

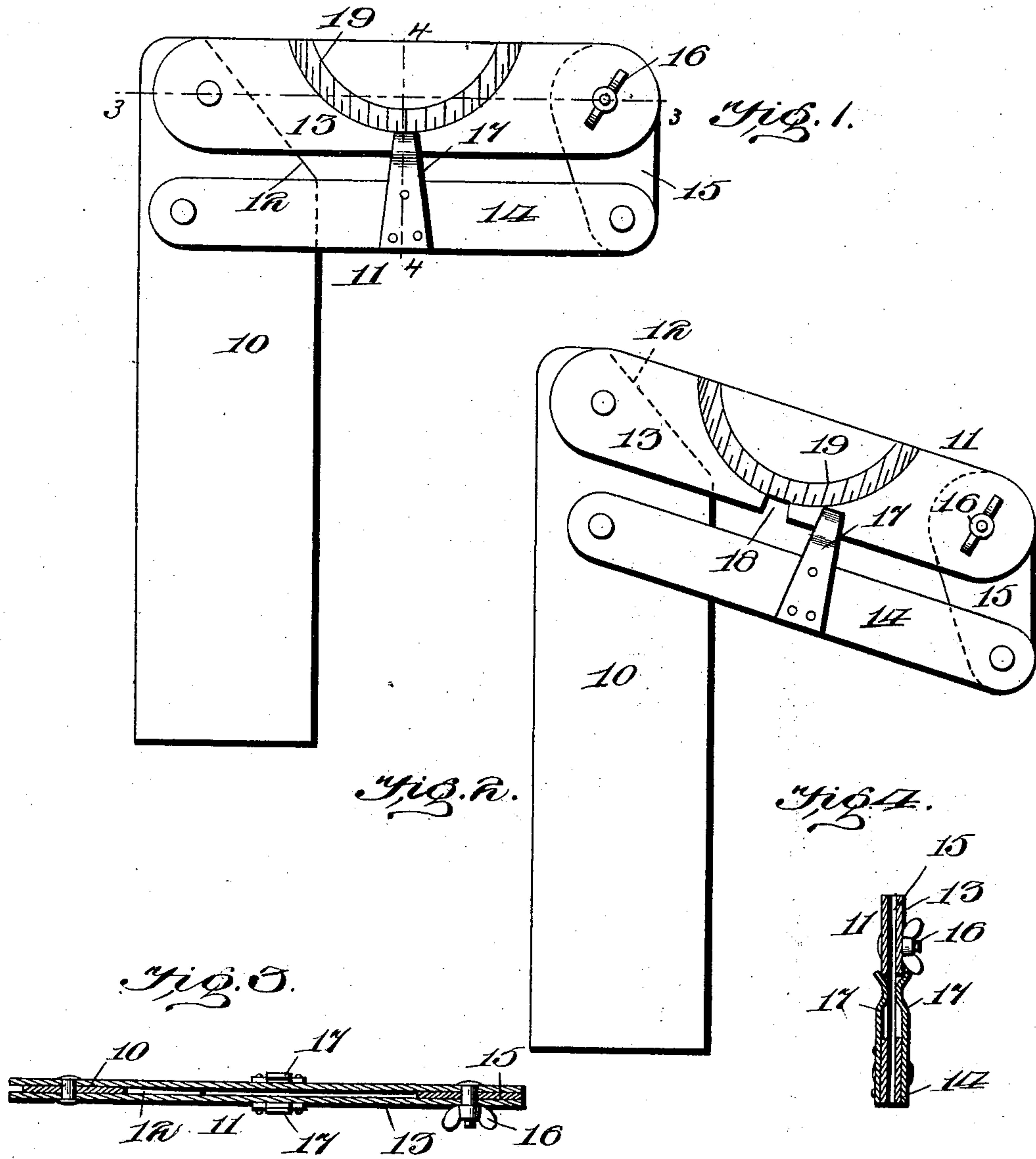
No. 685,372.

Patented Oct. 29, 1901.

E. C. DUNCAN.
BEVEL SQUARE.

(Application filed Dec. 10, 1900.)

(No Model.)



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Witnesses

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EMILY C. DUNCAN, OF CENTRALIA, WISCONSIN.

BEVEL-SQUARE.

SPECIFICATION forming part of Letters Patent No. 685,372, dated October 29, 1901.

Application filed December 10, 1900. Serial No. 39,381. (No model.)

To all whom it may concern:

Be it known that I, EMILY C. DUNCAN, a citizen of the United States, residing at Centralia, in the county of Wood and State of Wisconsin, have invented a new and useful Bevel-Square, of which the following is a specification.

This invention relates to squares; and the object thereof is to provide a simple device of this character that can be used either as a bevel or try square.

More particularly the object is to provide a combined try and bevel square so constructed that when used for the first-named purpose the blades will be securely locked in proper relation and when used for the latter the angular relation of the blades will be suitably indicated.

In order to carry out these objects, one form of construction is shown in the accompanying drawings and described in the following specification, of which said drawings form a part; but it will be understood that the construction illustrated and described is open to modification and change within the scope of the claims hereunto appended.

In the drawings, Figure 1 is a side elevation of the preferred form of construction, showing the blades arranged at right angles to each other. Fig. 2 is a side elevation of the same, but illustrating the blades set at an inclination to each other. Fig. 3 is a horizontal section on the line 3 3 of Fig. 1. Fig. 4 is a cross-section on the line 4 4 of Fig. 1.

Similar reference-numerals designate corresponding parts in the several figures of the drawings.

The device, as shown, comprises a pair of blades, (designated, respectively, 10 and 11.) The blade 10 is preferably a single piece, having straight parallel side edges and one of its ends beveled, as at 12. The blade 11 is pivotally connected to the blade 10 at its beveled end and comprises a pair of spaced (preferably parallel) members 13 and 14, each of which is independently pivoted at one end to the beveled end of the blade 10 and connected to each other at their opposite ends by means of a link 15. Each of the members 13 and 14 is preferably made of two correspondingly-shaped sections, pivoted on opposite sides of the blade 10 and the link 15, the pivot connection of one of the members and the link being

in the form of a clamp-bolt 16. By means of this construction it will be seen that the blade 11 may be set at any desired angle to the blade 15 and clamped at such angle by means of the bolt 16, and, furthermore, that no matter what angle the two blades assume the two members 13 and 14 will always remain parallel.

To provide for holding the blades at right angles to each other, one of the members, as 14, is provided with a holding-catch 17, preferably in the form of a spring, which projects from one side of the said member and engages in a notch 18 in the other member when the two blades are at right angles to each other, thus automatically locking them in place. This catch, furthermore, serves as a pointer to designate the angle of inclination of the pivotal blade, a suitably-graduated scale 19 being provided on the member 13 for this purpose. One of these combined locking devices and pointers may be arranged on each pair of sections, as shown in Figs. 3 and 4.

The operation of the device will be readily apparent. When the blades are at right angles to each other, they will be automatically and rigidly locked in place, and the device thus forms a try-square. When it is designed to use the same as a bevel-square, the latch 17 is disengaged from the notch 18, which will permit the blades being set at the angle desired. When this angle is obtained, which can be readily ascertained by means of the latch 17 indicating the same upon the scale, the blade 11 is locked against movement by the clamp-bolt 16. Furthermore, by having the end of the blade 10 beveled a much sharper angle can be obtained than if it were only square or rounded, as in the ordinary bevel-square.

It will thus be seen that a very simple and practical instrument is provided, by means of which different angles may be readily and accurately obtained.

From the foregoing it is thought that the construction, operation, and many advantages of the herein-described square will be readily apparent to those skilled in the art without further description, and it will be understood that changes in the form, proportion, and 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 the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In an instrument of the class described, a pair of blades, one of said blades consisting of separate members, each of which is independently pivoted at one end to the other blade, said members projecting solely from one side edge of the said blade and having the extremities of their pivoted ends located within the plane of the opposite side edge of the same, and means pivotally connecting the free ends of said members.

2. In an instrument of the class described, a pair of blades, one of said blades consisting of separate members, each of which is independently pivoted at one end to the other blade, said members projecting solely from one side edge of said blade and having the extremities of their pivoted ends located within the plane of the opposite side edge of the same, a link pivotally connecting the free ends of the members, and means for holding said members against independent movement.

3. In an instrument of the class described, a pair of blades, one of said blades consisting of separate members, each of which is independently pivoted at one end to the other blade, said members projecting from one side edge of said blade and having the extremities of their pivoted ends located within the plane of the opposite side edge of the same, a link pivotally connecting the free ends of the members, and a locking device carried by one member and adapted to engage the other to hold the two blades at a fixed predetermined angle.

4. An instrument of the class described, having a pair of blades pivotally connected, one of said blades comprising separate members, and means carried by one member, and automatically engaging another member, to hold the blades at a fixed predetermined angle to each other.

5. In an instrument of the class described, a pair of blades, one of said blades comprising separate members, each of which is pivotally

connected at one end to the other blade, said members being pivotally connected at their opposite ends, and a combined locking device and pointer for holding said blades against independent movement when in a predetermined position.

6. In an instrument of the class described, a pair of blades, one of said blades comprising separate members, each of which is pivotally connected at one end to the other blade, said members being pivotally connected at their opposite ends, and a combined locking device and pointer carried by one member and arranged to engage the other when the members are in a predetermined position, whereby the blades are held against independent movement.

7. In an instrument of the class described, a pair of blades, one of said blades comprising two members, a spring-latch carried by one of the members, the other member having a notch to receive the latch and lock the members in fixed relation, and also having a graduated scale with which said latch coacts to indicate the angle of inclination of the two blades.

8. In an instrument of the class described, a pair of blades, one of said blades comprising two members, a spring-latch carried by one of the members, and engaging the other member to lock the members in fixed relation, and also having a graduated scale with which said latch coacts to indicate the angle of inclination of the two blades.

9. In an instrument of the class described, a pair of blades, one of said blades comprising separate members, each of which is pivotally connected at one end to the other blade, a link pivotally connecting the free ends of said members, and a spring-latch carried by one of the members and engaging the other member to lock them in fixed relation.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EMILY C. DUNCAN.

Witnesses:

HERMAN WIPPERMAN,
ELEANORE SLATTERY.