No. 815,528. PATENTED MAR. 20, 1906.

A. HAAG.

COMBINED SQUARE AND BEVEL.

APPLICATION FILED JULY 20, 1905.

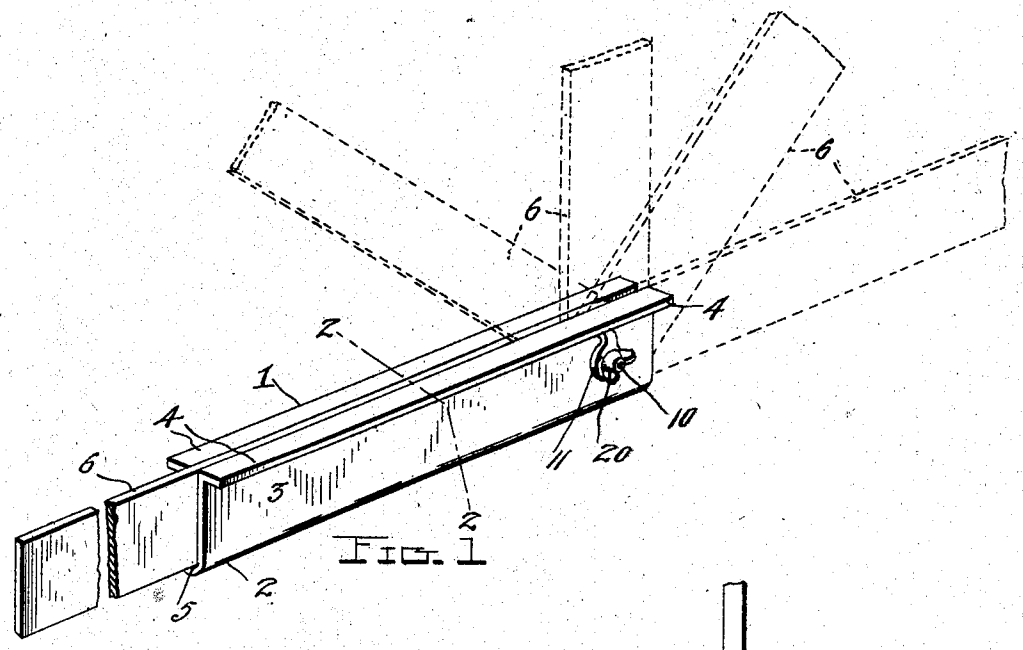


FIG. 1

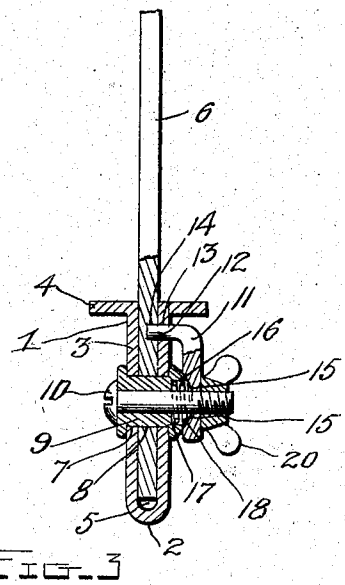


FIG. 3

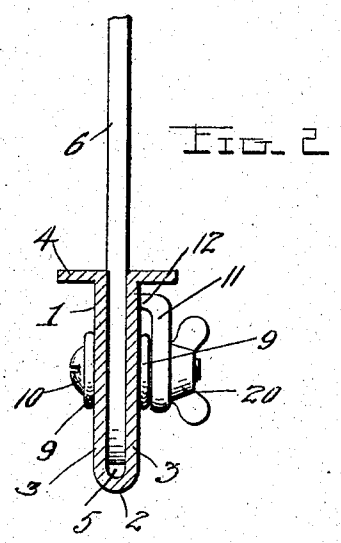
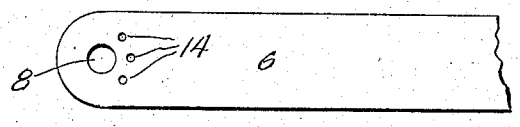


FIG. 2

FIG. 4



Witnesses
J. A. Gruesbeck Jr.
Jas. A. Lockhart

Inventor
Arthur Haag
by H. B. Wilcox
Attorney

UNITED STATES PATENT OFFICE.

ARTHUR HAAG, OF NEW YORK, N. Y.

COMBINED SQUARE AND BEVEL.

No. 815,528. Specification of Letters Patent. Patented March 20, 1906.

Application filed July 20, 1905. Serial No. 270,526.

To all whom it may concern:

Be it known that I, ARTHUR HAAG, a citizen of the United States, residing at New York, in the State of New York, have invented certain new and useful Improvements in a Combined Square and Bevel; 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 which it appertains to make and use the same.

My invention relates to improvements in combined squares and bevels; and it consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

The object of the invention is to provide a simple, durable, and comparatively inexpensive tool of this character which may be quickly and easily adjusted for use either as a square or a miter-bevel and which when not in use may be folded to occupy but little space.

The above and other objects, which will appear as the nature of my invention is better understood, are accomplished by means of the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved combination square and bevel, showing its blade in full lines in its closed position and in dotted lines in its several open positions to permit its use either as a square or miter-bevel. Fig. 2 is a vertical transverse sectional view taken on the line 2 2 in Fig. 1, the blade being shown in its open position. Fig. 3 is a detail sectional view through the pivot and locking-lug of the blade, and Fig. 4 is a detail view of one end of the blade.

Referring to the drawings by numerals, 1 denotes the handle or body portion of my improved combination square and bevel, which is preferably formed from a single piece of sheet metal by bending the same centrally and longitudinally upon itself, as at 2, to form two parallel sides 3, and by bending the side edges of said sides outwardly in opposite directions at right angles to said sides 3 in order to form flanges 4, as clearly shown in Fig. 2 of the drawings. The opening 5 thus formed in the body or handle 1 is adapted to receive the blade 6 of the tool. This blade, which is of the usual or any preferred form, is pivotally mounted at one end of the body 1 between its sides 3, so that when the tool is not in use it may be folded within said body, as shown in Fig. 1. The pivotal connection between the blade and body is effected, as clearly shown in Fig. 3 of the drawings, by forming alining pivot-openings 7 in the sides 3 and a similar opening 8 in the inner end of the blade 6 in order to receive a hollow or tubular rivet 9, which forms the pivot of said blade. Said rivet is of tubular form to receive a clamping-bolt 10, which is adapted to clamp a lug 11, which locks the blade in its adjusted position. The lug 11 has an inwardly-projecting end 12, which is adapted to pass through an aperture 13, formed in one of the sides 3 of the body, and into any one of a series of recesses 14, which are arranged radially around the pivot-opening 8 in the end of the blade 6, as clearly shown in Fig. 4 of the drawings. Said lug 11 has the inner face of its opposite end recessed, as shown at 15, to receive the curved projection 16 of the rivet 9, and said projection is formed with an enlarged concentrically-disposed recess 17 to receive a spring 18, which surrounds the bolt 10. The latter, as clearly shown in Fig. 3 of the drawings, extends through the rivet 9, the spring 18, the lug 11, and has upon its outer screw-threaded end a winged clamping-nut 20, which is adapted to force the lug 11 downwardly to cause its ends 12 to enter one of the recesses 14 in the blade.

It will be seen that when the nut 20 is unscrewed the spring 18 will force the lug 11 outwardly to disengage its end 12 from one of the recesses 14, so that the blade 6 may be swung to any of the positions shown in Fig. 1 and then secured therein by tightening the screw 20.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

1. A combination square and bevel comprising a body having a longitudinally-extending recess, a pivot-opening and an aperture in one face adjacent to said pivot-opening, a blade formed with a pivot-opening and recesses arranged radially around said open-

ing and adapted to aline with said aperture in the body, a pivot passed through said pivot-opening in the body and blade, a lug upon said pivot adapted to extend through said aperture in the body and to enter one of said recesses in the blade, and a clamping device upon said pivot, substantially as described.

2. A combination square and bevel comprising a body having a longitudinally-extending recess, a pivot-opening and an aperture in one face adjacent to said pivot-opening, a blade formed with a pivot-opening and recesses arranged radially around said opening and adapted to aline with said aperture in the body, a tubular pivot extending through said alining pivot-openings in the body and blade, a screw-bolt extending through said tubular pivot, a lug apertured to receive said bolt and having a projection adapted to pass through the aperture in said body and to enter one of the recesses in said blade, a spring for forcing said lug outwardly and a clamping-nut upon the outer end of said bolt, substantially as described.

3. A device of the character described, comprising a hollow U-shaped body formed from a piece of sheet metal by bending it centrally and longitudinally upon itself to form parallel sides and by bending its sides longitudinally in opposite directions to form right-angular flanges, and a foldable blade mounted between the parallel sides of said body.

4. A folding square and bevel comprising a hollow U-shaped body formed from a piece of metal by bending it to form parallel sides and right-angularly-projecting flanges extending longitudinally along said sides, said sides being formed with alining pivot-openings, and one being formed with an aperture adjacent to its pivot-opening, a foldable blade formed with a pivot-opening and a series of recesses arranged around said opening, a tubular pivot passed through the pivot-openings in said body and blade, a screw-bolt passed through said tubular pivot, a locking-lug upon said bolt and formed with a projection adapted to project through the aperture in said body and into one of the recesses in said blade, a spring upon said bolt between said lug and said pivot, and a clamping-nut upon the outer end of said bolt, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

ARTHUR HAAG.

Witnesses:
C. A. McLEOD,
S. A. DOANE.