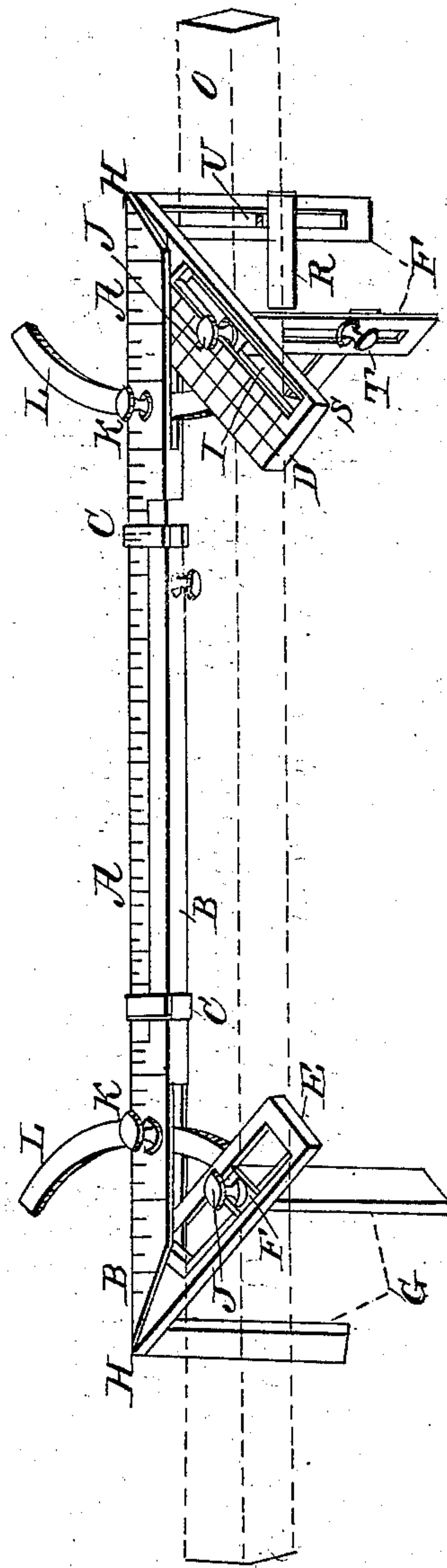


L. CROFOOT.

Bevel.

No. 15,600.

Patented Aug. 26, 1856.



UNITED STATES PATENT OFFICE.

LEGRAND CROFOOT, OF SYRACUSE, NEW YORK.

INSTRUMENT FOR LAYING OUT RAFTERS.

Specification of Letters Patent No. 15,600, dated August 26, 1856.

To all whom it may concern:

Be it known that I, LEGRAND CROFOOT, of the city of Syracuse, in the county of Onondaga and State of New York, have invented
5 a new and useful Improvement in Instruments for Laying Out Rafters; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawings, making part of this specification.

10 In making my invention, construct the measure (A—B) of wood having the extremities plated with brass; make it in two parts with clasps (C) so arranged as to
15 connect the two parts together and at the same time allow them to be drawn or extended lengthwise by each part sliding through the clasp of the other part. The parts A—B of the measure may be made of any convenient length and divided into feet, inches,
20 and fractions of an inch. Each end of the measure is provided with a bevel (D—E) working upon a pivot (H). Each end of the measure is also provided with a plate (F) (G) set at right angles with the measure, and each of the bevel plates (D and E)
25 are also provided with similar plates connected with the bevel by the sliding piece (I—I) and the set screws (J—J). The
30 bevels may be held in the desired position by the set screws (K—K) acting on the arcs of circles L L which have their centers at H H respectively. These arcs may be so graduated that the divisions, and figures
35 on that attached to E, may serve to adjust the instrument for laying off the lower ends of rafters for any desired pitch of roof while divisions with corresponding numbers running in the reverse direction upon
40 the arc of the bevel D, shall indicate the proper position of D, to describe the perpendicular line required for the upper end of the rafter when in position in the roof. Or the arcs may be graduated in degrees of
45 circles indicating the angles of the bevels at either end of the instrument for the pur-

pose of laying off struts braces, &c. at any angle desired.

The face of the bevel D is made wide to afford room for a convenient table, by
50 which, the width of building, and proposed pitch of roof being given, the required length of rafter is shown at a glance.

An important advantage attained by the use of my invention over the use of independent bevels and measuring rod is, that
55 the planes of the bevels laid off will always bear the same relation to each other, but when independent bevels are used, any irregularity in the form of the rafter will be
60 liable to change that relation. On applying the instrument to a rafter (O), the bevels serve to mark the side surfaces, while the squaring plates may be adjusted so as to mark the upper and lower surfaces.
65

After the instrument is adjusted so as to mark one rafter for being cut, it is obvious it will serve for marking or laying out any
70 desired number of rafters of the same dimensions.

Plates (R and S) are attached to the square tongues, and are adjustable by the set screws (T and U). The plates are for
75 the purpose of marking tenons on the ends of timber or rafters.

What I claim as my invention and desire to secure by Letters Patent is—

1. The combination of the adjustable expanding measure A B with the adjustable bevels D and E, constructed and arranged
80 substantially as hereindescribed for the purposes specified.

2. And also in combination with the above the fixed square-plates F and G and the adjustable square-plates, sliding on the bevels
85 D and E substantially as herein specified and for the purpose set forth.

LEGRAND CROFOOT.

Witnesses:

R. F. STEVENS,
R. D. SNOW.