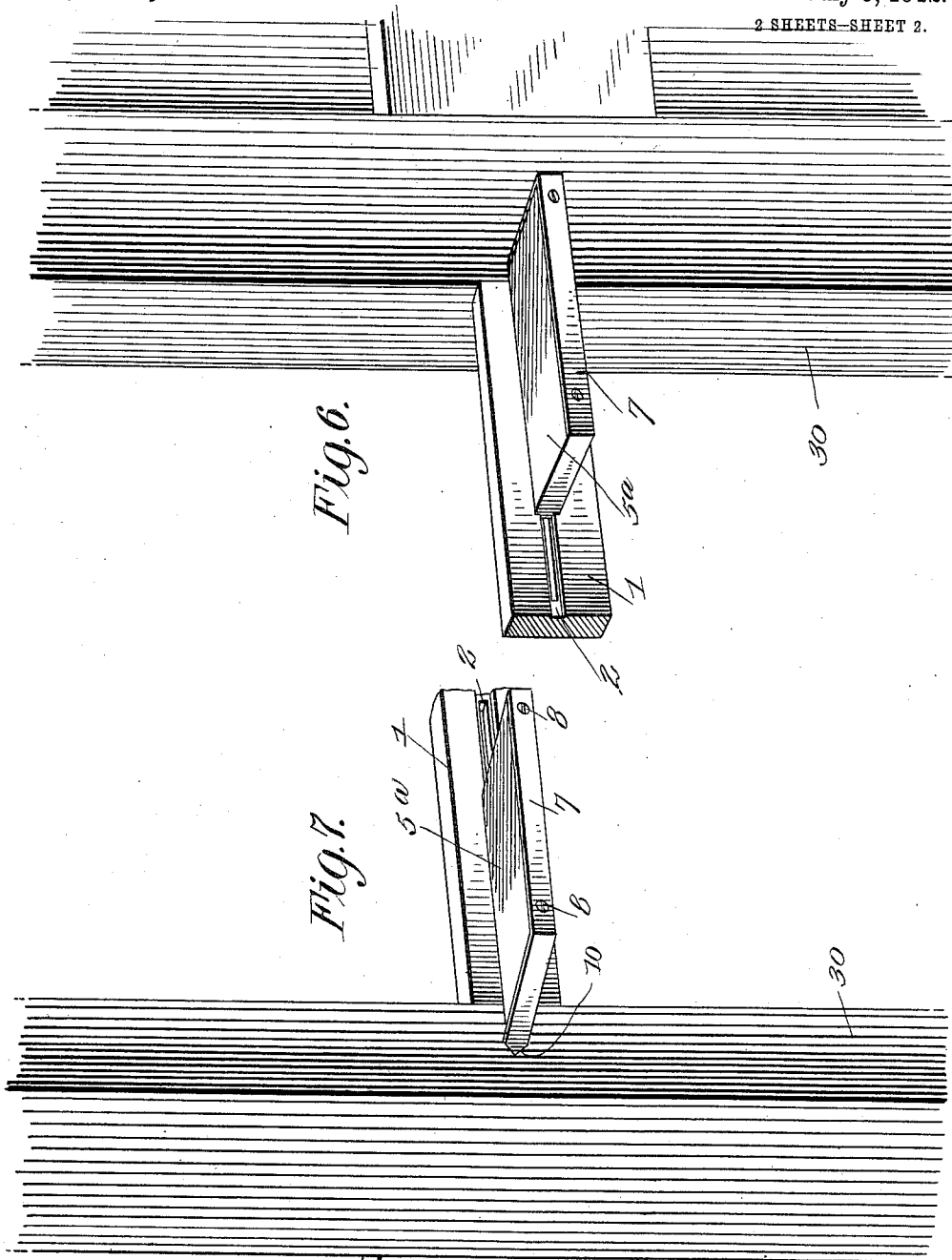
ATTORNEYS

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UNITED STATES PATENT OFFICE.

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CARPENTER'S GAGE.

1,032,227.

Specification of Letters Patent.

Patented July 9, 1912.

Application filed February 24, 1911. Serial No. 610,551.

To all whom it may concern:

Be it known that I, CHARLES A. MATHESON, a citizen of the United States, and a resident of Duluth, in the county of St. Louis, State of Minnesota, have invented a new and useful Improvement in Carpenters' Gages, of which the following is a specification.

My invention is an improvement in carpenters' gages, and consists in certain novel constructions and combinations of parts hereinafter described and claimed.

The object of the invention is to provide a simple device of the character specified, for carpenters' use, and designed for quickly and accurately locating on a door the exact points at which to cut the openings for the key and knob of the lock, and the width and depth of the cuts for the hinges.

Referring to the drawings forming a part hereof: Figure 1 is a perspective view of the gage arranged to locate the points for the openings for the keyhole and knob of the lock; Fig. 2 is a similar view from the opposite side; Fig. 3 is a similar view with the device folded; Fig. 4 is a section on the line 4—4 of Fig. 1; and, Fig. 5 is a longitudinal section of the device in folded position. Figs. 6 and 7 are perspective views of a portion of the door and a portion of the improvement, showing the manner of obtaining the dimensions for the hinge cuts.

The present embodiment of the invention comprises a bar 1 having a groove 2 extending longitudinally of one face thereof, and a plurality of alined slots 3 cut from the opposite face to the groove. Each end of the bar is also grooved transversely, as at 4, the grooves communicating at one end with the groove 2 and opening on the opposite face of the bar at the opposite end.

A pair of blocks 5, 5^a is slidable in the groove 2, each block having a rib 6 on one edge fitting the groove. Each block is also provided with a metallic facing 7 on the opposite edge from the rib and held in place by screws 8, and each facing is provided at the outer end of the block end with an angular portion 9 fitting against the adjacent end of the block. The angular portion is extended beyond the edge of the block to form a tongue 10, and the tongues are adapted to fit within the end grooves 4 when the blocks are in their innermost positions. The blocks are of such length that when their inner ends abut (Fig. 5) the

tongues are seated in the grooves and the outer ends of the blocks are approximately flush with the ends of the bar. A plate 11 of sheet material is connected with each block, each plate having a longitudinal slot 12, and one end of each plate is beveled to form a point 13, and each point is provided with an angular lug 14 at its extremity. A set-screw 15 is passed through the slot of each plate and through the registering slot of the bar into a recess 16 on the edge of the adjacent block. A nut 17 is arranged in a counter-sink 18 at the outer end of each recess for engagement by the screw, and the nut is held in place by a plate 19. Each set-screw is provided with a milled head 20 and with an annular shoulder 21 between the head and the threaded portion for engaging the outer face of the plate 11 on each side of the slot 12. By loosening the set-screw 15 the plates 11 may be arranged as shown in Figs. 3 and 5, that is, folded on the bar, or they may be arranged at any desired angle with respect to the bar and secured in adjusted position by tightening the set-screw. When in folded condition, the plates are arranged in alinement with the tongue 14 of one plate fitting over the end of the bar, and a notch 22 is provided in the adjacent face of the bar for receiving the tongue of the other plate.

In using the device to locate the points for boring for keyhole and knob the plates are arranged as shown in Figs. 1 and 2, that is, at right angles to the bar, and at a distance such that the distance between the lugs 14 of the respective plates corresponds to the distance between the keyhole and knob opening. Should the said openings be not in vertical alinement, the plates may be adjusted transversely of the bar. The proper position of the plate on the bar is obtained by abutting the bar against the edge of the lock, and the lugs 14 are centered over the keyhole and over the knob opening. The set-screws are then tightened and it will be evident that when the device is placed against the edge of the door at the position to be occupied by the lock the lugs will indicate the position of the openings exactly. When the bar is placed against the door the points may be marked by pressing the free ends of the plates toward the faces of the door, thus causing the lugs to make an impression.

In order to obtain two dimensions for the

hinge cut, one of the blocks 5 is adjusted on the bar until the distance between the points 10 and the end of the bar 1 corresponds to the depth of the cut from the side edge of the door. The other block 5^a is adjusted on the bar, until the distance between the point 10 and the end of the block corresponds to the width of the cut on the edge of the door. The bar is then abutted against the edge of the door 30 at the point where the hinge cut is to be made, and the said bar is held perpendicular to the said edge with the point 10 of the first-named block against one face of the door. While held in this position, the block is moved laterally and the point 10 traces the line showing the depth of the cut. The block is then reversed, and the opposite end is abutted against the face of the door with the point 10 against the edge, and with the bar perpendicular to the face of the door. The bar is then moved laterally, and the point 10 traces a line showing the rear edge of the cut. The former position is shown in Fig. 6 of the drawing and the latter in Fig. 7. Many other uses of the improved tool will be evident to the mechanic that need not be specified here. The tool is simple, compact, and may be cheaply constructed and will not get out of order with reasonably careful handling.

I claim:

1. A carpenter's gage comprising a bar having a longitudinal groove in one face, and having slots leading from the groove to the opposite face, a pair of blocks slidable in the groove, a plate for each block, each plate having a longitudinal slot, the plates being arranged on the opposite face of the bar from the blocks, and a set-screw passing through the slot of each plate and the adjacent slot of the bar and engaging the adjacent block, each plate having one end reduced and provided with an angular point, the bar having a recess at its center for receiving the point of one plate, and a lug extending laterally from the outer end of each block for engaging the end of the bar, the bar having a groove for receiving each lug.

2. A carpenter's gage comprising a bar having a longitudinal groove in one face, and having slots leading from the groove to the opposite face, a pair of blocks slidable in the groove, a plate for each block, each plate having a longitudinal slot, the plates being arranged on the opposite face of the bar from the blocks, and a set-screw passing through the slot of each plate and the adjacent slot of the bar and engaging the adjacent block, each plate having one end reduced and provided with an angular point, the bar having a recess at its center for receiving the point of one plate, and a lug

extending laterally from the outer end of each block for engaging the end of the bar.

3. A carpenter's gage comprising a bar having a longitudinal groove in one face, and having slots leading from the groove to the opposite face, a pair of blocks slidable in the groove, a plate for each block, each plate having a longitudinal slot, the plates being arranged on the opposite face of the bar from the blocks, and a set-screw passing through the slot of each plate and the adjacent slot of the bar and engaging the adjacent block, each plate having one end reduced and provided with an angular point, the bar having a recess at its center for receiving the point of one plate.

4. A carpenter's gage comprising a bar having a longitudinal groove in one face, and having slots leading from the groove to the opposite face, a pair of blocks slidable in the groove, a plate for each block, each plate having a longitudinal slot, the plates being arranged on the opposite face of the bar from the blocks, and a set-screw passing through the slot of each plate and the adjacent slot of the bar and engaging the adjacent block, each plate having one end reduced and provided with an angular point.

5. A carpenter's gage comprising a bar having a guideway on one face, a block slidable in the guideway at each end of the bar, a plate for each block, each plate having a longitudinal slot and an angular point at one end, the plates being arranged on the opposite side of the bar from the blocks and the bar having a slot registering with the slot of each plate and extending into the guideway, and a set-screw passing through the registering slots and engaging the adjacent block.

6. A carpenter's gage comprising a bar having a guideway on one face, a block slidable in the guideway at each end of the bar, a plate for each block, each plate having an angular point and being arranged on the opposite face of the bar from the blocks, means for slidably connecting each plate to one of the blocks, the bar having a slot for the passage of each connection, and means for locking each block and plate to the bar.

7. A carpenter's gage comprising a bar, a block slidable on each end of the bar, a plate for each block on the opposite face of the bar from the block, each plate having an angular point at one end, and means for connecting each plate to a block for permitting the plate to move longitudinally with respect to the block or for clamping the plate and the block on the bar.

CHARLES A. MATHESON.

Witnesses:

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