

(No Model.)

G. S. FORREST.

CARPENTER'S GAGE.

No. 299,635.

Patented June 3, 1884.

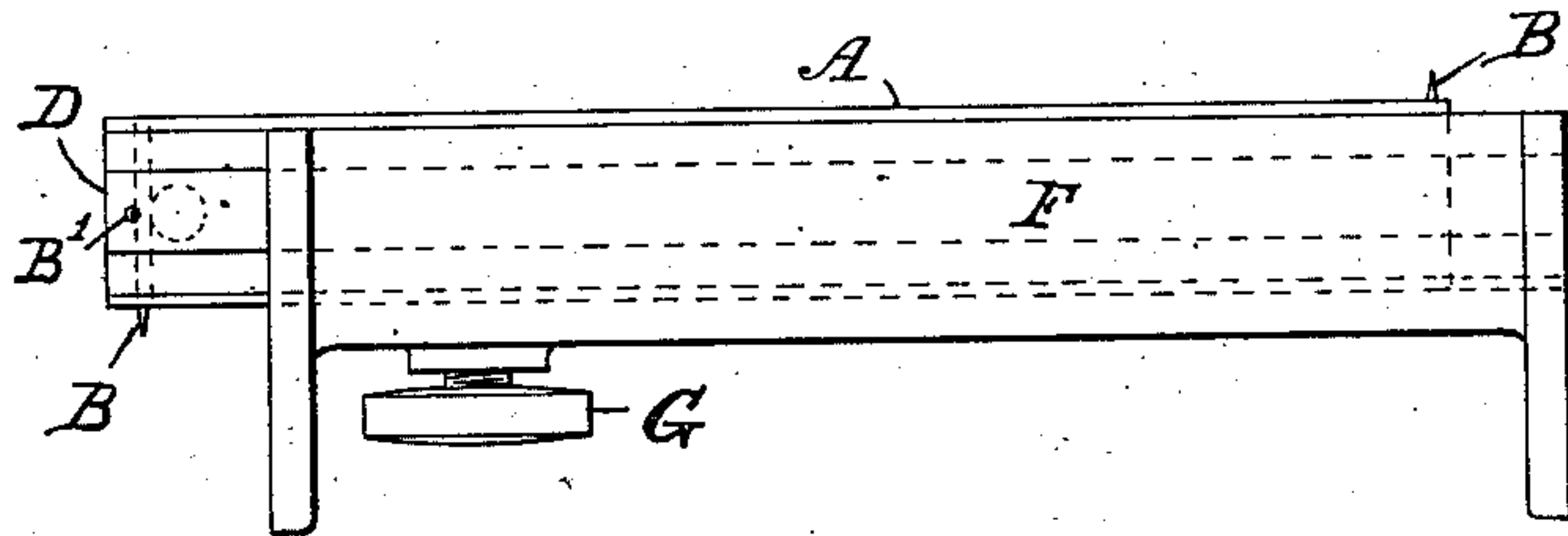


Fig. 1.

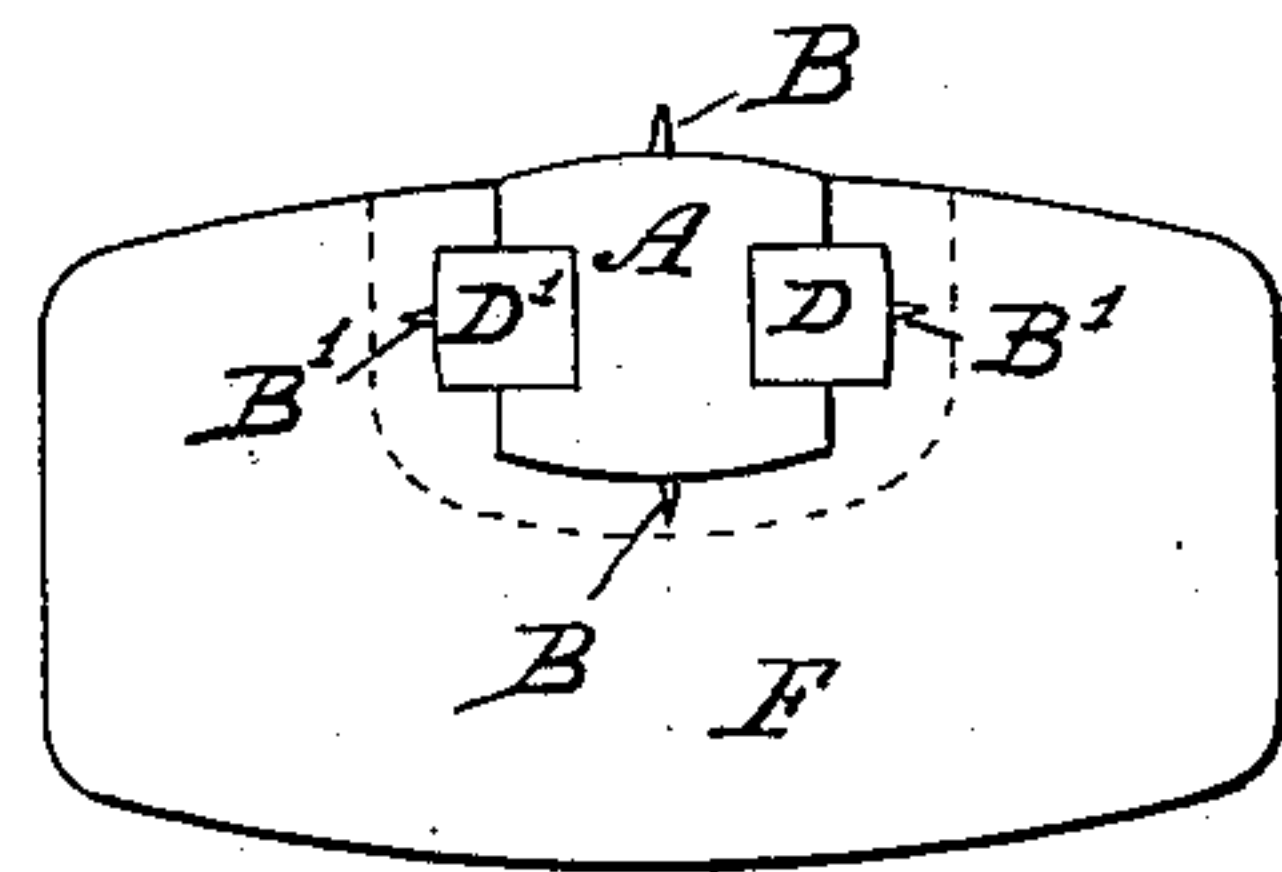


Fig. 2.

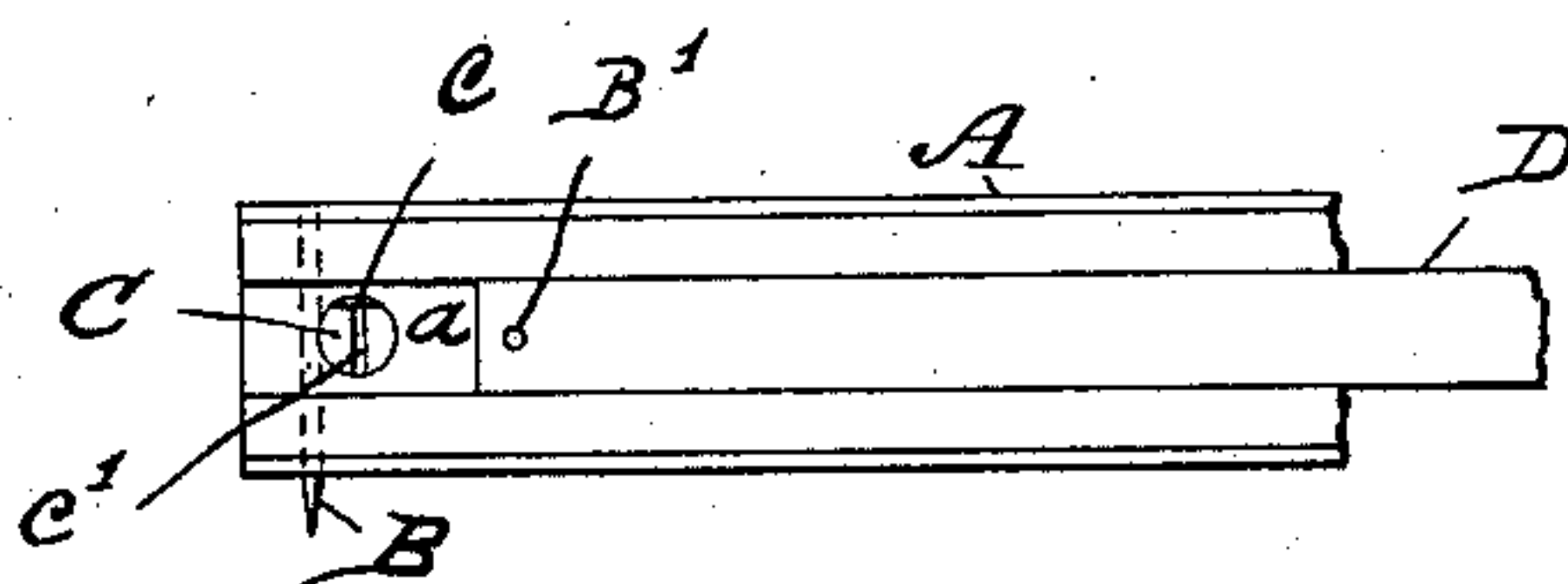


Fig. 3.

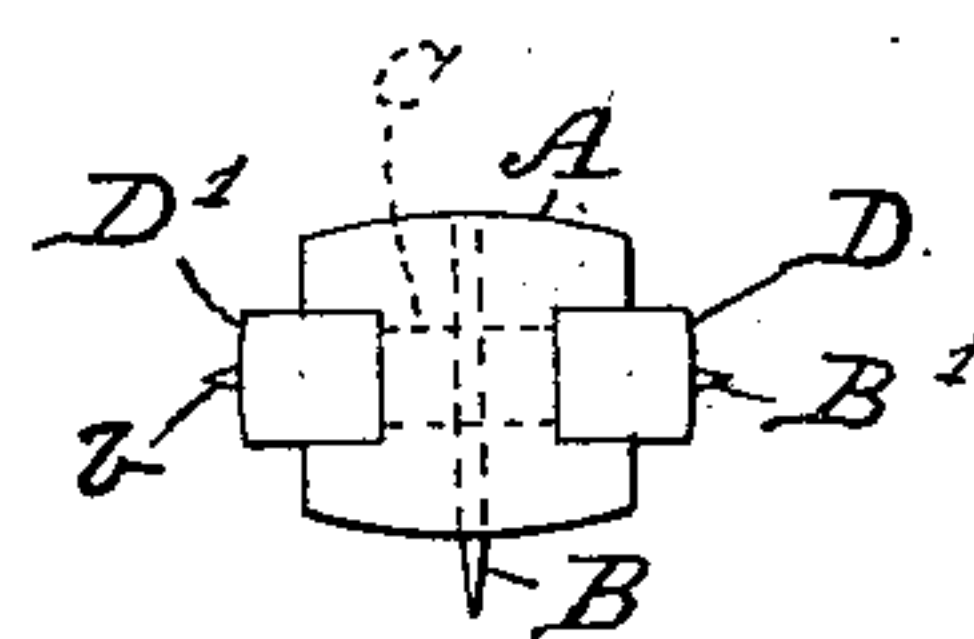


Fig. 4.

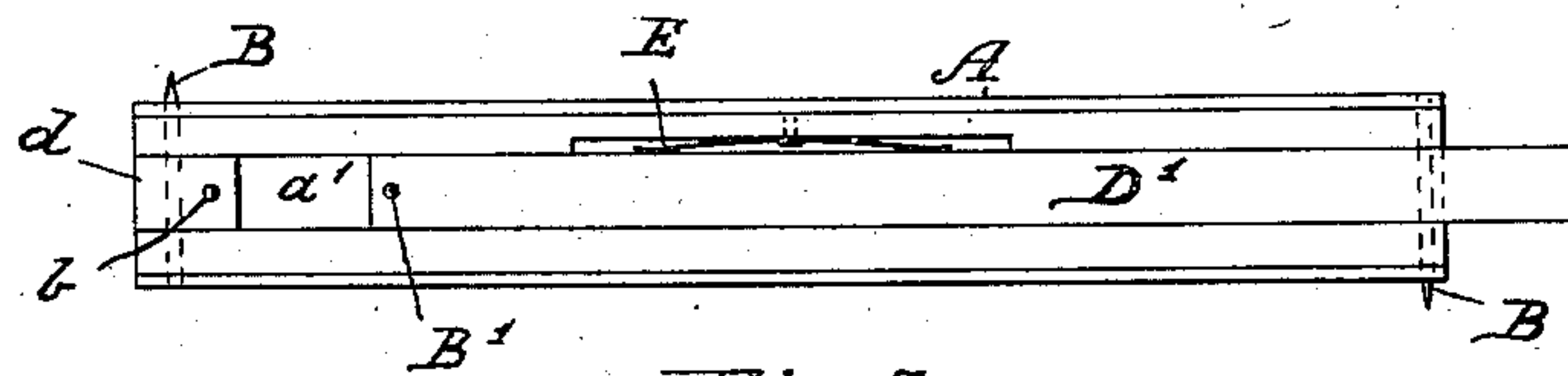


Fig. 5.

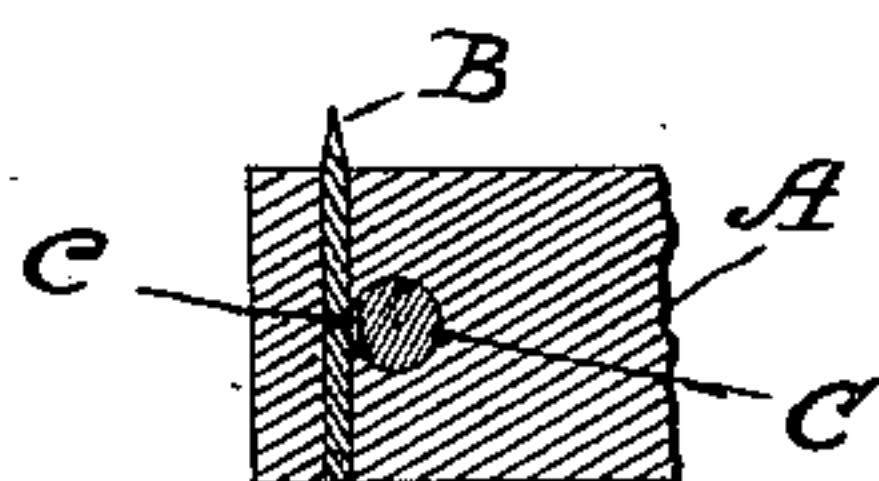


Fig. 6.

Witnesses.

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CARPENTER'S GAGE.

SPECIFICATION forming part of Letters Patent No. 299,635, dated June 3, 1884.

Application filed April 17, 1884. (No model.)

To all whom it may concern:

Be it known that I, GEORGE S. FORREST, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Carpenters' Gages; and I hereby declare the following to be a clear and exact description thereof.

My improvements consist in providing adjustable tongues on the gage-bar, by which said bar is held in the head, instead of forming said bar and the tongues of one piece of metal, as is the customary method, and providing one end of either or both of said tongues with marking-brads for use as a gage, and in the manner of fastening said marking points or brads either in the gage-bar or the tongues.

The invention is clearly shown in the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the figures, of which—

Figure 1 is a side elevation of a gage embodying my improvements complete, Fig. 2 being an end view. Fig. 3 shows a section of the gage-bar in side elevation detached from the head, and having the tongue slid along in its groove far enough to display the fastening for the marking-brads. Fig. 4 is an end view of the same, showing both the adjustable tongues, with their spurs or marking-brads, the marking-brads in the gage-bar, and the device for securing said brads in dotted lines. Fig. 5 shows the opposite side of the gage-bar and its tongues to that shown in Figs. 1 and 3, and also a spring placed in said bar, which bears upon the tongues and its friction prevents any unnecessary sliding. Fig. 6 shows a marking-point in position in a broken end of the gage-bar, having the fastening device so placed as that said marking-point may be slipped out of the gage-bar for the purpose of sharpening.

The gage-bar A is provided with marking-brads B—one projecting from the top and the other from the bottom side at opposite ends thereof—secured in their respective holes by the pin C, which is flattened slightly upon one side, and having in one end a slot similar to those formed in screw-heads, by which it may be turned with a screw-driver. The hole into

which this pin is placed is made crosswise of the gage-bar A, from one to the other of the grooves in said bar, in which the adjustable tongues D D' are placed, and at right angles with and one side of the holes for the marking-points B B, as seen in Figs. 1 and 3. These holes are bored so close to each other as to connect one with the other, and in order to enter the pin C in its hole, after the marking points or brads B B have been placed in position, it becomes necessary to flatten said pin slightly upon one side, as shown in Figs. 3 and 6, and by slipping it into its hole in the gage-bar flat side toward the marking-point, as seen in section, Fig. 6, it may then be turned by means of a screw-driver sufficiently to bring some part of its round side to bear against said marking-point, as shown in Fig. 3, and thus hold the same securely in any desired position.

The gage-bar A has grooves *a a'* cut in its sides, into which the sliding adjustable tongues D D' are fitted.

Midway from either end of the gage-bar A, and depressed in one side of either of the grooves *a a'*, are suitable springs, E, which bear against the tongues D D', as seen in Fig. 5, and by frictional contact hold said tongues in any desired position in said grooves.

The double-headed slide F fits loosely three sides of the gage-bar A, and is provided with grooves similar to the grooves *a a'* in the bar A, to which the tongues D D' are also fitted, and upon which said slide F may be adjusted and held at any desired point by the thumb-screw G.

A gage exactly identical with the above-described gage, with the exception of the fastening-pin C and adjustable tongues D D', was made by me the subject of a previous patent. It is not therefore my intention to enter into the details of its various uses in the present case. The object in making the tongues D D' adjustable is that they may also serve as separate gages, while actually taking the place of rigid tongues, inasmuch as they act as ways upon which the sliding head F is fitted. The tongue D is fitted to the groove *a* in the bar A, and is provided with a marking-point, B', as shown in the drawings, this tongue being made the full length of the bar A, while the tongue D' is fitted to the groove *a'* in said bar

A, and is made a trifle shorter than said bar, and the difference in its length is made up by the piece *d*, which is fastened rigidly in the end of the groove *a'* of the bar A, as shown in Fig. 5, and provided with a marking point or brad, *b*, which, in connection with the adjustable tongue D', forms a convenient mortise-gage. In the slide F, the groove to which the tongue D' is fitted will require to be slotted for a distance of one-quarter or three-eighths of an inch from its end, in order to clear the marking-points B' and *b* when it is desired to move the bar A as far within the slide F as it is intended to go.

15 A gage constructed in this manner will accomplish the purposes of any and all gages of its character (not exceeding its length) now in use.

20 The spring E need not necessarily be fastened to the movable head F, as by fastening it to one end of the adjustable tongues D D' equally as good results will follow.

I am aware that mortise-gages, as also extra slide-bars carrying marking-brads, have been 25 previously used and patented as improvements upon various styles of carpenters' gages; but I am not aware that either have ever been made an essential feature in the general construction of a gage, or have been utilized for 30 the purpose of holding the gage-bar and the sliding head together. Therefore

What I claim, and desire to secure by Letters Patent of the United States, is—

35 1. In a carpenter's gage consisting of a gage-bar having suitable marking-points, and a movable head provided with a thumb-screw for setting the same, the adjustable tongues D D', having marking-brads B' B', for use as a gage, fitted to grooves in said gage-bar and 40 movable head, forming ways upon which said head may move, substantially in the manner and for the purpose set forth.

2. In a carpenter's gage consisting of a gage-bar having suitable marking-points, and a movable head provided with a thumb-screw 45 for setting the same, the adjustable tongues D D', having marking-brads B B', for use as a gage, fitted to grooves in said gage-bar and movable head, forming ways upon which said head may move, and suitable springs, E, secured within the grooves in said head and bearing against said tongues D D', substantially as and for the purpose set forth. 50

3. In a carpenter's gage consisting of a gage-bar having suitable marking-points, and a movable head provided with a thumb-screw 55 for setting the same, the adjustable tongues D D', having marking-brads B B', for use as a gage, fitted to grooves in said gage-bar and movable head, forming ways upon which said head may move, and suitable springs, E, fastened upon the tongues D D', and bearing against one side of the grooves in the movable head, substantially as described, and for the purpose specified. 60 65

4. In a carpenter's gage, the following combinations: the adjustable tongues D D' and tongue *d*, having marking-brads B' *b*, with the gage-bar A, having grooves *a a'*; the adjustable tongues D D' and tongue *d*, having marking-brads B' *b*, with the movable head F, having suitable grooves for their reception; the spring E, with the tongues D D', gage-bar A, and movable head F; and the fastening-pin C, having flattened side *c* and slot *c'*, with the marking-brads, all constructed and operating 70 75 substantially in the manner and for the purpose specified.

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Witnesses:

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