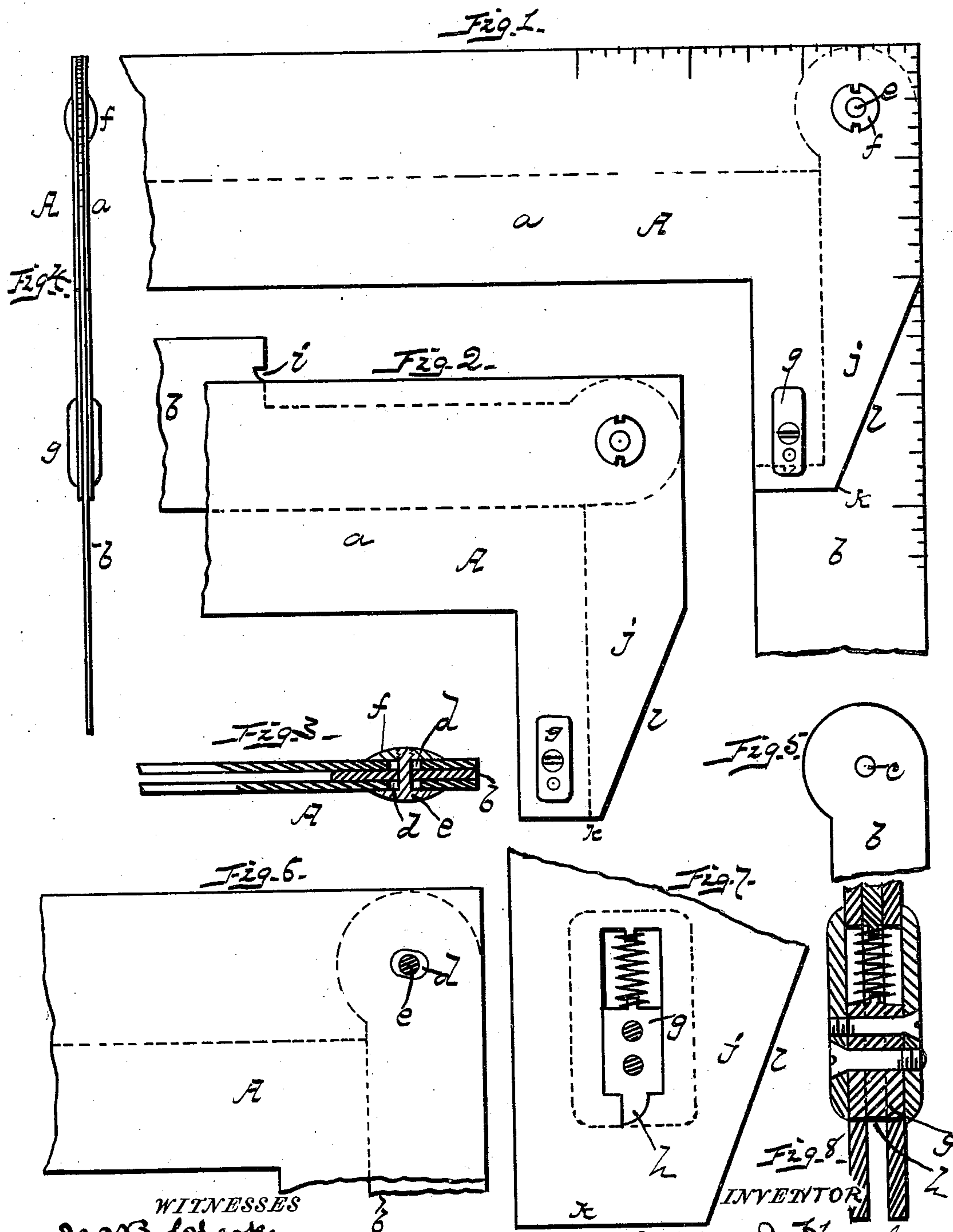


(No Model.)

J. S. HANLON,  
FOLDING SQUARE.

No. 561,109.

Patented June 2, 1896.



WITNESSES  
Jas. B. Clarke

Wm. Morris

J. S. Hanlon  
J. E. Bates

INVENTOR  
John S. Hanlon

Attorney

# UNITED STATES PATENT OFFICE.

JOHN STEVENTS HANLON, OF NEW HAVEN, CONNECTICUT.

## FOLDING SQUARE.

SPECIFICATION forming part of Letters Patent No. 561,109, dated June 2, 1896.

Application filed February 11, 1896. Serial No. 578,937. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN STEVENTS HANLON, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Folding Squares; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention has relation to improvements in folding squares; and it consists in the novel construction and arrangement of the same whereby one portion of the square can be readily folded upon the other and the folded portion hidden from view, all as will be hereinafter more fully explained.

The annexed drawings, to which reference is made, fully illustrate my invention, in which—

Figure 1 represents a side view of my device open and ready for use. Fig. 2 is also a side view of the same, showing the square closed. Fig. 3 is a sectional view taken through the joint. Fig. 4 is an edge view, and Fig. 5 is a detail view, of my device. Fig. 6 is a detail view showing the oblong opening in the square. Fig. 7 is a detail view showing more clearly the spring-catch, the side plate of the catch removed; and Fig. 8 is a detail vertical sectional view through the catch.

Referring by letter to the accompanying drawings, A represents the square, comprising the fixed half or portion *a* and a folding portion *b*. The movable or folding portion *b* is provided with a transverse perforation *c* at its inner end, and the portion *a* is also provided with transverse openings *d d* registering with the perforation *c*. These registering openings *d d* are oblong in shape and through which and the perforation in the folding portion is passed a screw-bolt *e*, provided with a nut *f* on its end, thus providing a pivotal or hinged connection between the two portions of the square.

The fixed portion *a* of the square is pro-

vided with a recess or groove in which the folding portion enters when the square is folded, and which protects said portion as well as hiding it from view. The folding portion of the square is held firmly in its proper place by a spring-catch *g*, which is attached to the portion *a*. The catch-point *h* is beveled and engages a beveled notch *i* in the offset of the folding portion and is self-locking when the square is opened up. In order to fold the square, the operator simply forces the catch back and turns the portion *b* upon its pivot backward and into the groove or receptacle therefor in the portion *a*. Should the screw-joint become loose or the square become not plumb, the same is remedied by adjusting the parts to one another at the pivotal connection, the elongated openings permitting the screw and end of the folding arm to be adjusted or moved in the proper direction for squaring the device. The short end *j* of the portion *a*, in which the spring-catch is located, is cut square, as at *k*, and then on an incline, as at *l*, which construction gives strength and durability to this short arm of the portion *a*.

In constructing my square, and in order to easily and readily provide the groove or kerf for the folding portion, I make the portion of three parts or plates, the middle plate being narrower than the outside plates and the whole riveted together; but if desirable the portion *a* may be made of one piece and the groove cut or made therein. The usual marks showing inches, &c., can be used on the square as in the case with common squares of this character now in use, and a square as herein described and shown is durable and when folded takes up less room for shipping as well as general use, and at the same time is cheap to manufacture.

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

In a folding square the combination of the fixed portion or half provided with the oblong-shaped transverse openings *d, d*, and the longitudinal groove in its edge for receiving the folding portion, and the short end *j* cut square as at *k* and provided with the inclined portion *l* the pivotal screw and spring-con-



trolled slide *g* provided with the catch-point  
*h*, the folding portion provided with the offset  
having the notch to engage said point *h*  
whereby when the square is opened the parts  
5 are self-locking and when closed the folding  
portion is hidden from view and protected  
within said groove all as shown and described.

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

JOHN STEVENTS HANLON.

Witnesses:

CHARLES H. HAYDEN,  
DAVID T. McNAMARA.