

**No. 675,464.**

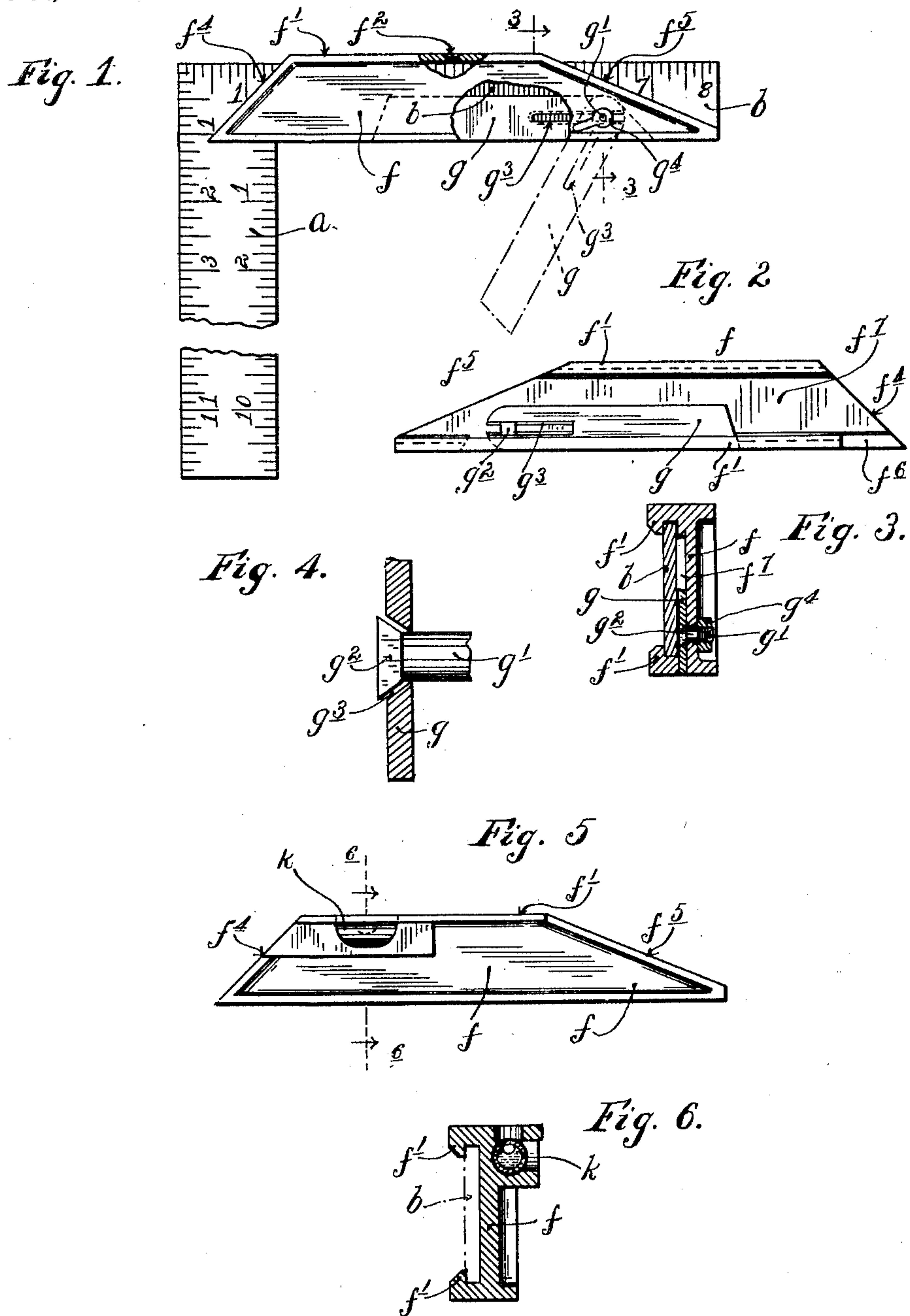
**Patented June 4, 1901.**

**E. CARLSON.**  
**COMBINATION SQUARE.**

(Application filed July 13, 1900.)

**2 Sheets—Sheet 1.**

(No Model.)



*Witnesses.*

Robert Otto

Harry Kilgore.

*Inventor*

*Edwin Carlson*

By his Attorneys.

Williamson Merchant

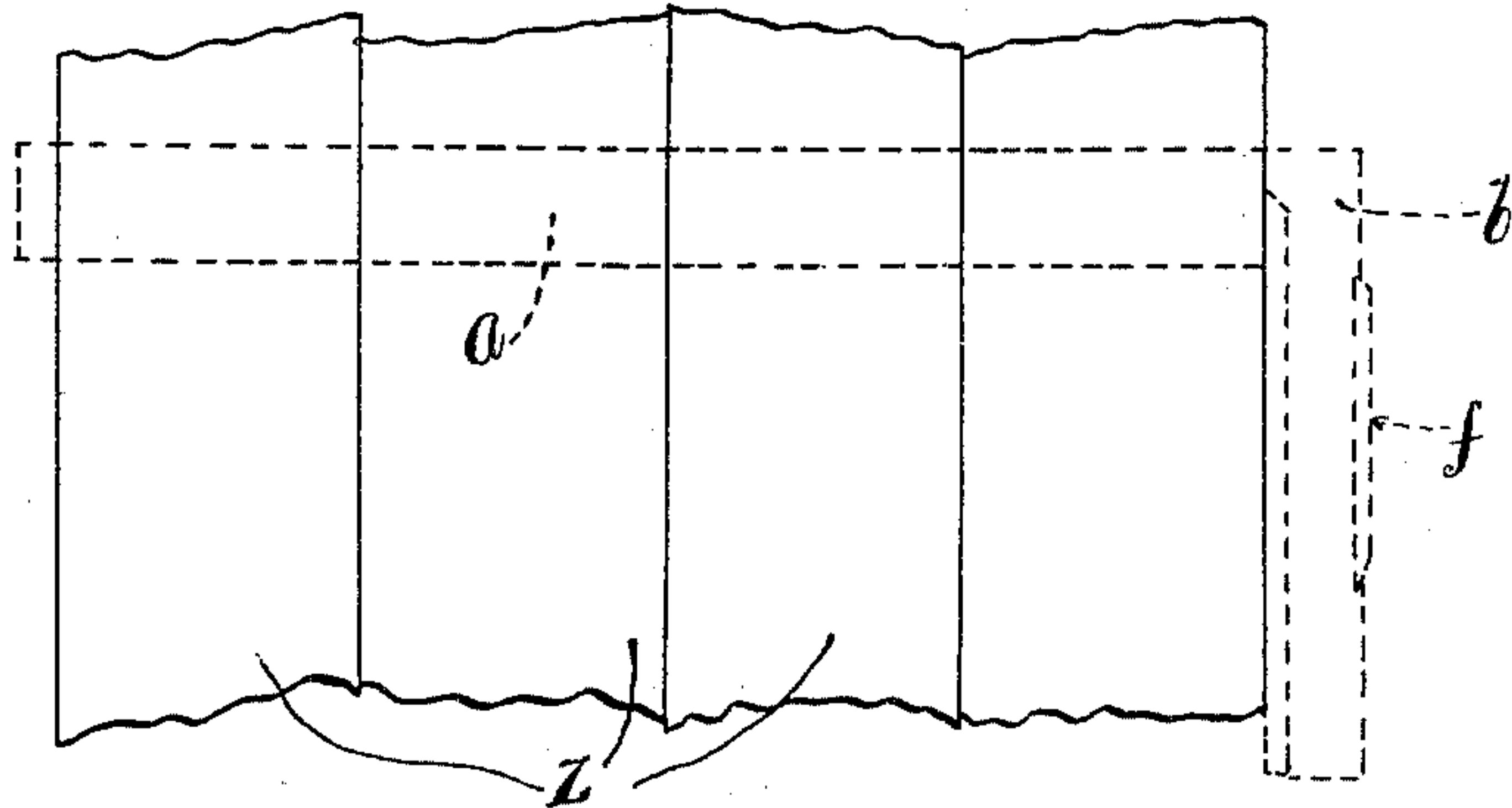
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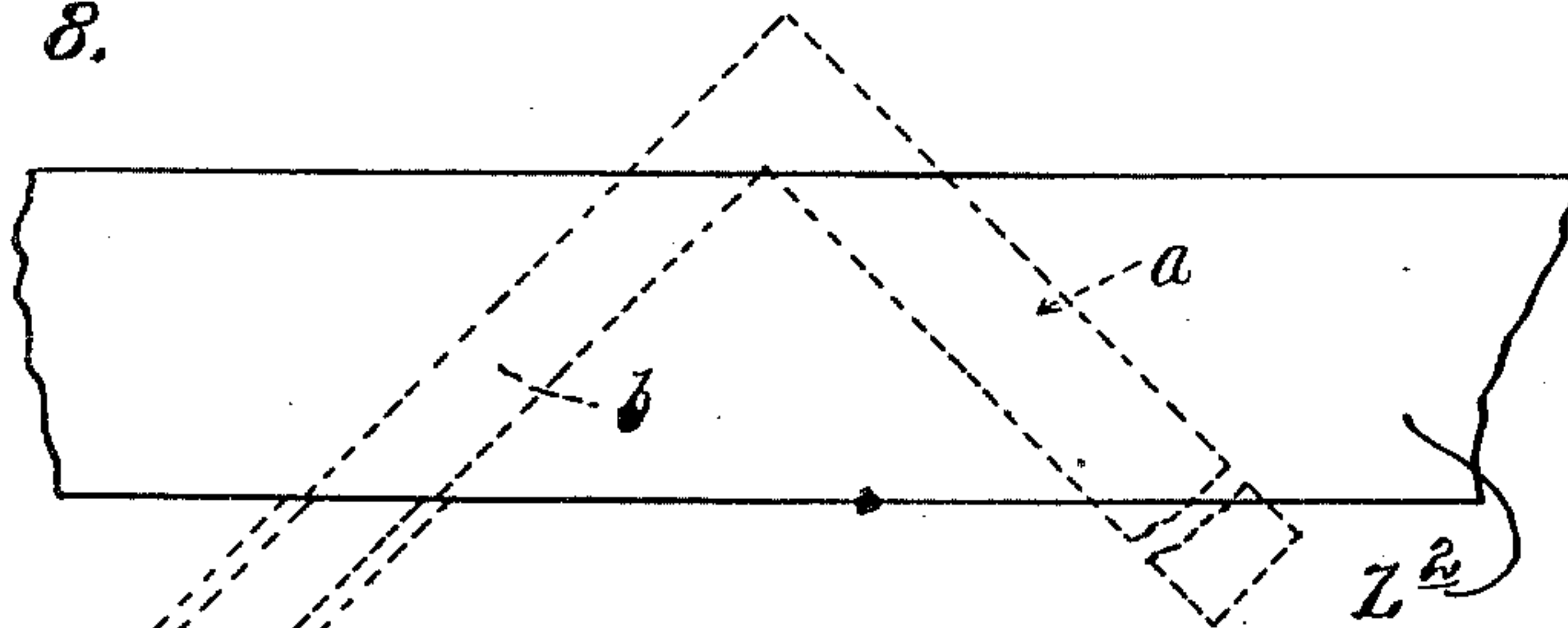
(No Model.)

2 Sheets—Sheet 2.

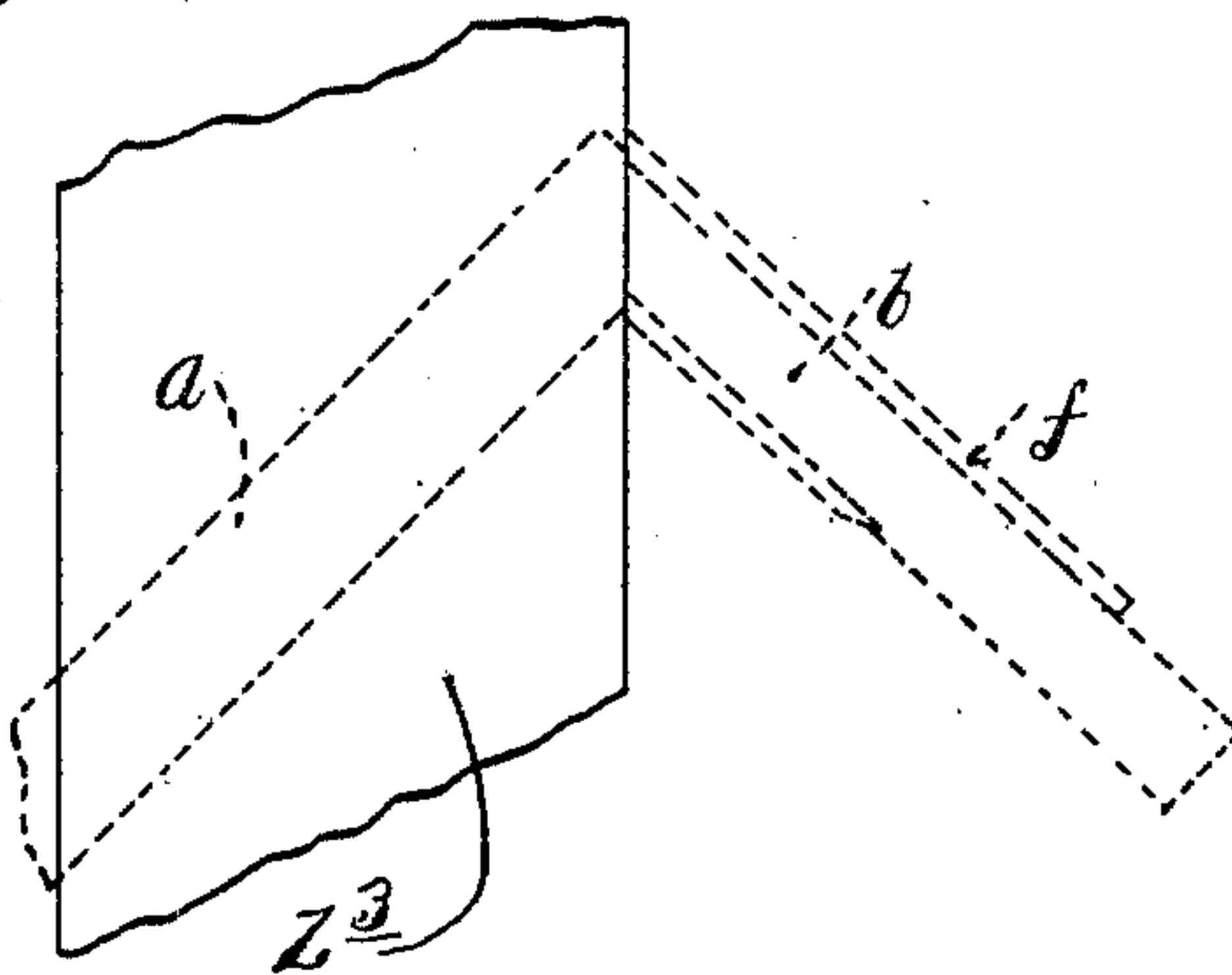
*Fig. 7.*



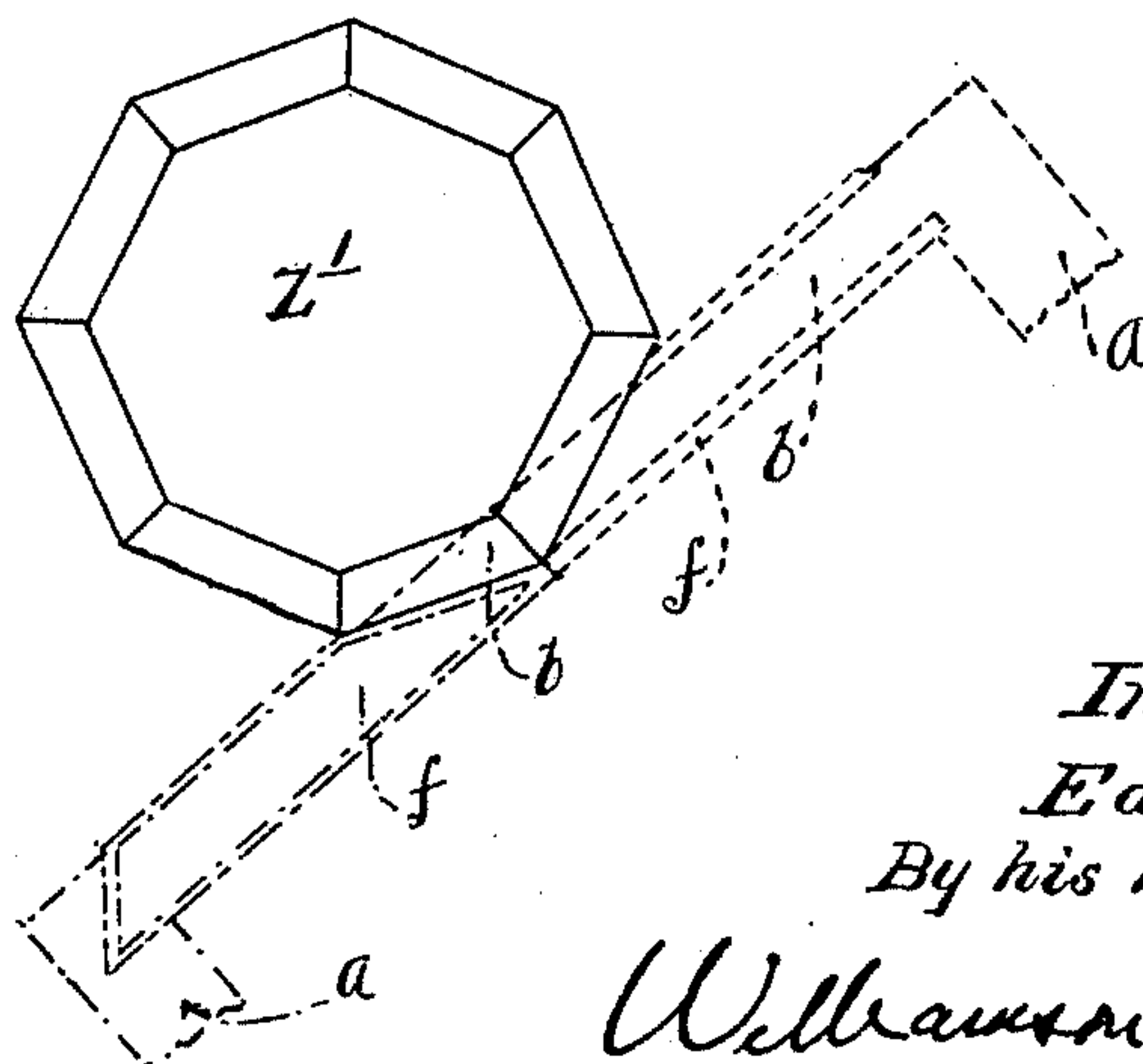
*Fig. 8.*



*Fig. 9.*



*Fig. 10.*



Witnesses

Robert Otto.

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# UNITED STATES PATENT OFFICE.

EDWIN CARLSON, OF MINNEAPOLIS, MINNESOTA.

## COMBINATION-SQUARE.

SPECIFICATION forming part of Letters Patent No. 675,464, dated June 4, 1901.

Application filed July 13, 1900. Serial No. 23,442. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN CARLSON, a citizen of the United States, residing at Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Combination-Squares; and I do hereby 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.

My invention has for its object to provide an improved square adapted for general use and especially adapted for use by carpenters or woodworkers.

To the above ends the invention consists of the novel devices and combinations of devices hereinafter described, and defined in the claims.

The invention is illustrated in the accompanying drawings, wherein like characters indicate like parts throughout the several views.

Figure 1 is a plan view with some parts broken away, showing an ordinary carpenter's square with my improved attachment applied thereto. Fig. 2 is a bottom plan view of the attachment removed from the square. Fig. 3 is a transverse section on the irregular line 3 3 of Fig. 1. Fig. 4 is an enlarged detail on the same line as Fig. 3, but with parts broken away and others removed. Fig. 5 is a plan view showing a slightly-modified form of the attachment. Fig. 6 is a transverse section on the line 6 6 of Fig. 5, and Figs. 7, 8, 9, and 10 are diagram views illustrating different uses of the square with the attachment applied thereto.

The letters *a* and *b* indicate, respectively, the blade and tongue portions of an ordinary carpenter's square. For many uses a simple square of this character is all that is required, but for many other uses a square with a landing or block on the tongue portion is not only desirable but necessary.

As a feature of my invention I provide a detachable landing or block *f*, provided at one side with keeper-flanges *f'*, adapted to overlap the edges of the tongue *b* of the square, so as to permit the said block to be applied and removed by telescopic end-wise movements on the said tongue *b*. To cause the block or landing *f* to snugly fit the

tongue *b*, a small set-screw *f<sup>2</sup>* is preferably screwed through one of the keeper-flanges *f'* for contact with the edge of the tongue portion *b*, as best shown in Fig. 1. At one end the block or landing *f* is beveled at an angle of forty-five degrees, as shown at *f<sup>4</sup>*, while its other end is shown as beveled at an angle of twenty-two and one-half degrees to its longitudinal edges, as shown at *f<sup>5</sup>*. To permit the head or landing *f* to be slipped onto the tongue *b*, as shown in Fig. 1, the inner end of the longer flange or keeper *f'* is cut away, as shown at *f<sup>6</sup>*.

The construction illustrated in Figs. 1 to 4, inclusive, involves a bevel-square blade *g*, adapted to be folded into a seat *f<sup>7</sup>* in the landing or block *f*, as shown by full lines in Figs. 1, 2, and 3. This blade *g* is pivoted to the landing or block *f* by a small nutted bolt *g'*, the head of which is preferably squared and beveled, as best shown in Fig. 4 and indicated at *g<sup>2</sup>*. The bolt-head *g<sup>2</sup>* fits in a beveled slot *g<sup>3</sup>* of the blade *g*, and when the nut *g<sup>4</sup>* is tightened on the bolt *g'* the blade *g* will be clamped and held wherever set.

In the construction illustrated in Figs. 5 and 6 the blade *g* is omitted and the landing or head *f* is provided with a small level *k*.

The device above described is capable of a great many different uses. With the detachable landing or block *f* applied as shown in Fig. 1 the square may be used as shown in Fig. 7, wherein the square is indicated by dotted lines and wherein *z* indicates a series of boards or parallel strips. Again, with the landing or block applied as indicated in Fig. 1 the square may be used to lay off octagon figures, as indicated in Fig. 10 at *z'*. With the landing or head *f* slid toward the end of the square tongue *b* the square may be used as shown at Fig. 8, wherein *z<sup>2</sup>* indicates a board or a piece of work. With the landing or block *f* applied on the tongue *b* opposite side up from that shown in Fig. 1 but with the same end turned inward the square may be applied to a piece of work *z<sup>3</sup>*, as indicated in Fig. 9. These of course are only a few of the many different ways in which the device may be used.

The bevel-square blade *g* may be set at any desired angle with respect either to the blade or to the tongue of the square, and by the

movement of the landing or head  $f$  may be moved toward and from the blade  $a$  without varying its set angle thereto. In virtue of the slot  $g^3$  in the blade  $g$  said blade may be  
5 extended more or less from the landing or block to which it is pivoted.

It will of course be understood that my improved attachment above described is capable of considerable modification within the  
10 scope of my invention.

What I claim, and desire to secure by Letters Patent of the United States, is as follows:

1. The combination with a square  $a$ ,  $b$ , of the detachable landing or block  $f$ , having  
15 the keeper-flanges  $f'$  and differently-beveled ends, which landing or block has parallel

edges and is applicable to the square either end to and either side up, substantially as described.

2. The combination with the square  $a$ ,  $b$ , of the detachable and adjustable landing or block  $f$  telescoping onto one arm of said square, and the blade  $g$  with slot  $g^3$  pivoted to said landing or block  $f$  by the nutted bolt  $g'$  and folding into a seat  $f^7$  in said landing,  
25 substantially as described.

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

EDWIN CARLSON.

Witnesses:

M. M. MCGRORY,

F. D. MERCHANT.