

(No Model.)

A. H. BUCKELEW.
ADJUSTABLE MITER GAGE.

No. 467,852.

Patented Jan. 26, 1892.

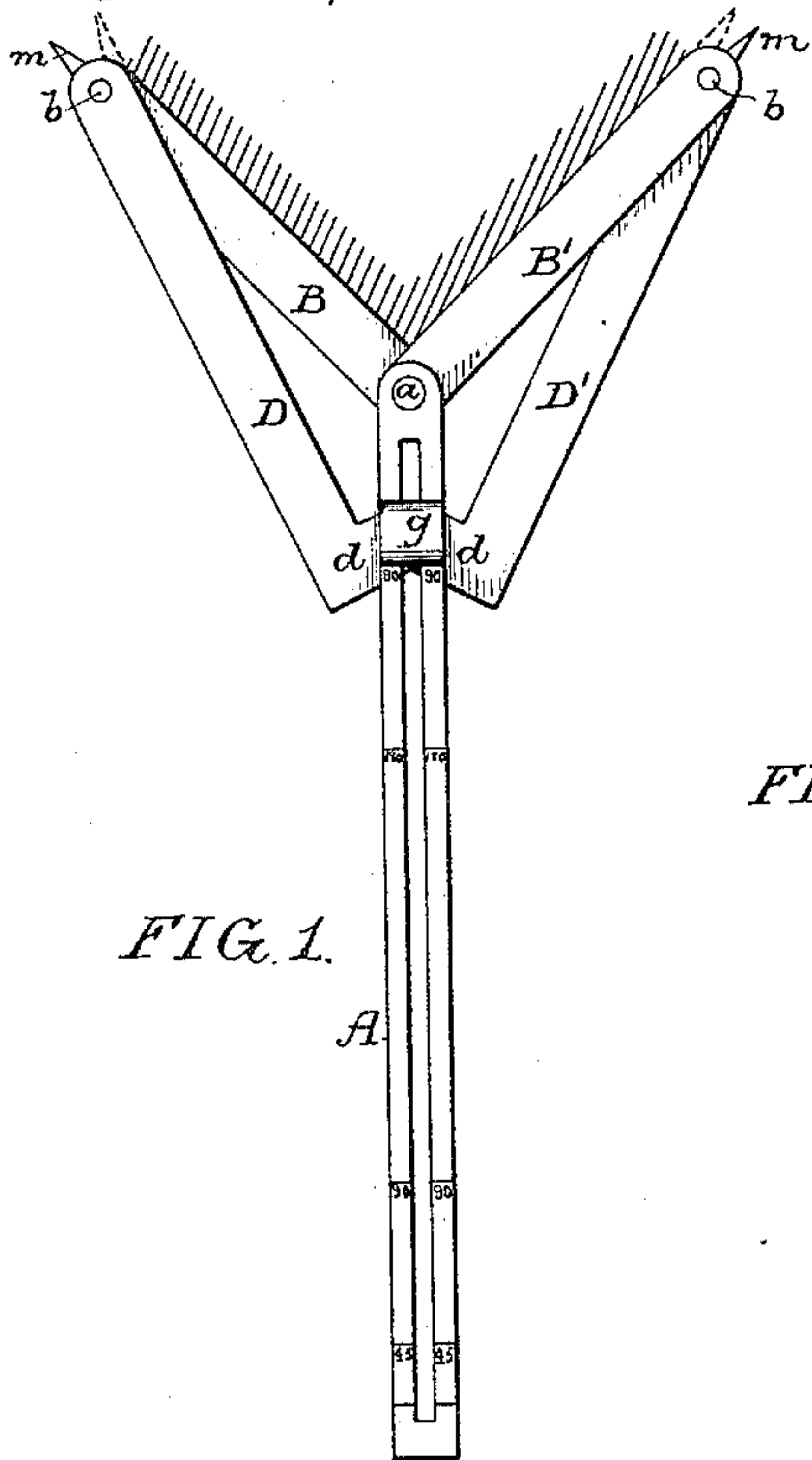


FIG. 1.

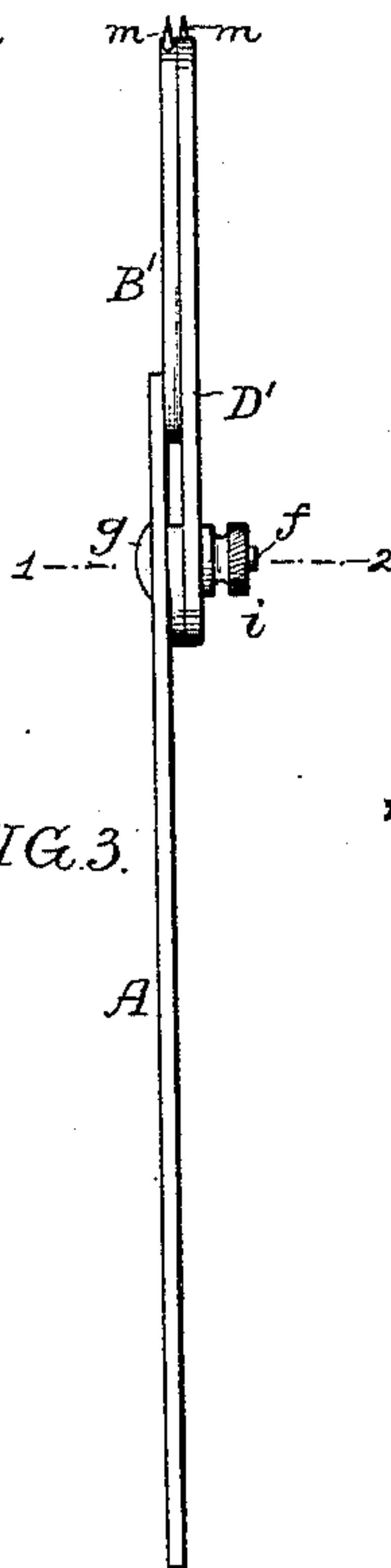


FIG. 3.

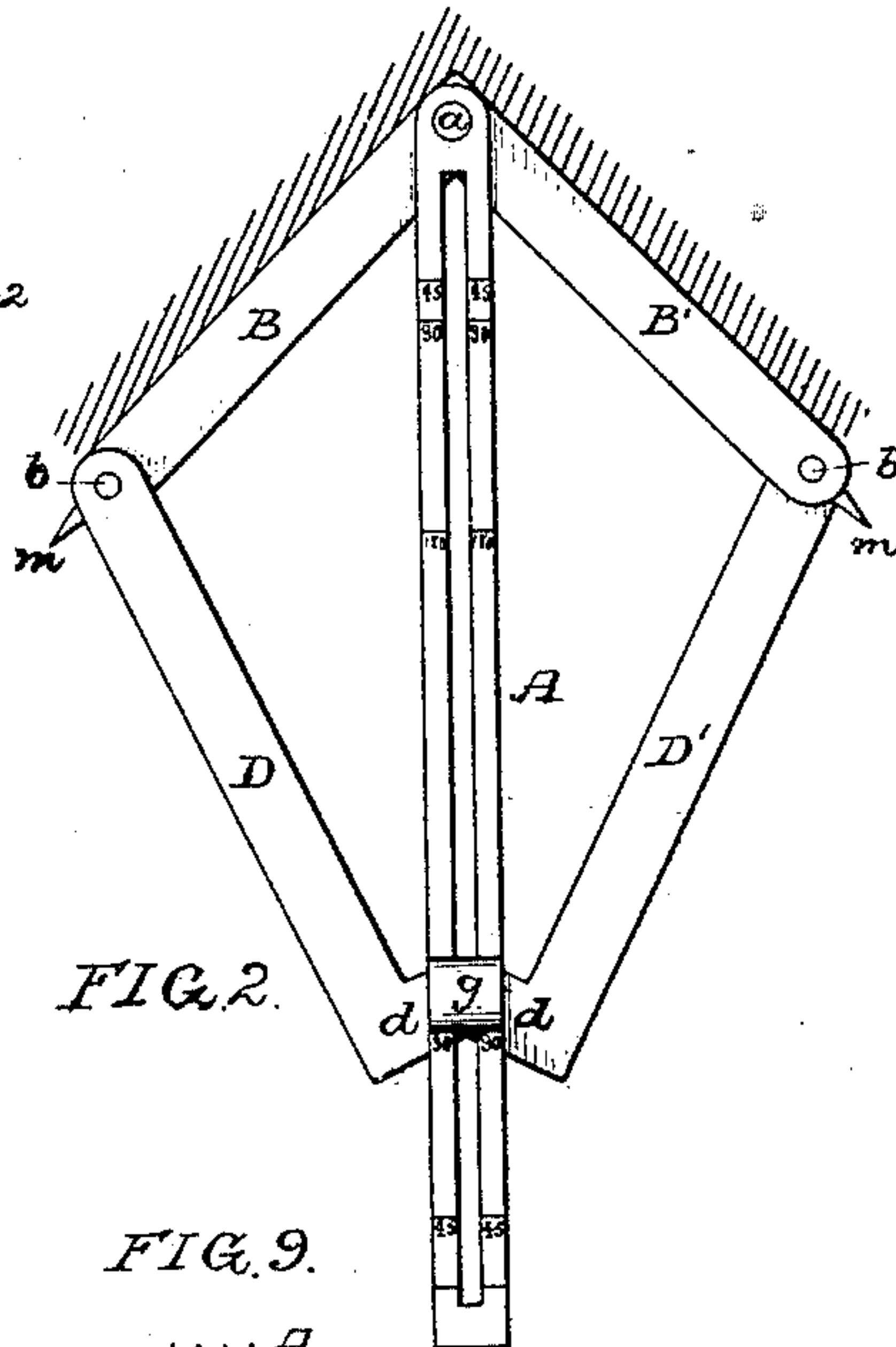


FIG. 2.

FIG. 9.

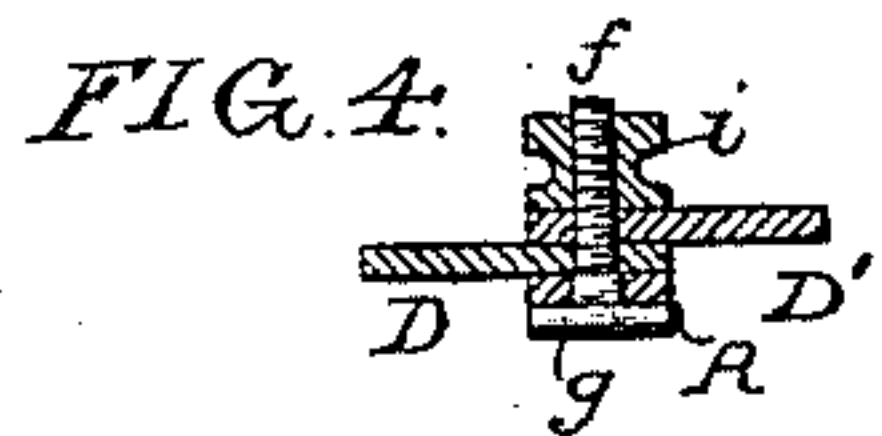


FIG. 4.

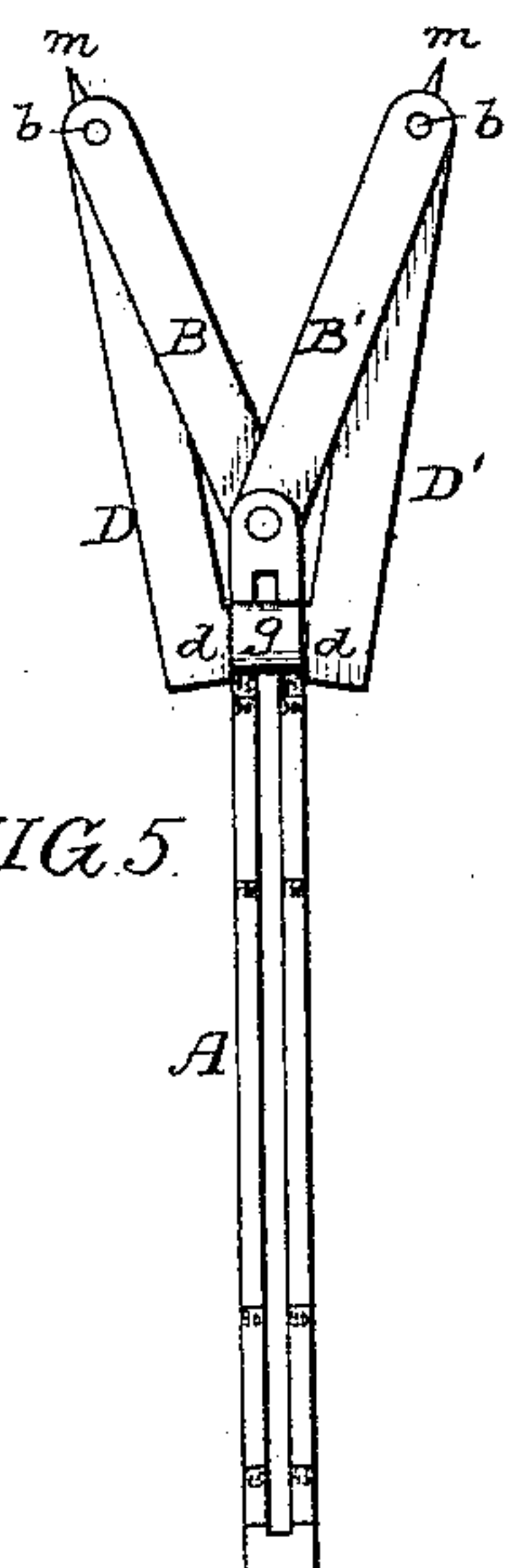
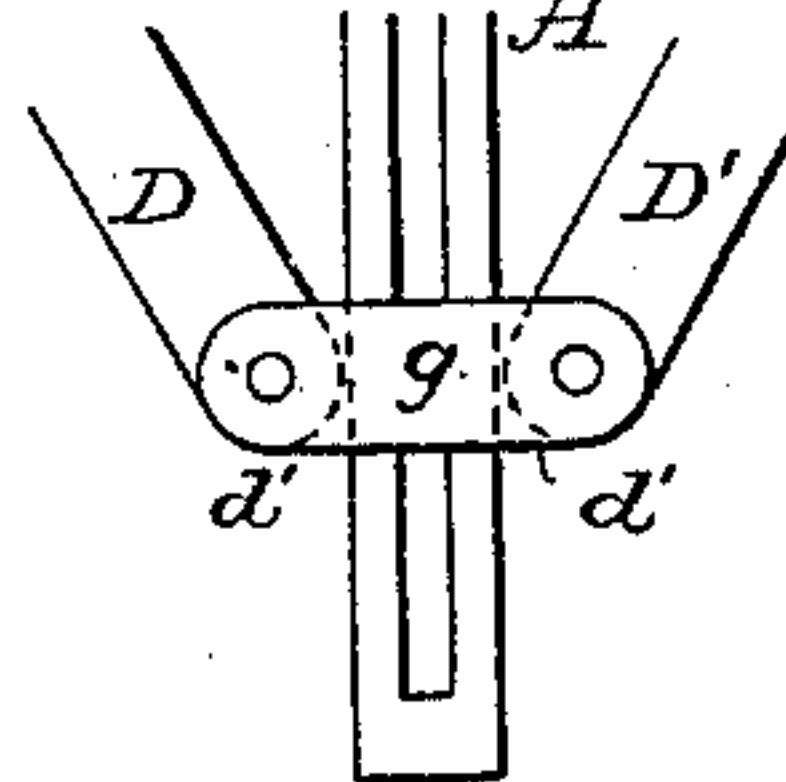


FIG. 5.

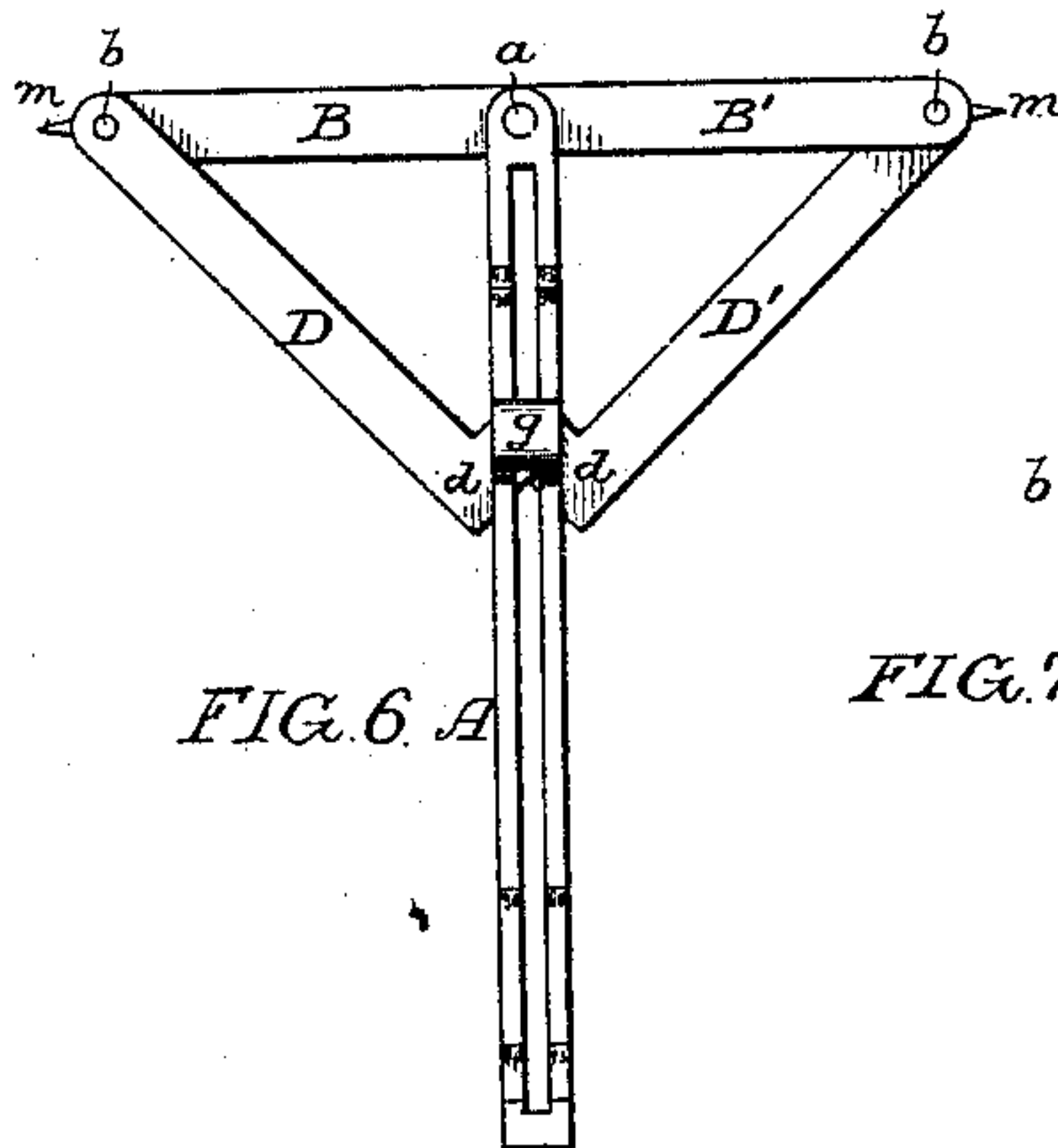


FIG. 6.

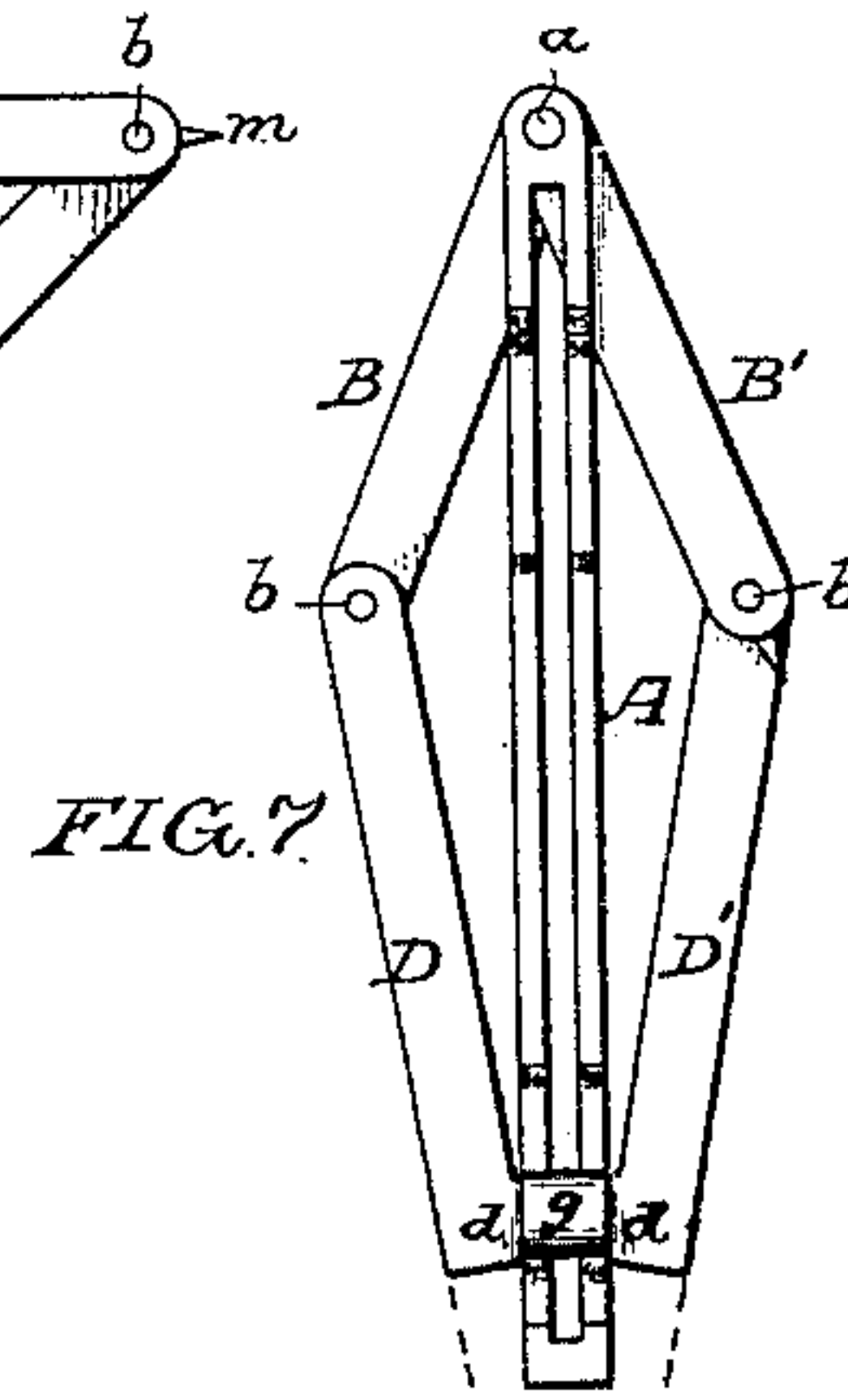
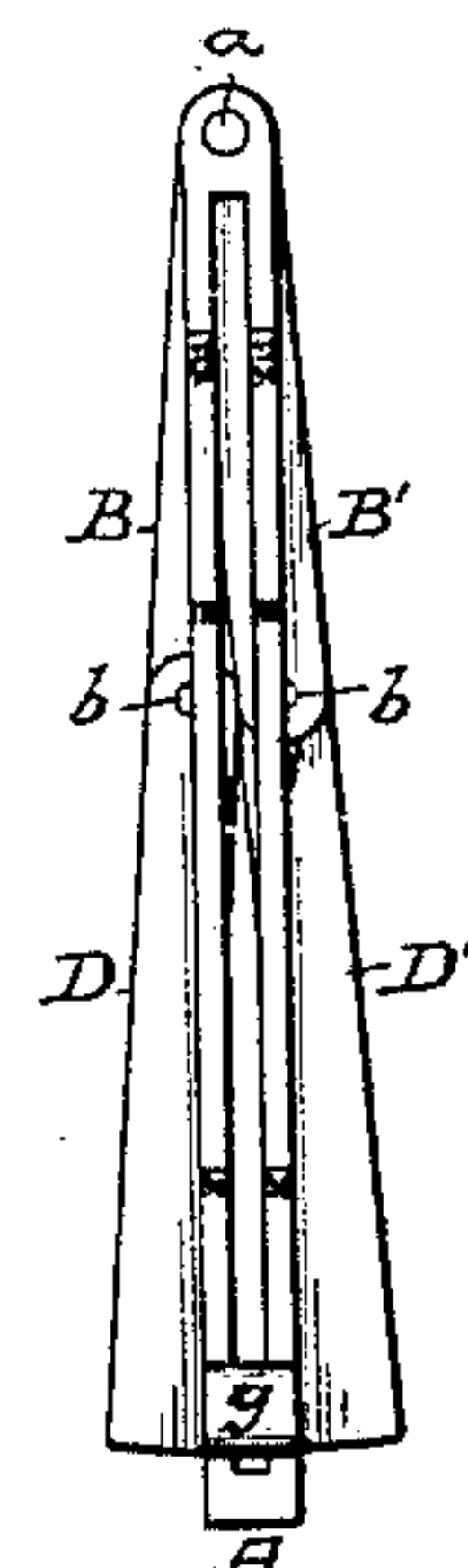


FIG. 7.

FIG. 8.



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UNITED STATES PATENT OFFICE.

ALBERT H. BUCKELEW, OF JENKINTOWN, ASSIGNOR TO THE ONDERDONK HEATING AND VENTILATING COMPANY, OF PHILADELPHIA, PENNSYLVANIA.

ADJUSTABLE MITER-GAGE.

SPECIFICATION forming part of Letters Patent No. 467,852, dated January 26, 1892.

Application filed October 12, 1891. Serial No. 408,471. (No model.)

To all whom it may concern:

Be it known that I, ALBERT H. BUCKELEW, a citizen of the United States, and a resident of Jenkintown, Montgomery county, Pennsylvania, have invented certain Improvements in Adjustable Miter-Gages, of which the following is a specification.

One object of my invention is to so construct an adjustable miter-gage as to render the same compact and easily handled, so as to indicate the angle of both outside and inside miters, a further object being to provide for the use of the tool as a scribing-compass, when desired. These objects I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is a view of my improved adjustable miter-gage, showing the same applied to an outside miter. Fig. 2 is a similar view showing the gage applied to an inside miter. Fig. 3 is an edge view of the gage. Fig. 4 is a transverse section on the line 1 2, Fig. 3. Figs. 5, 6, 7, and 8 are views on a reduced scale, showing different positions of adjustment of the gage; and Fig. 9 is a view illustrating a modification of the invention.

A is a bar slotted throughout almost its entire length, and to one end of this bar are pivoted at *a* two arms B B', to the outer ends of which are pivoted at *b* links D D', one for each bar, the inner ends of these links being bent at right angles, so as to form elbows *d*, which are hung to a bolt *f*, passing through the slot in the bar A, one end of this bolt having a head *g*, which bears against the face of the bar, while the elbow ends of the links D D' are confined against the back of the bar by means of a thumb-nut *i*, applied to the bolt *f*. When this thumb-nut is loosened, the bolt *f* can be moved in the slot of the bar A, so as to cause the links D D' to adjust the arms B B' to any desired angle in respect to each other. Hence the tool may be fitted to either outside or inside miters of any degree of bevel, the arms being secured in any position after adjustment by tightening the thumb-nut, so as to confine the elbow ends of the links to the bar A. The face of said bar A is graduated, as shown in Figs. 1 and 2 and in Figs. 5

to 8, and by causing one edge of the head *g* of the bolt *f* to register with any desired one of said graduations the arms B B' will be caused to assume the angle indicated by said graduation. Hence the tool is available not only for application to existing miters for the purpose of determining the angle of the same, but also for laying off new work at any desired angle or for a straight-edge, as indicated in Fig. 6.

One of the essential features of the invention is the use of elbow-links for the purpose of connecting the pivoted arms B B' with the sliding bolt *f*, for by this means the tool can be made much shorter than if said links were straight, this difference being represented, respectively, by full and dotted lines in Fig. 7. The elbows may, however, be carried by the sliding bolt instead of being formed directly upon the links. For instance, in Fig. 9 I have shown said elbows in the form of arms *d'* projecting from the head *g* of the bolt, the inner ends of the links D D' being pivoted to said elbows. The construction shown in Figs. 1 to 8 is, however, preferred.

The ends of the arms B B' are provided with points *m*, so that the tool can be used as a compass when desired, one of the pins constituting the center point and the other the scribing-point of said compass. If it is desired to construct the compass so that these points may more closely approach each other, they may be located as shown by dotted lines in Fig. 1. It is evident, also, that instead of the slotted bar A and bolt *f* a plain bar with a sleeve sliding thereon may be used without departing from my invention, the links being hung to the sleeve or its elbows and the sleeve being confined by a thumb-screw. Hence in the claims I have used the term "slide" to indicate this element of the tool.

Having thus described my invention, I claim and desire to secure by Letters Patent—

1. An adjustable miter-gage comprising the guide-bar, a pair of arms pivoted to the end of the same, so as to swing both inward toward the bar and outward beyond the end of the same, a pair of links connected to said bars at their outer ends, a slide on the guide-bar, elbows connecting the links to said slide, and

means for confining the slide in its different positions of adjustment, substantially as specified.

2. An adjustable miter-gage consisting of a
5 guide-bar, a pair of arms pivoted to the outer
end of the same, so as to swing both inward
toward the bar and outward beyond the end
of the same, a slide on the guide-bar, a pair
of links hung to the pivoted arms at their
10 outer ends and bent at their inner ends, so as
to form elbows connected to the slide, and
means for securing said slide in its different
positions of adjustment, substantially as
specified.

15 3. A combined adjustable miter-gage and

scribing-compass consisting of a guide-bar, a
pair of arms pivoted to one end of the same
and having projecting points at their outer
ends, links hung to said outer ends of the
arms, and means for confining the inner ends 20
of the links to the guide-bar in different posi-
tions of adjustment, substantially as specified.

In testimony whereof I have signed my name
to this specification in the presence of two sub-
scribing witnesses.

ALBERT H. BUCKELEW.

Witnesses:

WILLIAM D. CONNER,
HARRY SMITH.