

(No Model.)

A. S. COOPER.  
PARALLEL RULER.

No. 533,788.

Patented Feb. 5, 1895.

Fig: 1.

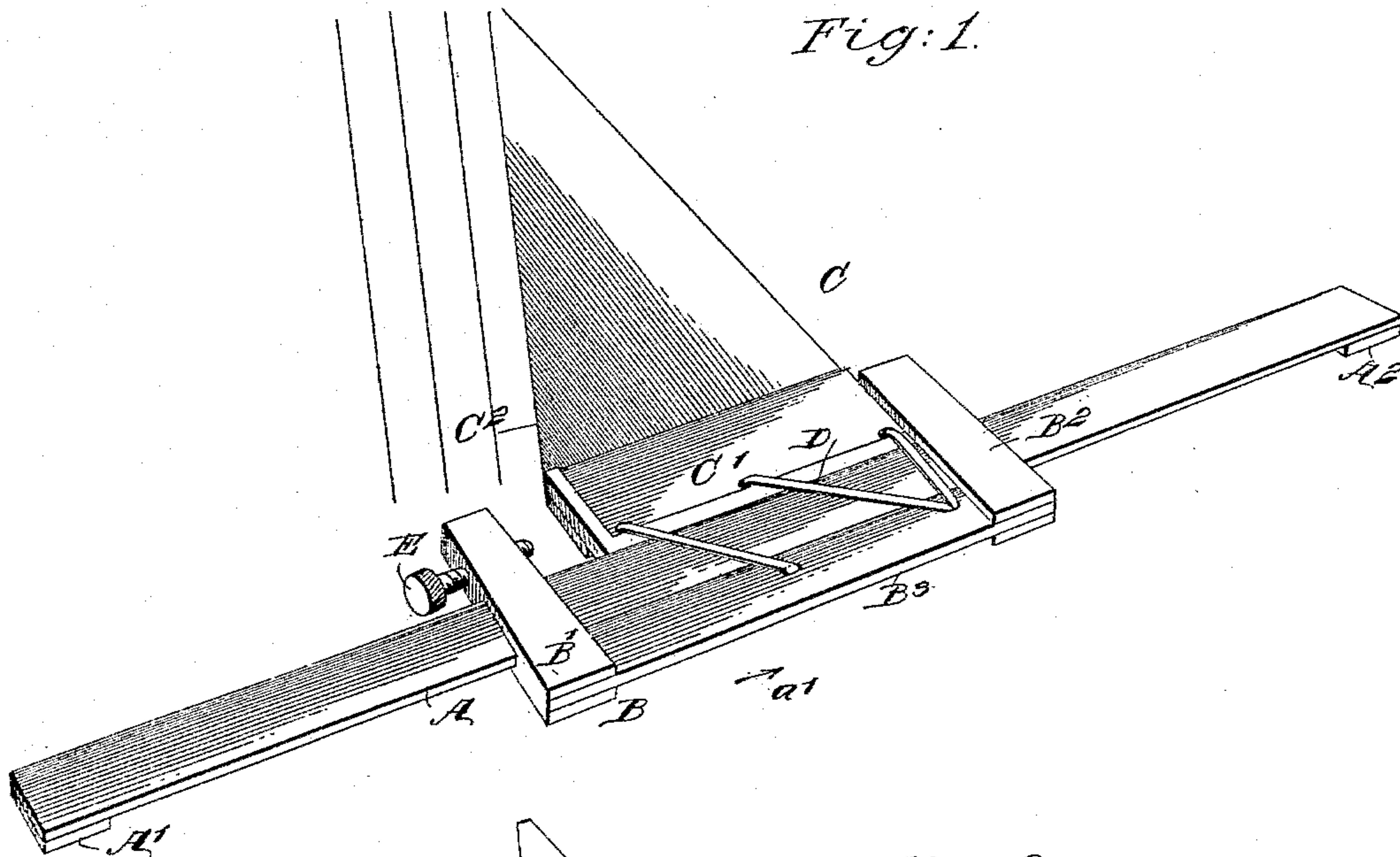


Fig: 2.

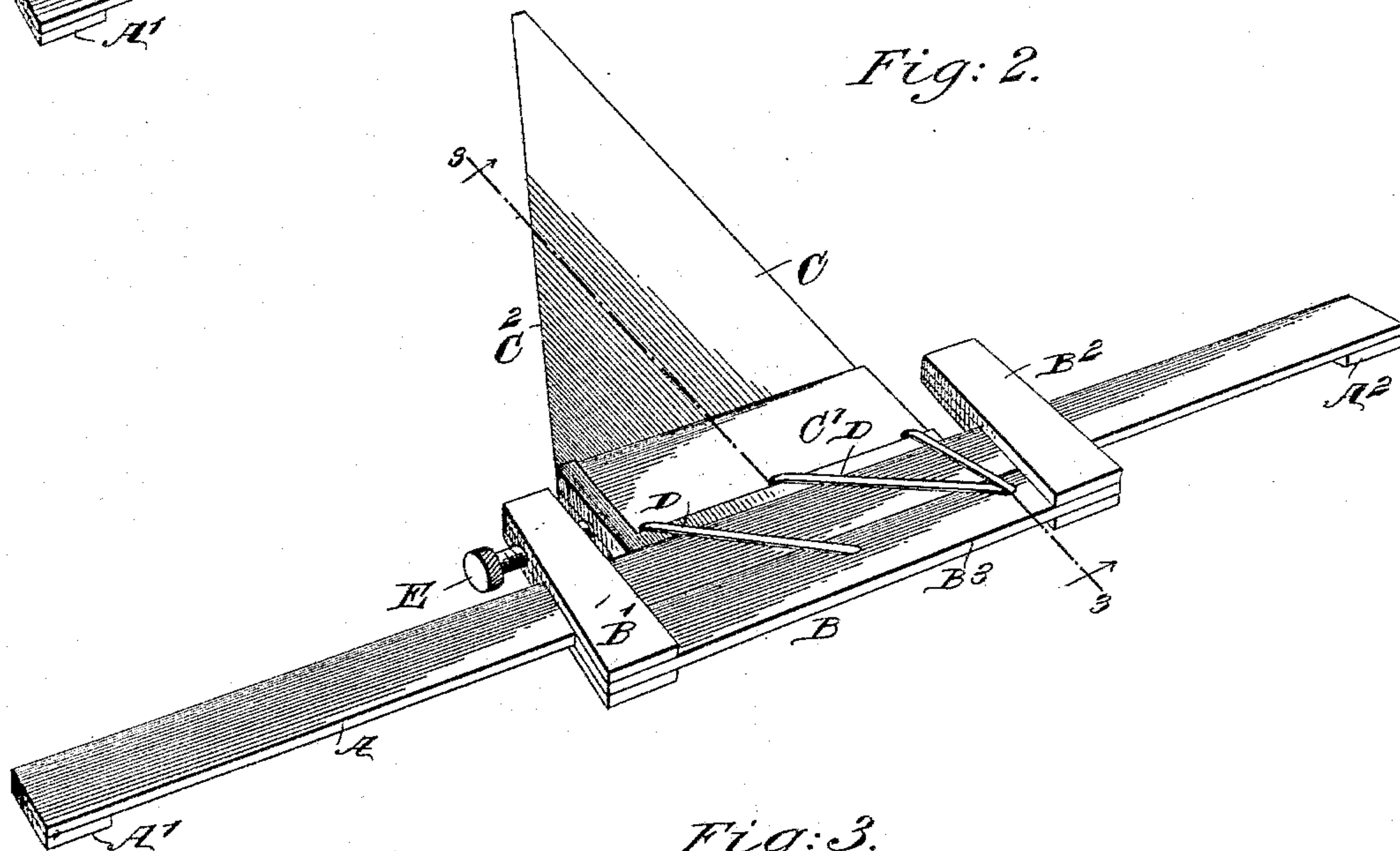
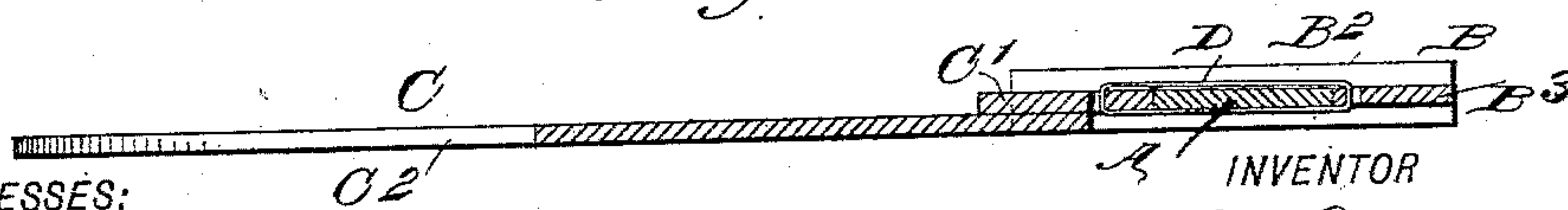


Fig: 3.



WITNESSES:

John A. Rennie.  
Thos. G. Weston.

INVENTOR

A. S. Cooper.  
BY  
Munn & Co.  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

AUGUSTUS STEIGER COOPER, OF SANTA BARBARA, CALIFORNIA.

## PARALLEL-RULER.

SPECIFICATION forming part of Letters Patent No. 533,788, dated February 5, 1895.

Application filed April 20, 1894. Serial No. 508,260. (No model.)

*To all whom it may concern:*

Be it known that I, AUGUSTUS STEIGER COOPER, of Santa Barbara, in the county of Santa Barbara and State of California, have  
5 invented a new and Improved Parallel-Ruler, of which the following is a full, clear, and exact description.

The invention relates to drawing instruments; and its object is to provide a new and  
10 improved parallel ruler or section liner which is simple and durable in construction, very effective in operation, and arranged to enable the operator to readily and quickly draw a series of parallel lines placed uniform dis-  
15 tances apart.

The invention consists principally of a bar or straight-edge, on which is fitted to slide a head, and a drawing blade adapted to abut on the said bar and connected by obliquely  
20 arranged springs with the said sliding head.

The invention also consists of certain parts and details, and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

25 Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in all the figures.

Figure 1 is a perspective view of the improvement. Fig. 2 is a similar view of the same with the parts in a different position; and Fig. 3 is a transverse section of the same on the line 3—3 of Fig. 2.

The improved drawing instrument is provided with a bar or straight-edge A, provided at its ends with lugs A' and A<sup>2</sup>, adapted to rest on the drawing board or other place on which the lines are to be drawn. On this bar or straight-edge A is fitted to slide a head B  
40 made U-shaped and having the transverse bars B' and B<sup>2</sup>, through which pass loosely the bar or straight-edge A; and the connecting arm B<sup>3</sup> connecting the bars B' and B<sup>2</sup> with each other on the outer edge of the bar or  
45 straight-edge A. The bar B' carries a set screw E, the office of which will hereinafter appear.

Between the inner ends of the sliding head B is arranged a drawing blade C having the  
50 head portion C' and an angular drawing edge C<sup>2</sup>, the head portion C' abutting on the inner edge of the bar or straight edge A, as is plainly

shown in the drawings. The head portion C' is connected by springs D with the arm B<sup>3</sup> of the sliding head B, the said springs being  
55 arranged obliquely, so that when the head B is moved, as hereinafter more fully described, then the drawing blade C is moved forward along the abutting edge of the bar or straight-edge A, as hereinafter more fully described. 60

The device is used as follows: When the several parts are in the position shown in Fig. 1, then the bar or straight edge A is held in place by fastening the ends to the drawing board, by means of either pins or weights, as  
65 desired. The operator then places his thumb on the head portion C' of the drawing blade C so as to press the said drawing blade firmly in position on the drawing board, with the drawing edge C<sup>2</sup> turned in the direction corresponding to the line to be drawn. The line  
70 is now drawn along the edge C<sup>2</sup>, and then the operator pushes on the bar B', so as to shift the sliding head B in the direction of the arrow a' until the inner end of the set screw E  
75 abuts against the top of the head portion C', as shown in Fig. 2. The operator now releases the pressure on the head portion C' of the drawing blade C, so that the springs D draw the latter forward in the direction of  
80 the arrow a' until the lower end of the head portion C' rests against the bar B<sup>2</sup>. A second line can now be drawn along the drawing edge C<sup>2</sup> parallel to the line first made. The above described operation is then repeated; 85 that is, the drawing blade C is pressed on the drawing board and held in place, the line is drawn and then the sliding head B is moved in the direction of the arrow a' until the set screw E presses on the head C', after which  
90 the drawing blade is released and moves forward by the action of the springs D.

It will be seen that by adjusting the set screw E the lines drawn can be placed a greater or less distance apart according to  
95 the nature of the work.

By reference to Fig. 3, it will be seen that the springs D are preferably made in the shape of rubber bands, extending over both sides of the straight-edge and passing through  
100 apertures in the head portion C' of the drawing blade and the connecting arm B<sup>3</sup> of the sliding head B, so that all of the parts are always securely held together, and at the same



time permit the sliding motion above described.

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

1. A parallel ruler, comprising a support, a head sliding on said support and provided with spaced abutments, and a drawing blade movable between said abutments, substan-  
10 tially as described.

2. A parallel ruler, comprising a support, a head sliding on the support and provided with spaced abutments one of which is ad-  
15 justable, and a drawing blade movable between the said abutments, substantially as described.

3. A parallel ruler, comprising a straight edge, a head sliding on the straight edge, and a sliding and spring actuated drawing blade  
20 carried by the said head, substantially as described.

4. A parallel ruler, comprising a straight-edge, a head fitted to slide on the said straight-edge, a sliding drawing blade adapted to abut  
25 on the said straight edge and springs connecting the blade with the said sliding head and

serving to operate the said blade, substantially as shown and described.

5. A parallel ruler, comprising a straight-edge, a head fitted to slide on the said straight edge, a drawing blade having a head fitted to  
30 slide in one open side of the said sliding head and adapted to abut against one edge of the said straight-edge, and springs arranged obliquely and connecting the said sliding head  
35 with the said drawing blade, substantially as shown and described.

6. A parallel ruler, comprising a straight-edge, a head fitted to slide on said straight-edge, a drawing blade having a head fitted to  
40 slide in one open side of the said sliding head and adapted to abut against one edge of the said straight-edge, springs arranged obliquely and connecting the said sliding head with the  
45 said drawing blade, and a set screw screwing in the said head, for regulating the distance apart the lines are to be drawn, substantially as shown and described.

AUGUSTUS STEIGER COOPER.

Witnesses:

CHAS. ANGUISOLA,  
A. W. TRYCE.