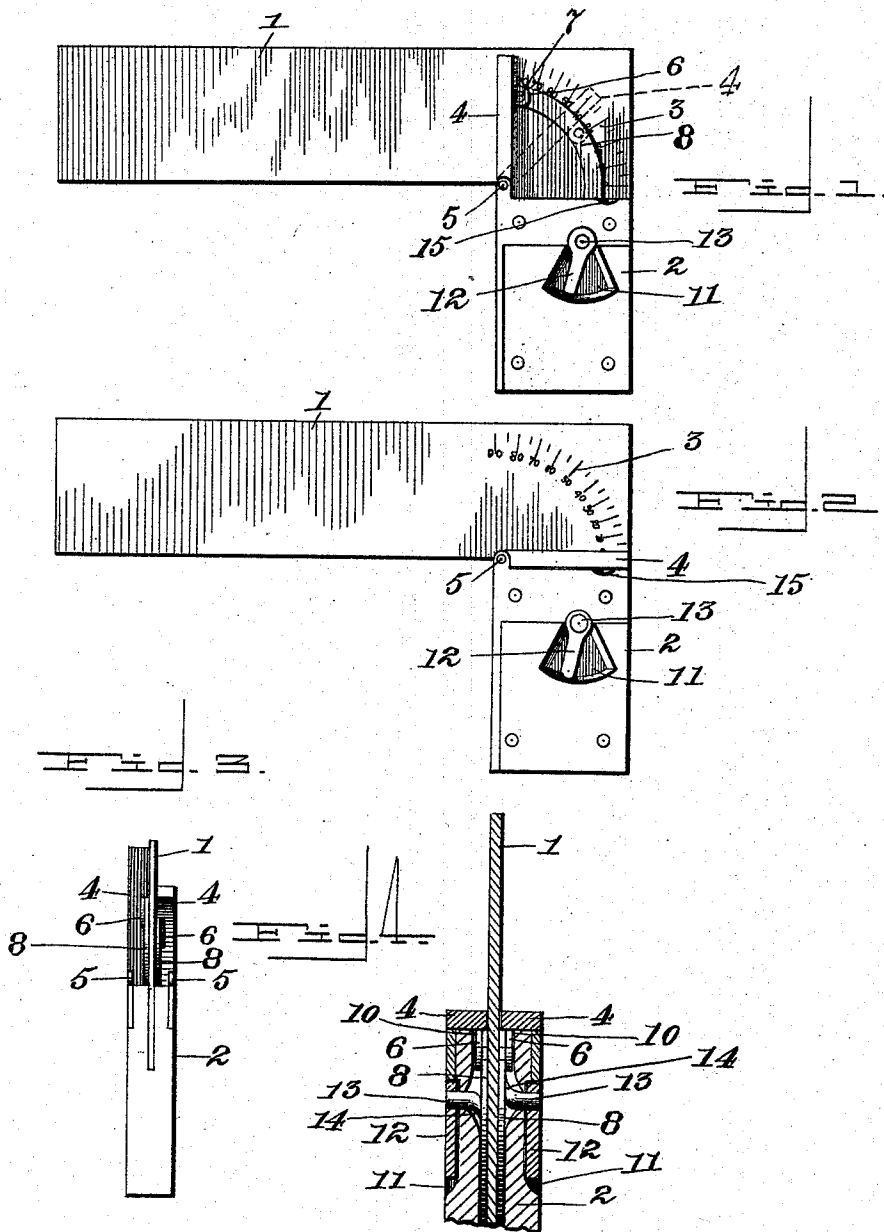


(No Model.)

P. GRABLER & J. J. BROWN.
SQUARE.

No. 527,968.

Patented Oct. 23, 1894.



WITNESSES:

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UNITED STATES PATENT OFFICE.

PETER GRABLER AND JOSEPH J. BROWN, OF PITTSBURG, PENNSYLVANIA.

SQUARE.

SPECIFICATION forming part of Letters Patent No. 527,968, dated October 23, 1894.

Application filed October 24, 1893. Serial No. 489,017. (No model.)

To all whom it may concern:

Be it known that we, PETER GRABLER and JOSEPH J. BROWN, citizens of the United States of America, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Try-Squares, of which the following is a specification, reference being had to the accompanying drawings.

This invention has relation to certain new and useful improvements in try squares and more particularly to a combination tool comprising both square and bevel.

This invention has for its object the provision of novel means whereby a try square may be adjusted to any angle or degree without changing the angle of the square proper or obstructing the same.

Furthermore, the invention contemplates a novel construction that will afford two separate and independent adjustments, each capable of being placed at different angles; a further object being to provide a locking device that will firmly retain the tool when set at the desired angle.

This invention has for its still further object, the construction of a tool that will be simple, strong, durable and comparatively inexpensive to manufacture.

With the above objects in view, the invention consists in the peculiar construction, combination and arrangement of parts to be hereinafter more particularly described and specifically pointed out in the claims.

In describing the invention in detail, reference is had to the accompanying drawings forming a part of this specification and wherein like figures of reference indicate similar parts throughout the several views, in which—

Figure 1, is a plan view of our improved try-square, showing the upper and lower arms at different angles of adjustment. Fig. 2. is a similar view with the adjustable arms closed. Fig. 3. is an end view. Fig. 4 is a detail view of the locking device arranged in the stock of the try-square.

In the drawings the numeral 1, indicates the blade of the square; 2, the stock of the same; 3, the arc scales; 4, 4, the adjustable arms, pivoted or hinged at 5 and carrying at their inner faces lugs 6, 6, to which are pivot-

ally secured at 7, 7, segmental guides 8, 8, operating in grooves 10, 10, formed in the stock on opposite sides of the blade.

At the upper end of the stock near the center, a recess 11 is formed in the shape of a segment. In said recess a small thumb lever 12, is placed. At the end and integral with this lever is a pin 13, carrying a cam 14. Against the segmental guide 8, at the top edge near the end of the stock a finger recess 15, is provided.

The arc scale 3, is concentric to the pivot 5, and the arms may be set at any angle between 0 and 90°.

Operation:—We will assume the square and its adjustments are in their normal position and it is desired to obtain two different angles or degrees; for example, forty-five degrees and seventy degrees. The thumb lever is then slightly moved to one side, thus releasing the cam from the guide. Then the arm forming the bevel may be adjusted to the desired point and the cam tightened by means of the thumb lever. The operation may then be repeated on the opposite side of the blade, and the square will be ready for use.

It will be particularly noted that the peculiar construction of the segmental guide, pivoted to the center of the arms, adds both strength and durability to the device.

We are aware that adjustable squares or bevel squares have been heretofore used, but they are not capable of being adjusted at two different angles, besides retaining and not interfering with the try-square proper.

Still further advantages of the device will be apparent from the foregoing description.

The tool is particularly designed and adapted to be used by carpenters, yet it may be employed and used with great advantage in connection with other instruments.

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

1. A try square provided with independently adjustable arms to indicate two different angles without disturbing the square proper substantially as described.

2. A try square and bevel comprising a blade and stock set at right angles, and having secured to its stock independently ad-

justable arms on opposite sides of the blade; and means for adjusting the same to different angles or degrees without interfering with the square proper, substantially as described.

5 3. A try square comprising a blade and stock set at right angles, and having secured to its stock independently adjustable arms on opposite sides of the blade, and means for locking said arms at the desired degree or
10 angles substantially as described.

4. A combined try-square and double bevel, comprising a blade and stock, independently adjustable arms pivoted on opposite sides of the square at the intersection of blade and
15 stock, said arms carrying segmental arms or guides adapted to operate in slots, cams and

thumb levers designed to lock said arms, substantially as described.

5. A combined try-square and double bevel, comprising a blade and stock provided with 20 independently adjustable arms adjustable to any angle between one and ninety degrees pivoted or hinged on opposite sides of the square and arc scales arranged on the blade
25 on opposite sides, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

PETER GRABLER.
JOSEPH J. BROWN.

Witnesses:

H. C. EVERT,
H. E. SEIBERT.