

No. 795,145.

PATENTED JULY 18, 1905.

A. C. LOOMIS.
DRAFTSMAN'S TRIANGLE.
APPLICATION FILED JAN. 3, 1906.

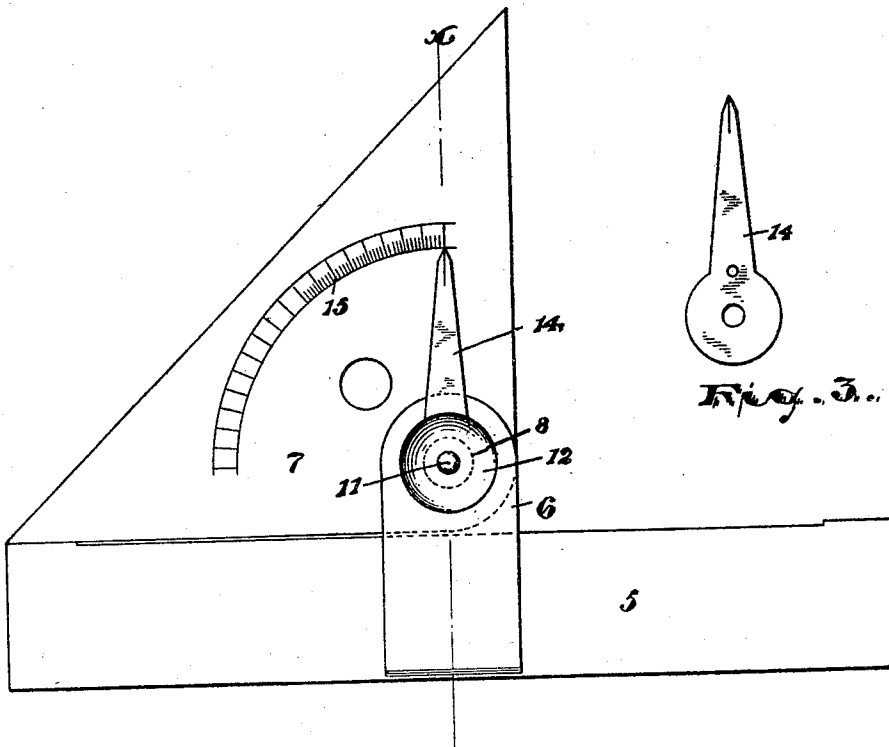


Fig. 1.

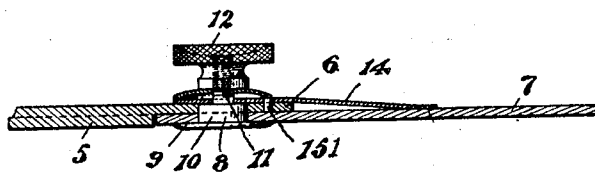


Fig. 2.

WITNESSES:

Ralph Lancaster
Russell M. Everett.

INVENTOR:

Albert C. Loomis.

BY

Charles H. Peck
ATTORNEY

UNITED STATES PATENT OFFICE.

ALBERT C. LOOMIS, OF WEST ORANGE, NEW JERSEY.

DRAFTSMAN'S TRIANGLE.

SPECIFICATION forming part of Letters Patent No. 795,145, dated July 18, 1905.

Application filed January 3, 1905. Serial No. 239,463.

To all whom it may concern:

Be it known that I, ALBERT C. LOOMIS, a citizen of the United States, residing at West Orange, in the county of Essex and State of New Jersey, have invented certain new and useful Improvements in Draftsmen's Triangles; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to figures of reference marked thereon, which form a part of this specification.

The objects of this invention are to provide a single triangle for use in connection with a T-square in mechanical drafting the edges of which will be adjustable with relation to the base of the triangle to enable lines to be drawn at any desired angle, to reduce the need of a plurality of triangles, to provide a comparatively simple and inexpensive construction, and to secure other advantages and results, some of which may be referred to hereinafter in connection with the description of the working parts.

The invention consists in the improved triangle and in the arrangements and combinations of parts of the same, all substantially as will be hereinafter set forth, and finally embraced in the clauses of the claim.

Referring to the accompanying drawings, in which like figures of reference indicate corresponding parts in each of the several views, Figure 1 is a plan of my improved triangle. Fig. 2 is a section of the same at line *x*, and Fig. 3 is a detail plan of a certain index finger or pointer.

In said drawings, 5 indicates the base portion or section of the triangle, having parallel longitudinal edges and adapted to lie against and parallel with the long arm of the T-square. This said base portion has a short perforated extension 6 about midway between its ends at right angles thereto, which projects laterally or perpendicularly from the inner longitudinal side of the device, the under side of said short extension lying in a plane coincident with the plane of the upper side of the body of said base portion 5. The section 5

and the extension 6 may be of hard rubber, celluloid, wood, or other material and may be in one integral piece or otherwise. Underneath the said extension 6 is arranged and pivotally held a triangular section 7, the right angle of which is rounded off, as indicated in Fig. 1, in dotted outline, and concentric with the rounded edge is arranged or formed an eye or perforation for a pivot 8, on which the said triangle 7 is adapted to turn. The pivot 8 has a thin and flat head 9, a large pivotal shank 10, and smaller threaded end 11 to receive the thumb-nut 12. On said pivotal shank are arranged the perforated extension 6 and triangular section 7, the two being held together on said pivotal shank by the thumb-nut 12 and head 9. On said threaded end is also arranged an index-finger 14, adapted to cooperate with a graduated arc 15, imprinted or impressed upon the face of the section 7. By means of the index-finger and arc, degrees at which the edges of triangle are standing may be easily determined, as will be understood. The said finger 14 is held in fixed relation to the extension 6 by a pin 151 or any other suitable means, as indicated in Fig. 2. The thumb-nut clamps the triangular section against the extension 6 with sufficient firmness to prevent an accidental change of position under ordinary circumstances; but the clamping is preferably not such as prevents an adjustment of parts by simple pressure of the hand.

The sides of the triangle forming the pivotal angle are of a length sufficient to bring their projecting ends into coincidence with the ends of the base-piece when either of said sides are turned into coincidence with said base-piece, and thus in cross-hatching using the hypotenuse edge and pressing the device against the long arm of the T-square the triangular section always will be firm, whether the body of the said section be at one side or the other of the pivot 10. By rounding the angle subtending the hypotenuse the other sides may be brought into close parallel relation to the edge of the base, thus insuring a more firm and permanent relationship when cross-hatching at forty-five degrees in either direction, the angle more frequently employed.

I am aware that modifications in the construction of my device may be made without departing from the spirit or scope of the invention, and I do not, therefore, wish to be understood as limiting myself by the specific descriptive terms employed in describing the details of my construction excepting as the prior state of the art may require.

Having thus described the invention, what I claim as new is—

1. The improved triangle herein described, comprising the base-piece having parallel longitudinal edges and a lateral extension fixed midway between its ends, a triangular section pivoted upon said extension and having a graduated arc and index-finger projecting from said extension at right angles to said base-piece, substantially as set forth.

2. The improved triangle herein described, comprising a long, parallel-sided base-piece having a fixed lateral extension midway of its ends, a triangular section having a rounded angle and pivoted at said rounded angle on

said extension, the straight sides of the triangle forming the angle being respectively adapted to be turned into parallel relation to and contact with the base-piece and means for clamping the same in fixed relation.

3. The improved triangle herein described comprising a base-piece having an extension between its ends, and a triangular section pivoted on said extension and lying in the plane of said base-piece, a pivot extending through said extension and triangular section and having a head 9, at one end, the other being reduced and threaded, the threaded end having a thumb-nut by which the triangle is clamped to said extension at any desired adjustment, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 23d day of December, 1904.

ALBERT C. LOOMIS.

Witnesses:

CHARLES H. PELL,
RUSSELL M. EVERETT.