

C. E. LARSON.
COMBINATION BEVEL, SQUARE, AND SAW.
APPLICATION FILED FEB. 25, 1918.

1,277,433.

Patented Sept. 3, 1918.

FIG. 1.

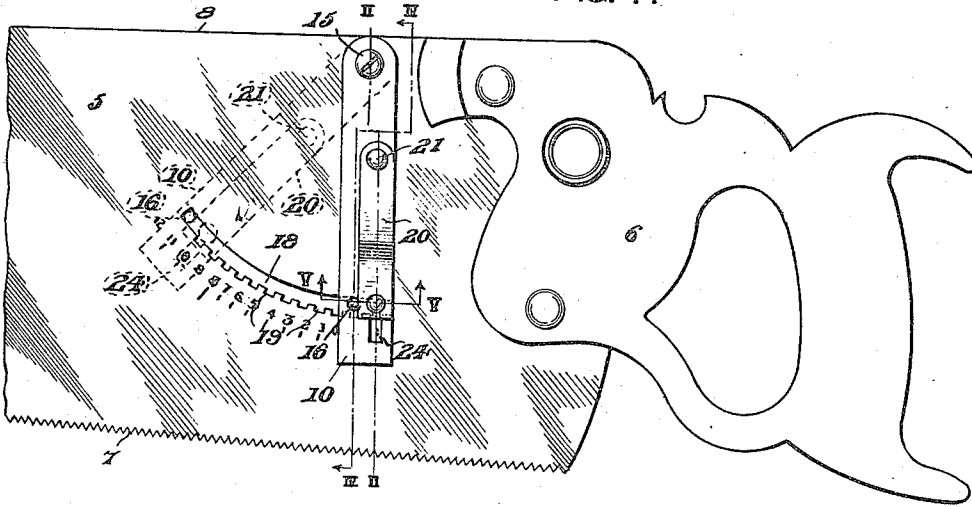


FIG. 2.

FIG. 3.

FIG. 4.

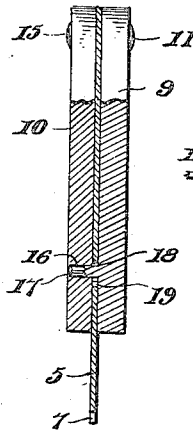
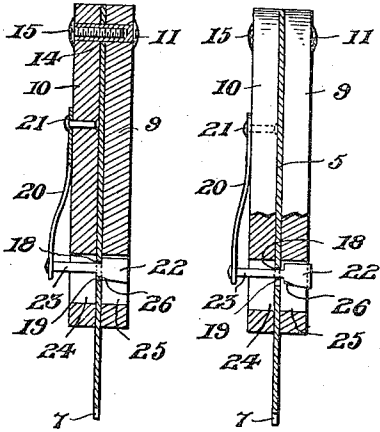


FIG. 5.

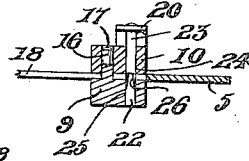
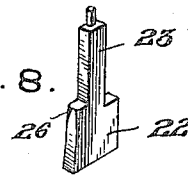
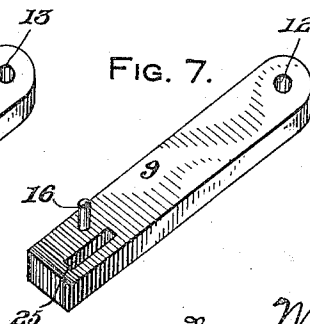
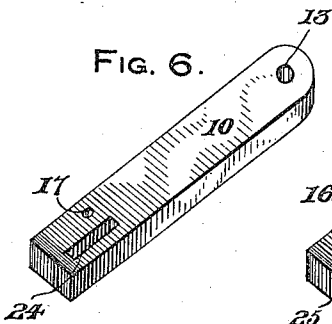


FIG. 6.

FIG. 7.

FIG. 8.



Inventor
C. E. Larson

By *Milton E. Lowry.*
Attorney

UNITED STATES PATENT OFFICE.

CARL E. LARSON, OF MASON CITY, IOWA.

COMBINATION BEVEL, SQUARE, AND SAW.

1,277,433.

Specification of Letters Patent.

Patented Sept. 3, 1918.

Application filed February 25, 1918. Serial No. 219,032.

To all whom it may concern:

Be it known that I, CARL E. LARSON, a citizen of the United States of America, residing at Mason City, in the county of Cerro Gordo and State of Iowa, have invented certain new and useful Improvements in Combination Bevels, Squares, and Saws, of which the following is a specification.

This invention relates to certain new and useful improvements in combination bevel, square, and saw and has particular reference to that type of device wherein the back edge of the saw blade is utilized to constitute the straight edge of the instrument, there being provided a pivoted member capable of adjustment at varying angles relative to the back edge of the saw.

The primary object of the present invention is to provide a more practical, durable and effective means for retaining the pivoted member of the device in its different positions.

A further object of the present invention is the provision of a readily releasable latching device for the pivoted member which is effective in operation and capable of being cheaply and easily constructed.

With these general objects in view and others that will become apparent as the nature of the invention is better understood, the same consists in the novel form, combination and arrangement of parts hereinafter more fully described, illustrated in the drawing, and claimed.

In the drawing wherein like reference characters indicate corresponding parts throughout the several views,

Figure 1 is an elevational view of a portion of a saw constructed and modified in accordance with the present invention, and showing by dotted lines an adjusted position of the pivoted member;

Fig. 2 is a transverse section of the device shown in Fig. 1 taken approximately on line II—II thereof;

Fig. 3 is a transverse sectional view of the device shown in Fig. 1 taken through the saw to one side of the pivoted member, such pivoted member being shown partly broken away and the latch being shown in released position;

Fig. 4 is a sectional view taken approximately on line IV—IV of Fig. 1;

Fig. 5 is a sectional view taken on line V—V of Fig. 1;

Fig. 6 is a perspective view of one of the strips of the pivoted member;

Fig. 7 is a perspective view of a second strip of the pivoted member; and

Fig. 8 is an enlarged perspective view of the latch detached from its actuating spring.

Referring more in detail to the several views, 5 indicates a conventional form of saw blade having a handle 6 and teeth 7 on one edge of the blade. As is usual in such saws, the back edge 8 of the blade is unbroken and may be well utilized as a straight edge for ruling purposes. A pivoted member, including two connected elongated strips respectively indicated at 9 and 10 is provided, each strip being placed upon a different side of the saw blade in flat engagement with the latter and connected together by a detachable screw connecting member 11. The connecting member 11 extends through transverse apertures 12 and 13 respectively provided in the ends of the strips 9 and 10 and also through an aperture 14 extending through the saw blade adjacent the back edge 8 thereof. By removing or unscrewing the bolt 15 of said member 11, the strips 9 and 10 may be readily detached from the saw blade; and it is noted that such member 11 forms a durable means for pivotally attaching the strips 9 and 10 to the saw blade.

In order to insure simultaneous movement of the strips 9 and 10 when adjusting the same, the strip 9 is provided with a laterally extending pin 16 which normally is positioned in the transverse aperture 17 of the strip 10 when the parts are assembled. The pin 16 extends transversely through the saw blade and has a portion thereof positioned in the arcuate slot 18 of the saw blade, said slot being a segment of a circular slot of which the pivotal connecting member 11 constitutes a true center.

The lower edge of the blade at the slot 18 is provided with a plurality of notches 19 adjacent each of which is provided, by stamping or the like, graduations from zero to 12 to indicate the different angles at which the pivoted member comprising the strips 9 and 10 may be adjusted. A flat spring 20 has one end thereof secured to the strip 10 as at 21 and a latching member 22 has its shank 23 fastened to the free end of the flat spring 20, said spring being normally tensioned to move away from the saw

blade. The shank 23 of the latch member 22 extends through an end slot 24 in the strip 10 and enters the arcuate slot 18 in the saw blade, the head or enlarged end portion of the latch member 22 being positioned in the end slot 25 of the strip 9. As clearly shown in Figs. 2 and 3, the latch member 22 is attached to the spring 20 with its flat sides parallel with the longitudinal axis of the strips 9 and 10, and the inclined edge 26 of said latch member is normally positioned within one of the slots 19 to thereby hold the strips 9 and 10 against pivotal or swinging movement. By pressing upon the spring 20 the latch member 22 may be moved from the position shown in Fig. 2 out of the notch as shown in Fig. 3, the strips 9 and 10 being then capable of free movement to adjust the same at the required angle relative to the back edge 8 of the saw blade.

The use of the present invention in view of the foregoing description, it is believed, will be readily apparent to those skilled in the art, it being noted that the saw blade is laid upon a piece of wood with either of the strips 9 or 10 flatly engaging the edge of the wood, and a pencil is then drawn along the edge 8 of the saw blade to mark the desired angle upon which the wood is to be cut.

While the form of the invention herein shown and described is what is believed to be the preferred embodiment thereof, it is nevertheless to be understood that minor

changes may be made in the form, arrangement and size of the parts of the same without departing from the spirit and scope of the invention as claimed.

What I claim as new is:—

1. The combination with a straight edge blade having an arcuate slot therein, one edge of the blade formed by said slot being notched, of a member pivoted to the blade adjacent the straight edge thereof, a flat spring secured to said member and having a free end normally tensioned to move away from the blade, and a latch member secured to the free end of said flat spring and normally positioned by said spring within the notches of the blade to hold the pivoted member against movement.

2. In a device of the class described, the combination with a blade having an arcuate slot therethrough, one edge formed by said slot being provided with notches, of a strip flatly engaging said blade and pivotally attached to the latter, a second strip upon the opposite side of said blade, said second strip being pivoted to the blade and connected with the first-named strip to move therewith, a spring attached to the last-named strip and having a latch member secured thereto, said latch member extending transversely through said strips and the slot of said blade, said spring normally positioning said latch within the notches to lock the strips against pivotal swinging movement.

In testimony whereof I affix my signature.

CARL E. LARSON

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."