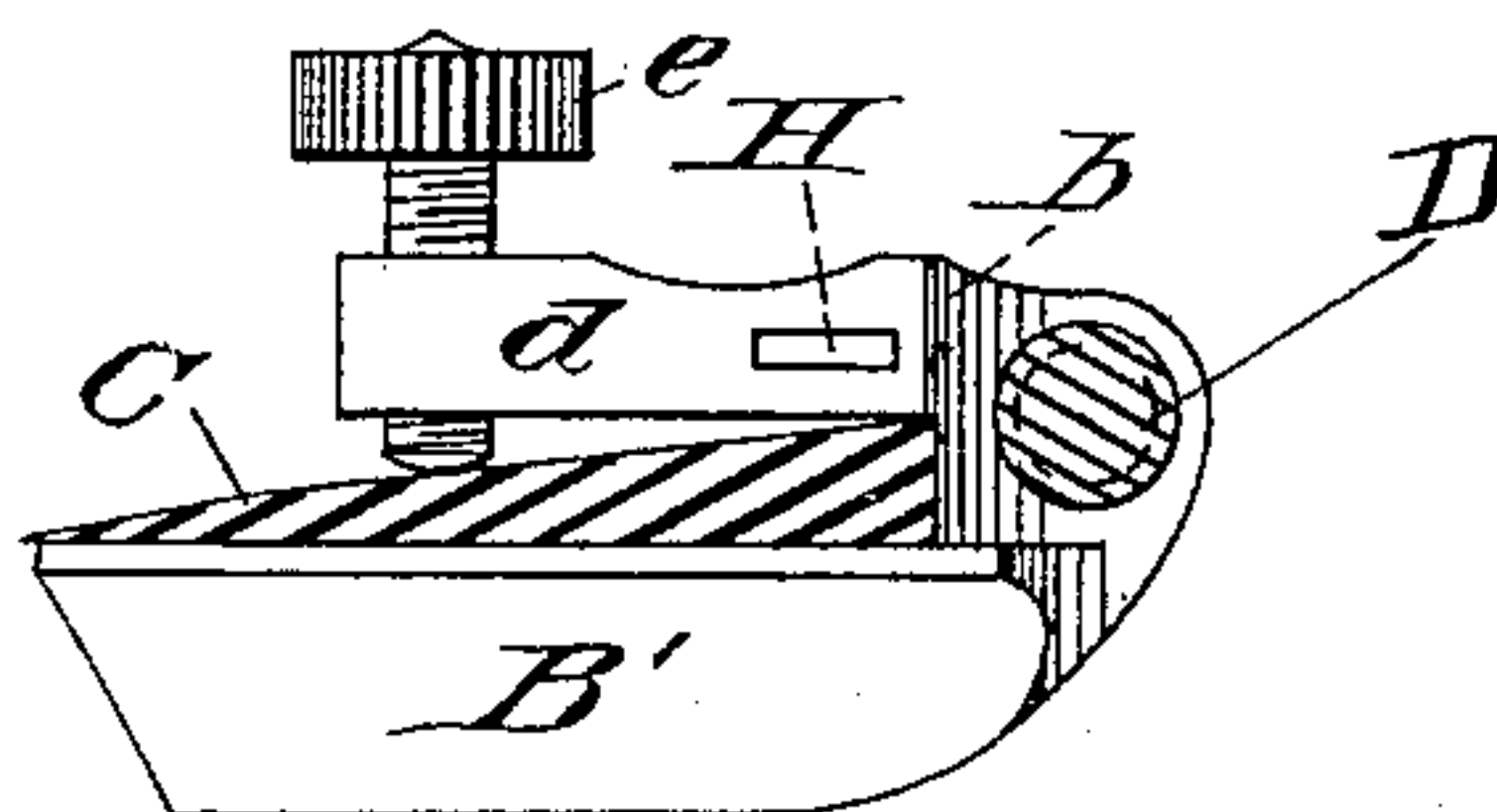
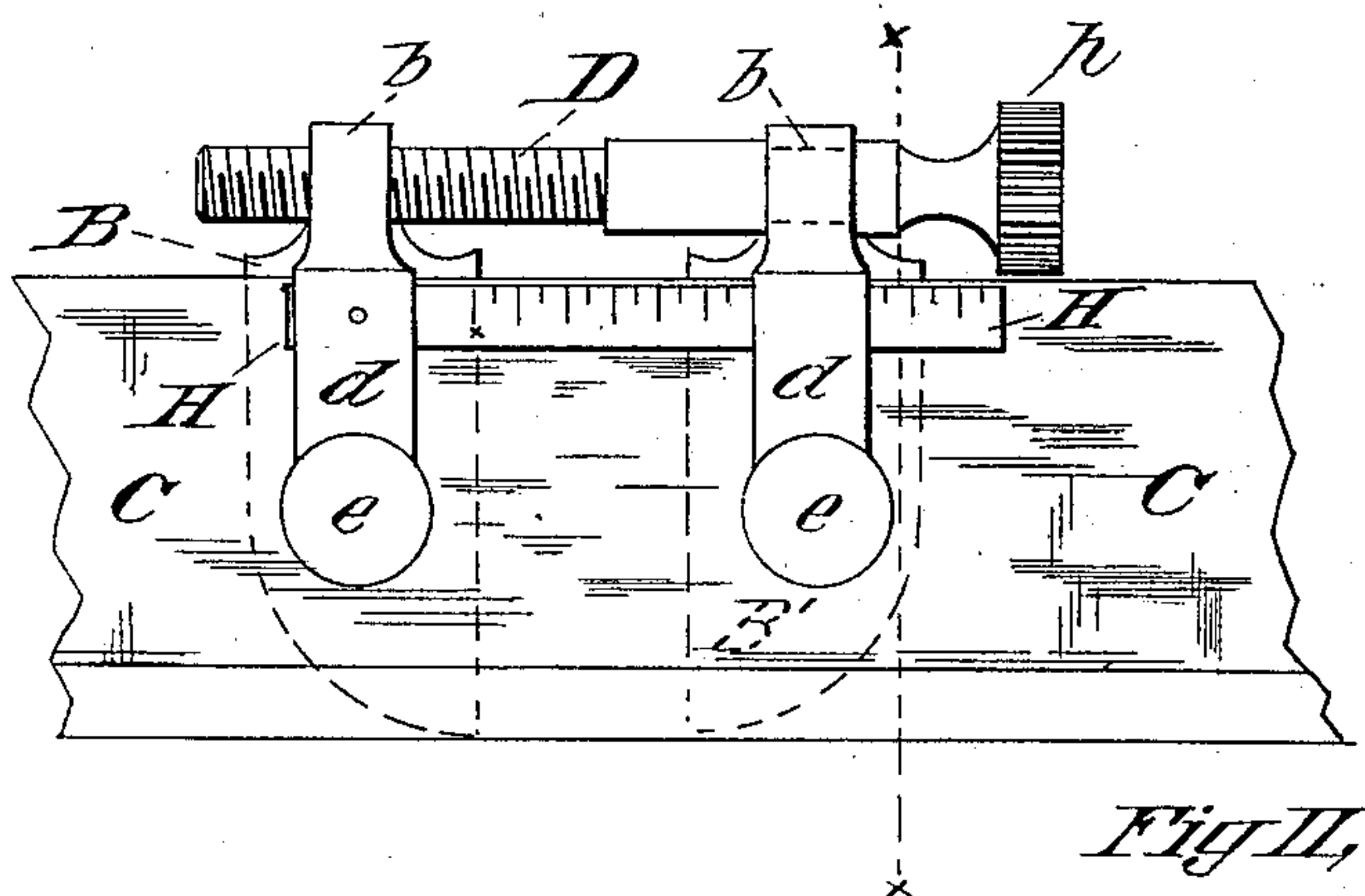
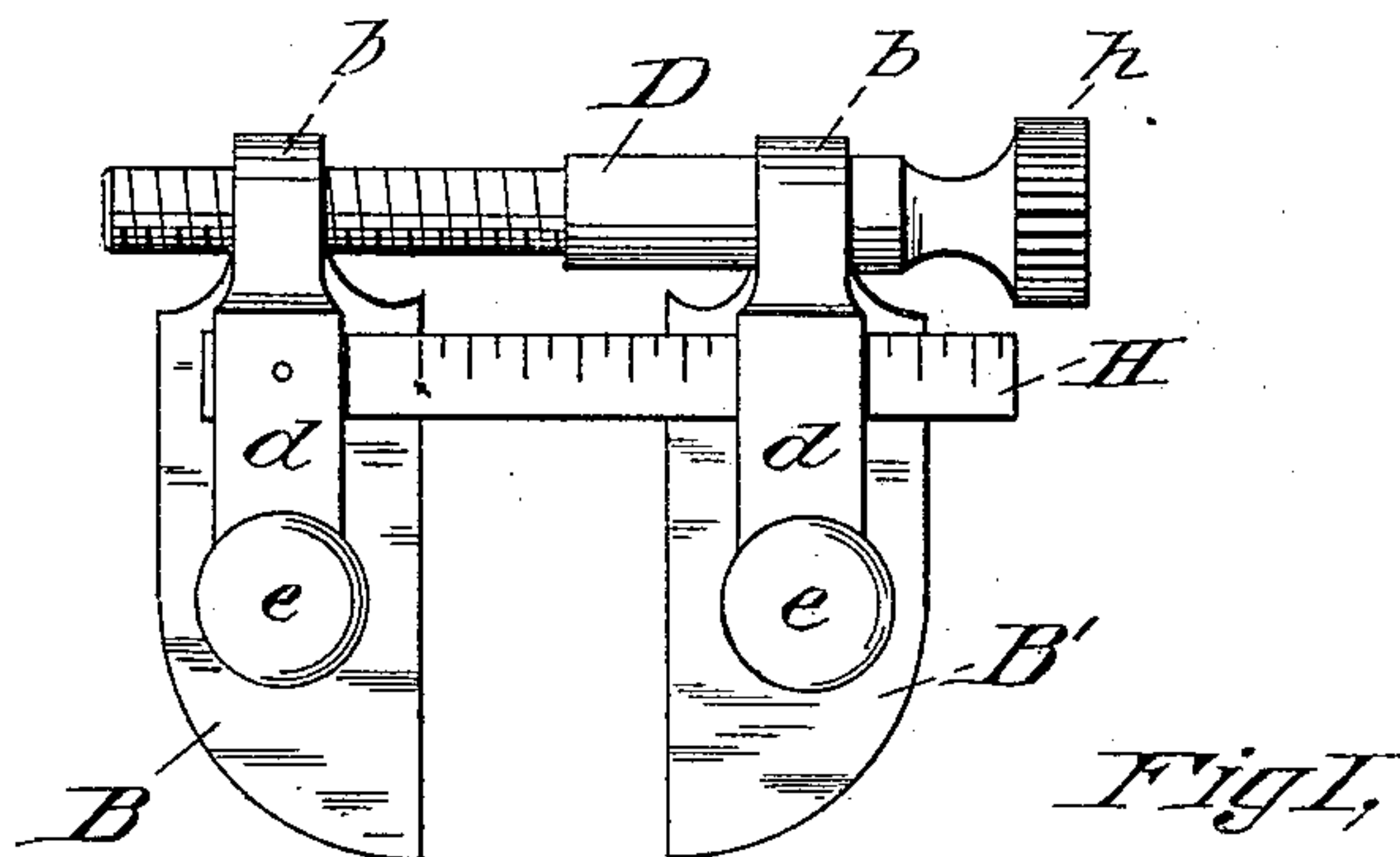


(No Model.)

J. H. HOAGUE.  
GAGE FOR DRAWING KNIVES.

No. 366,724.

Patented July 19, 1887.



Witnesses,  
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# UNITED STATES PATENT OFFICE.

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## GAGE FOR DRAWING-KNIVES.

SPECIFICATION forming part of Letters Patent No. 366,724, dated July 19, 1887.

Application filed March 10, 1887. Serial No. 230,372. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN H. HOAGUE, a citizen of the United States, residing at Chicopee, Hampden county, State of Massachusetts, have invented a new and useful Improved Gage for Drawing-Knives, of which the following is a specification.

My improvements relate to a gage adapted to be combined with the blade of a drawing-knife for the purpose of enabling a uniform chamfer or bevel to be made; and the invention consists in the combination and construction, as hereinafter described, and more particularly pointed out in the claims.

My invention is fully illustrated in the accompanying drawings, in which—

Figure I is a top plan view of my device unattached to the blade. Fig. II is the same view of my device having the blade of a drawing-knife combined therewith, and Fig. III is an end elevation on the dotted line *x x* of Fig. II.

B is a shoe forming the gage proper, having an upper surface conforming to one side of a drawing-knife blade, C, and of a length to extend transversely across said blade when seating it, as shown in Figs. II and III, and beveled away from an edge immediately beneath the blade to form the gage-surface, approximately an angle of forty-five degrees. The shoe B, from an offset, *b*, at its rear end, has an arm, *d*, extending over its blade-seating surface and parallel thereto, to afford a nut to a binding-screw, *e*, having its axis at right angles to said surface of the shoe. The offset *b* affords a bearing at the end of the blade-seating surface also for the back of the blade C. The shoe so constructed seats a blade C, while leaving its edge uninterfered with, and by running the screw *e* to bring its end against the inclined surface of the blade the action of said screw end forces and holds the back of the blade against the stop formed by the offset *b*. By this form of attaching device the blade may be combined with, as well as detached from, a gage shoe without any danger of its cutting-edge being injured during the operation.

A pair of gage-shoes so constructed, and having corresponding gage-surfaces opposite each other, would be each by itself combined

with a blade to have the desired interval between the gage-surfaces.

To facilitate the combination and adjustment of two gage-shoes to a blade, I form a nut in the offset *b* for a feed-screw, D, extended parallel to the back of the blade C, and having one end of the screw received in the nut of shoe B, and have the other end sleeved and collared in the offset *b* of the shoe B', so that when the screw D is rotated by its head *h* and one shoe is clamped by its screw *e* to the blade the other shoe will be drawn gradually to the required point, and the most accurate adjustment is assured.

A right and left screw having a corresponding nut in each of two shoes would be an equivalent of the device shown.

In order to cause the gage-edges of the shoes to remain parallel during the movement of one shoe, I carry a guide-bar, II, from one to the other, as shown, being fast at one end to the arm *d* of shoe B and sliding in the arm *d* of shoe B'. The said bar, being parallel to the screw D, acts as a guide to hold the gage-surfaces in a proper relative position, and providing said bar with a scale, as shown, enables the gage-edges to be set upon the blade to the scale.

Now, having described my invention, what I claim is—

1. The within-described gage for drawing-knives, having a blade wedge-shaped in cross-section, consisting of a shoe having a gage edge and side prolonged therefrom, provided with a continuous blade-seating surface extending nearly or entirely across the blade from its back toward its edge, an arm, *d*, extended above the blade-seating surface and integral therewith, a binding-screw, *e*, arranged in arms *d*, to operate approximately at right angles to the blade-seating surface of the shoe, and an offset, *b*, uniting the arm *d* to the blade-seating surface and forming a space for the admission of the blade C between the arm *d* and blade-seating surface, and a bearing for the back of the blade, all combined, as shown, to cause the action of the screw *e* against one side of the blade to automatically bring the blade to a bearing and hold it clamped against the offset *b*.

2. In gages for drawing-knives, two shoes,



B B', having opposite corresponding gage-sides, provided with arms *d*, bearing-surfaces for the back of the blade C, and clamp-screws *e*, arranged in said arms to operate upon the inclined side of said blade, in combination with a hand feed-screw, D, arranged in the off sets *b* at right angles to the gage-surfaces of the two shoes, and adapted upon rotation to slide either shoe upon the blade, the other being fast thereto.

3. In gages for drawing-knives, the combination, substantially as shown and described, of two shoes, B B', having opposite gage-sur-

faces, provided with superimposed arms *d*, clamp-screws *e*, operating to bear upon the side of the blade, and bearings for the back of the blade, and a hand feed-screw, D, arranged to move one shoe over the blade, the other being fast thereto, and a guiding-bar, H, fast to one shoe and adapted to slide in the other parallel to the feed-screw, as and for the purpose set forth.

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Witnesses:

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