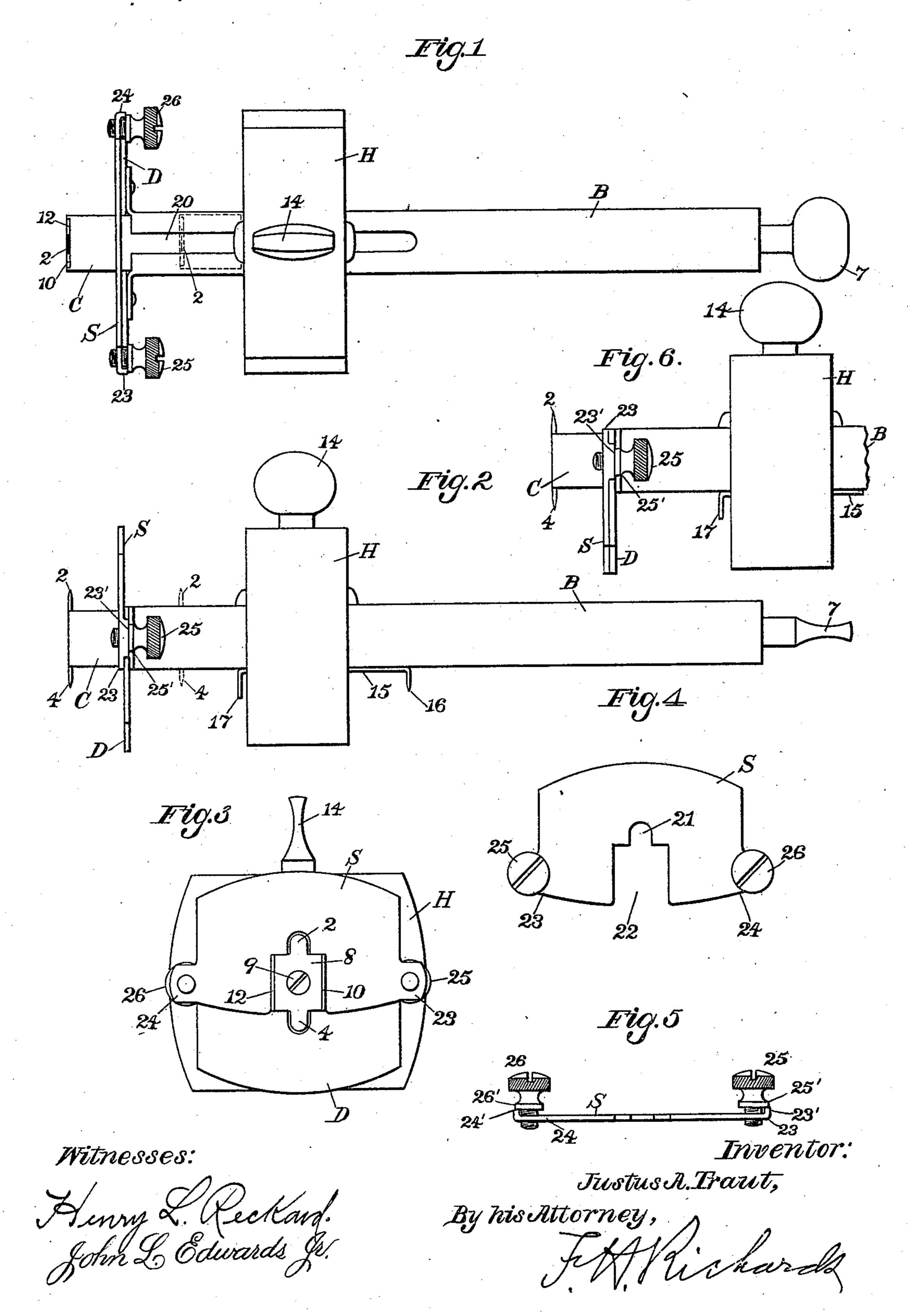
## J. A. TRAUT. MARKING GAGE.

No. 504,003.

Patented Aug. 29, 1893.



## United States Patent Office.

JUSTUS A. TRAUT, OF NEW BRITAIN, CONNECTICUT, ASSIGNOR TO THE STANLEY RULE AND LEVEL COMPANY, OF SAME PLACE.

## MARKING-GAGE.

SPECIFICATION forming part of Letters Patent No. 504,003, dated August 29, 1893.

Application filed March 16, 1893. Serial No. 466,384. (No model.)

To all whom it may concern:

Be it known that I, Justus A. Traut, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Marking-Gages, of which the following is a specification.

This specification relates to that class of marking-gages used by carpenters for laying out mortises, rabbets, and other work of that class; the object being to provide an attachment in the nature of a special gage-head adapted more especially for use in connection with the marking-gage described in Letters Patent No. 481,515, granted to me August 1892

23, 1892. In the drawings accompanying and forming a part of this specification, Figure 1 is a plan view of the marking-gage described in my 20 aforesaid Letters Patent and furnished with my present improvements. Fig. 2 is a side elevation of the gage and the attachments therefor shown in Fig. 1. Fig. 3 is an end elevation of the gage and attachment as seen 25 from the left-hand in Fig. 2. Fig. 4 is a side view of the attachment as seen from the righthand in Fig. 2. Fig. 5 is an edge view of the attachment as seen from below in Fig. 4. Fig. 6 is a view similar to a portion of Fig. 2, show-30 ing one mode of using the supplemental gagehead. Fig. 2 is drawn in projection with Fig. 1; and Fig. 5 with Fig. 4.

Similar characters designate like parts in

all the views.

The marking-gage shown in the drawings, and more fully described in my aforesaid Letters Patent, has a gage-bar, designated by B, and a sliding cutter-bar or cutter-carrier C. The gage-bar is provided with one head, D, 40 fixed thereto and designated as the butt-gage head, and a second head H, adjustable thereon. The cutter-bar, or carrier, carrying two cutters or marking points, 2 and 4, is fitted to slide in the gage-bar B to carry the marking 45 points to positions on either side of said fixed head. In Figs. 1, and 2, said points are (as shown by solid lines) carried beyond the fixed head, but the same may, as shown by dotted lines, be drawn into a position within the head. As a means for adjusting the cutter-carrier

within or on the gage-bar B, said carrier is

provided with an adjusting screw (not herein shown) which is journaled in a bearing formed in the end of the gage-bar, and at its outer end has the usual head or thumb-piece 7, whereby 55 to turn the screw.

The two cutters or marking-points 2 and 4, are shown projecting from the opposite ends. of a plate, 8, which is fixed to the outer end of the cutter-carrier C by means of a suitable 60 screw, as 9; and for preventing rotation of the cutter-plate 8, this is fitted between the ribs or lips 10 and 12, respectively, formed on said carrier, as will be understood by comparison of Figs. 1, 2, 3, and 4, as described in 65 my aforesaid patent. The two cutters are in the same plane transversely of the gage, for the purpose of adjusting the gage to the setting off of distances varying by the thickness of the head D. The fixed head D is made of a 70 thickness corresponding to the usual required clearance between a door and the face of the door-jamb therefor. And to render it usable in connection with the adjustable head for the several purposes herein set forth, said fixed 75 head extends only partially around the bar B. leaving one side thereof (which is the upper side in Figs. 1, 2 and 3) without any fixed head or plate at the end thereof.

The sliding head H is fitted to slide upon 80 the gage-bar B in the usual manner, and is shown furnished with a thumb-screw, 14, or other similar means for setting the head in any required position on said bar. On one side of the gage-bar B said sliding head is 85 also shown furnished with a sliding rod or bar, 15, having at one end thereof a marking-point, 16, for use as an auxiliary gage as required for marking off the thickness of butt-plates, and for other like work; and have 90 ing at the other end thereof a thumb-piece, 17, whereby to adjust the gage-point.

The fixed head D being usually in practice only one-sixteenth of an inch in thickness, is adapted to be used where a line is to be 95 drawn at one side or the other of a saw-cut; for this purpose the marking-point may be set outside the fixed head, as shown by solid lines in Figs. 1 and 2; or, it may be set on the inner side of said head, as shown by dotted 100 lines in said figures.

When the cutter-carrier is a second gage-

bar fitted to slide within the principal gagebar B as herein shown, said principal bar has formed therein slots, as 20, for permitting the marking-points 2 and 4 to be drawn 5 within the fixed head D, as shown, for instance, in Fig. 1.

The features which as hereinbefore described constitute the butt-gage, also, in connection with the sliding head H, constitute to the adjustable mortise-gage. In using the instrument for this purpose, the adjustable head is set on the gage-bar B so that the distance between the outer faces of the fixed and the movable head is equal to the width 15 of the mortise to be laid out, and the marking point is set a suitable distance beyond the fixed head D. To adjust the position of the mortise on the block, it is only necessary to slide the cutter-bar C within the gage-bar 20 B to bring the marking-points the required distance from the gage-heads, these heads remaining set to the width of the mortise. This use of the instrument, which is of great convenience to carpenters, cabinet-makers and 25 others requiring to lay out mortises accurately and quickly, is more fully set forth in my aforesaid Letters Patent.

Having now, for the purposes of my present application, fully described the particular 30 marking-gage to which my present improvement is especially adapted to be applied, I will now particularly describe this improvement and the manner of using the same.

My present improvement consists in a sup-35 plemental gage-head adapted to be removably attached to the so-called "butt-gage" head of the marking-gage, in a position immediately beyond the transverse plane of said butt-gage head. Said supplementary gage-head consists 40 of a plate which is designated in a general way by S, and is constructed for attachment to the outer side (at the left-hand in Figs. 1 and 2) of the butt-gage head D. For permitting the proper placing of the head S upon 45 the head D, said head S has formed in one edge thereof an opening, 22, for receiving the gage-point carrier C; and has an extension, 21, from said space 22 for the passage of the gage-point 2 (or the gage-point 4, as the case 50 may be), as illustrated in Fig. 3. At its ends the head S is shown provided with the projecting ears 23 and 24, respectively, which ears are perforated and threaded for carrying the clamp-screws 25 and 26, respectively. 55 These screws are each shown furnished with a collar, 25' and 26', respectively, which collars bear on their outer sides upon the upturned ends 23' and 24', respectively, of said ears 23 and 24; and at their inner sides, when 60 the head S is in use, bear upon the projecting ends of the head D, as shown best in Fig. 1. By loosening the screws 25 and 26, the head S may be withdrawn upward (in Figs. 1, 2 and 3) off from the head D; and when 65 the head S is thus put in place, by tightening said screws the collars thereof rigidly bind the same upon the head D of the gage.

The head S is shown made of the same thickness as the head D; and since the two gagepoints 2 and 4 are in the same transverse 70 plane relatively to the head D, therefore I have provided, by means of the two heads D and S, one head, D, at a given distance from the gage-point 4; and a second head, S, at a distance from the gage-point 2 which is equal 75 to the aforesaid distance from the point 4 to the head D, less the thickness of the head S, which thickness, it is to be remembered, is the standard amount of clearance usually allowed between the door and its jamb. By 80 means of this attachment and combination, I provide the gage with two clearance-marking arrangements, which vary by the amount of the standard clearance space. Also, by reversing the position of the head S on the head 85 D, and setting the one upon and forward of the other as illustrated in Fig. 6 (corresponding to the left hand portion of Fig. 2) we have the marking-gage of my aforesaid patent provided with a butt-gage head of extra thick- 90 ness for laying-off the hinge-mortises in cases where extra clearance is required between the door and the door-jamb; and these two kinds of adjustment of the gage are made, it will be seen, by the use of the same attachable supple-95 mentary gage-head.

The use described in my aforesaid patent of the head D in a slot, or saw-cut, where lines are to be drawn parallel to one side of said cut, also applies to the head S; so that roo by means or my present improvement the marking-gage is adapted for laying-off two parallel lines at one side of said channel or cut, and at a distance apart equal to the thickness of the head S, this being, as before 105 stated, of the required standard thickness. By means of my present improvement, therefore, the marking-gage of my aforesaid prior patent is made applicable to additional uses. It is also to be noted that when said mark- rro ing-gage is set for setting-off any succession of lines at several different distances, as described in said patent, the other work contemplated by my present invention is effected by temporarily attaching the head S 115 to the head D each time the set of lines is to be laid off. After once using the removable head S, it is quickly removed, by loosening two screws, for permitting the markinggage itself to be further used to complete the 120 required set of lines; the removable gagehead being re-applied when it is to be again used in repeating the same work.

Having thus described my invention, I claim—

1. As an attachment for a marking-gage of the class specified, the removable gage-head consisting of a plate notched on one edge thereof for receiving the cutter-carrier of the gage, and having at the ends thereof means 130 for clamping and unclamping the head to and from the butt-gage head of the markinggage, substantially as described.

2. The combination with a marking-gage

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having the butt-gage head D at one end of the gage-bar and on one side thereof, of the gage-head plate S adapted, as set forth, to be clamped upon the outer side of said head D in two positions, first, on the opposite side of the gage-bar, and second, on the same side of the gage-bar, of said head D whereby the marking-gage is adapted for setting-off lines at distances varying by the thickness of the head S.

3. In a marking-gage of the class specified, having at one end thereof the head D ex-

tending on one side of said bar, of the supplemental gage-head S consisting of a plate having projecting ears for carrying clamping-15 screws, and the clamp-screws carried by said ears and having collars located in position for clamping the ends of the head D, substantially as described.

JUSTUS A. TRAUT.

Witnesses:

FRANCIS H. RICHARDS, FRED. J. DOLE.