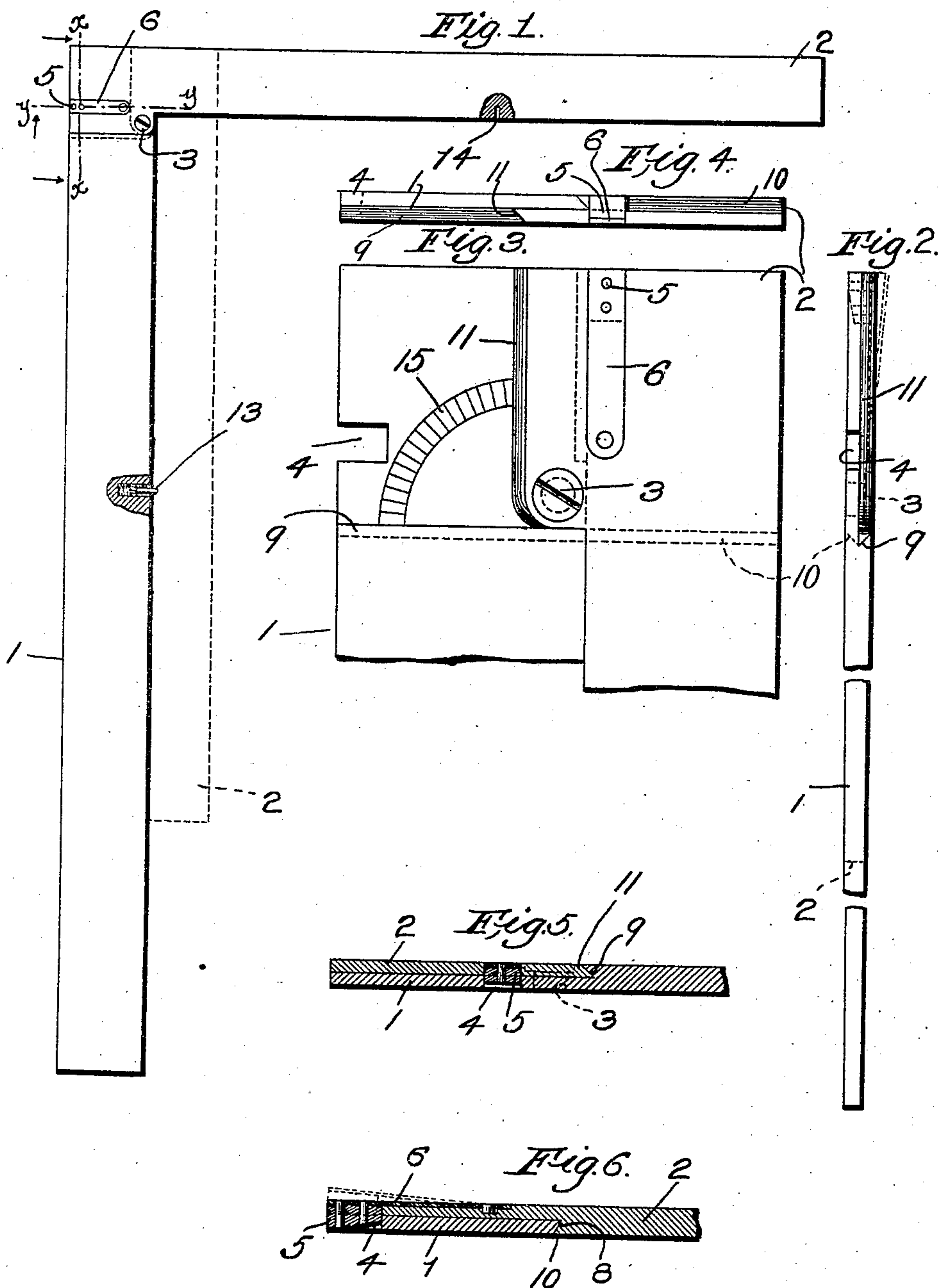


No. 855,233.

PATENTED MAY 28, 1907.

D. S. CORMIER.  
SQUARE.

APPLICATION FILED SEPT. 13, 1906.



Witnesses.  
H. C. Lincolford.  
W. L. Priary.

Inventor.  
Donat S. Cormier,  
by Lewis Gregory, atty's



# UNITED STATES PATENT OFFICE.

DONAT S. CORMIER, OF WALTHAM, MASSACHUSETTS.

## SQUARE.

No. 855,233.

Specification of Letters Patent.

Patented May 28, 1907.

Application filed September 13, 1906. Serial No. 334,428.

*To all whom it may concern:*

Be it known that I, DONAT S. CORMIER, a citizen of the United States, and a resident of Waltham, county of Middlesex and State of Massachusetts, have invented an Improvement in Squares, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawing representing like parts.

This invention relates to squares such as are used by carpenters and such as are frequently called "carpenters' squares," and it relates particularly to folding squares of this type.

The objects of the invention are, among others, to provide a novel construction by which the square may be locked either in its open or in its closed position, and a novel construction by which the pivoted joint of the square is stiffened and braced when the square is open, thereby to make the square as stiff and rigid as if it were made in one piece.

Other objects of the invention will appear from the following description of one embodiment of my invention, and the novel features of the invention will be pointed out in the claims appended to this specification.

In the drawings,—Figure 1 shows a side view of my improved square, the square being shown open in full lines and folded in dotted lines; Fig. 2 is a back side edge view of the square when open; Fig. 3 is an enlarged view of the joint showing the square folded; Fig. 4 is a top plan view of Fig. 3; Fig. 5 is an enlarged section on line  $x-x$ , Fig. 1; Fig. 6 is an enlarged section on line  $y-y$ , Fig. 1.

The square shown in the drawing has two legs or blades 1 and 2 which are pivoted together at the corner of the square, as at 3, in such a manner that the two legs can be folded together, as shown in dotted lines Fig. 1. Each leg is reduced in thickness at the joint and the thinned portions of the legs overlap each other; this construction being adopted in order that the square may be no thicker at the joint than at other portions of the legs.

In order to lock the square in its open position, I have provided the leg 1 with a locking notch 4, into which a locking lug 5, carried by the leg 2, is adapted to enter. The locking lug 5 is preferably mounted on a spring stem 6 which is received in a recess in the side of the leg 2. With this construction, the locking lug has a movement laterally of the legs, the movement in one direction causing it to enter the locking notch and locking

the legs in their open position, and the movement in an opposite direction withdrawing it from the notch, permitting the legs to be folded.

The locking lug is so positioned on the leg 2 that when the square is folded, it will engage the edge 8 of the leg 1 and thus lock the square in its folded condition. The spring stem 6 has sufficient strength so that when the blades are turned relative to each other, said spring will force the locking lug into either the notch 4 or into engagement with the edge 8. The lock is thus an automatically operative one, although the locking lug has to be manually disengaged from the notch 4 or the edge 8.

In order to make the square perfectly stiff and rigid when it is open, I have undercut the shoulder between the main body of each leg and the thin portion thereof, as shown at 9 and 10 respectively, and each of the legs is provided with a beveled edge to engage the undercut shoulder on the other leg. For instance, the edge 8 on the leg 1 is beveled, as shown, and the edge 11 on the leg 2 is beveled.

When the square is open, the beveled edge 11 on the leg 2 engages the undercut shoulder 9 on the leg 1 and the beveled edge 8 on the leg 1 engages the undercut shoulder 10 on the leg 2. The two legs are thus interlocked together and the joint is much strengthened and stiffened. In fact, a joint made in this way, is practically as strong as if the two legs were made integral with each other.

When the square is folded, a comparatively small portion of the thin parts of the legs overlap. In order to hold the two legs of the square in the same plane and to relieve the joint from any undue strain, I have provided a spring pressed pin 13 in one leg which is adapted to engage a socket 14 in the other leg.

If desired, a protractor scale may be applied to the square so that it may be used as a protractor to lay off the different angles. The protractor scale can be conveniently placed on the meeting faces of the thin ends of the legs, as shown at 15 in Fig. 2, and the beveled edges 8 and 11 may be used in connection with this scale for getting the desired angle.

The constructional details may be changed in various ways without departing from the invention.

Having described my invention, what I



claim as new and desire to secure by Letters Patent is:—

1. In a folding square, the combination with two legs pivoted together to fold inwardly, one of said legs having a locking notch in its outer edge, of a locking lug yieldingly carried by the other leg to move laterally thereof and adapted to engage said notch when the legs are open thereby to lock them in open position and to engage the inner edge of the notched leg when the legs are closed thereby to lock them in their closed position.

2. In a folding square, two legs pivoted together to fold inwardly, one of said legs having a locking notch in its outer edge and a locking lug carried by the other member and adapted to engage either said notch when the legs are open, thereby to lock them in open position, or the inner edge of the notched leg when the legs are closed, thereby to lock them in their closed position.

3. In a folding square, the combination of two legs pivoted together, each being reduced in thickness at the pivotal joint and provided with an undercut shoulder and a beveled edge, the beveled edge of each being adapted to engage the undercut shoulder of the other when the square is open, one of said legs having a locking notch in its outer edge, of a locking lug carried by the other member and adapted to engage said notch when the legs are open, thereby to lock them in open position; and to engage the inner

beveled edge of the notched member when the legs are closed, thereby to lock them in their closed position.

4. In a folding square, the combination of two legs pivoted together, each being reduced in thickness at the pivotal joint and provided with an undercut shoulder and a beveled edge, the beveled edge of each being adapted to engage the undercut shoulder of the other when the square is open, one of said legs having a locking notch in its outer edge, of a locking lug carried by the other member and adapted to engage said notch when the legs are open, thereby to lock them in open position and to engage the inner beveled edge of the notched member when the legs are closed, thereby to lock them in their closed position, and a protractor scale placed on the side face of one of the reduced portions.

5. A folding square having in combination two legs pivoted together, means to lock the legs in either their open or closed position and a spring pressed pin carried by the edge of one leg and adapted to enter a recess in the edge of the other leg when the square is folded.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

DONAT S. CORMIER.

Witnesses:

LOUIS C. SMITH,  
JOSEPH L. P. ST. COEUR.