

W. SHUMARD.

Diamond-Gages.

No. 135,249.

Patented Jan. 28, 1873.

Fig. 1.

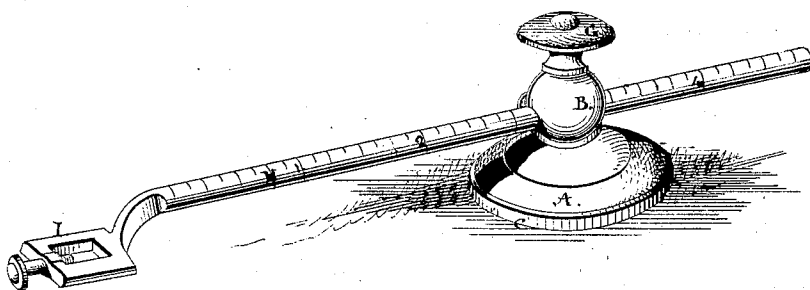
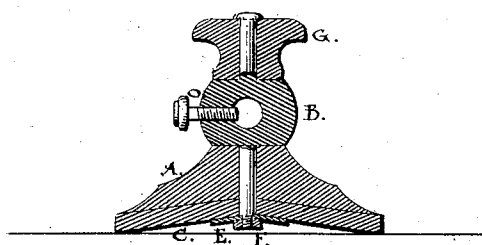


Fig. 2.



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WARREN SHUMARD, OF RICHMOND, INDIANA.

IMPROVEMENT IN DIAMOND-GAGES.

Specification forming part of Letters Patent No. 135,249, dated January 28, 1873.

To all whom it may concern:

Be it known that I, WARREN SHUMARD, of Richmond, county of Wayne and State of Indiana, have invented certain Improvements in Diamond-Gages, of which the following is a specification:

My invention relates to an improved gage for holding the diamond in cutting glass of a circular form.

Figure 1 is a perspective view of the device complete. Fig. 2 is a vertical section, showing the base A with the swivel B, cushion C, and cap G attached.

A is the base of the device. B is the swivel through which the rod H, Fig. 1, passes. The lower end of the swivel passes downward through the base A, cushion C, and plate E, and is held in place by the nut F attached to its lower end. The stem of the swivel also passes upward through the cap G, which is fitted loosely to it. C is an elastic cushion, which may be made of rubber, leather, or any other soft or yielding material. H is a graduated rod, which passes through the swivel B, and is held in the requisite position by the set-screw O. The rod H has a mortise, I, in its outer end to receive the end of the tool which holds the diamond for cutting the glass. The set-screw J holds the diamond-tool in proper position while being revolved around the base A.

To use the device the operation is as follows: The base A, with cushion attached, is placed upon the glass at the center of the circle that is desired to be cut. The rod H is secured in the desired position by means of the set-screw O. One hand is then placed on the cap G, while the other takes hold of the tool containing the diamond and placing it in the mortise I in the outer end of the rod H, the diamond describing a circle around the base according to the length given to the rod H, the swivel B turning in the base A and cap G, which are pressed down upon the glass with sufficient force to cause the base to remain stationary while the cutting is being performed. A very slight pressure upon the cap G is sufficient to retain the base in position on account of the suction of the elastic cushion, which is made concave by the base A being hollowed out.

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

1. The base A having the elastic cushion C attached, substantially as described.

2. The rod H, as described, in combination with the swivel B and cap G and base A, as specified.

WARREN SHUMARD.

Witnesses:

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