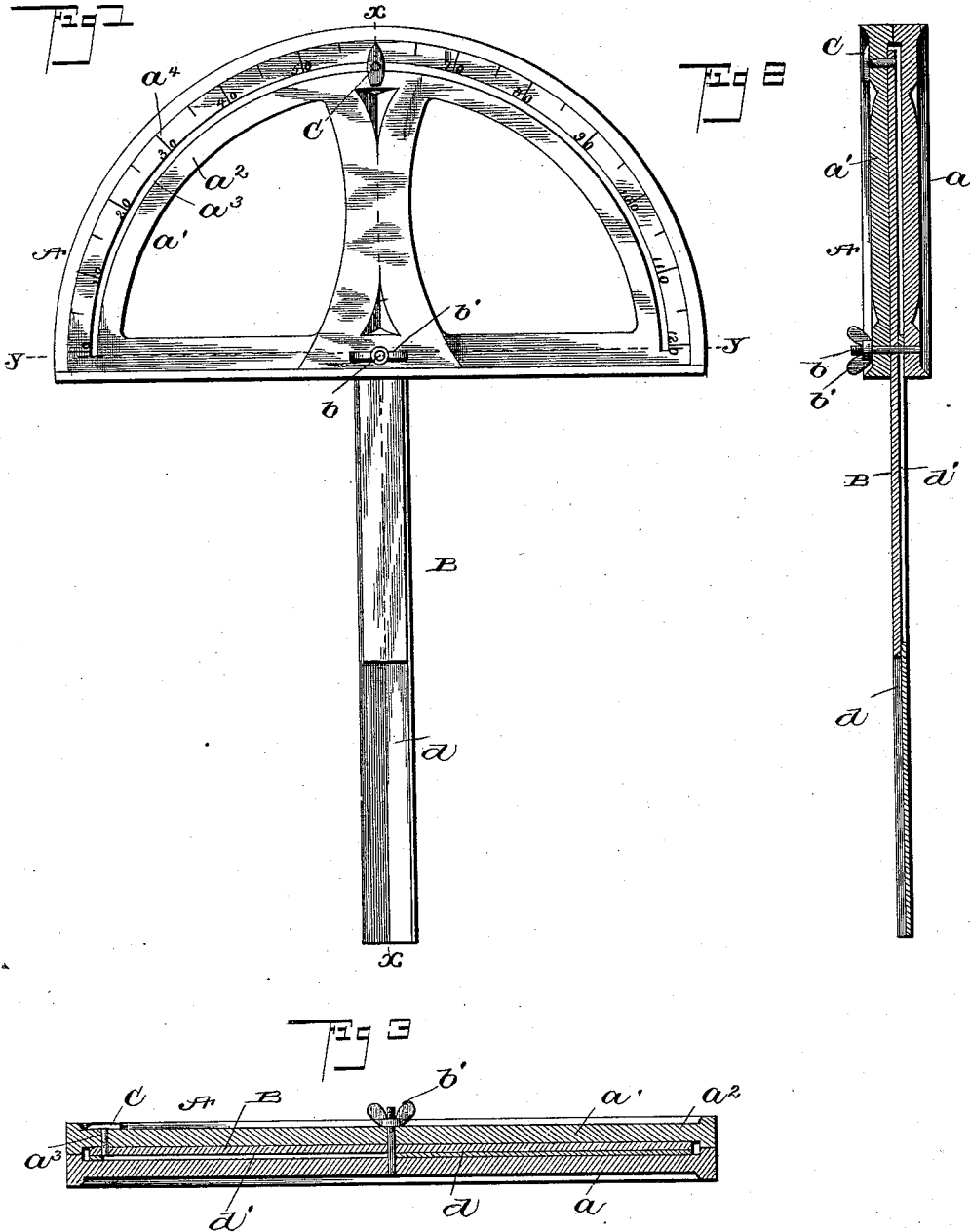


(No Model.)

G. R. RICHARDSON.
BEVEL SQUARE.

No. 471,897.

Patented Mar. 29, 1892.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE R. RICHARDSON, OF LATROBE, CALIFORNIA.

BEVEL-SQUARE.

SPECIFICATION forming part of Letters Patent No. 471,897, dated March 29, 1892.

Application filed November 9, 1891. Serial No. 411,323. (No model.)

To all whom it may concern:

Be it known that I, GEORGE R. RICHARDSON, of Latrobe, in the county of El Dorado and State of California, have invented certain new and useful Improvements in Bevel-Squares; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a new and improved bevel-square, and has for its object the production of a cheap, simple, and highly-efficient device of this nature which can be readily and easily operated and which provides for measuring or gaging to a maximum degree.

The invention consists in an arc or semi-circular frame having a scale thereon and an arm pivotally mounted in said frame at the center of the chord of the arc and having a pointer traveling over said scale, said arm being extensible, so as to provide for increasing gaging facilities, substantially as hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view of my improved bevel-square, showing the arm extended. Fig. 2 is a longitudinal sectional view thereof on the line xx , Fig. 1. Fig. 3 is a longitudinal sectional view on the line yy , Fig. 1, with the arms closed. Fig. 4 is a transverse sectional view through both arms.

Referring to the drawings, A designates the arc or semicircular frame, which is composed of two corresponding parallel sides a and a' . In the curved bar a^2 of the slide a' is formed a continuous slot a^3 , adjacent to the edge of which is a scale of graduation a^4 . A continuous uninterrupted space is provided between the inner opposite faces of the sides of this frame.

B is an arm or blade located between the sides of frame A and pivotally mounted in place at the center of the chord of the arc by a rod b , having a thumb-screw b' , by which the arm or blade can be held at any angle. From this arm or blade projects a headed stud C, which extends through slot a^3 . The head of this stud is pointed at one end, said end traveling over the scale a^4 to serve as an indicator. C is a supplemental or extensible arm or

blade working in conjunction with the arm or blade B. The latter is made V shape in cross-section, so as to fit snugly in a corresponding groove d , formed in the top face of the arm or blade C. A slot d' extends longitudinally through the latter about one-half its length, and the pivot-rod b is extended through this slot, which permits of the sliding adjustment of the arm or blade C. By sliding this supplemental arm or blade outward the measuring or gaging facilities are increased about one-half. When not in use, the arm or blade C is moved inward and both arms or blades are turned on their pivot-rod until they are between the parallel straight portions of the frame, when they are concealed from view and kept out of the way.

The advantages of my invention are apparent, and it will be particularly observed that a maximum gaging can be accomplished and the arms or blades protected or kept out of the way when not in use. A bevel-square thus constructed is extremely simple and inexpensive, is accurate in its working, and can be readily and easily adjusted to any desired angle or inclination.

I claim as my invention—

1. A bevel-square having a two-part arm or blade, one of which parts is pivoted and the other free to slide thereon, substantially as set forth.

2. A bevel-square having a two-part arm or blade, one of which parts is pivoted and is V shape in cross-section and the other is free to slide thereon and is provided with a corresponding groove or recess, substantially as set forth.

3. The herein-described improved bevel-square, consisting of the frame having corresponding sides with an intervening space, one of said sides being provided with a slot and a scale, the two-part arm or blade, one of said parts being extensible, the pivot-rod therefor, and the headed stud projecting from one of said parts of the arm or blade through said slot, substantially as set forth.

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

GEORGE R. RICHARDSON.

Witnesses:

JOHN SEINAS,
J. C. PORTER.