

L. C. STRONG.
SAW FILING CLAMP.

Patented Feb. 16, 1892.

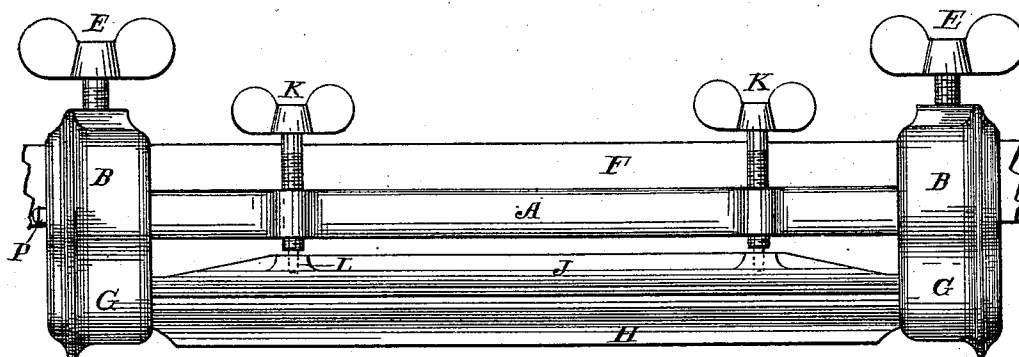


Fig. 1.

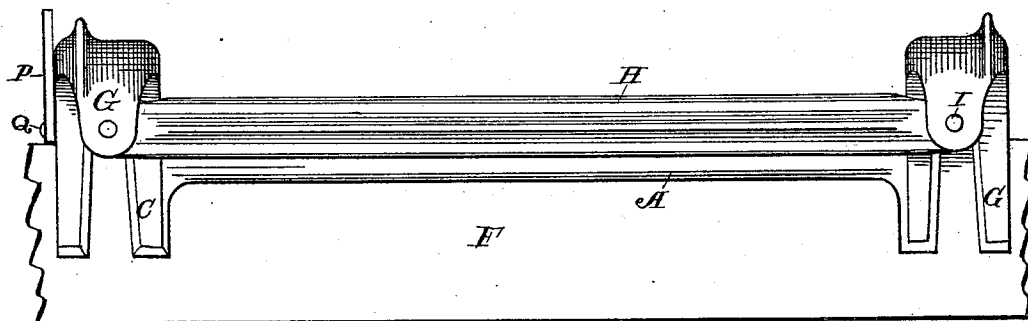


Fig. 2.

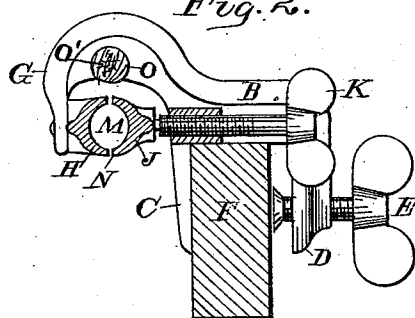


Fig. 3.

WITNESSES:

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LEVI C. STRONG, OF BROOKLYN, NEW YORK.

SAW-FILING CLAMP.

SPECIFICATION forming part of Letters Patent No. 469,022, dated February 16, 1892.

Application filed December 5, 1890, Serial No. 373,683. (No model.)

To all whom it may concern:

Be it known that I, LEVI C. STRONG, a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Saw-Filing Clamps, of which the following is a specification.

The object of my invention is to construct a simple, cheap, and effective saw-filing clamp so arranged that it will hold any kind of a saw firmly, prevent any jar or vibration while in the process of filing, that is easily adjusted, and so constructed that the saw can easily be attached and detached, the whole being of small compass for facility in handling and transportation.

It consists of a bar having a clamp at each end for securing it to the stationary support, and each clamp has a forwardly-projecting curved neck, to the inner sides of which are secured the ends of the saw-clamping bar. The other clamping-bar is held in position by means of two set-screws, which pass through the main bar of the frame. Each saw-clamping bar has its face which is in contact with the saw hollowed, so as to provide two bearing-faces against the saw, and each of the curved necks which project forward from the clamp has on its hollowed side a detent or recess to receive a wooden or soft-metal plug, so that when the saw is being placed in the clamp the teeth will not be liable to damage against the metal neck, all of which will now be set forth in detail.

In the drawings, Figure 1 is a top view of my improved saw-filing clamp; Fig. 2, a front view of the same, and Fig. 3 a vertical cross-section.

The device is constructed of a main bar or frame A, of any suitable length, having integral therewith, at each end, a clamp B, composed of the inner legs C and the outer legs D, through the latter of which are the horizontally-disposed thumb-nuts E, which compress the support F when the device is placed in position.

Projecting upwardly and forwardly from each clamp and homogeneous therewith, preferably, is a curved extension or neck G, and to the inner side of the limb of this neck is secured the front saw-clamping bar H. This

bar H may be cast with the clamp-neck G or made separately and afterward attached by means of rivets or screws I, as shown. The rear saw-clamping bar J rests loosely on the inner ends of the set-screws K, which pass horizontally through the main frame a, and each of the set-screws has a reduced end, as shown at I, which enters a suitable hole in the bar J, so that the shoulder thus formed on the screw will rest against the bar when the screw is moved forward. No other support is required for this rear bar. Instead of employing these screws, any other adjusting device may be substituted—such as wedges, cams, &c.—without departing from the spirit of my invention. Each bar, as shown in Fig. 3, has its side which rests against the same hollowed out, as at M, so as to provide narrow bearing-joints N at the upper and lower sides. By this means the saw-blade is firmly grasped by the bars and the rear bar J will more readily adjust itself to the saw-surface.

On the under side of each neck or extension G is a detent or recess O, located directly above the clamping-bars H J, in which detent I place a wooden plug or a piece of soft metal O'—such as lead—for the purpose of protecting the teeth of the saw while it is being adjusted.

I call particular attention to the overhanging neck G, which supports the front clamping-bar H.

All saw-filing clamps, so far as I am aware, depend for support upon a bracket which extends out under the saw; but in all devices the arm or bracket is cumbersome and in the way of the user, and by the construction herein shown the article is made neat and presentable in appearance, besides being light and workmanlike and easily adapted, owing to its compactness, to being easily carried with a kit of tools.

In order to provide a means for holding band-screws in addition to the clamping-bars, I place at one or both ends of the clamp-head an arm P, held in position by means of a screw Q. This arm can be moved up to a vertical position when not in use; but when desired to support a band-saw blade it is turned down to a horizontal position under the saw-blade and the screw Q firmly set, so that when

the saw-clamping bars are released in order to move the blade farther along said arms P will hold in the blade.

What I claim as new is—

5 1. A saw-filing clamp having overhanging extensions or necks provided with downwardly-projecting clamp necks or arms, and the front saw-bar attached to the lower end of said arms, in combination with a rear parallel
10 clamping-bar held in relation to the front bar by means of set-screws through the main frame, substantially as herein set forth.

2. A saw-filing clamp having the outer saw-clamping bar secured to the lower ends of
15 rigid overhanging necks and the other clamping-bar loosely suspended on the ends of set-screws which pass through the frame from the rear side, each bar being hollowed or concaved on the side which faces the screw, sub-
20 stantially as herein set forth.

3. A saw-filing clamp composed of a bar or frame having at each end a clamp and screw for securing the same to a bench, an overhanging extension or neck integral therewith

at each end, a stationary clamping-bar secured 25 to the lower ends of said necks, and a movable clamping-bar supported on the ends of set-screws which pass horizontally through the frame, substantially as herein set forth.

4. A saw-filing clamp composed of two jaws, 30 with set-screws for securing same to a bench, having at each end an overhanging extension or neck integral therewith, the hollow of each neck having a wooden plug or a piece of soft metal, in combination with the saw-clamping 35 bars, one attached permanently to the rigid neck and the other to the outer ends of the set-screws, which pass through the frame from the rear side, said clamping-bars having their sides facing the saw concaved, substantially 40 as set forth.

Signed at Brooklyn, in the county of Kings and State of New York, this 3d day of December, A. D. 1890.

LEVI C. STRONG.

Witnesses

J. S. ZERBE,
S. J. CHASE.