

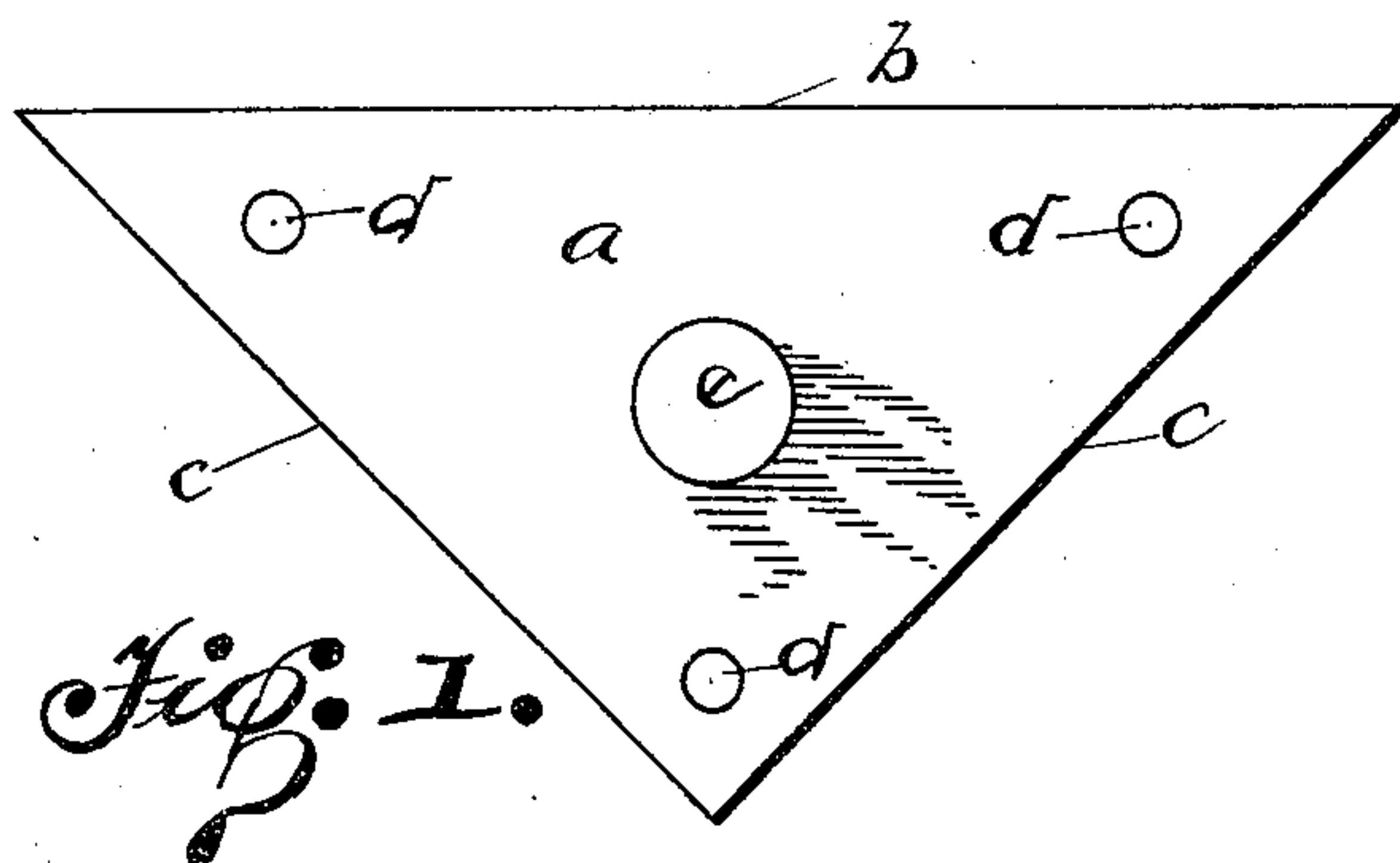
No. 611,129.

Patented Sept. 20, 1898.

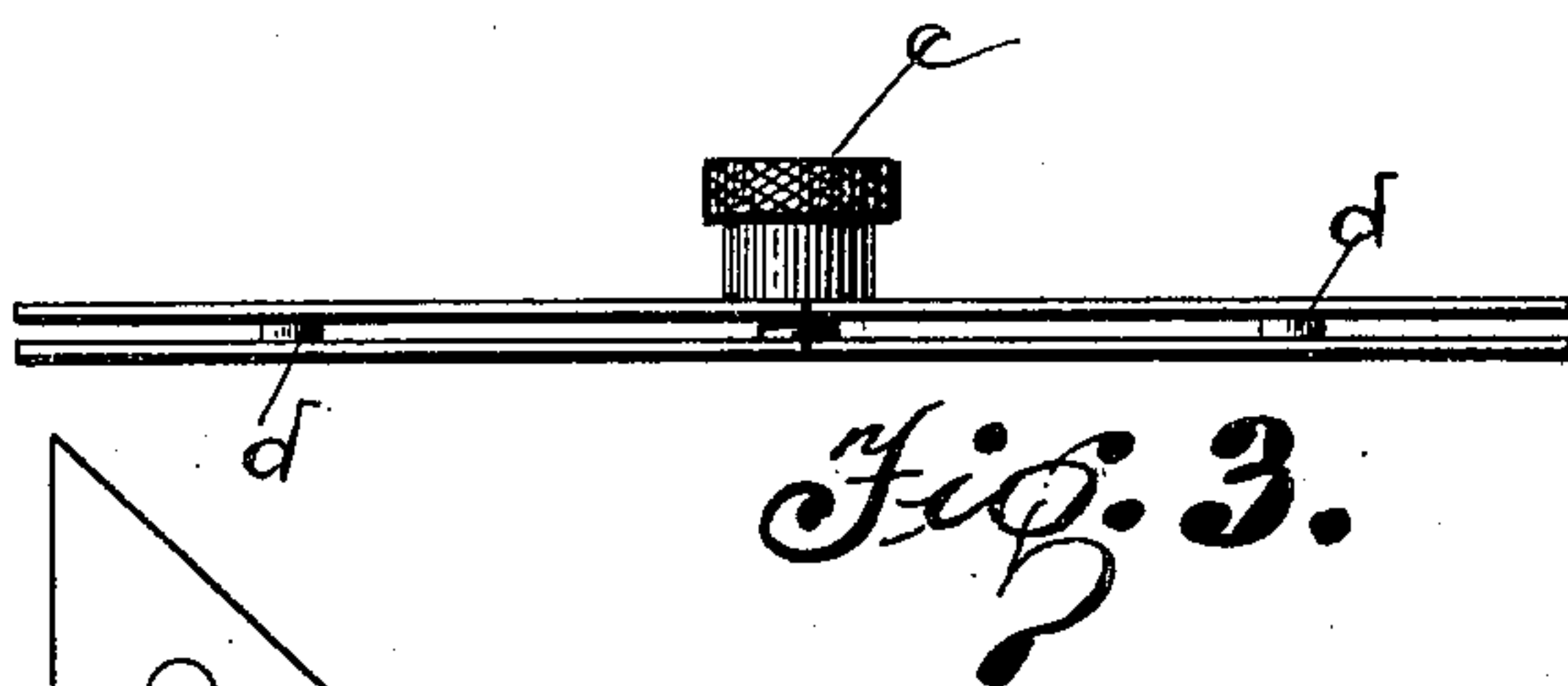
F. LAFFERTY.  
BEVEL TOOL.

(Application filed Aug. 22, 1896.)

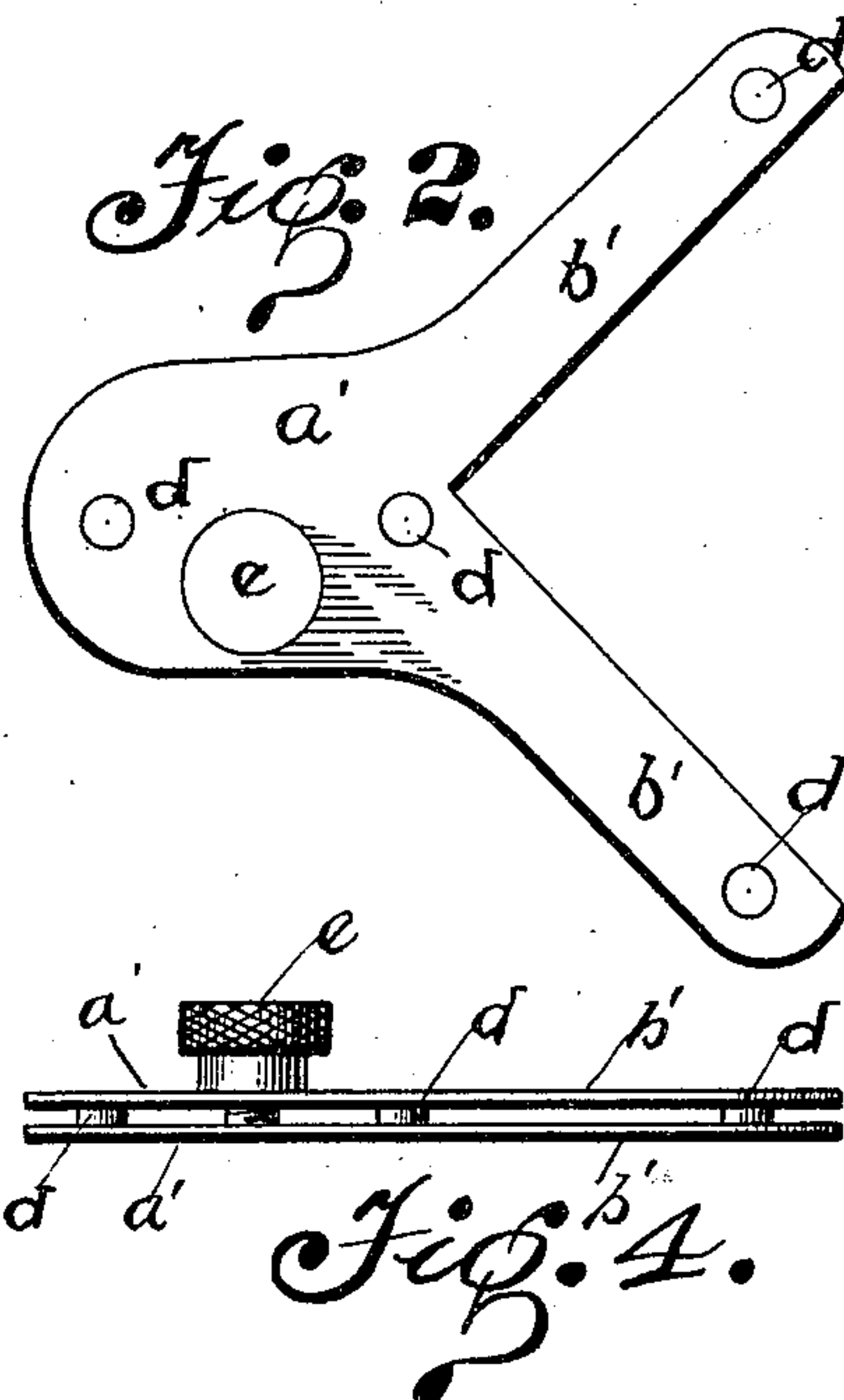
(No Model.)



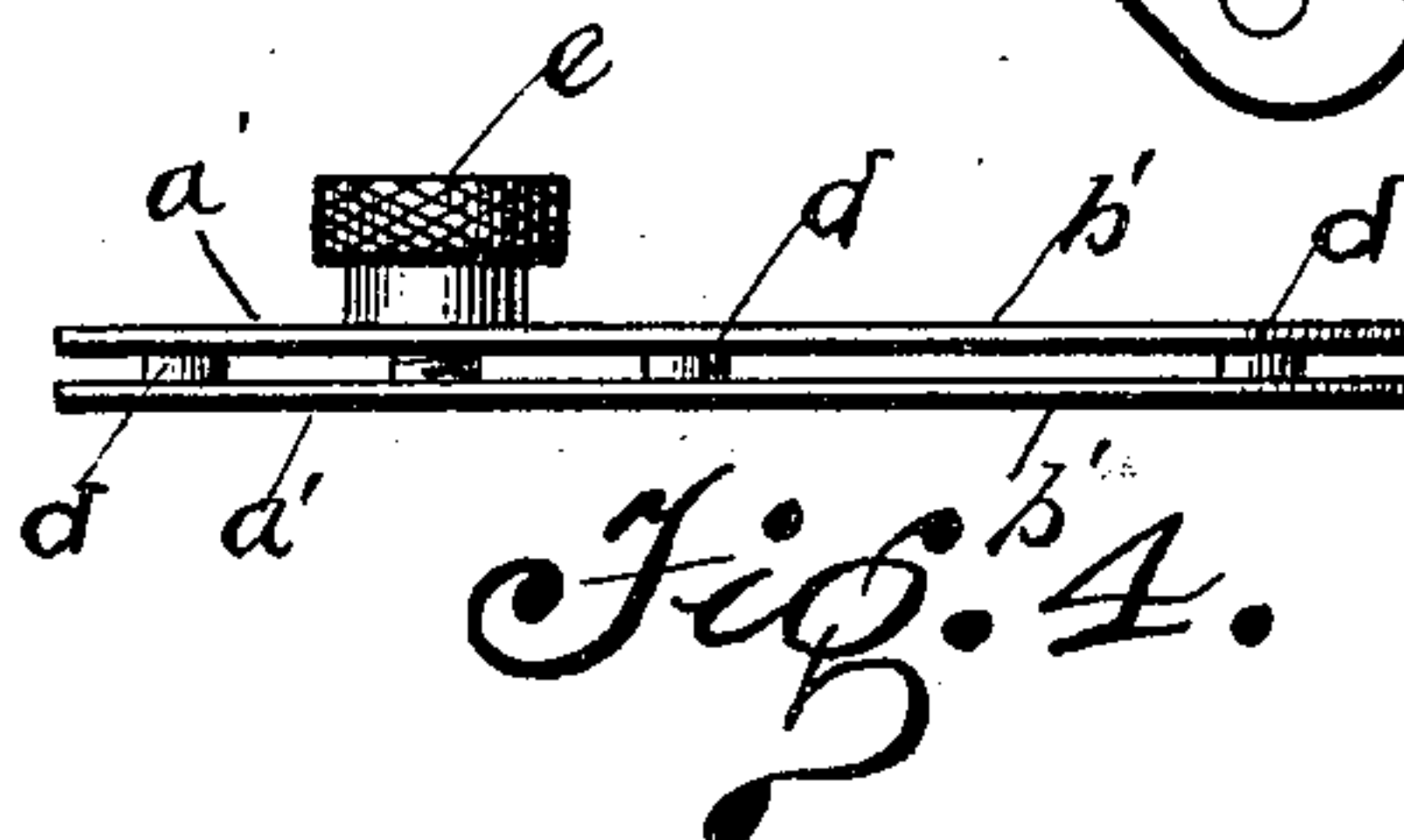
*Fig. 1.*



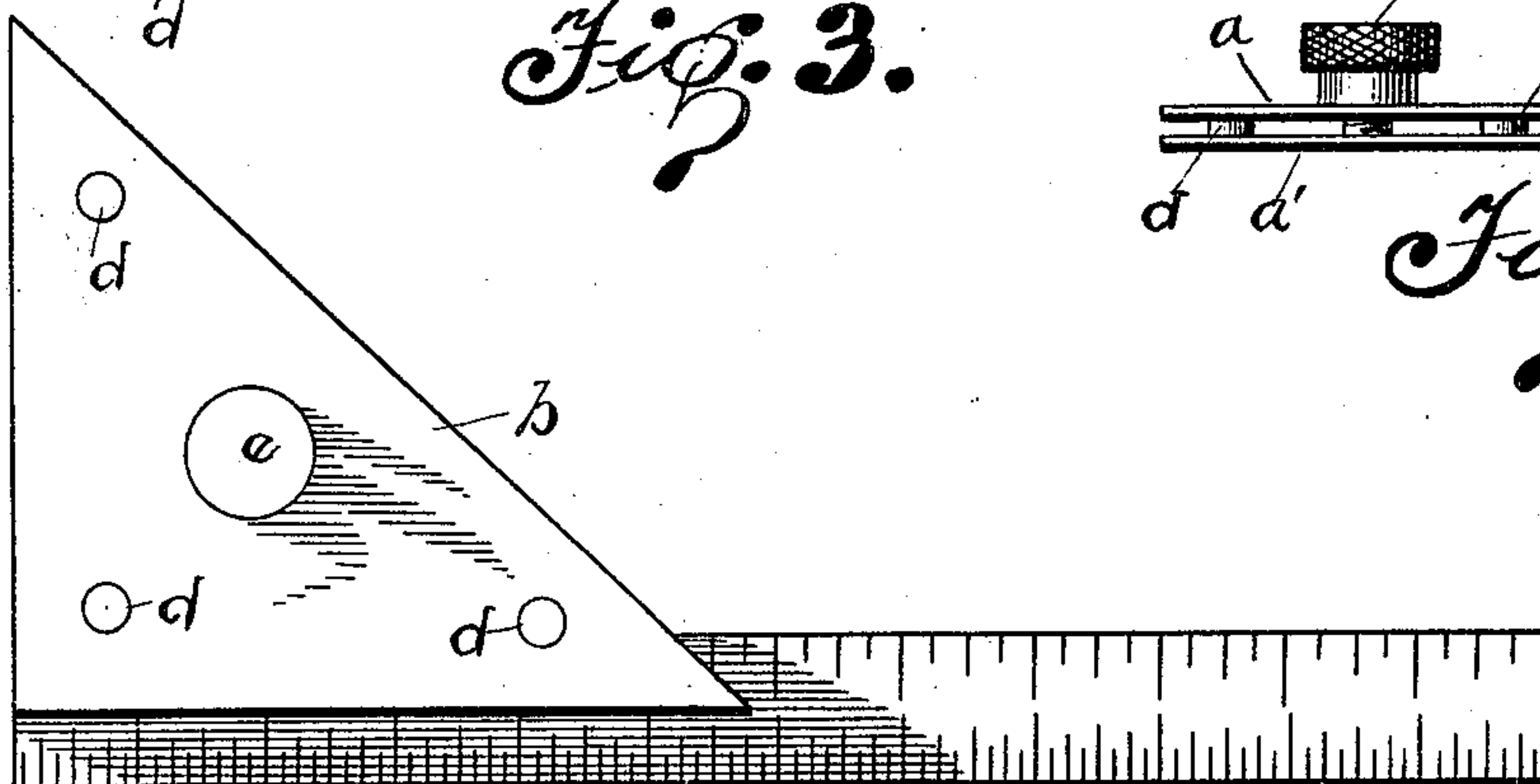
*Fig. 3.*



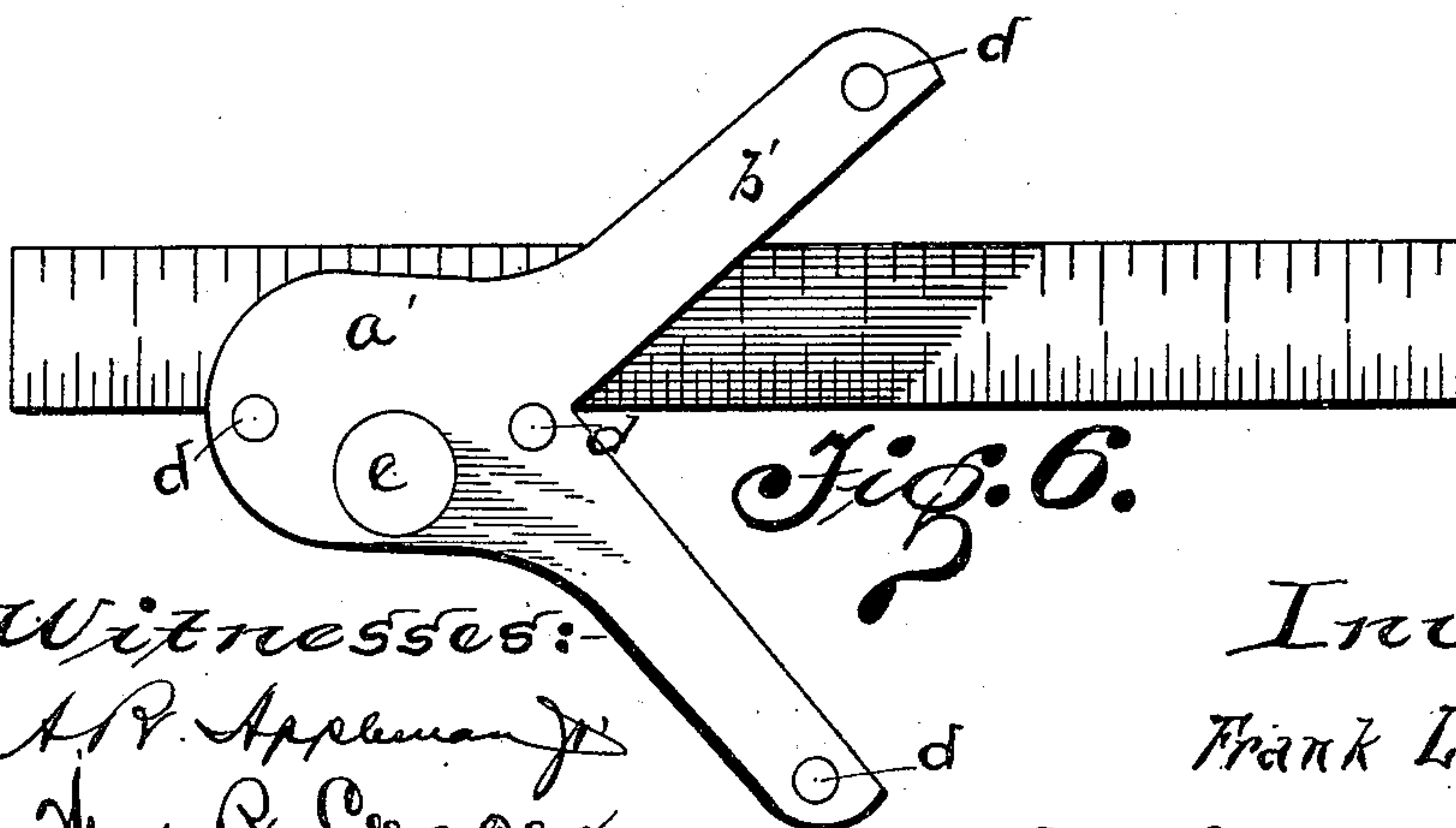
*Fig. 2.*



*Fig. 4.*



*Fig. 5.*



*Fig. 6.*

Witnesses:  
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By Henry C. Grant, Atty.

# UNITED STATES PATENT OFFICE.

FRANK LAFFERTY, OF LORAIN, OHIO.

## BEVEL-TOOL.

SPECIFICATION forming part of Letters Patent No. 611,129, dated September 20, 1898.

Application filed August 22, 1896. Serial No. 603,620. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK LAFFERTY, a citizen of the United States of America, residing at Lorain, in the county of Lorain and State of Ohio, have invented certain new and useful Improvements in Tools, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in tools and may be more particularly referred to as a "combination-square."

The invention has for its object to construct a tool of this class that may be used as an outside square and an inside square, as a depth-gage, as a center-square, and for obtaining a true angle of forty-five degrees.

A still further object of the invention is to construct a device of the above-described class whereby the ordinary machinist's rule may be employed, thus lessening the cost of the article to the mechanic; furthermore, a tool that will be extremely simple in its construction, strong, durable, effectual in its operation, and comparatively inexpensive to manufacture.

With the above and other objects in view the invention finally consists in the novel construction and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claim.

In describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like letters of reference indicate similar parts throughout the several views, in which—

Figure 1 is a plan view of the triangle rule-holder. Fig. 2 is a view of the form of the holder employed for the center-square. Fig. 3 is a side view of Fig. 1. Fig. 4 is a similar view of Fig. 2. Fig. 5 is a top plan view showing the rule in position in the triangle, and Fig. 6 is a similar view of the center-square.

Referring to the drawings by reference-letters, *a* represents the two triangular plates, having the angle opposite side *b* a right angle and the two other angles of forty-five degrees each. These two plates are connected together by pins *d d*, set at right angles conforming to the plates and forming rests for the rule, as shown in Figs. 5 and 6. The plates

are tightened on the rule by means of a thumb-nut *e*, engaging in both plates.

In the device illustrated for the center-square, which may be termed an "auxiliary center-head," *a' a'* indicate the two plates, having V-shaped arms *b'*, pins *d d*, connecting the same near their outer ends, and similar pins in the plates, said latter pins having their periphery on a direct line with termination of the V to bring the edge of the rule in perfect alinement therewith. By this construction the ordinary rule may be employed and the tool may be used for miter-work or for any angle-work required by mechanics in general. The thumb-nut is first loosened and the rule inserted between the plates, when by tightening the nut the plates will hold the rule firmly in position after the rule has been adjusted to any desired angle.

Particular attention is called to the fact that the pins *d d* in the plates are located in such a manner as to bring the rule perfectly straight at any desired angle, and it will also be noted that various changes may be made without departing from the general spirit of my invention.

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

In a combination-tool, a rule, a triangular plate having pins secured to one face thereof, said pins being arranged parallel with the edges of the plate and forming bearing-surfaces for the rule, so that the edge of the rule will be held paralleled with the edges of the plate, a lug centrally arranged on said plate and provided with screw-threads, a second triangular plate provided with apertures to receive the pins and lug carried by the first-named plate, a thumb-nut engaging said screw-threaded lug whereby the plates are forced together to hold the rule firmly in position, substantially as herein shown and described.

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

FRANK LAFFERTY.

Witnesses:

C. E. GRIFFIN,  
C. J. STEWART.