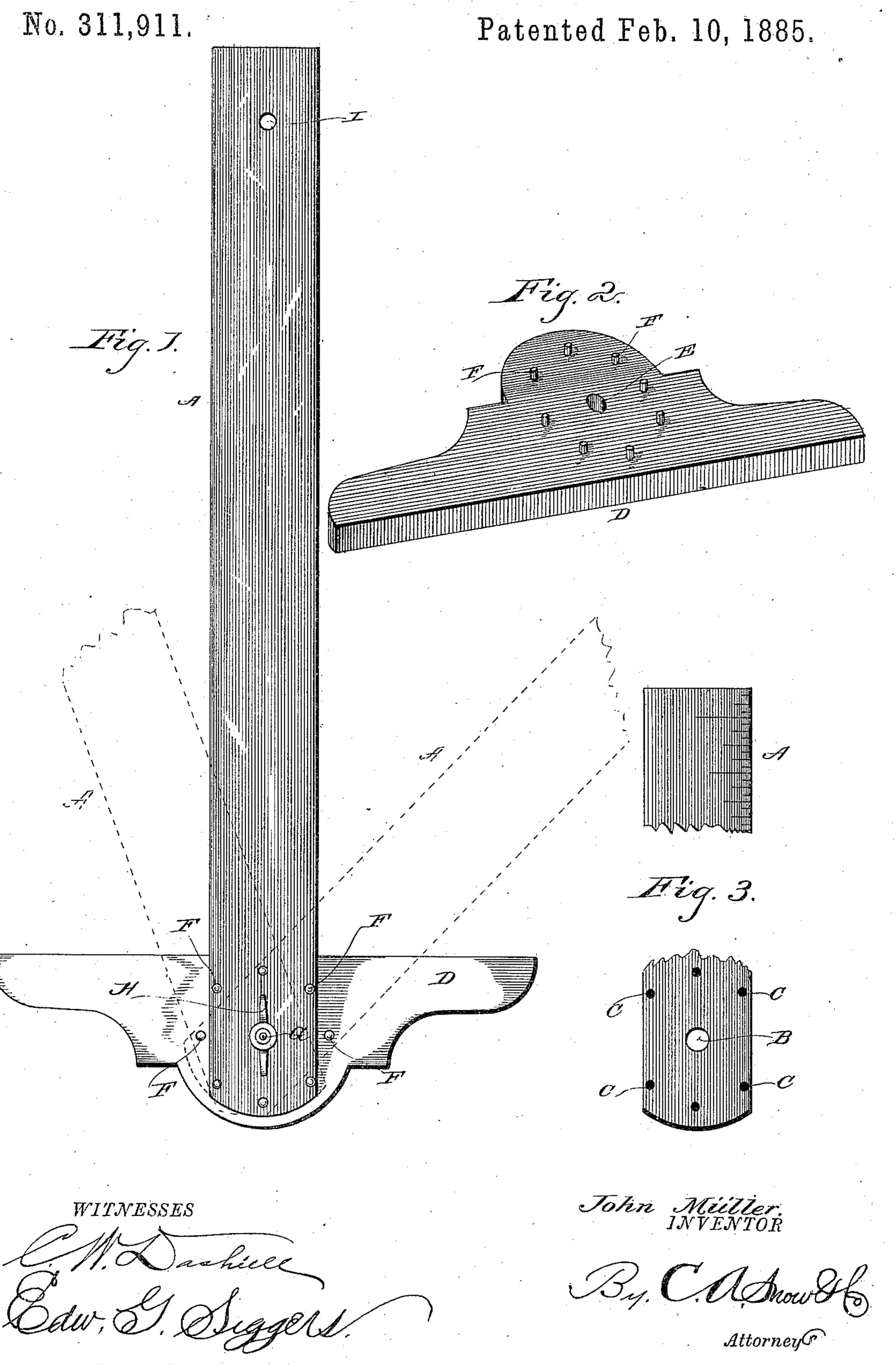
J. MÜLLER.

## COMBINED DRAWING SQUARE AND MITER.



## United States Patent Office.

JOHN MÜLLER, OF KANSAS CITY, MISSOURI.

## COMBINED DRAWING SQUARE AND MITER.

SPECIFICATION forming part of Letters Patent No. 311,911, dated February 10, 1885.

Application filed October 27, 1884. (No model.)

To all whom it may concern:

Be it known that I, John Müller, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Mis-5 souri, have invented a new and useful Improvement in Combined Drawing Square and Miter, of which the following is a specification, reference being had to the accompanying drawings.

My invention relates to combined drawing squares and miters; and it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and par-

ticularly pointed out in the claims.

In the drawings. Figure 1 is a plan view of my improved square and miter. Fig. 2 is a perspective view of the head-piece removed from the rule, and Fig. 3 is a plan view of the rule detached from the head-piece.

Referring by letter to the accompanying drawings, A designates the rule, which is graduated in the usual manner, and may be made of wood, hard rubber, steel, or brass. At one end the rule A is rounded, and provided

25 with a bolt-hole, B, and six pin-holes, C, arranged on the arcs of a circle and on opposite sides of the bolt-hole B. D designates a headpiece, which is provided with a central bolthole, E, around which eight short pins, F, are 30 arranged in a circle. G designates a headed

screw-bolt, which is passed up through the central hole, E, in the head-piece D, and through the central hole or bolt-hole in the rule A, and a

thumb-nut, H, is turned down upon the screwbolt to hold the rule and head piece together. 35

By loosening the thumb-nut the head-piece D may be lifted from one pin and turned and placed upon another, thereby changing the device from a square to a miter, and vice versa; or the head-piece may be removed entirely, 40 and the device may be used as a straight-edge when desired. Near the foot of the rule a hole, I, is provided, by which the device may be hung up when not in use.

Having thus fully described my invention, 45 what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. The combination, with the rule provided with a bolt-hole, B, and six pin-holes, C, arranged on the arc of a circle on opposite sides 50 of said bolt-hole, of the head-piece D, provided with the bolt-hole E and eight short pins, F, and the screw-bolt G and thumb-nut H. substantially as specified.

2. The combination, with the rule provided 55 with the bolt-hole and pin-holes, of the single half head-piece having the short pins F, and the screw-bolt and thumb-nut, substantially as specified.

In testimony that I claim the foregoing as 60 my own I have hereto affixed my signature in presence of two witnesses.

JOHN MÜLLER.

Witnesses:

JAKOB WELKER, ALBERT BATCHELDER.