

UNITED STATES PATENT OFFICE.

GEORGE W. VAUGHAN, OF COVINGTON, KENTUCKY.

IMPROVEMENT IN CARPENTERS' GAGES.

Specification forming part of Letters Patent No. **190,934**, dated May 15, 1877; application filed March 3, 1877.

To all whom it may concern:

Be it known that I, GEORGE W. VAUGHAN, of Covington, in the county of Kenton and State of Kentucky, have invented a new and valuable Improvement in Carpenters' Gages; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of octagon and differential gage; and Fig. 2 is a side view, part sectional. Fig. 3 is an end view, and Fig. 4 is a perspective view of a beam, square or rectangular in cross-section, with my gage applied. Fig. 5 is a top view of a tapering block, with my improved gage shown applied thereto in several positions, as it is slid along on one of the faces of the block from the enlarged lower end toward the smaller upper end of the block.

The object of this invention is to provide a gage by which a quadrangular beam or piece of timber may be readily marked for conversion into the octagonal form.

In the accompanying drawings, A designates the main piece or bar of my gage. Said bar is provided on its under side, near its ends, with circular recesses A' A', in which turn metal blocks B, pivoted to said bar A. To the under side of said disks are secured corresponding guides C, which have flat opposite inner faces c c. D D designate two markers or points, extending down through said gage-bar A between said guides.

The arrangement of the foregoing parts is such that when the said bar A is laid across one side of a quadrangular beam, E, (shown in Fig. 4,) the guides C C will set against the two other sides of said beam, which are at

right angles to said first side, and the points or markers D D will score straight lines parallel to the edges of said beam, as shown by dotted lines d d.

In Fig. 5 I have shown the application of my differential gage to a tapering block, in which the gage is applied preferably at or near the larger end of the tapering block, the gage-blocks U abutting against the side faces of the tapering block. The bar A is then slid forward toward the smaller end of the block, resting on the upper face, the gage-blocks U constantly being made to bear against the side faces of the tapering block, causing the bar to assume, as it is moved along the surface of the block, oblique positions relative to the axis of the tapering block, as shown in dotted lines in Fig. 2.

The gage-lines thus marked will not be parallel to the edges of the top face of the block, but will be straight and gradually tapering differentially, whereby the taper is produced with less loss of timber than in the ordinary method, in which the gage-lines are parallel with the edges of the tapering block.

What I claim as new, and desire to secure by Letters Patent, is—

1. A differential gage adapted to be applied to a surface having tapering or parallel sides, constructed substantially as herein shown and described.

2. A gage-bar provided with pivoted blocks and markers, substantially as described, and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

GEORGE WASHINGTON VAUGHAN.

Witnesses:

R. E. POWELL,
A. MORRIS, Jr.