

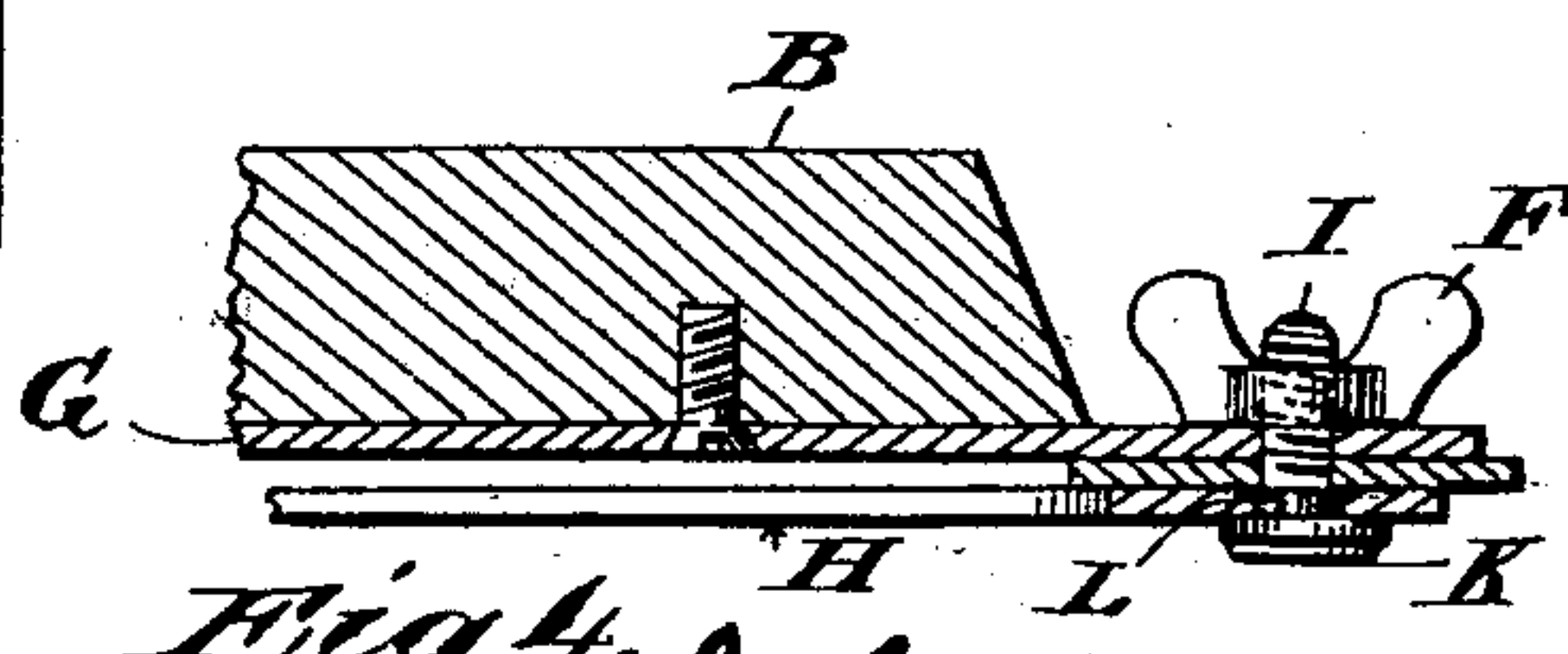
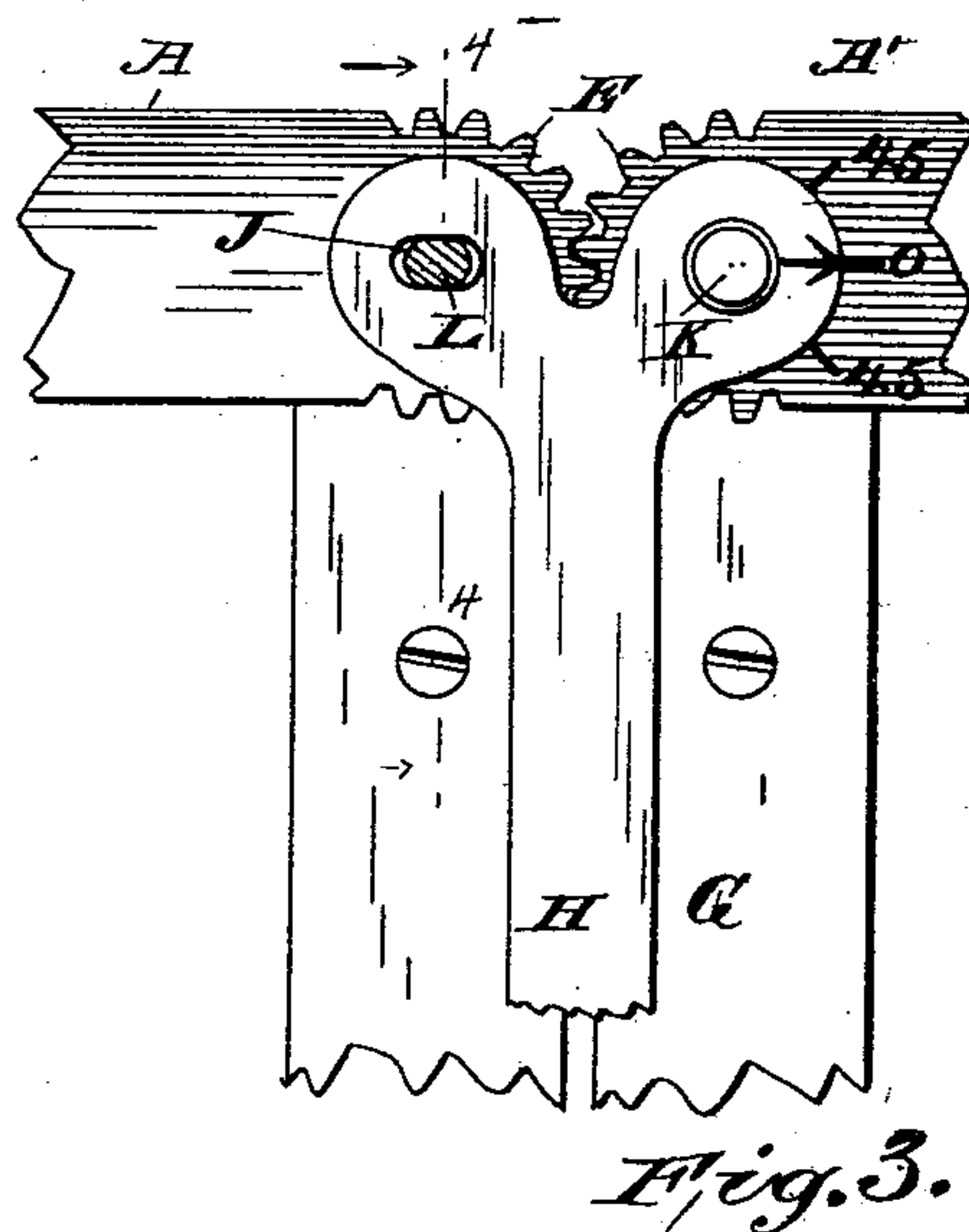
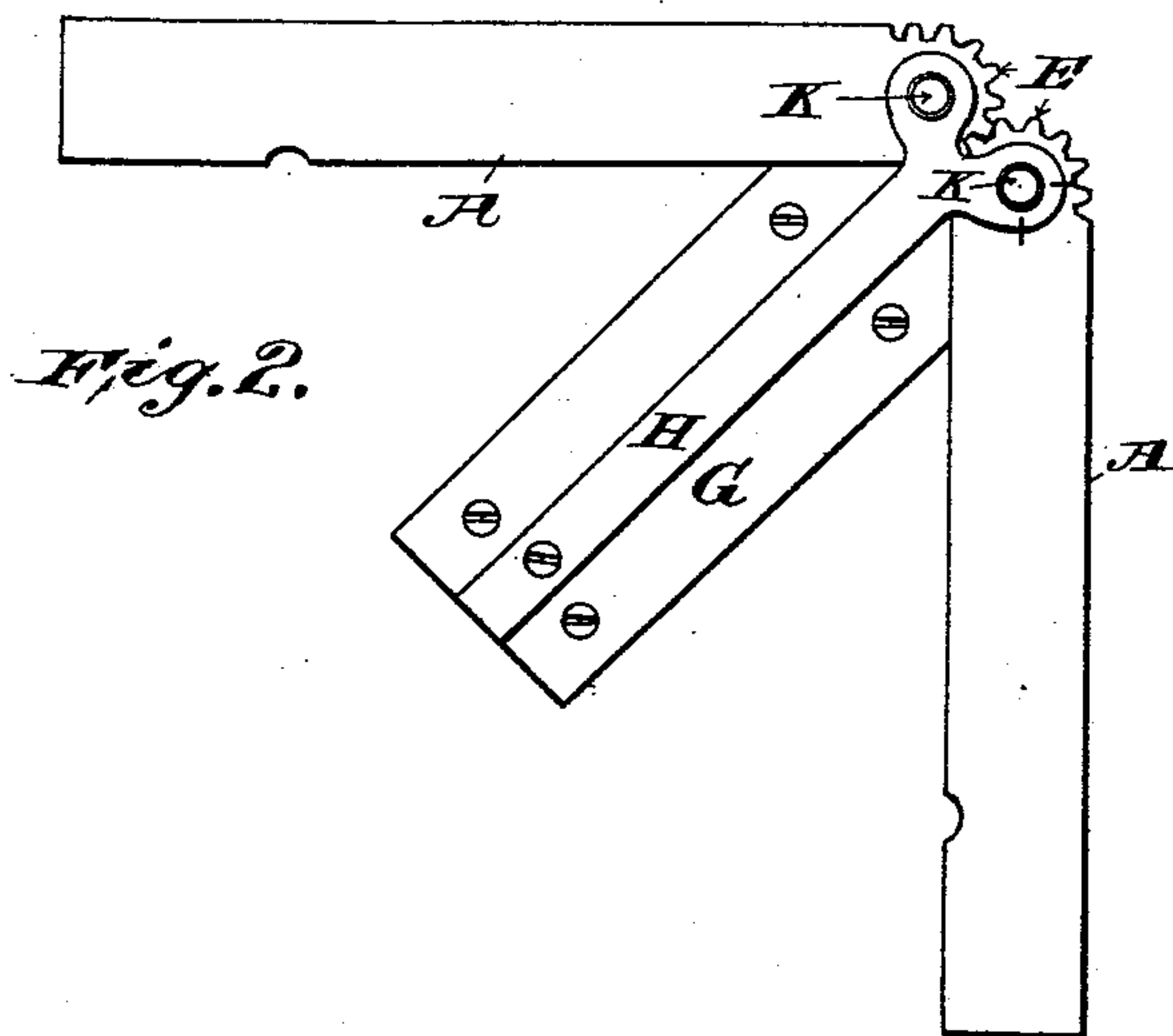
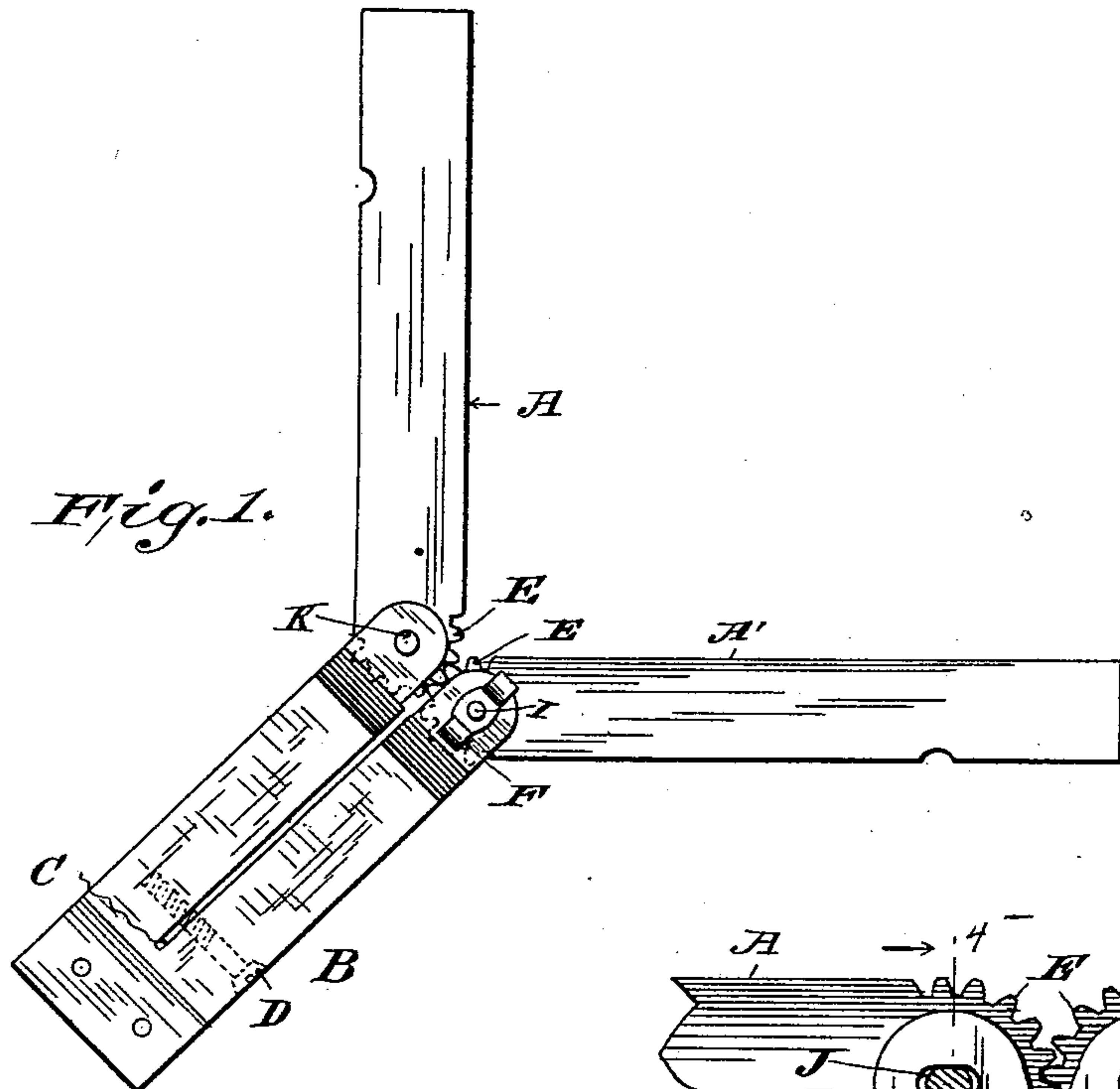
No. 684,367.

Patented Oct. 8, 1901.

J. J. GREEN.
BEVEL SQUARE.

(Application filed Apr. 11, 1900.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JOHN JAY GREEN, OF BOONTON, NEW JERSEY.

BEVEL-SQUARE.

SPECIFICATION forming part of Letters Patent No. 684,367, dated October 8, 1901.

Application filed April 11, 1900. Serial No. 12,397. (No model.)

To all whom it may concern:

Be it known that I, JOHN JAY GREEN, a citizen of the United States, and a resident of Boonton, in the county of Morris and State of New Jersey, have invented certain new and useful Improvements in Bevel-Squares, of which the following is a specification.

My invention relates to bevel-squares. Its object is to provide a device which, while being so compact as to be easily carried about in the pocket, shall enable the workman to easily and rapidly lay off angles in a manner that cannot be done with existing devices.

My bevel accommodates itself automatically to any angle, salient or receding, to which it is applied, and it can also be used as a straight-edge or try-square.

To carry out my invention, I employ two blades which are pivoted so as to turn freely in the end of the bevel-stock, the said stock being split longitudinally throughout nearly its whole length and the blades being attached one to each split portion. This splitting of the stock is for the purpose of obtaining sufficient springiness to prevent lost motion when the blades are revolved. At their pivoted adjacent ends the blades are provided with gear-teeth which intermesh, so that the blades move equally and together. The degree of firmness with which the gears interlock is controlled by a screw or similar means, penetrating from the sides the two portions of the split bevel-stock.

In the drawings, Figure 1 is a top view of my improved bevel-square; Fig. 2, a back view of the same. Fig. 3 is an enlarged view of the interacting ends of the blades, showing a scale on one blade and the means by which the blades are held in position; and Fig. 4 is a cross-section on the line 4 4 of Fig. 3.

Referring to the drawings, A A' are the bevel-blades, pivoted at K in the ends of the stock B and provided with gear-teeth E, by which their ends intermesh. The stock B is divided throughout nearly its entire length by the slot C for the purpose of obtaining a certain amount of springiness for holding the teeth E together to prevent lost motion, the degree of firmness with which they press to-

gether being controlled by the screw D or a similar arrangement.

F is a clamping-nut for setting the bevel at any desired angle.

K K are the pivots about which the blades revolve, one of the pivots terminating in a screw I, on which the clamp-nut F works.

G is the metal face of the stock B, and H a metal strip over the slot C and having at its upper end two apertured wings through which pass the pivots about which the blades turn. One of the apertures has an elongated slot J, in which sits the squared-off part L of screw I, which serves to prevent the pivot K turning when the screw F is tightened up. This elongated slot J also allows, in conjunction with the split stock and the adjusting-screw D, the wear of the gear-teeth to be compensated. By means of an arrow-point on one of the wings of the strip H and a scale on the blade A' the bevel can be immediately brought to any desired angle and set.

The operation is as follows: The clamping-nut F is loosened. Then if it is desired to measure a salient angle the blades are turned until they rest against the sides of the angle, as in Fig. 1, and the clamping-screw set. If the angle is a receding one, the bevel-blades are swung on the pivots K until they rest against the sides of the angle, when they are clamped as before, Fig. 2. To mark the molding, &c., to fit into the angle measured by the bevel, it is laid along the side of the stock B, crossing the wings A and A'. The molding, &c., being marked off along the edge of the blades, the pieces so marked and cut will, when joined accurately, fit the angle measured by the bevel.

Having thus fully described and illustrated my invention, what I claim is—

1. In a bevel, the combination of a pair of blades having intermeshing geared ends, a split stock in the two ends of which the blades are respectively pivoted, an adjusting-screw traversing the split bevel-stock for preventing lost motion between the geared ends, and means for setting the blades at any desired angle.

2. In a bevel-square, the combination of a pair of blades provided with gear-teeth at one

end, a split bevel-stock, an adjusting-screw
for said stock, a winged strip for pivotally re-
taining the blades in place relatively to the
stock, said winged strip being provided with
5 an elongated pivot-slot, adapted to compen-
sate lost motion, substantially as described.
Signed at New York, in the county of New

York and State of New York, this 9th day of
April, A. D. 1900.

JOHN JAY GREEN.

Witnesses:

M. BUTLER,
A. STETSON.