(No Model.)

C. CHRETIEN.

COMBINATION SQUARE.

No. 557,302. Patented Mar. 31, 1896.

Fig. 1.

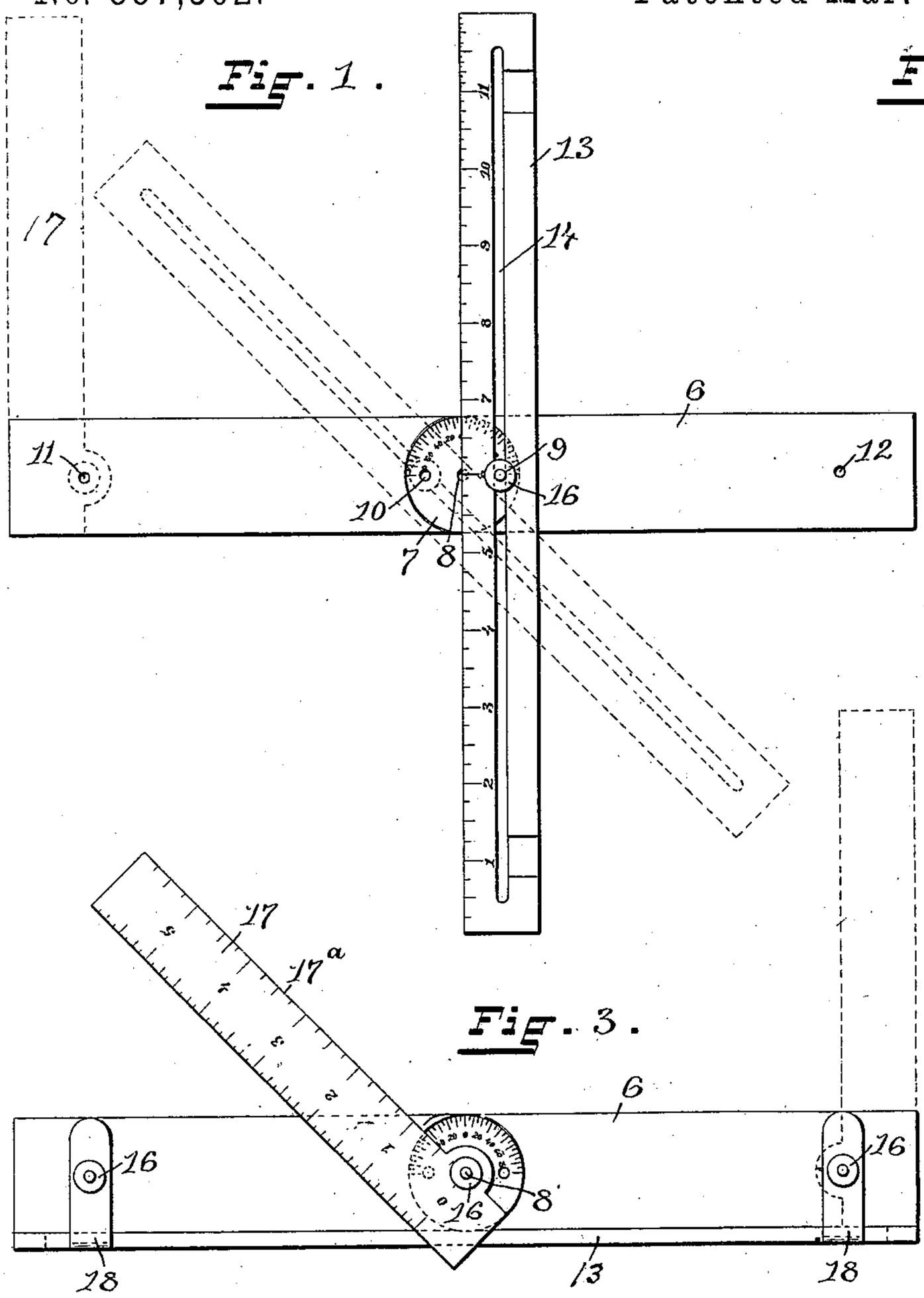


Fig. 2.

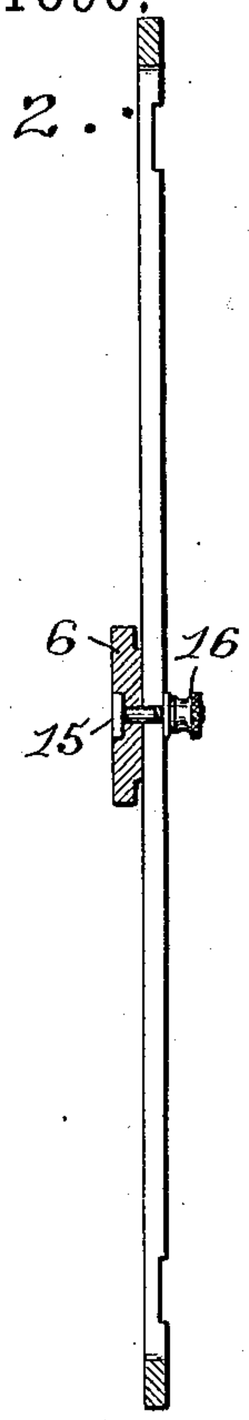


Fig. 3.

Fig. 5.

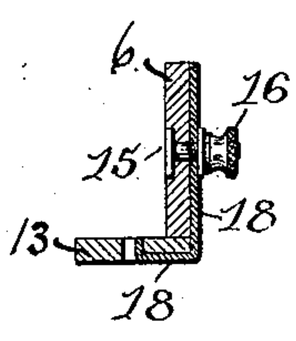
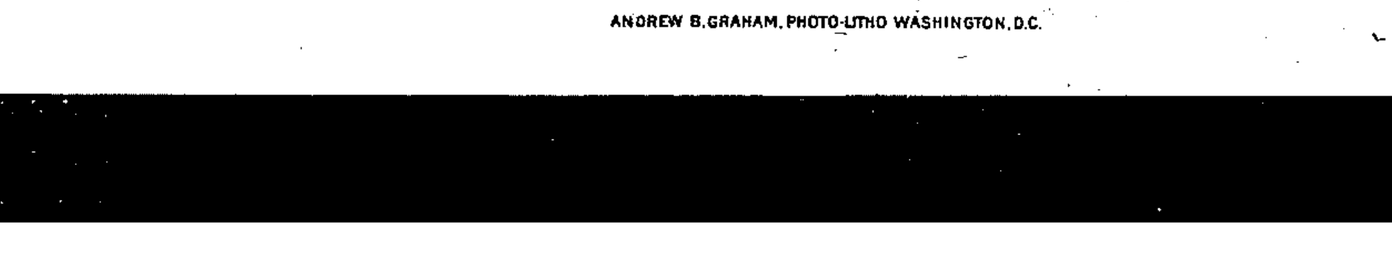


Fig. 4.



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UNITED STATES PATENT OFFICE.

CASIMIR CHRETIEN, OF MANVILLE, RHODE ISLAND.

COMBINATION-SQUARE.

SPECIFICATION forming part of Letters Patent No. 557,302, dated March 31, 1896.

Application filed November 13, 1895. Serial No. 568,777. (No model.)

To all whom it may concern:

Be it known that I, CASIMIR CHRETIEN, of Manville, in the county of Providence and State of Rhode Island, have invented a new and useful Improvement in Combination-Squares; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification.

The invention refers to an improvement in the class of try-squares used by artisans to measure and transfer angular positions; and the same consists in the peculiar construction and combination of parts by which the tool may be used under a variety of conditions, all of which will be more fully set forth hereinafter, and more particularly pointed out in the claims.

The object of the invention is to produce a combination-square, adapted for use under greatly-varying conditions, which can be folded and packed into a small space for convenience in transportation and protection.

Figure 1 is a side view showing the parts of my improved combination-square in different positions. Fig. 2 is a vertical view, partly in section, of the same. Fig. 3 is a side view showing the square adapted for use as a box-square. Fig. 4 is an end view, and Fig. 5 a transverse sectional view, of the same.

In the drawings, 6 indicates a plate, preferably of sheet metal, of uniform width and square ends. It is provided at the center of its length with the circle 7, graduated into degrees and minutes. Within the circle is the central hole 8 and on the two opposite sides the holes 9 and 10, and near the ends the holes 11 and 12. The plate 13, provided with the central longitudinal slot 14, is adapted to be secured in either one of the two holes 9 or 10 by means of the screw-threaded post 15 and the thumb-nut 16, and when so secured at right angles to the plate 6 the edge of the plate 13 extends along the center of the graduated disk 7.

The plate 17 is provided near one end on the line of the edge 17^a with a projection around the hole 8', so that the plate 17 may be secured to the plate 6 by means of the post 15 and the thumb-nut 16 in the central hole 8 and be adjusted to the graduations of the circle 7 to any desired angle, and may also be secured in either of the holes 11 and 12 on a line of the bottom, or either end of the plate 6 and the end edge, to form a right-angled square

To convert the parts into a box-square, the slotted plate 13 is secured to one edge of the plate 6 by means of the hook-plates 18, the hooks of which extend into the slot 14, the longer arm being fastened to the plate 6 by two posts 15 and thumb-screws 16, as is shown in Figs. 3, 4, and 5.

The plates 6, 13, and 17 may be and in the preferred form are graduated to form scales of any desired standard measurement and subdivision.

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

1. A combination-square composed of the plate 6 provided with the graduated circle 7 and the holes 8, 9, 10, 11 and 12, the slotted plate 13 and the post and thumb-screw connections 15, 16, whereby, the slotted plate may be secured to the center or to one side of the graduated circle at any point along the length of the slot, as described.

2. In a square, the combination with the plate 6 having the graduated circle 7 provided with the holes 8, 11 and 12 of the slotted plate 13, the hooked plates 18, the plate 17 and the posts and thumb-screws for securing the plates, in the manner and for the purpose substantially as described.

In witness whereof I have hereunto set my hand.

CASIMIR CHRETIEN.

Witnesses:
JOSEPH A. MILLER,
HENRY J. MILLER.