R. J. KOEBERLE.

SAW CLAMP.

APPLICATION FILED JUNE 19, 1909.

979,967. Patented Dec. 27, 1910.

Fig. 6.

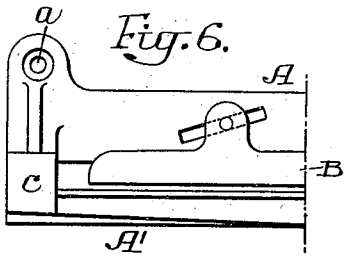


Fig. 1.

Fig. 3.

Fig. 2.

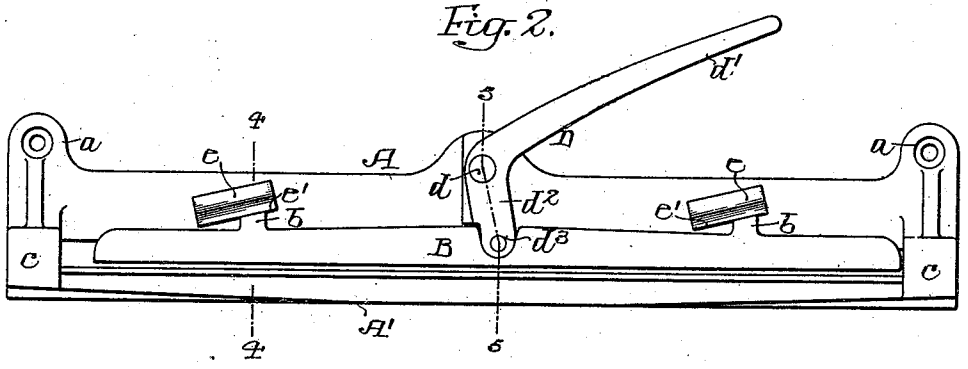


Fig. 4.

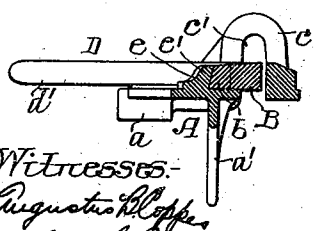
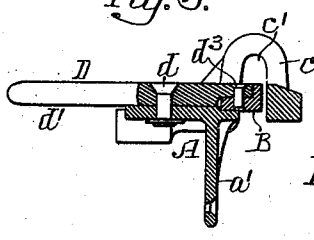


Fig. 5.



Witnesses.-
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UNITED STATES PATENT OFFICE.

ROBERT J. KOEBERLE, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HENRY DISSTON & SONS, INCORPORATED, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

SAW-CLAMP.

979,967. Specification of Letters Patent. **Patented Dec. 27, 1910.**

Application filed June 19, 1909. Serial No. 503,147.

To all whom it may concern:

Be it known that I, ROBERT J. KOEBERLE, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Saw-Clamps, of which the following is a specification.

My invention relates to certain improvements in clamps used for holding saws while being sharpened.

My invention is applicable either to the ordinary hand saw or band saw.

The object of the invention is to construct a simple device which can be quickly operated to clamp the saw firmly throughout the length of the clamp, so that the saw will be held as rigidly at each end of the clamp as at the center. This object I attain in the following manner, reference being had to the accompanying drawing, in which:—

Figure 1, is a perspective view of my improved saw clamp; Fig. 2, is a plan view; Fig. 3, is an end view; Fig. 4, is a sectional view on the line 4—4, Fig. 2; Fig. 5, is a sectional view on the line 5—5, Fig. 2; and Fig. 6, is a view of a modification.

A is the base plate of the clamp having perforated projections a, a at each end and a perforated depending portion a' at the center by which the clamp can be fastened to a bench or other support.

A′ is the fixed clamping jaw connected to the base plate A at each end by arched members c, c; the groove c' in the arched members allowing for the introduction of the saw so that any length of saw can be inserted in the clamp.

B is the movable jaw of the clamp, being moved toward and from the jaw A′ by a lever D pivoted at d to the base plate A and having a handle d'. The arm d^2 rests in a socket in the movable jaw and is preferably connected to it by a pin d^3, although this is not absolutely necessary.

On the base plate A some distance from each side of the center are inclined lugs e, both lugs being inclined in the same direction and preferably undercut, as shown in Figs. 1 and 4, and on the rear of the movable jaw B are projections b, b beveled to conform to the working face e' of each lug e.

When longitudinal motion is imparted to the movable jaw of the clamp by movement of the lever D the projections ride upon the working faces of the lugs and these lugs force the ends of the movable jaw toward the fixed jaw, so that if a saw is placed between the two jaws it can be firmly clamped throughout the length of the clamp by operating the lever to shift the movable jaw. The jaw is forced toward the saw not only by the movement of the lever D but also by the action of the beveled lugs. It will be noticed that the lugs are undercut so that they tend to hold the fixed jaw to the base plate A, keeping the upper surface of the two jaws in alinement.

Heretofore the great difficulty has been to make a satisfactory clamp which would be of sufficient length that the saw would only have to be adjusted twice to file the full length of the saw.

Usually in saw clamps of this type the ends of the movable jaw spring to such an extent that it is impossible to properly sharpen the saw, except throughout a small section of the saw at the center of the clamp. Means have been provided, such as adjusting screws, for adjusting the clamp, but these are objectionable as they have to be adjusted each time the saw is clamped, but by the above described device one single movement of the lever will bring the movable jaw firmly against the saw blade and it will bind the saw blade firmly throughout its length.

In some instances in place of the lugs having inclined faces, I may make inclined slots in the base plate and provide the movable jaw with pins adapted to the slots, as illustrated in Fig. 6.

I claim:—

1. The combination in a saw clamp, of a base plate carrying a fixed jaw connected to it by arched members at each end, a movable jaw mounted to slide upon the base plate, a horizontally movable lever pivoted to the center of the base plate and having one arm pivotally connected to the movable jaw, and beveled surfaces on the base plate at each side of the lever forming guides for the movable jaw to positively force said jaw toward the fixed jaw as the lever is operated.

2. The combination of a base plate carrying a fixed jaw and having undercut beveled lugs, a movable jaw having projections at the rear arranged to aline with the working faces of the lugs, and means for moving the

movable jaw so that it will ride upon the working faces of the lugs.

3. The combination of a base plate having a fixed jaw connected to it by arched members at each end, a movable jaw mounted on the base plate, a lever pivoted to the center of the base plate and having one arm connected to said movable jaw, two beveled lugs on the base plate on each side of the lever, said movable jaw having projections on the rear also beveled and arranged to travel on the working faces of the lugs; the parts being so arranged that as the lever is operated the movable jaw will have a longitudinal movement as well as a movement toward the fixed jaw.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

ROBERT J. KOEBERLE.

Witnesses:
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WM. A. BARR.