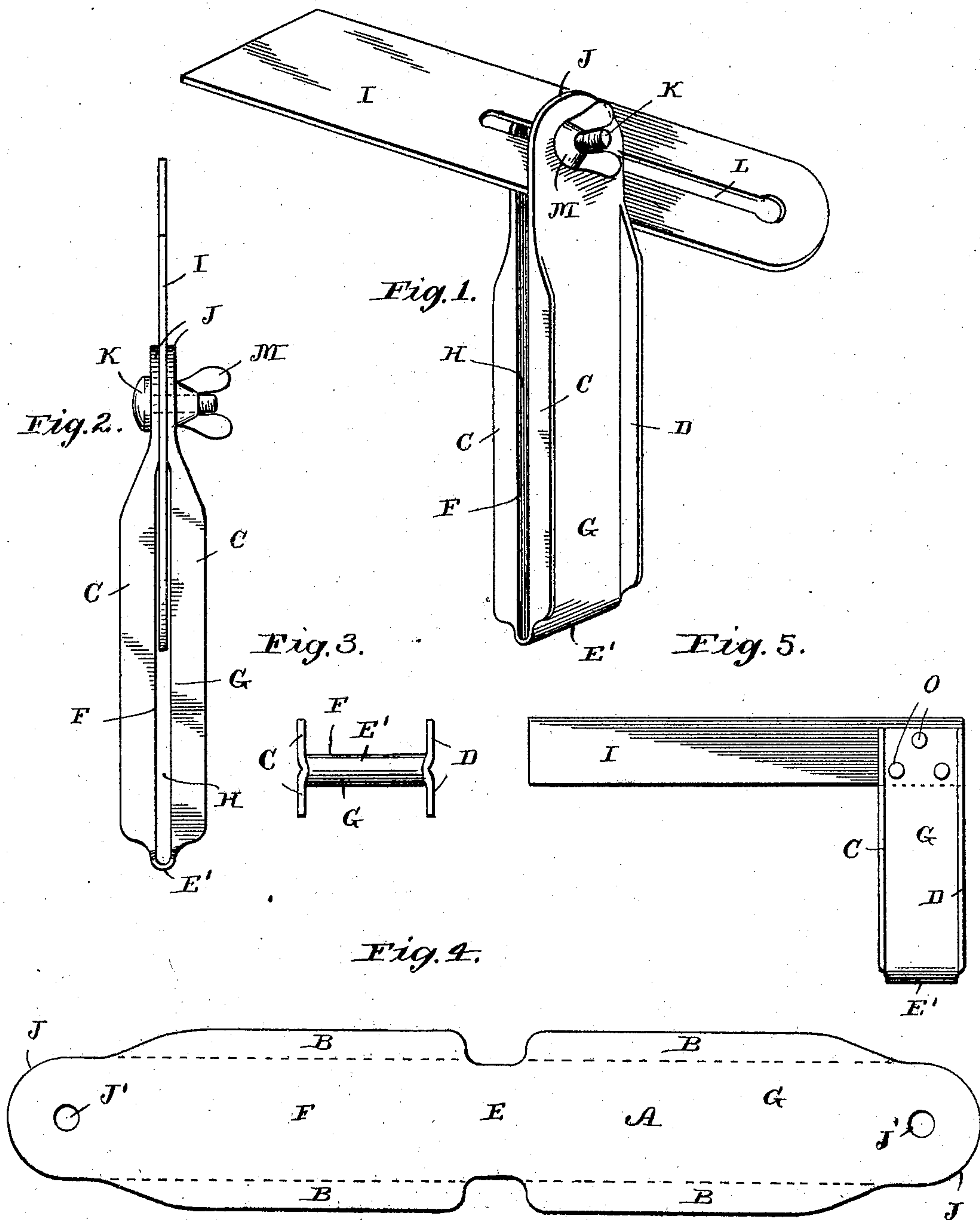


No. 806,518.

PATENTED DEC. 5, 1905.

F. G. BREUL.  
SQUARE.

APPLICATION FILED DEC. 13, 1904



Witnesses  
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# UNITED STATES PATENT OFFICE.

FREDERICK G. BREUL, OF BRIDGEPORT, CONNECTICUT.

## SQUARE.

No. 806,518.

Specification of Letters Patent.

Patented Dec. 5, 1905.

Application filed December 13, 1904. Serial No. 236,676.

*To all whom it may concern:*

Be it known that I, FREDERICK G. BREUL, a citizen of the United States, and a resident of Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Squares, of which the following is a specification.

My invention relates to improvements in sheet-metal squares, and more especially to a new construction of back therefor.

It is the purpose of the invention to provide a novel construction of back for different styles of squares—as, for instance, try-squares, bevel-squares, T-squares, &c.; further, to produce a back from a single piece of metal which will comprise two side portions, each portion having both longitudinal edges flanged to form two straight edges in a way to permit both the inner and outer edges of the back to be used as a straight-edge; further, to construct the back in a manner that will allow the blade to be adjusted to any angle.

Referring to the accompanying drawings, forming a part of this specification, similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a perspective view of a bevel-square provided with my improved back and having an adjustable blade. Fig. 2 is an end view of the square seen in Fig. 1. Fig. 3 is a detached end view of the back. Fig. 4 is a plan view of a blank from which the back is formed, and Fig. 5 shows a side view of a try-square provided with a back constructed in accordance with my invention.

Steel squares of this class having a double-straight-edge back have heretofore been made of three sheet-metal parts, the back being formed in two pieces and the blade comprising the third, as disclosed in allowed application of R. A. Breul, Serial No. 209,597. In my present application I am able to produce a back for square possessing all the merits and advantages of the before-mentioned square, including double straight edges, from a single piece of sheet metal, which insures a reduction in cost.

Referring to the characters of reference marked upon the drawings, A indicates a blank from which my back is formed. This may obviously be stamped or otherwise cut from sheet-steel and then by a couple of additional operations struck up into the shape

shown for the purposes of forming a back complete ready for assembling. The first operation upon the blank would be to strike up the four side edges B, deflecting the stock thereof at a right angle, forming the broad straight edges C C and D D, the two former representing the inner straight edges of the back, while the latter indicate the outer straight edges. These edges C and D are exactly parallel with each other and serve to engage the edge of the stock to be squared or marked.

The blank after being operated upon as above is then bent across its intermediate portion E, forming a closed end E' and bringing the two side portions F and G also parallel with each other, but not into engagement, leaving a space H therebetween of substantially uniform width and slightly greater than that of the thickness of the blade I.

In the construction of a back for use in a miter-square, as shown in Figs. 1 and 2, the ends J would be rounded and each provided with a central hole J' to register with that of the other for the reception of an adjustable pivotal screw K. This screw freely passes through a slot L in the adjustable blade I to allow said blade to be pivoted and shifted longitudinally thereon, said blade being adapted to swing in both directions and either end to pass intermediate of the sides of the back and to be secured in any of said adjusted positions by means of the nut M on the screw K.

In the construction of a try-square as shown in Fig. 5 the back would preferably be secured to the blade by means of rivets O, any number of which may be employed, it being obvious that said blade is rigidly disposed at a right angle to the back.

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

1. In a square of the class described, the combination with a back formed of a single piece of sheet metal, bent transversely of its length forming two sides with a closed outer end and an open inner end and having one or both of its adjacent pairs of parallel edges turned and deflected outward to form a broadened engaging surface, and a blade adjustably pivoted intermediate of the free ends of the back.

2. In a square of the class described, the combination of a back formed of a single piece of sheet metal bent transversely of its length to form two side portions disposed parallel with

each other, outwardly-disposed straight and parallel flanges on both of the longitudinal edges of each of said side portions, and a blade attached to the free ends of such side portions.

5 3. In a square of the class described, the combination of a back formed of a single piece of sheet metal, bent transversely of its length forming two sides with a closed outer end and an open inner end and having its parallel edges  
10 turned at a right angle to broaden the engag-

ing surfaces, and a blade adjustably pivoted intermediate of the free ends of the back member.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 6th day of 15  
September, A. D. 1905.

FREDERICK G. BREUL.

Witnesses:

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RUTH RAYMOND.