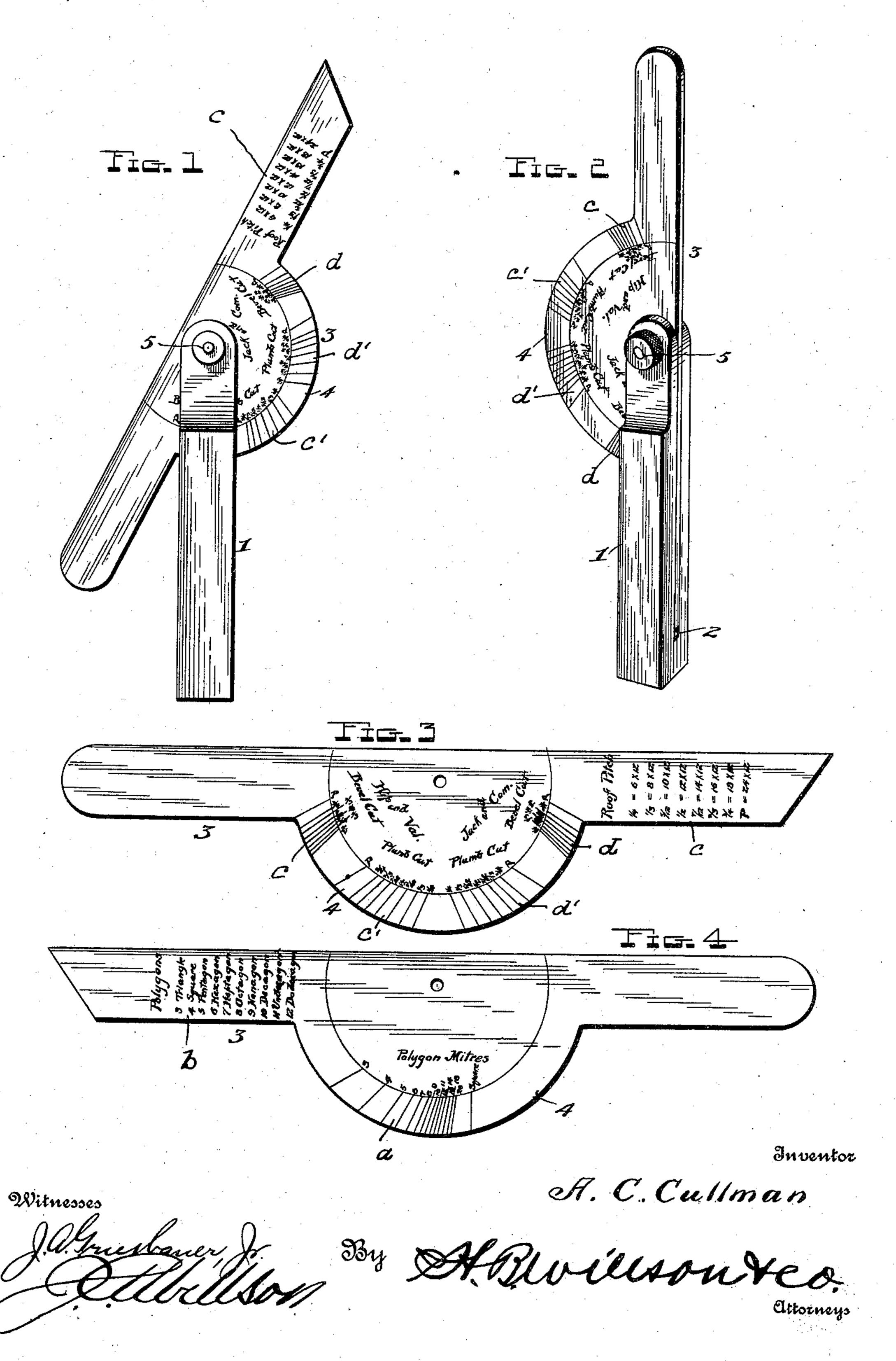
A. C. CULLMANN. BEVEL AND SQUARE.

(Application filed Mar. 3, 1902.)

(No Model.)



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UNITED STATES PATENT OFFICE.

ALBERT C. CULLMANN, OF LA CROSSE, WISCONSIN.

BEVEL AND SQUARE.

SPECIFICATION forming part of Letters Patent No. 708,533, dated September 9, 1902.

Application filed March 3, 1902. Serial No. 96,465. (No model.)

To all whom it may concern:

Be it known that I, ALBERT C. CULLMANN, a citizen of the United States, residing at La Crosse, in the county of La Crosse and State 5 of Wisconsin, have invented certain new and useful Improvements in Bevels and Squares; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to 10 which it appertains to make and use the same.

The invention relates to a bevel and square—to a tool which may be easily and quickly adjusted to various angles desired

by the mechanic.

The object of the invention is to provide a tool of this character which shall be simple of construction, durable in use, comparatively inexpensive of production, and efficient in action.

With this and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, which will be hereinafter more fully described, and particularly pointed out in 25 the appended claim.

In the accompanying drawings, Figure 1 is a side view of the tool, showing the blade opened. Fig. 2 is a perspective view showing the blade closed. Fig. 3 is a front view 30 of the blade, and Fig. 4 is a rear view of the

blade.

Referring to the drawings, 1 denotes the handle, which is provided with a transverse slot 2.

3 denotes a blade which is provided with a segmental extension 4 intermediate its ends and is pivoted by a thumb-screw 5 in the slot of the handle. The segmental portion of the blade is provided with suitable graduated in-40 dices upon each side particularly adapted for the carpenter, and these are so arranged as to enable him to get various and exact angles in laying out his work. Upon one side of the segmental portion are lines forming a 45 polygon-miter scale a, which lines are designed to be brought into alinement with one edge of the handle 1 to give the various angles of polygons and are marked to indicate

the corresponding number of sides. By set-50 ting the blade 3 with one of these lines coincident with the edge of the handle its outer continuous edge will give the proper angle

for cutting the adjoining ends of objects to form such polygons. Thus if the line 5 of said scale be brought to coincide with the 55 edge of the handle the continuous outer edge of the blade will give the angles of a pentagon. On the same side of one of the ends of the blade is a table b, bearing numbers corresponding to those of the lines of scale a and 60 indicating the adjustments. Thus the table indicates that if it be desired to set the blade to give the angles of a three-sided figure of triangle the line 3 should be brought into coincidence with the edge of the handle, the line 65 4 for a square, the line 5 for a pentagon, and so on. On the reverse side of the segmental portion of the blade are scales $c\,c'$ and $d\,d'$, the lines of which are adapted to be brought into coincidence with the edge of the scale to set the 70 blade for indicating the bevel and plumb cuts for hip and valley and common and jack rafters. As shown, the scales c d are disposed at the ends of the segmental portion at their intersection with the inner edge of the blade, 75 while the scales c' d' are disposed between the same and center of said segmental portion. The lines of the scales are in line with suitable figures or characters indicating the pitch. The scale c' cooperates with the scale c for 80 hip and valley rafter-work, and the scale d'coöperates with the scale d for jack and common rafter-work. A roof-pitch table e is placed on the same side of the scale, said table bearing figures or characters correspond- 85 ing to those of the lines of scales c c' d d' and corresponding matter indicating the pitchthus, $\frac{1}{4}$ =6×12, or six inches rise to twelve inches on level, $\frac{1}{3}$ =8×12, or eight inches rise to twelve inches on level, and so on—so that 90 the operation of adjusting the blade to the exact angle may be quickly performed.

The tool is exceedingly simple, may be made at small cost, and is well adapted for the purpose for which it is designed.

From the foregoing description, taken in connection with the accompanying drawings, the construction, mode of operation, and advantages of the invention will be readily understood without requiring an extended ex- 100 planation.

Various changes in the form, proportion, and details of construction may be made within the scope of the invention without departing from

the spirit or sacrificing any of the advantages thereof.

Having thus described my invention, what I claim, and desire to secure by Letters Pat-

5 ent, is-

The combination with a handle having a longitudinal slot; of a blade pivoted in said slot and having a central segmental extension projecting from one edge, said extension being provided on one side with lines forming a polygon-miter scale a and designating angle-indices, and on its opposite side with the companion bevel and plumb cut scales c, c' and d, d', formed by angle-lines and corre-

sponding indices, said scales c and d being disposed at the ends of the segmental portion

at their intersection with the inner edge of the blade, and the scales c' d' between the same and the center of the segmental portion, the blade also having a table b explanatory of the a indice-angles of scales a, and a table a explanatory of the indices and pitch-measures of the scales a and a a together with means for securing the blade in adjusted position, substantially as and for the purpose specified. a

In testimony whereof I have hereunto set my hand in presence of two subscribing wit-

nesses.

A. C. CULLMANN.

Witnesses:

W. J. DAVIDSON,
P. LARSON.