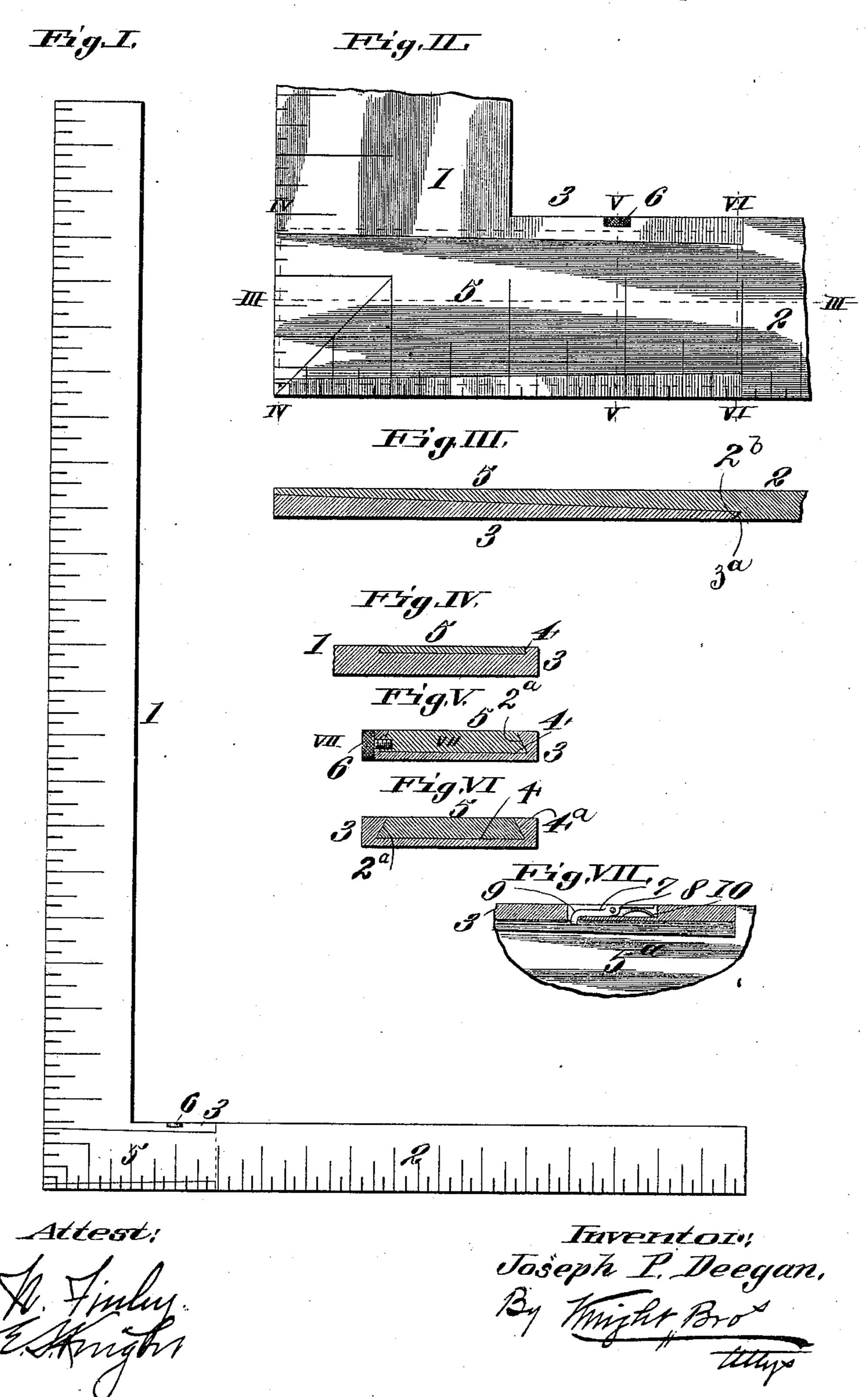
## J. P. DEEGAN. CARPENTER'S SQUARE.

No. 566,970.

Patented Sept. 1, 1896.



## United States Patent Office.

JOSEPH P. DEEGAN, OF ST. LOUIS, MISSOURI.

## CARPENTER'S SQUARE.

SPECIFICATION forming part of Letters Patent No. 566,970, dated September 1, 1896.

Application filed January 31, 1896. Serial No. 577,488. (No model.)

To all whom it may concern:

Be it known that I, Joseph P. Deegan, a citizen of the United States, and a resident of the city of St. Louis, in the State of Mis-5 souri, have invented a certain new and useful Improvement in Carpenters' Squares, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of to this specification.

My invention relates to an improvement in

carpenters' jointed squares.

My invention consists in features of novelty hereinafter fully described, and pointed out

15 in the claim.

Figure I is a side view of my improved square. Fig. II is an enlarged detail side view of the angle portion of the square. Fig. III illustrates a longitudinal section 20 taken on line III III, Fig. II. Fig. IV illustrates a cross-section taken on line IV IV, Fig. II. Fig. V illustrates a cross-section taken on line V V, Fig. II. Fig. VI illustrates a cross-section taken on line VI VI, 25 Fig. II. Fig. VII illustrates a section taken on line VII VII, Fig. V, showing a modified form of the securing device employed to re-

tain parts of a square together.

In the drawings, 1 designates the long arm, 30 and 2 the short arm, of a carpenter's square. On the long arm 1 is a right-angle extension 3, formed with a dovetail mortise 4, in which fits a dovetail tenon 5 of the short arm 2. The extension 3 is also formed with beveled 35 side undercuts 4a, gradually flaring inwardly, which receive corresponding side bevels 2<sup>a</sup> on the tenon. It is important to retain the greatest amount of material possible in the short arm 2 at the juncture of the short arm 40 and tenon, and for this reason I form the tenon of greater thickness at said juncture than at its outer end, the tenon gradually increasing in depth (as is clearly illustrated, especially in Fig. III) from its outer end to 45 the juncture at its inner end. The central portion of the extension 3 is gradually reduced in height in the reverse direction from the outer end of the tenon 5, and therefore

while the two parts are joined together they are connected by what is known as a "scarf- 50 joint," and a flat surface is produced on each side of the square. The inner end of the extension is formed with a transverse bevel 3a, fitting in a transverse bevel-shaped undercut 2°.

For the purpose of retaining the two arms of the square in proper relation to each other when placed together I employ a set-screw 6, which is inserted through the edge of the extension 3 and enters into an opening in the 60 tenon, (see Fig. V,) and when in such position securely holds the tenon from movement in the dovetail mortise 4. When it is desired to take the square apart, the screw 6 is turned outward until it has been turned out of en- 65 gagement with the tenon, when the tenon can be readily slipped from the mortise, and the two arms of the square will be separated.

In Fig. VII I have shown a modified form of retaining device, in which a trip-arm 7 is 70 pivoted in a recess 9 to a pin 8 at the same location as that of the screw 6. The point of the arm 7 is adapted to engage with a notch in the edge of the tenon 5° and is normally held in engagement by a spring 10, located 75

under the rear end of the arm.

I claim as my invention—

A carpenter's jointed square comprising a long arm and a short arm; the long arm having a right-angle extension formed with a lon- 80 gitudinal dovetail mortise which gradually increases in height from its outer end, with gradually inwardly-flaring beveled undercuts at the sides thereof, and with a transverse bevel at its inner end, and the short 85 arm having a transverse bevel-shaped undercut, and a longitudinal dovetail-shaped tenon gradually increasing in depth from its outer end, formed with gradually inwardly-widening bevels at the sides thereof; substantially 90 as described.

J. P. DEEGAN.

In presence of— E. S. KNIGHT, N. FINLEY.