No. 788,017. PATENTED APR. 25, 1905.

R. A. BREUL.

SQUARE.

APPLICATION FILED MAY 24, 1904.

Fig. 1.

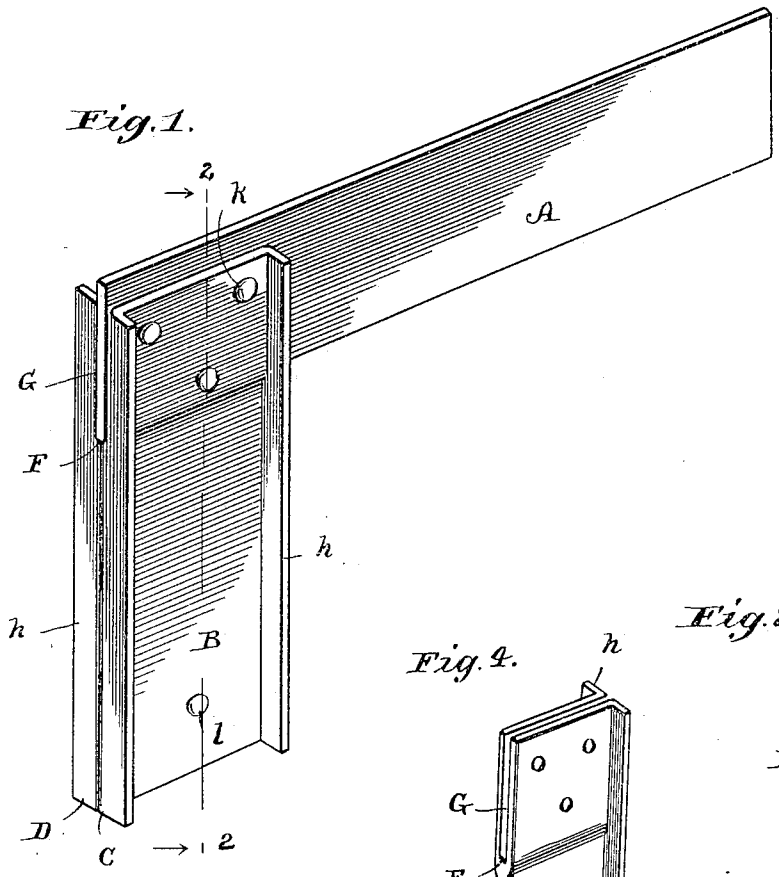


Fig. 2.

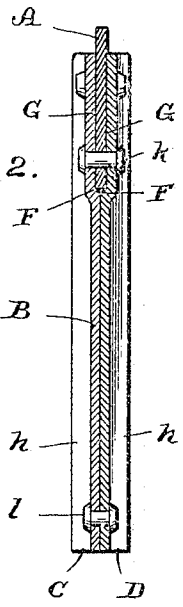


Fig. 4.

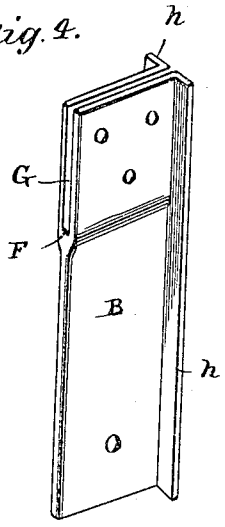
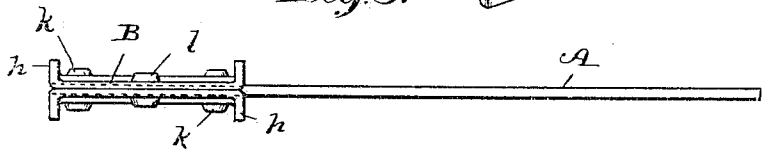


Fig. 3.



Witnesses

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No. 788,017. Patented April 25, 1905.

UNITED STATES PATENT OFFICE.

RICHARD A. BREUL, OF BRIDGEPORT, CONNECTICUT.

SQUARE.

SPECIFICATION forming part of Letters Patent No. 788,017, dated April 25, 1905.

Application filed May 24, 1904. Serial No. 209,597.

To all whom it may concern:

Be it known that I, RICHARD A. 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.

This invention relates to new and useful improvements in try-squares such as are employed by mechanics in laying out work.

It is the purpose of my invention to improve upon the squares now found upon the market by producing an all sheet-metal square which shall be light, strong, durable, and simple in construction and inexpensive to manufacture and, finally, to produce it in a way so that it can be sold in the market at an exceptionally low figure.

With the above objects in view my invention resides and consists in the novel construction and assemblage of parts shown upon the accompanying drawings, forming a part of this specification, upon which similar characters of reference denote like or corresponding parts throughout the several figures, and of which—

Figure 1 shows a perspective view of my improved sheet-metal square complete. Fig. 2 is a central vertical cross-section taken on line 2 2 of Fig. 1. Fig. 3 is a bottom edge view of the square as seen in Fig. 1, and Fig. 4 is a perspective view of a modified form of back embodying my invention.

My improved square, as shown, is preferably formed of three sheet-metal parts of special construction assembled and secured together by a suitable number of rivets.

Referring in detail to the characters of reference marked upon the drawings, A indicates the blade of the square, which comprises a plain strip of sheet metal. This blade is secured to the back B, which, as shown in the preferred form, is made of two sections C and D, of specially-shaped sheet metal, adapted to be laid together to form the solid back and to receive a portion of the blade, as shown. These back-sections, as seen in Figs. 1 to 3, inclusive, are alike in construction, and each comprises a single piece of sheet metal struck up to form an offset or recess G, having a transverse shoulder F to receive and engage the blade. Side flanges *h* are also disposed outwardly at right angles from the body portion of said sections to form the engaging or straight edges of the back, which are obviously arranged at a right angle to the blade. The recess F, formed intermediate of the upper inner face of the sections C and D, forms a pocket to receive the blade, which is secured therein by means of rivets *k*, of which there may be any desired number. The lower portions of the sections lie together solid with the flanged edges fitted flush, forming a compact dirt-proof construction, and secured together by means of rivets 1 passing therethrough and through the plate A, thus uniting the parts as if in one integral piece.

It is obvious that the back for my square may be made of one piece of sheet metal, as shown in Fig. 4, and still contain the essential feature of this invention, which includes the offset or recess G, with a transverse shoulder for the blade and having the remaining portion lay closed together, as in the preferred form. This construction would contain outwardly-disposed flanges on one edge only. In the manufacture of this square these parts would be struck up complete in suitable dies, so as to leave the matter of assembling a comparatively simple one, and which can be performed by inexperienced help.

I am aware that squares have heretofore been made from metal in several ways, some of which embodied special features and additional parts from those contained in my present square. The backs of some of such squares include straight sheet-metal side members with intermediate filling-pieces, all of which produce a heavy, expensive, and in other ways more objectionable construction than that herein shown, while the backs of some others are formed from castings, which are expensive to make, cost much labor to plane or mill the bottom, sides, edges, and recess thereof, and are liable to break and render the square useless.

Having thus described my invention, what

I claim, and desire to secure by Letters Patent, is—

1. In a try-square, the combination with a blade, of a back bent completely from sheet metal, the sides of said back containing offsets and shoulders to receive and inclose the blade, the remaining side portions of said back meeting close together, and rivets for securing said back portions and blade together.

2. In a try-square, the combination with a blade, of two plates of sheet metal each having lengthwise outwardly-bent flanges and a straight transverse offset in their end portions to jointly inclose the blade, said plates being in close contact with each other below such offsets and means for securing the blade and plates together.

3. A try-square comprising a back formed of two layers of sheet metal shaped to lie close together throughout their lower portions; to form an opening intermediate of their upper ends, and to comprise longitudinal flanges along their side edges, and a blade fitted in said opening and means for securing said parts together.

4. In a try-square, the combination with a blade, of a back bent completely from sheet metal, and comprising offsets and shoulders to receive and inclose the blade, the remaining portion of said back meeting close together, and rivets for securing said back and blade together.

Signed at Bridgeport, in the county of Fairfield and State of Connecticut, this 11th day of May, A. D. 1904.

RICHARD A. BREUL.

Witnesses:
C. M. NEWMAN,
RUTH RAYMOND.