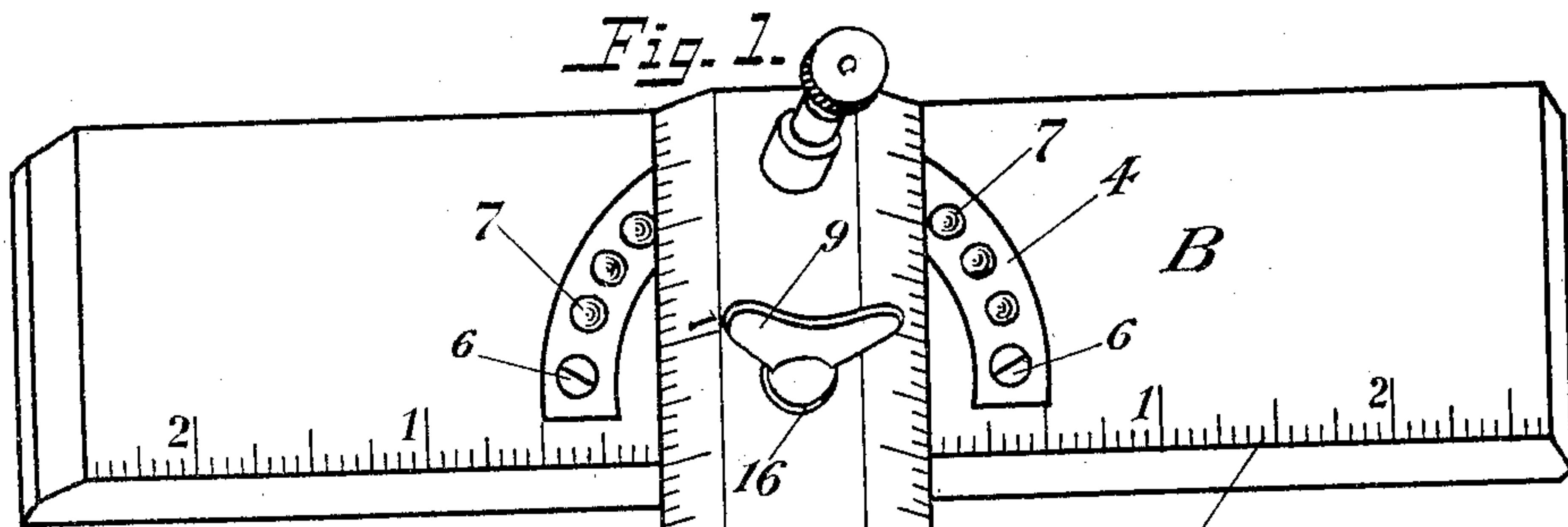


No. 817,991.

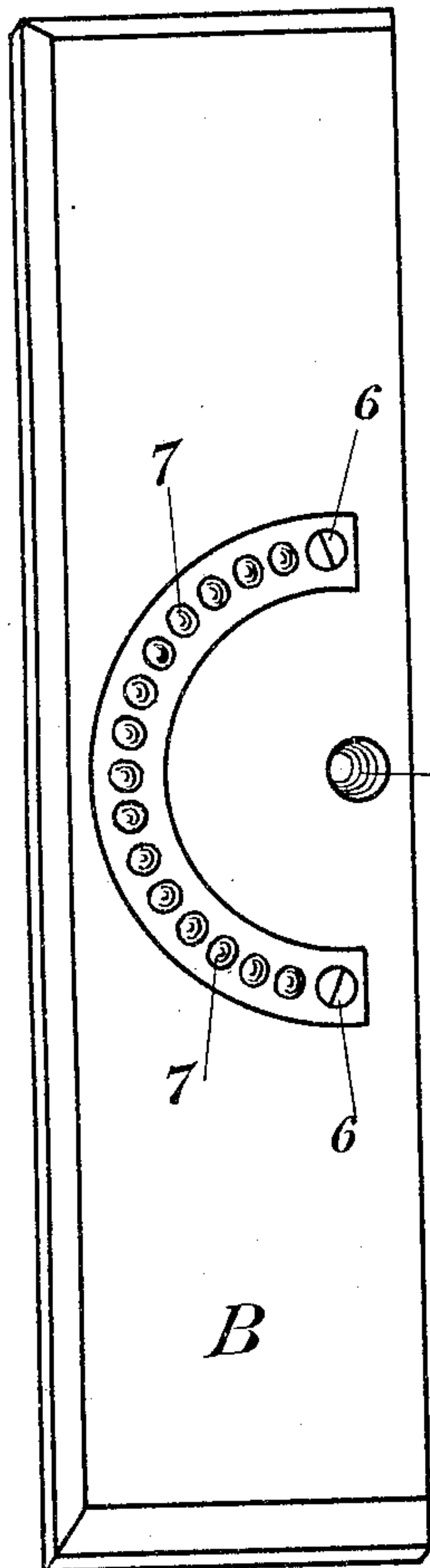
PATENTED APR. 17, 1906.

T. S. ROSS.  
BEVEL SQUARE.

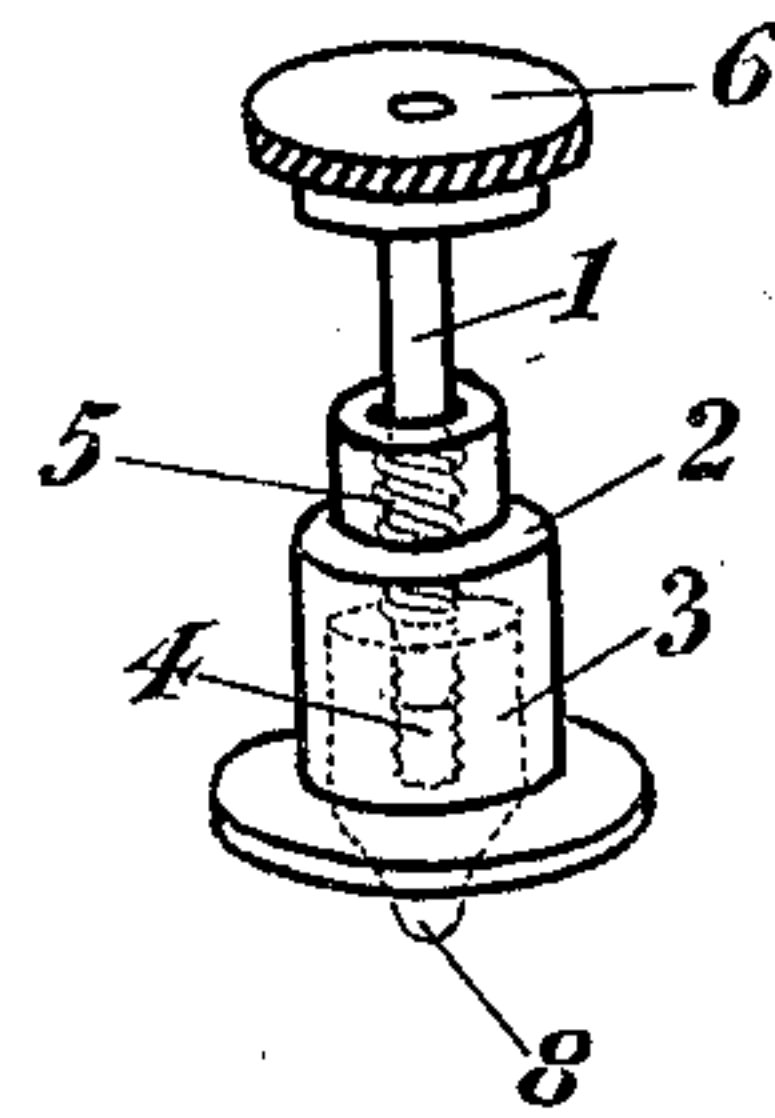
APPLICATION FILED NOV. 14, 1905.



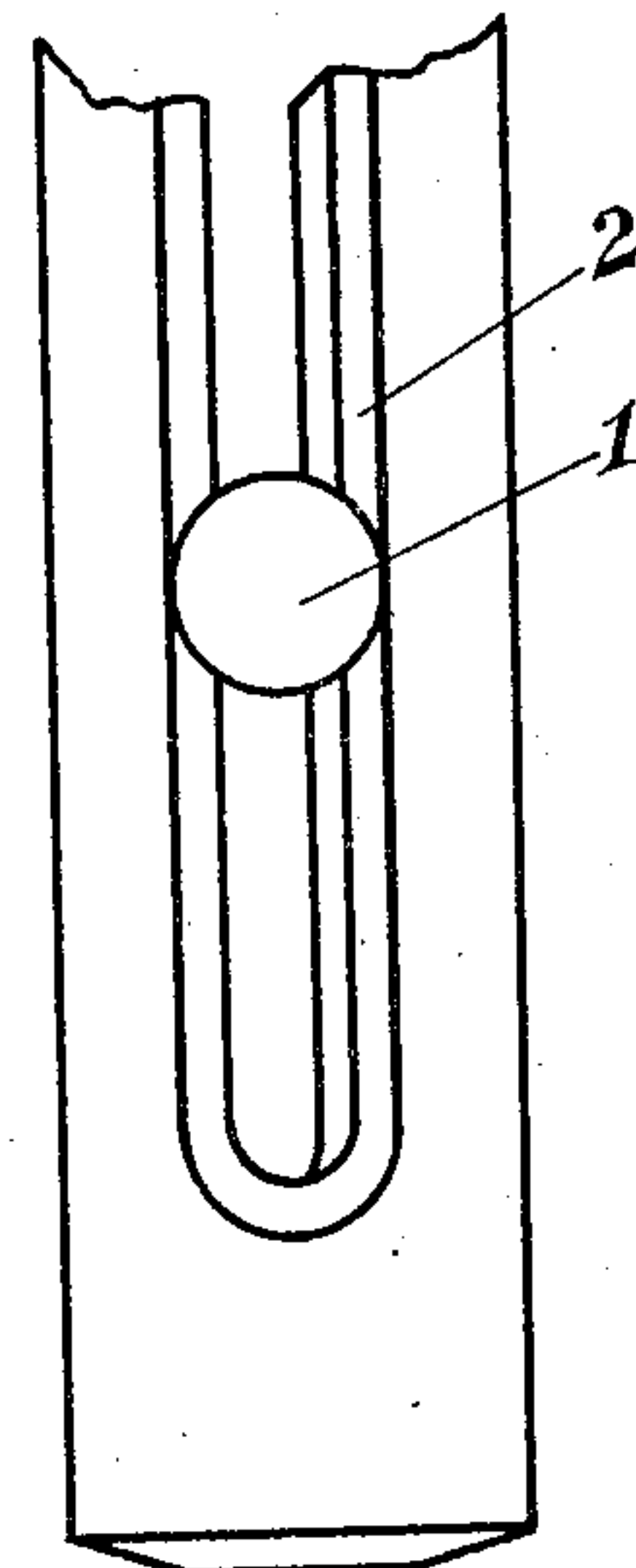
*Fig. 2.*



*Fig. 3.*



*Fig. 4.*



WITNESSES:

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*Thomas S. Ross.*  
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his  
ATTORNEY.



# UNITED STATES PATENT OFFICE.

THOMAS S. ROSS, OF BALTIMORE, MARYLAND, ASSIGNOR OF ONE-THIRD  
TO MICHAEL H. NOON AND ONE-THIRD TO JAMES J. ELLIS.

## BEVEL-SQUARE.

No. 817,991.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed November 14, 1905. Serial No. 287,214.

*To all whom it may concern:*

Be it known that I, THOMAS S. ROSS, a citizen of the United States, residing at Baltimore city, State of Maryland, have invented certain new and useful Improvements in Bevel-Squares, of which the following is a specification.

My invention relates to an improvement in bevel-square rules, the object of which is to supply a rule which is accurate and quick of adjustment and one when once adjusted can be permanently held in such adjustment without danger of slipping while being used in the execution of similar purposes for which it was originally adjusted.

By the use of my invention the same results can be obtained without the use of several separate and distinct drafting instruments required to otherwise accomplish the same results.

By the use of my invention the possibility of making errors in calculation in different degrees of drawing and spacing is greatly overcome. The time required in execution is lessened by having the single instrument which can be used to advantage over the several others that would ordinarily be required.

With the foregoing object in view my invention consists in certain novel features of construction and combination of parts, which will be hereinafter described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of my invention. Fig. 2 is a longitudinal sectional view of the stock, showing the semicircular female member of the locking device. Fig. 3 is a view of the male member of the locking device. Fig. 4 is a face view of the under side of the rule-blade.

In Fig. 1, A is a rule-blade provided with a scale 1 and 2 on each tapered edge. B is the stock, being provided with the scale 3 and also with the locking device 4, which is countersunk in the surface thereof and held firmly thereto by means of the screws 6 6. 7 7 are recesses adapted to engage into locking contact with the point 8 of Fig. 3. 9 is a thumb-screw, by which the rule-blade A is held firmly to the stock B by means of the circular threaded hole 17, which engages the thread (not shown) on the thumb-screw. 16 is a washer between the thumb-screw 9 and the blade A. The rule-blade A is longitudinally

slotted at 10 and provided with the slide 11 and thumb-screw 12 and with the projections 14 and scale 13 13.

In Fig. 3, 6 is a thumb-nut provided with the stem 1 and adapted to enter the hollow casting 2 and fit loosely therein. 3 is a metal plug hollowed out and threaded at 4 to allow the stem 1 to be screwed therein. Between the plug 3 and the upper inner part of the casting and wound around the stem 1 is a spring 5, and by reason of the thumb-nut the tension can be tightened or loosened, as desired.

In Fig. 4, 1 is a washer into which the thumb-screw 12 of Fig. 1 is screwed therein by means of a thread. (Not shown.) 2 represents a hollowed-out groove by means of which the washer 1 is moved backward and forward. The slide 11 is controlled or made permanent by means of the thumb-screw 12.

In assembling my device the rule-blade A is fixed to the stock B by means of the set-screw 9 and the point 8 in Fig. 3 is fitted in and adapted to engage in the recesses 7 7. By this means the rule-blade A can be turned at any angle and by means of the attachment permanently held thereto, so as not to slip or become displaced while in use, yet it may be readily moved to or from one disk to the other at will. The slide on the rule-blade performs two functions: First, it acts as a guard, so that when adjusted in the ruling of a line of a certain length there is no danger of going beyond the point desired. It is also provided with a circular hole 15, through which a drawing instrument may be inserted for the purpose of making circular lines. It will thus be seen that in use the rule can be quickly adjusted to meet the requirements without the use of one or more separate instruments that might be required to produce the same results.

The scale on the rule-blade in conjunction with the scale on the stock saves time in making measurements in the ruling of lines of a desired space apart as well as in the calculation of making angles, semicircumferences, and the like as may be required. Also there is but little danger of accidental displacement after adjustment, yet by its simplicity a little or no effort is required in making or changing to an adjustment desired.

From the foregoing it will be seen that I have provided a simple device for purposes usually requiring more or less additional in-



struments in accomplishing the same results, thereby reducing the cost, saving of time in the use thereof, and inducing its adoption.

Slight changes might be resorted to in the form and arrangement of the several parts described without departing from the spirit and scope of my invention, and hence I do not desire to limit myself to the exact construction as therein set forth; but,

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. A bevel-square rule comprising a stock and blade and a locking device therefor, the stock being provided with a semicircular plate having recesses in the top part thereof, the blade having a scale thereon, in combination with a locking device therefor, consisting of a thumb-nut provided with a stem, a hollow casting, a metal plug, means of attaching the plug to the stem, a spring arranged around the stem and located within the casting between the plug and the upper part of the casting and means of pivotally attaching the blade to the stock so that the plug may become engaged in the recesses of the plate on the stock substantially as described.

2. A bevel-square rule comprising a stock with scale thereon, a semicircular plate provided with recesses attached to the top part thereof, in combination with a blade with beveled edges and scale thereon and means for engaging the recesses, and having a longitudinal slot cut through the center, a slide having an extension with a hole in the extension and secured to the blade by a thumb-screw and washer and means for securing the blade to the stock substantially as described.

3. A bevel-square rule comprising a stock with a scale thereon, a semicircular plate provided with recesses secured to the top part of the stock by suitable means in combination with a blade having scales thereon, said blade having locking means to engage in the recesses, a longitudinal slot cut through the center of the blade, a slide provided with an extension and a hole therein, a washer on the under part, a thumb-screw to engage the washer whereby the slide is secured to the blade, substantially as herein described.

4. A bevel-square rule comprising a stock with scale thereon, in combination with a blade having beveled edges and scale, and having a longitudinal slot in the center, a slide having an extension and provided with a hole in the extension, means of adjustably securing the slide to the blade, the blade being secured to the stock by means of a set-screw substantially as described.

5. A bevel-square rule comprising a stock, scale thereon, a semicircular plate provided with recesses secured to the top part of the stock by suitable means in combination with a blade having beveled edges and scale thereon and provided with a locking means whereby the recesses on the stock are engaged, a longitudinal slot in the center of the blade, a slide having extensions to form a gage a hole in said slide, a thumb-screw and washer attaching the slide to the blade substantially as herein described.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS S. ROSS.

Witnesses:

JOHN F. SCHULZ,  
MARY M. MAGRAW.