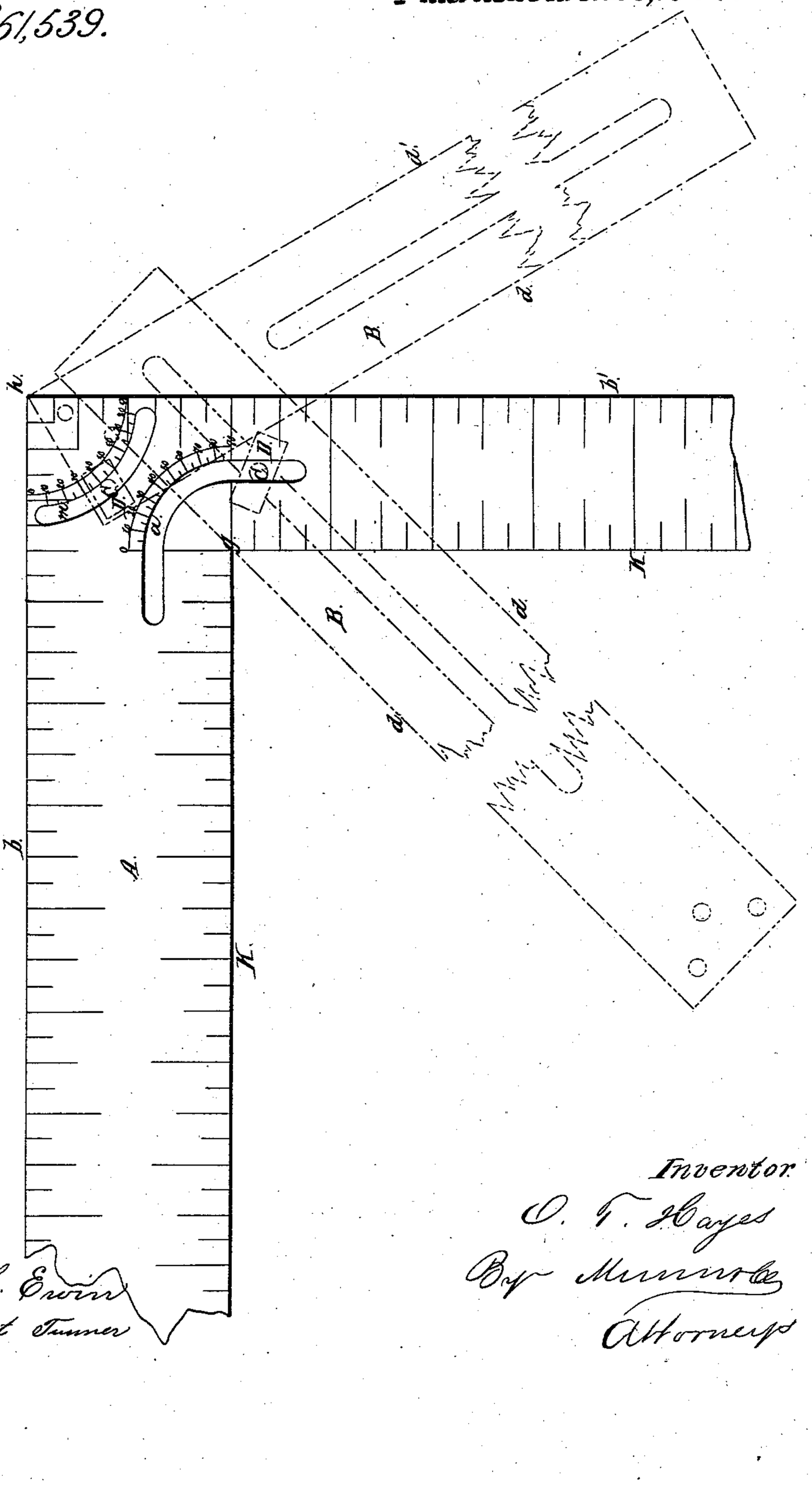
O. T. Hayes.

Carpenters Square.

Patented Jan. 29, 1867.

No. 61,539.



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OREN T. HAYES, OF HASTINGS, MINNESOTA.

Letters Patent No. 61,539, *dated January* 29, 1867.

IMPROVEMENT IN CARPENTERS' SQUARES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, OREN T. HAYES, of Hastings, in the county of Dakota, and State of Minnesota, have invented a new and useful Improvement in Carpenter Squares; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable those skilled in the art to which my invention appertains to understand and use the same, reference being had to the accompanying drawings, forming part of this specification, and in which the improvement is represented by a plan view.

The improvement consists in the provision, near the angle of the square, of a slot or slots, for the pivotal attachment of a plate or plates, which may be set at such an angle as may be required with the inner and outer edges of the square, for the purpose of laying off angles of work, mitres, or otherwise.

In the drawings, A represents a portion of the square, having slots *a* and *m*, the central portion of the former being described from the inner angle of the square, and the other slot being described from the outer angle of the square, and having scales or graduations marked against them, embracing ninety degrees. B is a plate, which is adjustably attached to the square by means of the screw-bolt *c* and nut D, the bolt passing through a slot in the plate B, and securing it so that one of the edges *d* shall range with the inner angle *g* of the square and with such mark on the scale as shall be desired. It is shown adjusted to make a mitre joint, or at forty-five degrees with the edges K K of the squares, but may be made to indicate any angle. The plate B is shown in red lines, attached by the slot *m* and the bolt, as before, to indicate angles and afford the means of ruling lines having any required angle with the edges *b b'* of the squares. The plate is shown with its square end ranging with the line of thirty degrees, which would cause the edge *d'* to form an angle of thirty degrees with the edge *b'*, or of one hundred and twenty degrees with the edge *b*. The plate B may be attached by means of holes, or by the slot. The scales may be calculated for any specific kind of work, as, for instance, laying off rafters where the rise varies from one in four to one in two, or less, and it is thought advisable to so arrange the opening near the end of the plate B that the angle may agree with the point *h* as the plate is revolved around the latter as a centre.

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

A square, provided with a graduated scale of angles, and one or more curved slots at the intersection of its limbs, for the attachment of an adjustable plate B, applied and operating substantially as and for the purpose specified.

To the above specification of my improvement in carpenters' squares I have signed my hand this 16th of July, 1866.

OREN T. HAYES.

Witnesses:

EDWARD H. KNIGHT,
JAMES L. EWIN.