No. 734,892. PATENTED JULY 28, 1903.

C. H. KOHLER.

ATTACHMENT FOR HANDSAWS.

APPLICATION FILED AUG. 9, 1902.

NO MODEL.

Fig. 1.

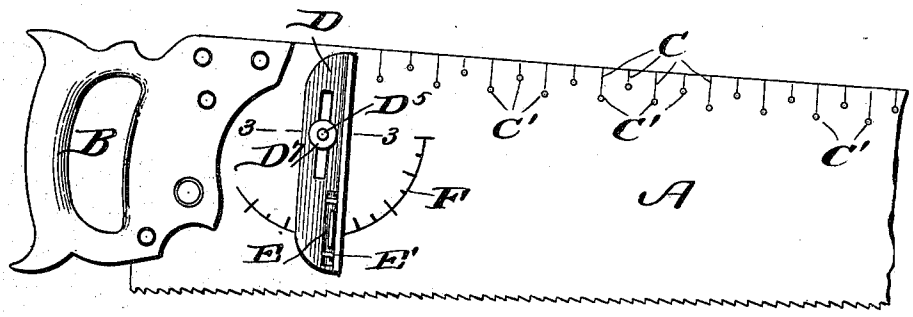


Fig. 2.

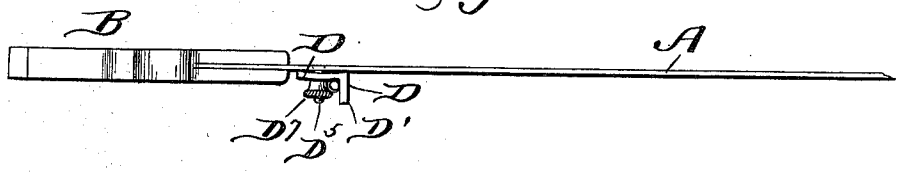


Fig. 4.

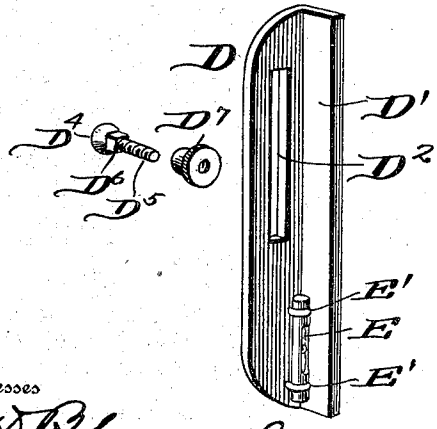


Fig. 3.

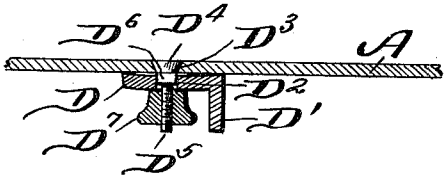
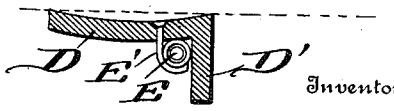


Fig. 5.



Witnesses

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No. 734,892. Patented July 28, 1903.

UNITED STATES PATENT OFFICE.

CHARLES HENRY KOHLER, OF MARINER HARBOR, NEW YORK.

ATTACHMENT FOR HANDSAWS.

SPECIFICATION forming part of Letters Patent No. 734,892, dated July 28, 1903.

Application filed August 9, 1902. Serial No. 119,106. (No model.)

To all whom it may concern:

Be it known that I, CHARLES HENRY KOHLER, a citizen of the United States, residing at Mariner Harbor, in the county of Richmond and State of New York, have invented a new and useful Attachment for Handsaws, of which the following is a specification.

The object of my invention is to construct a handsaw which can be used as a rule for laying off lines parallel to or at any desired angle to the edge of a board.

Another object of my invention is to so locate the level and angle-finder that they will be out of the way while the saw is being used.

In the drawings, Figure 1 is a side elevation of a saw-blade with my improvements thereon. Fig. 2 is a plan view of same. Fig. 3 is a horizontal section on the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the angle-finding device and the lever and showing the set-screw and thumb-nut in detail. Fig. 5 is a detail horizontal section showing in detail the curvature of the angle-plate and the manner in which the spirit-level is secured to same.

In the drawings, A represents the blade of a saw, and B the handle. Upon the rear edge of the blade are short transverse lines C, dividing the edge into inches and fractions thereof. At the inner ends of these lines, which are alternately of unequal length, are apertures C'. Between the handle and the first of the space-marks is secured a metal plate D, having two straight edges, the one being longer than the other, and its ends forming arcs of a circle. Along the longer edge an integral flange D' projects upwardly at a right angle to the plate D. The upper portion of the plate is slotted, as at D^2. A beveled bolt-opening is produced in the saw D^3, Fig. 3, and the beveled head D^4 of the threaded screw D^5 fits snugly therein, the head of the bolt lying flush with the side of the saw-blade. The bolt adjacent the head is squared, as indicated at D^6, a side of the square being equal to the width of the slot. To secure the plate in position, the slot is made to register with the bolt-opening, the bolt is passed through the squared portion resting in the slot, and a thumb-nut D^7 is secured on the threaded end, binding the plate firmly to the blade. To the lower part of the plate, resting in the angle formed by the flange, is the spirit-level E, clamped in place by the wire members E', as clearly shown in Figs. 4 and 5.

The plate D is outwardly curved, as is most clearly shown in Fig. 5, where the dotted line represents the saw-blade. The tightening of the thumb-bolt forces the inner portion of the plate toward the saw, and the plate being of spring metal its opposite edges will bind firmly against the blade and offer considerable resistance to movement of the plate relative to the saw. With the pivotal point of the plate as a center an arc of a circle is struck, as shown at F, the arc being divided into degrees.

It is obvious that the blade of the saw can be used as a rule for running parallel lines along a board, for example. In such a case the plate would be placed as shown in Fig. 1, the blade of the saw laid flat on the board, flange D' resting against the edge of the board. If now a pencil-point be inserted in the perforation at, say, six inches from the flange and the blade drawn along the board, the flange bearing against its edge, a line will be drawn the length of the board six inches from and parallel to the edge.

To secure an angle, the thumb-nut is loosened and the plate turned along the line F until the edge of the flange reaches the desired inclination, as shown by the scale, when the nut is again tightened.

The application of the spirit-level will of course be readily understood, and it will also be understood that the inch or other scale marks shown at C may be placed on both sides of the saw-blade.

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

1. The combination with a saw, of a longitudinally and outwardly curved protractor-plate secured thereto, said plate being longi-

tudinally slotted, a thumb-screw working through said slot, and a graduated scale on the saw adjacent the protractor.

2. In a saw having a scale marked along its rear edge, an outwardly-curved metal plate having a longitudinal slot produced therein detachably secured to the side of said blade, a flange projecting outward and integral with the forward side of the plate and a spirit-level secured in the angle formed by the flange and the plate.

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