

No. 628,753.

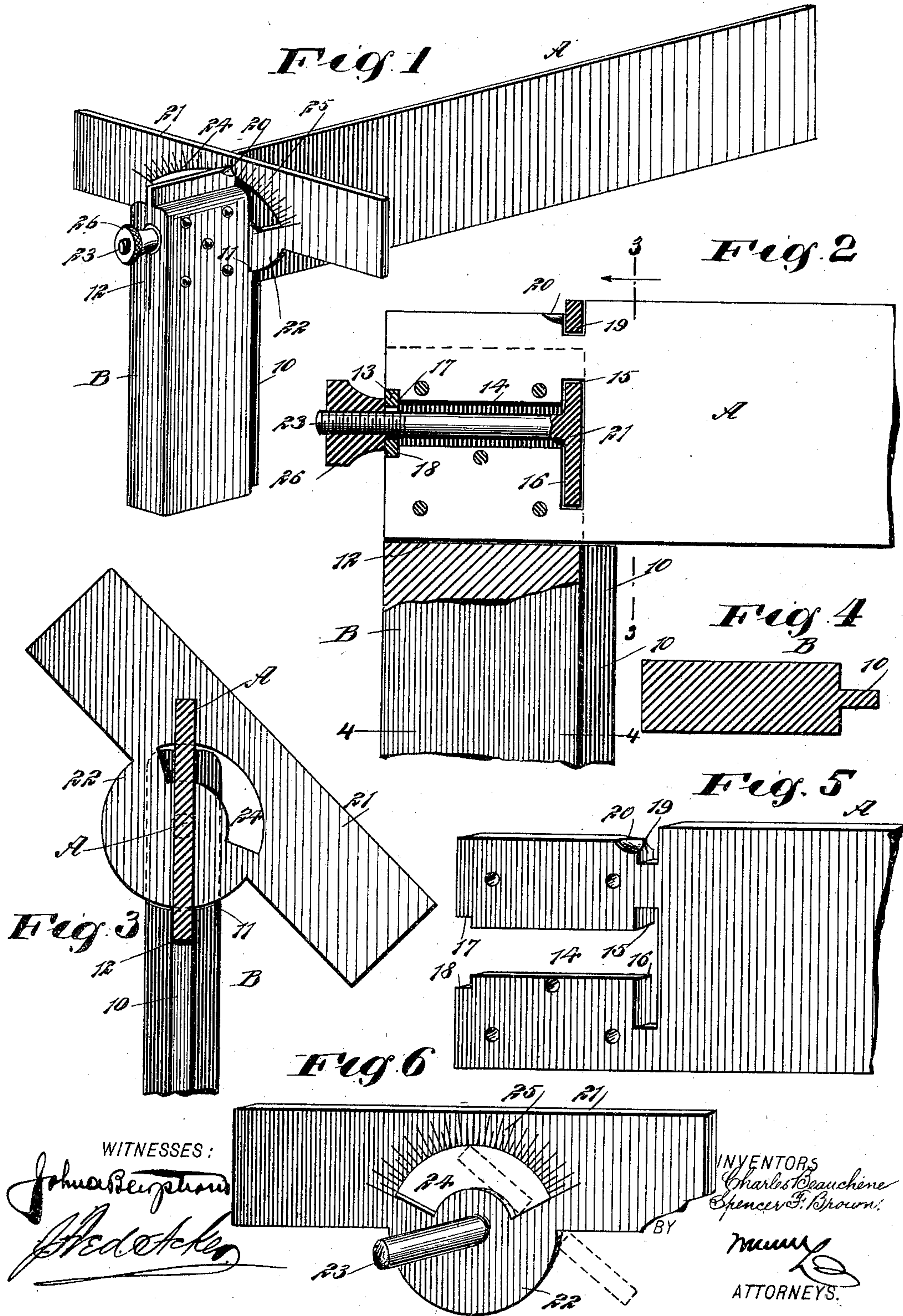
S. F. BROWN & C. BEAUCHÉNE.

Patented July 11, 1899.

BEVEL SQUARE.

(Application filed Oct. 8, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

SPENCER F. BROWN AND CHARLES BEAUCHÉNE, OF LAKE LINDEN,
MICHIGAN.

BEVEL-SQUARE.

SPECIFICATION forming part of Letters Patent No. 628,753, dated July 11, 1899.

Application filed October 8, 1898. Serial No. 693,013. (No model.)

To all whom it may concern:

Be it known that we, SPENCER F. BROWN and CHARLES BEAUCHÉNE, of Lake Linden, in the county of Houghton and State of Michigan, have invented a new and Improved Bevel-Square, of which the following is a full, clear, and exact description.

The object of our invention is to provide a try and miter square of simple, durable, and economic construction by means of which the miter of any article may be expeditiously and conveniently delineated and whereby a straight cut may be indicated at the top or at the bottom and at a side of an object and marked with a single stroke of a marking-tool.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

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

Figure 1 is a perspective view of the improved square. Fig. 2 is a partial side elevation of the long member of the square, parts of the short member of said square being broken away to illustrate the manner in which the two members are connected, the miter-plate carried by the members of the square being in transverse section and likewise a portion of the adjusting device for said plate. Fig. 3 is a section taken substantially on the line 3 3 of Fig. 2. Fig. 4 is a section on the line 4 4 of Fig. 2. Fig. 5 is a perspective view of the inner end of the long member of the square or that end which is connected with the short member of the square; and Fig. 6 is a detail perspective view of the miter-plate, the long member of the square being shown in dotted lines as about to be connected with said plate.

A represents the long member of the square, and B the short or head member. The short or head member B of the square is thicker than the long member A, and at the inner longitudinal edge of the short or head member B a rib or flange 10 is longitudinally and centrally formed, said rib or flange contacting with the lower edge of the long member

of the square and being of the same thickness as said member.

In the inner edge of the short member of the square, at that end which connects with the long member A, a longitudinal recess 11 is made, the bottom wall whereof is circular or concaved, as shown in Fig. 3, and a longitudinal slot 12 is made in the receiving end of the short or head member of the square and is adapted to receive an end of the long member A, as shown in Fig. 2, and, furthermore, at the outer edge portion of the longitudinal slot 12 a washer or ferrule 13 is countersunk in the said head member, as illustrated in both Figs. 1 and 2.

That end of the long member A of the square that is to enter the slot in the head or short member B of said square is provided with a centrally-located longitudinal opening 14, and at the inner wall of said opening 14 two opposing recesses 15 and 16 are made, the said recesses being produced in opposing longitudinal walls of the opening 14, while corresponding recesses 17 and 18 are made in said longitudinal walls of the opening 14 at its outer end. Another recess 19 is made in the upper or outer longitudinal edge of the member A, the outer or edge recess 19 being in alinement with the recesses 15 and 16, and one wall of the recess 19 is shaped to form a pointer 20, as is shown in Figs. 1, 2, and 5.

In connection with the two members of the square a miter-plate 21 is provided. This plate comprises a body in the form of a parallelogram and a pendent member 22, which is located at the central portion of the inner edge of the body, and the said pendent member 22 is of semicircular form, being provided with a bolt or a screw 23, secured to its center, while above the pendent member 22 of the miter-plate a segmental slot 24 is produced in the body, and a scale 25 is arranged along one edge of said slot 24, as is shown in Figs. 1 and 6, the scale indicating inches and fractions thereof.

In assembling the parts of the square one member of the long arm of said square is passed into and through the segmental slot 24 in the miter-plate, and said arm of the square is then turned until it stands at a right angle to the plate, as shown in Figs. 1

and 2, at which time the outer wall of the segmental slot 24 will be located in the outer or edge recess 19 of the arm A, the bottom edge of the slot being contained within the recess 15, while the edge of the pendent member 22 of the miter-plate will be located in the recess 16, and the miter-plate may, therefore, be turned upon the arm A, as upon a pivot. The slotted end of the arm A of the square is then passed into the slot 12 in the short or head member or arm of the square, the inner longitudinal edge of the arm A resting upon the inner edge of the rib 10 on the head member or arm, while a portion of the long member or arm A will extend above an end of the short one, and the pointer 20 will be opposite the scale 25.

The recesses 17 and 18 are made in the slotted end of the long arm or member A to receive the washer or ferrule 13. When the two arms A B are brought together, they are securely connected by means of rivets, screws, or their equivalents, and the threaded end of the screw or bolt 23 will pass out through the ferrule 13 and said threaded end of the bolt is provided with a nut 26, as shown in Figs. 1 and 2.

When the plate 21 is at a right angle to the long arm A, a straight cut may be delineated, and when the square is brought to an engagement with the work a side of the rib 10 and a corresponding side of the long member of the square will engage with the said work, and the cut may be indicated by a single stroke of the pencil, since the pencil will have only to follow the outer edge of the plate and continue along the outer edge of the member A.

It will be observed that upon loosening the nut 26 the plate 21 may be carried to any desired angle relative to the members of the square, thus providing for any degree of mitering, it being possible to accurately obtain the angle through the medium of the scale 25.

Having thus described our invention, we claim as new and desire to secure by Letters Patent—

1. A square provided with a long and with a short member, the latter being thicker than the former and provided with a guide-rib which engages with an edge of said long mem-

ber, the short member of the square being provided with a slot and the long member being provided with a longitudinal slot at that end which enters the short member, together with recesses at the inner end of the said slot and a recess at its outer edge, a plate provided with a segmental slot, a scale being arranged adjacent to the slot, the said slot being adapted to receive the slotted end of the long member of the square, the plate being held to turn in the recesses in said square, a pivot-bolt attached to said plate, which bolt is loosely passed through the short member of the square, and a nut at the outer end of said bolt, for the purpose specified.

2. In a bevel-square, the combination of two square-sections joined rigidly to each other, one of said sections having a slot therein, a miter-plate having portions fitted in the slot, a bolt on which the miter-plate is mounted, the bolt being fitted in the square, whereby to permit the movement of the miter-plate, and means for locking the miter-plate on the square.

3. In a bevel-square, the combination of the square-sections rigidly joined to each other, one of said sections having a longitudinal slot in the end that is secured to the other section, and the slot having transversely-offset portions, a bevel-plate having a part fitted to move in the offset portions of the slot, and a bolt on which the bevel-plate is carried, the bolt being extended through the main portion of the slot.

4. In a bevel-square, the combination of the square-sections rigidly secured to each other, one of said sections having a slot formed in the end that is attached to the other section, such slot having transverse offsets at its inner end, a miter-plate having a portion mounted to move in said offsets, a bolt attached to the miter-plate and mounted to turn in the main portion of the slot, and means carried by the outer end of the bolt, whereby to lock the same.

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Witnesses:

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