(No Model.)

H. W. WILLIAMS.

DEVICE FOR SIDE DRESSING THE TEETH OF SAWS.

No. 383,931. Patented June 5, 1888.

Fig. 1.

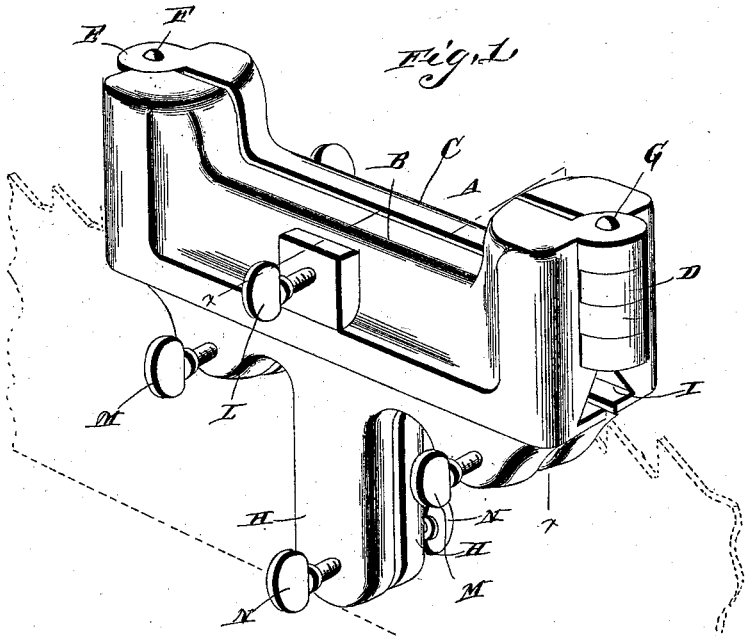


Fig. 2.

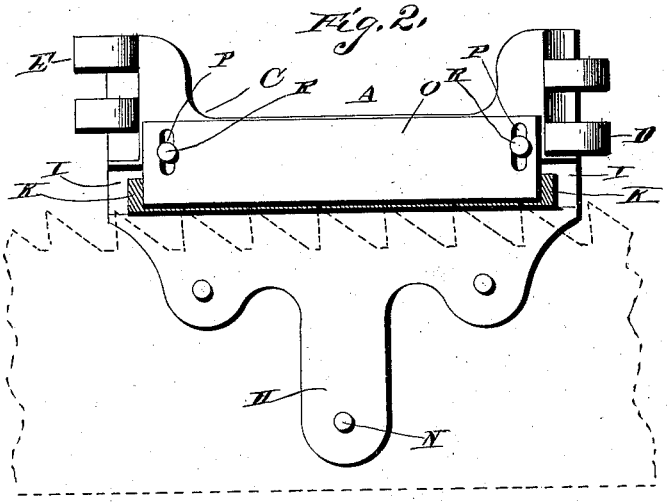
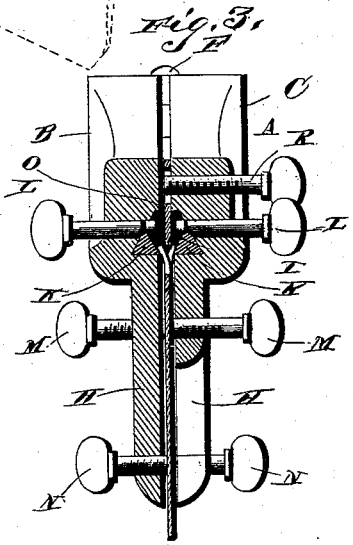


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

HAMILTON W. WILLIAMS, OF NASHVILLE, TENNESSEE.

DEVICE FOR SIDE-DRESSING THE TEETH OF SAWS.

SPECIFICATION forming part of Letters Patent No. 383,931, dated June 5, 1888.

Application filed February 11, 1888. Serial No. 263,682. (No model.)

To all whom it may concern:

Be it known that I, HAMILTON W. WILLIAMS, a citizen of the United States, residing at Nashville, in the county of Davidson and State of Tennessee, have invented a new and useful Improvement in Devices for Evening the Teeth of Saws, of which the following is a specification.

My invention relates to an improvement in devices for evening the teeth of saws; and it consists in the peculiar construction and combination of devices, that will be more fully set forth hereinafter, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a perspective view of a device embodying my improvement. Fig. 2 is a central longitudinal elevation of the same, one of the sections of the frame or body being removed. Fig. 3 is a vertical transverse sectional view, taken on the line *x x* of Fig. 1.

A represents the frame or body, which comprises two longitudinal separable sections, B C, each of which is made of cast metal, wood, or any other material, and is of the form here shown. At the upper corners of the said sections or members are formed ears D E, which match each other and enable the members or sections to be placed side by side. A hinge-bolt, F, passes through vertical aligned openings in the matched ears E, and a removable pin, G, is adapted to be inserted in aligned openings in the matched ears D. From the under side of each section or member, at the center thereof, projects a vertical arm, H, of suitable length, and on the inner side of each section, at a suitable distance from the upper edge thereof, is made a longitudinal groove, I, the inner side of which is beveled or inclined, as shown. In the said grooves I are secured a pair of files, K, which are triangular in cross-section and have their inner opposing edges projecting slightly within the inner sides of the sections or members B C. The said sections or members are provided each with a cam-detent, L, which is arranged in an opening in the center of the section or member and is adapted to impinge upon the upper edge of the file, so as to secure the latter rigidly in position in the groove.

M represents a pair of adjusting-screws, which work in transverse-threaded openings in the lower corners of each member or section, and N represents similar adjusting-screws, which work in threaded openings in the lower ends of arms H.

To the inner side of the member B is secured a vertically-movable guide-plate, O, which is provided at its ends with vertical slots P. Set-screws R work in the said slots and extend through the member B, and are adapted to clamp the guide-plate to the said member at any desired vertical adjustment.

The operation of my invention is as follows: After the teeth of the saw have been swaged or sharpened, or while the saw is still held in the clamp or vise with its teeth uppermost, the members of the frame or body A are arranged on opposite sides of the saw and closed upon the same and secured by the pin G. The lower edge of the guide-plate O rests upon the points of the teeth and the lower edges of the files rest against the sides of the teeth near the points thereof. The guide-plate is adjusted vertically, according to the desired width of the saw-teeth, and when the same is adjusted the operator grasps the frame or body A with both hands and moves the same longitudinally back and forth on the saw, thereby causing the files to cut the sides of the saw-teeth and reduce the same to an even width throughout the entire length of the saw. Those portions of the members or sections B C which are below the files are slightly recessed or cut away, as shown in Fig. 3, to leave spaces on opposite sides of the saw, through which spaces the filings drop when the evener is in operation. When it is desired to only operate on one side of the saw-teeth, the operator may unjoint the device, entirely discard the member or section C, and only use the section B, with one file and the gage, as will be readily understood.

Having thus described my invention, I claim—

1. The combination of the members or sections B C, having the matched ears D E at opposite ends and having the grooves I in their opposing sides, the files secured in said grooves, the gage-plate O, secured to the inner side of one of the members and vertically adjustable, the bolt F, connecting the ears E and forming the hinge for the members, and the removable pin G, adapted to be inserted in aligned openings in the ears D, substantially as described.

2. The combination of the members or sections B C, having the matched ears D E at opposite ends and having the grooves I in their opposing sides, the files secured in said grooves, the bolt F, connecting the ears E and forming the hinge for the members, and the removable pin G, adapted to be inserted in aligned openings in the ears D, substantially as described.

3. The combination of the members or sections B C, hinged together at one end and having the fastening device at the opposite ends to secure the same together on opposite sides of a saw, said members having the grooves I and the set-screws M N, the files secured in the grooves I, and the gage-plate O, secured to one of the members or sections and vertically adjustable thereon.

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

HAMILTON W. WILLIAMS.

Witnesses:

JAMES E. WARNER,

GEORGE W. SHIELDS, Jr.