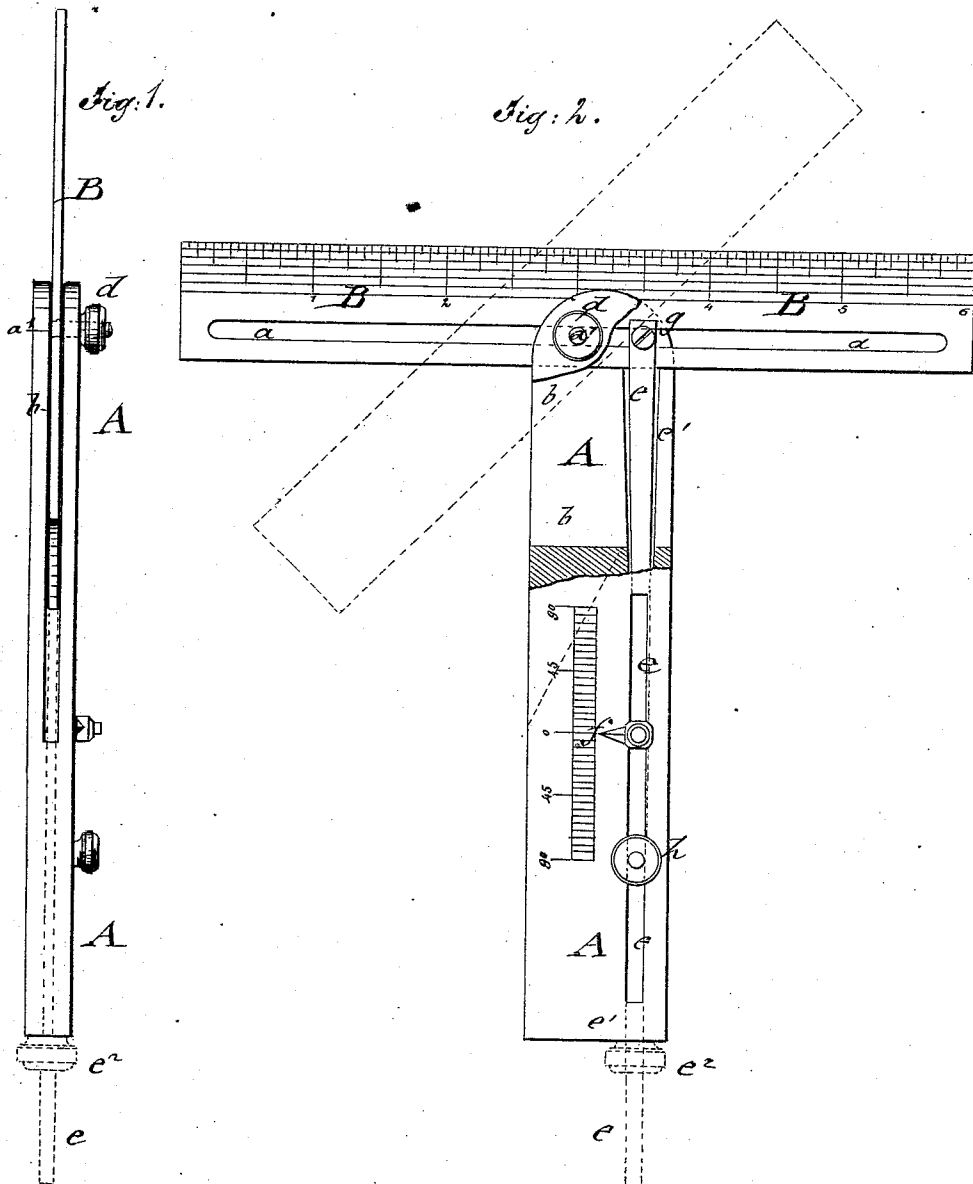


J. L. LARRISON & H. LEIGH.
Combined Try-Square and Bevel.

No. 160,106.

Patented Feb. 23, 1875.



WITNESSES:

Chas. Nida
A. F. Terry

INVENTOR:

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UNITED STATES PATENT OFFICE.

JOHN L. LARRISON, OF SCHOOLEY'S MOUNTAIN, NEW JERSEY, AND HENRY LEIGH, OF WURTSBOROUGH, NEW YORK.

IMPROVEMENT IN COMBINED TRY-SQUARES AND BEVELS.

Specification forming part of Letters Patent No. **160,106**, dated February 23, 1875; application filed November 30, 1874.

To all whom it may concern :

Be it known that we, JOHN L. LARRISON, of Schooley's Mountain, in the county of Morris and State of New Jersey, and HENRY LEIGH, of Wurtsborough, in the county of Sullivan and State of New York, have invented a new and Improved Combined Square, Bevel, and Try-Square, of which the following is a specification:

In the accompanying drawing, Figure 1 represents an end view, and Fig. 2 a top view, partly in section, of our combined bevel, square, and try-square.

Similar letters of reference indicate corresponding parts.

The invention will first be fully described, and then pointed out in the claim.

In the drawing, A represents the main piece of our improved combination-tool or try-square, to the semicircular end of which an adjustable and graduated rule, B, with a longitudinal slot, *a*, is applied in such a manner that it may be moved along a pivot-pin, *a'*, to any point of the slot, and also be swung thereon, to form any suitable angle with the main piece A. The rule B may thus be carried to the end of its slot in either direction from the main piece, so as to form a square or bevel with the same, and also in the exact protraction of the same, by sliding with its end into a recess, *b*, of the main piece, producing one straight rule therewith. The position of the rule is firmly secured by a clamping-screw, *d*, of the pivot-pin *a'*, admitting thereby the use

of the instrument without change until set to another angle. The exact position of the rule B to the required angle may be quickly adjusted by means of a sliding rod, *e*, which is guided in a longitudinal groove or recess, *e'*, of piece A, being provided with a pointer or indicator, *f*, which is set to a graduation of the main piece, while a pin or lug, *g*, at the end of rod *e*, passes through the slot *a* of rule B, and swings the same into the exact angle indicated by the pointer. The connecting lever-rod *e* is then fastened by a set-screw, *h*, so that the rule can neither slide nor swing, but is rigidly held in position.

For instruments of greater accuracy, the outer end of the lever-rod *e* may be provided with a micrometer-screw, *e''*, as indicated in dotted lines in the drawing, so that even angles with fractional parts of degrees may be set thereon.

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

The combination of notated main piece A, having foot-pin *a'* and recesses *b* *e'*, with adjustable notated rule B, having slot *a*, and the sliding lever-rod *e*, having pointer *f*, as and for the purpose specified.

JOHN L. LARRISON.
HENRY LEIGH.

Witnesses:

JAMES V. MORRISON,
FREDERICK HARDING.