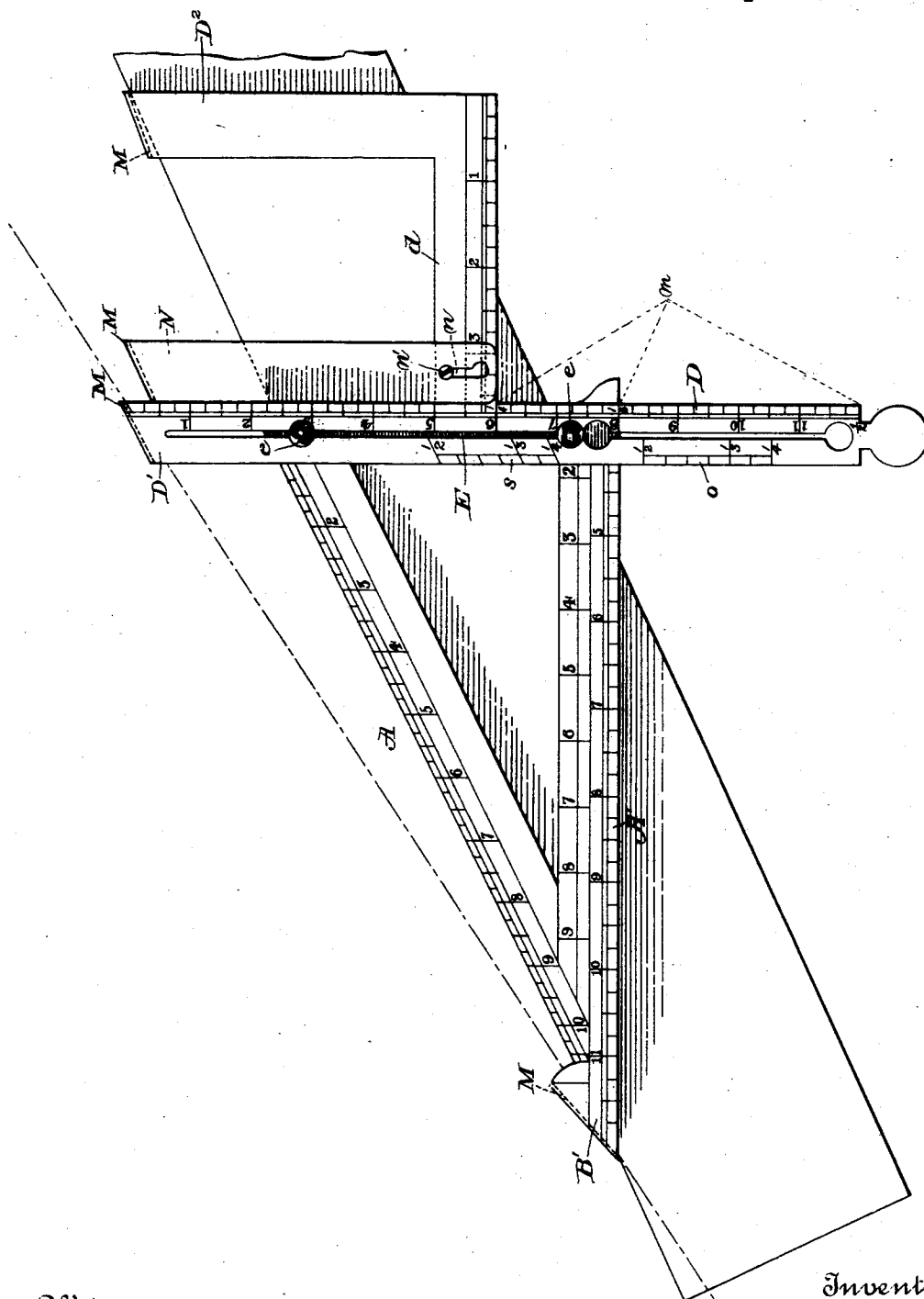


H. W. NICHOLS.
ROOF TEMPLET.

Patented Sept. 4, 1894.



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UNITED STATES PATENT OFFICE.

HENRY W. NICHOLS, OF SALT LAKE CITY, UTAH TERRITORY.

ROOF-TEMPLET.

SPECIFICATION forming part of Letters Patent No. 525,611, dated September 4, 1894.

Application filed March 7, 1894. Serial No. 502,764. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. NICHOLS, a citizen of the United States, residing at Salt Lake City, in the county of Salt Lake, Territory of Utah, have invented certain new and useful Improvements in Roof-Templets, of which the following is a description, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

My invention relates to measuring instruments, and more particularly to that class of devices known as roof templets, my object being to provide a construction by means of which all of the cuts or miters for rafters and the like may be readily laid off. In a patent granted to me April 18, 1893, No. 495,828, is described an instrument comprising a main frame, vertically adjustable tongues extending at right angles to the marking edge of said frame, and a movable arm so connected to a movable plate upon the main frame that when, by the aid of certain scales upon the parts, the movable arm is set to indicate particular miters upon a rafter, the movable plate is thereby correspondingly adjusted to indicate other miters. This construction necessitates the use of quite a number of parts, thus rendering the templet more or less liable to get out of adjustment, and, the more specific object of the present invention being to overcome the inconveniences attendant upon the use of the patented device, said present invention therefore consists primarily in providing another scale which performs the functions of the movable arm and plate heretofore described, as well as in certain details of construction and arrangement of parts as will be hereinafter described and claimed.

The accompanying drawing illustrates my device.

In the drawing, A is the main frame herein shown in the form of a right angle triangle, and D is a frame comprising the arms or tongues D', D², connected by the brace d, said frame being adjustably attached to the main frame by means of the set screws e passing through the slot E. As fully set forth in my prior patent, the object of the main frame and the adjustable arms is to lay off the end miters upon rafters, the adjustment for various pitches of roofs being indicated by the

scale *m* herein placed upon the right hand side of arm D', and to this end it will be at once seen that it is not necessary that the frame A should be in the shape of a triangle, nor, indeed, that the frame D have a plurality of tongues or be adjustable, the essential feature of this part of the invention being to have a plate as A' upon which is erected a perpendicular having a scale upon it to indicate what portions of the horizontal and vertical frames should be used in cutting the end miters of rafters.

In order that the templet may be accurately applied to the rafter to be cut, stops, as the downwardly bent portions M, are provided at suitable points for engaging with the side of the timber, and in the instrument herein illustrated, I have shown these stops as located one at the angle B' of the main frame and one at the top of each tongue D', D². As in my prior patent, the tongue D' is used for certain cuts in connection with ordinary roofing, and the tongue D² is used in ascertaining certain other cuts of these same roofs. In addition, however, I may employ a third tongue N to be used in laying off timbers for octagon roofs, and while, of course, this tongue may be rigidly secured to the movable frame in a manner similar to that in which the tongues D', D² are secured, I prefer to make it detachable, this being accomplished in any suitable way, as by providing the tongue with a slot *n* adapted to engage with the projection *n'* upon the movable frame. The detachable tongue also, preferably has the stop M.

The more particular function of the adjustable arm and plate in my prior patent, is to indicate the side cut or miter necessary to have the jack rafter fit against the hip, and to have the hip rafter fit against the ridge, and this function I accomplish in the present device by providing the scale *o* for use in ordinary roofs, and the scale *s* for use in octagon roofs, thus dispensing with the movable arm and plate and with their necessary guides, set screws, &c.

In laying off the upper and lower end cuts of common rafters, after adjusting the movable frame by means of the scale *m* (i. e., for one-third pitch, by bringing the one-third mark to the lower edge of the main frame A,

for one-fourth pitch, the one-fourth mark and so on as described in my prior patent), the stops M upon the angle B' and the tongue D' are applied to the edge of the timber, the lower cut marked along the straight edge A' and, after carrying the templet along the necessary distance, the upper cut is marked along the straight edge D'. For the end cuts of hip and valley rafters, the angle stop and the stop upon the tongue D² are employed, while for octagon roofs the angle stop and the stop upon the detachable arm N are used. To obtain the side cut upon jack rafters, &c., for ordinary roofs the mark upon scale o corresponding to the mark which has been used upon scale m for the end cuts, is brought to the lower edge of the frame A and, after applying the angle stop and the tongue stop D' to the side of the rafter, the angle is marked along the straight edge A. For octagon roofs, the scale s and detachable tongue N are used.

From the foregoing it will be seen that by simply providing an additional scale, several of the parts of the old device are dispensed with and an equally efficient instrument is produced, a disarrangement of the parts of which is almost impossible.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A roof templet comprising a main frame, a tongue for marking rafters secured at a suitable angle thereto, a scale upon said templet for determining the end cuts of rafters, and an additional scale upon said templet for determining the side cuts of jack rafters and the like; substantially as described.

2. A roof templet comprising a main frame, a second vertically adjustable frame secured at right angles thereto, a scale upon said adjustable frame for determining the end cuts

of rafters, and an additional scale upon said adjustable frame for determining the side cuts of jack rafters and the like; substantially as described.

3. A roof templet comprising a main frame, a second frame for marking rafters secured at a suitable angle thereto, and a detachable tongue secured upon said second frame; substantially as described.

4. A roof templet comprising a main frame, a second frame for marking rafters secured at a suitable angle thereto, a detachable tongue secured to said second frame, and a scale upon said templet for use in connection with the detachable tongue for marking the side cuts of jack rafters and the like; substantially as described.

5. A roof templet comprising a main frame, a second frame for marking rafters secured at a suitable angle thereto, and lugs or stops upon both frames for engaging with the timber to be marked; substantially as described.

6. A roof templet comprising a main frame, a second vertically adjustable frame secured at right angles thereto, said second frame comprising a series of tongues connected by a cross piece, a detachable tongue upon said second frame, a lug upon the main frame and upon the arms of the second frame, a scale upon the second frame for determining the end cuts of rafters, and an additional scale upon said second frame for determining the side cuts of jack rafters and the like; substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY W. NICHOLS.

Witnesses:

CHARLES D. JOHNSON,
FREDERICK E. SCHOPPE.