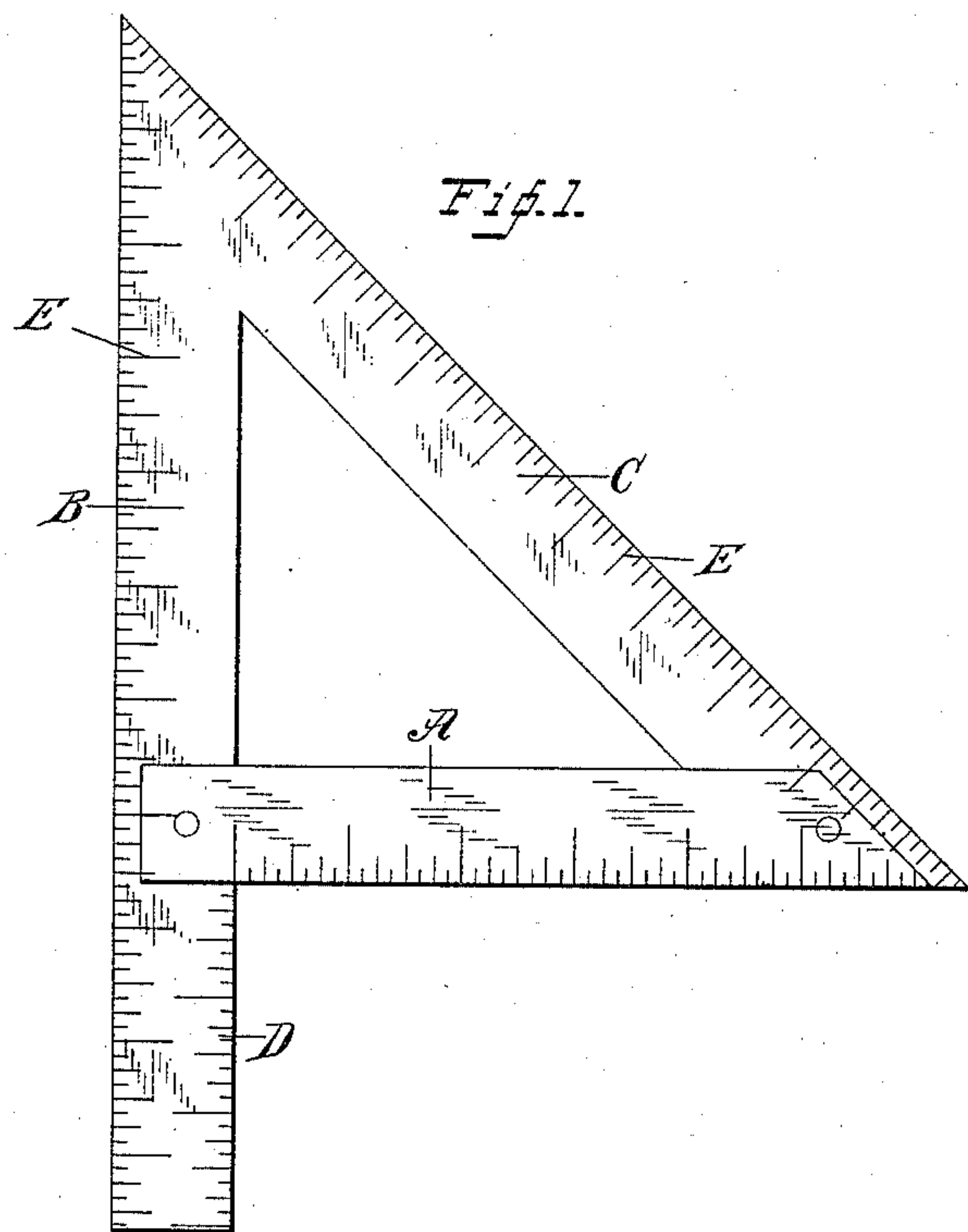


(No Model.)

P. L. FOX.  
COMBINED SQUARE AND MITER.

No. 331,047.

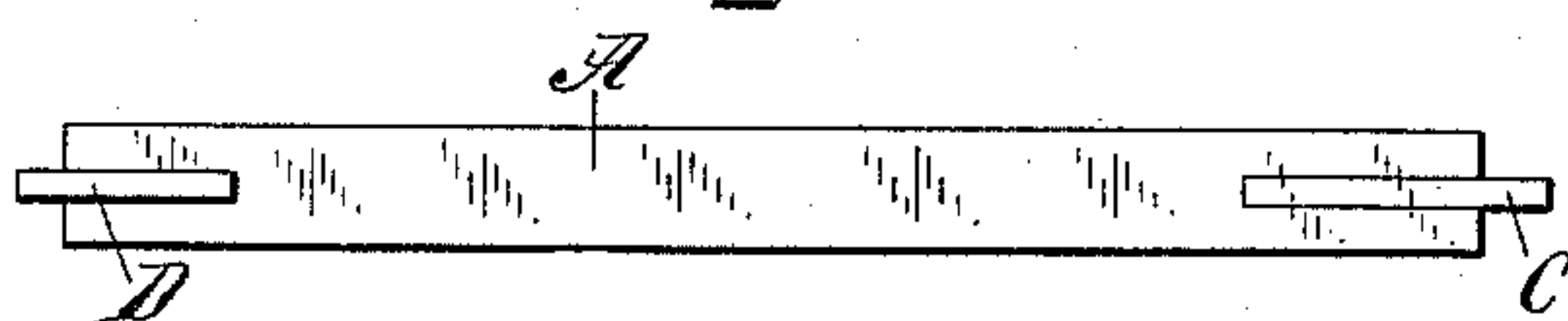
Patented Nov. 24, 1885.



*Fig. 2.*



*Fig. 3.*



Witnesses,

C. C. Perkins.  
C. E. Ruggles

Inventor,

Philos L. Fox  
By A. M. Wooster  
att'y.

# UNITED STATES PATENT OFFICE.

PHILO L. FOX, OF BRIDGEPORT, CONNECTICUT.

## COMBINED SQUARE AND MITER.

SPECIFICATION forming part of Letters Patent No. 331,047, dated November 24, 1885.

Application filed August 3, 1885. Serial No. 173,307. (No model.)

*To all whom it may concern:*

Be it known that I, PHILO L. FOX, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Combined Square and Miter; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to produce a combined square and miter which shall be perfectly adapted for general use, but more especially adapted for carpenter's use, and which shall combine the useful features of a common angle-square, a try-square, an ordinary T-square, and a miter. With these ends in view I have devised the simple and novel tool which I will now describe, referring by letters to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation; Fig. 2, an edge view of the long arm of the square, and Fig. 3 an edge view of the head thereof.

The marked peculiarity of my invention is its perfect simplicity, the entire device consisting of but two pieces, the parts of which are indicated by letters A, B, C, and D. In Fig. 1 part A, which is really the head of the square, corresponds with the base, part B with the perpendicular, and part C with the hypotenuse, of a right-angled triangle. The two arms of the triangle proper upon their outer edges are of equal length, so that the hypotenuse forms a perfect miter.

Part A, (the head,) corresponding in the drawings with the base of a triangle, may be made either of metal or wood, preferably of wood, but is made thicker than the other parts, and is provided at its ends with central slots to receive parts B and C, as clearly shown in Figs. 2 and 3. This enables me to apply the device to all the ordinary uses to which a T-square would be placed.

A very important feature of my invention is that part B, which I have compared with the perpendicular of a right-angled triangle, is extended below the head, as is clearly shown in Figs. 1 and 2, this extension being indicated by letter D, and forming, with part A, a perfect try-square.

It will of course be apparent that when the

device is used as a try-square, extension D will be in a horizontal position at the top and part A in a vertical position. The device may also be used in this position as an ordinary angle-square, perhaps more generally known as a "steel" square. When used as a T-square, the head (part A) is at the top and part B in a vertical position. The device may also be used in this position to perform all the ordinary offices of an angle-square. Its use as a miter will of course be readily understood and can hardly require description.

Parts B and C may be made in any suitable manner. I preferably, however, strike out this portion of the device, including of course extension D, in a single piece, as indicated in the drawings. To this piece part A is attached by rivets or in any convenient manner.

E represents scales, which I place upon the miter and upon the several edges of the squares.

It is of course well understood that carpenters at their work will not, and, in fact, cannot, take time, to use tools of this class that require adjustment. It has therefore been necessary heretofore for them to carry in their tool-boxes a try-square and a miter in addition to an ordinary steel square. I have found in practice, however, that my improved construction perfectly combines the functions of all three without a single adjustment and in an exceedingly simple and economical manner.

Having thus described my invention, I claim—

1. A combined square and miter consisting of parts B and C, the former having an extension, D, and a part, A, made thicker than the other parts, and having central slots at its ends to receive parts B and C, the former being joined thereto at a right angle and the latter at the outer end thereof.

2. A combined square and miter consisting of parts B and C, the former having an extension, D, all being made in a single piece, and having scales upon their outer edges, and a part, A, made thicker than the other parts, and joined to part B at a right angle thereto and to the outer end of part C.

In testimony whereof I affix my signature in presence of two witnesses.

PHILO L. FOX.

Witnesses:

A. M. WOOSTER,  
A. B. FAIRCHILD.