(No Model.) 2 Sheets—Sheet 1.

G. GLASS.

DEVICE FOR SIDE DRESSING SAWS.

No. 384,149. Patented June 5, 1888.

Fig. 1.

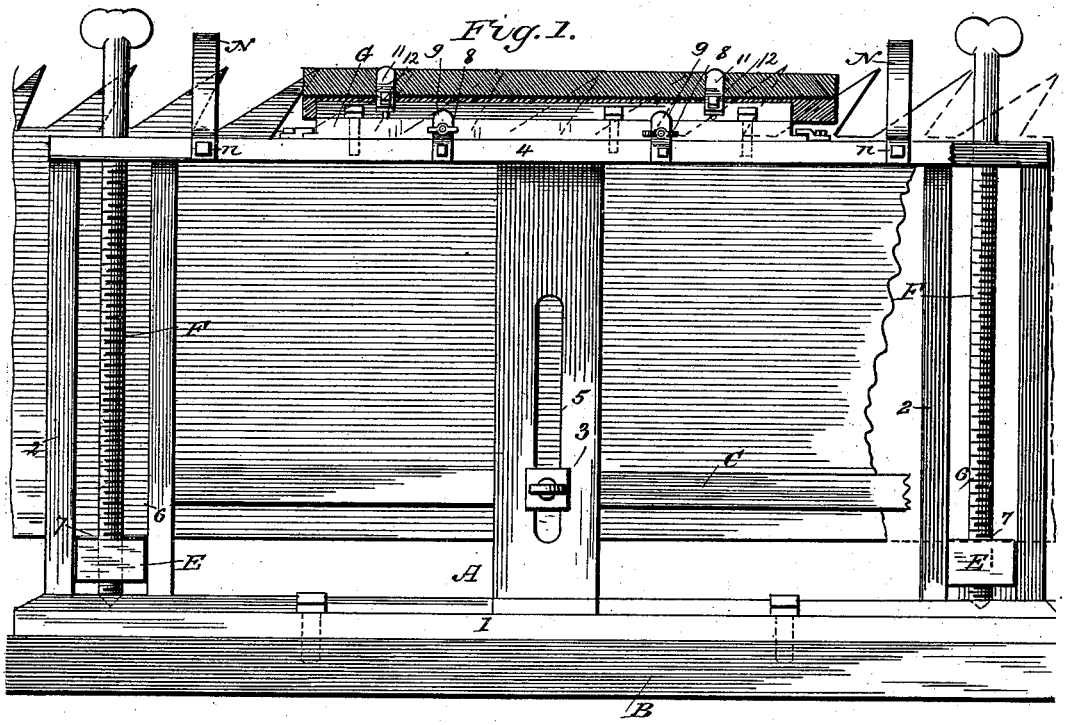
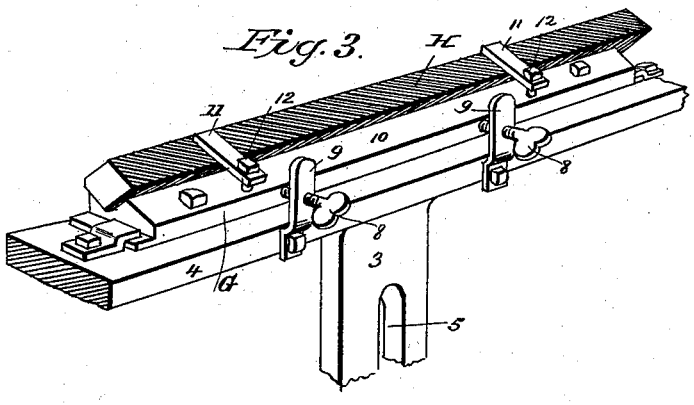


Fig. 3.



WITNESSES:
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P. B. Turpin.

INVENTOR:
Geo. Glass.
BY Munn & Co
ATTORNEYS.

(No Model.) 2 Sheets—Sheet 2.

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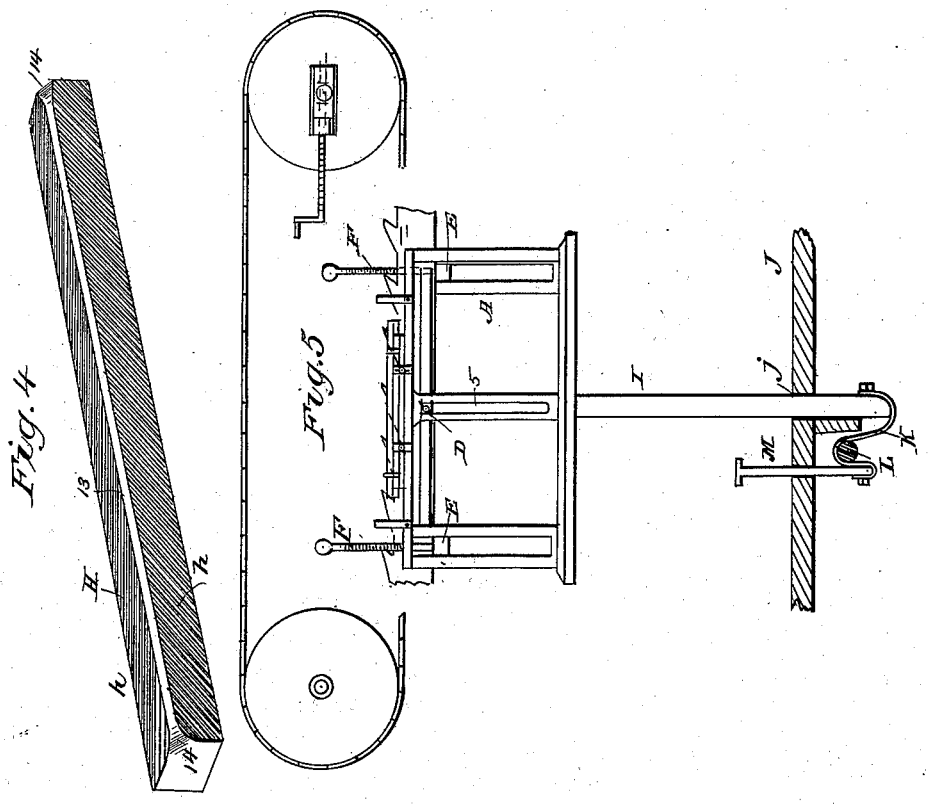

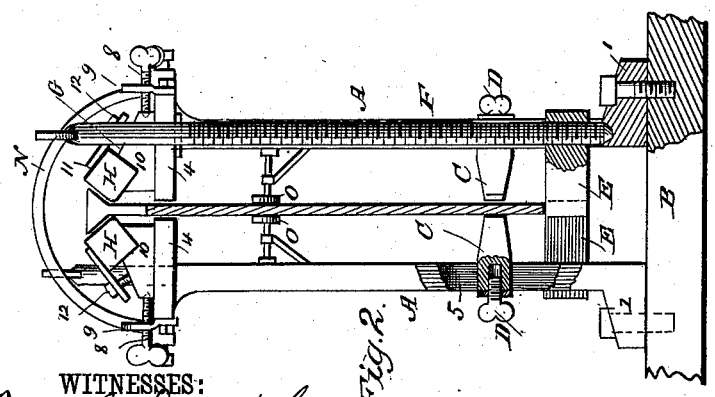

WITNESSES:
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UNITED STATES PATENT OFFICE.

GEORGE GLASS, OF CADILLAC, MICHIGAN.

DEVICE FOR SIDE-DRESSING SAWS.

SPECIFICATION forming part of Letters Patent No. 384,149, dated June 5, 1888.

Application filed December 7, 1887. Serial No. 257,253. (No model.)

To all whom it may concern:

Be it known that I, GEORGE GLASS, of Cadillac, in the county of Wexford and State of Michigan, have invented a new and useful Improvement in Devices for Side-Dressing Saws, of which the following is a specification.

This invention is an improvement in devices for side-dressing saws; and it consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figures 1 and 2 are respectively side and end views of my device, parts being broken away and others shown in section. Fig. 3 is a view showing the movable support for the device and the means for operating the same. Fig. 4 is a detail view of one of the files, and Fig. 5 is a detail view illustrating the file-holder and the means for adjusting the same.

The framing shown comprises two side frames or sections, A A, and a base, B, the side frames being bolted to the base, and each of such frames consisting of a base rail or foot, 1, end uprights or bars, 2 2, an intermediate upright, 3, and a top rail, 4. These intermediate uprights, 3, have vertical slots 5, which permit the movement of the lower guides, C C. These guides C have portions *c* projecting into and movable vertically in slots 5, and secured at any desired point by screws D. Thus the guides may be set up or down, as desired, to operate properly with different-sized saw-blades. The end uprights or bars, 2, of one side frame are slotted at 6, forming ways for the saw-supporting blocks E. These blocks E have threaded openings 7, in which turn the threaded adjusting-shafts F, journaled in or to the framing, and which may be turned to set the supports up or down to support narrow or wide saws, as desired.

The inner edges of the top rails, 4, fit close to and guide the saw. On these top rails I mount the file-carriers G, which are movable in and out on said rails to set the files against and away from the saw-teeth and to adjust said files to saw-teeth of different thickness. This adjustment of the file-carriers is effected by means of the set-screws 8, turned through threaded bearings 9 on the top rails, and fitted at their inner ends in sockets in the file-carriers. These file supports or carriers have main plates provided with seats 10 for the files, which files are held in such seats and in operative position by clamp-plates 11, bearing on said files and operated by set-screws 12, passed through the clamp-plates and threaded into the main plates of the file-support. The files H have faces *h h*, at the juncture of which are formed smooth bearing-faces 13, which form guides for the saw at a point immediately below the swage of the saw-teeth, and the ends of the file have rounded or beveled surfaces at 14, forming approaches to the bearings 13, and obviating any binding or similar difficulty in the passage of the saw through the device.

By means of the described device it will be seen the files serve as guides for the saw being treated and are so formed that they will not abrade the teeth below the swaged portion thereof, but will equally dress off the opposite sides of the said portion.

In swaging saws the teeth will become sprung more or less to one or the other side, and in dressing them down, if unsupported, when a tooth is sprung to one side the heaviest work comes on the file at that side, and the tendency is to force the tooth to the opposite side, and thus the side that does not require any more filing or dressing is filed, and the result is an irregularity in the saw.

By my construction, as will be seen, the teeth are held from being pressed to one side or the other and are dressed off evenly in the desired manner, the files serving to keep the tooth from springing over and being further cut on the side which has already been side-dressed enough.

The back edge of the saw resting on its support forms a straight-edge, and it will be seen that by lowering the saw I can side-dress any amount of swage desired, for as the saw is lowered down between the files the latter will cut heavier on the sides of the swage and bring every tooth out perfect without the corners of the files cutting into the side of the tooth, which would occur if the corners or edges of the files were not rounded or flattened off to form a smooth bearing.

In Fig. 5 the device or saw-dresser is mounted on a vertically-movable support, I, which latter passes down through a suitable guide, *j*,

preferably in the floor J, as shown, and is connected below such guide with one end of a strap, K, which passes up over a guide, L, and is connected at its opposite end to a foot-trip or treadle, M, by depressing which the saw-dresser may be raised to any suitable degree. This construction is especially intended for use on band-saws, as will be understood from Fig. 5, in which a band-saw and supports therefor are shown in connection with the dresser described. Friction-pulleys O operate to draw the saw down if there is any tendency to rise while passing through the files.

To prevent any springing apart of the side frames of the main frame, I provide one or more connecting-arches, N, which extend over the space between such side frames and are united at their opposite ends to said frames, preferably by bolts *n*, so they may be removed when so desired. These connecting-arches serve to prevent any independent movement of the upper ends of the side frames and serve to keep them steadily to position.

In operation it will be understood that the saw-blade is moved through the dresser, the parts of the latter being properly adjusted to dress the teeth of the saw in the desired manner and to the desired extent.

It will be understood that my dresser is intended for band and gang saws.

Having thus described my invention, what I claim as new is—

1. The combination of a saw-dresser, a support on which such dresser is mounted, a guide for such support, a foot-trip or treadle, a strap or connection between the trip and support, and a guide for such connection, substantially as set forth.

2. In a saw-dresser and as a new article of manufacture, a file adapted to act on or file the under face of a swaged saw-tooth, such file being formed with a smooth bearing surface, 13, whereby to bear against the saw at the base of the teeth, and with a cutting-surface adjoining and arranged at an incline, whereby to engage the under face of the swaged saw-tooth, substantially as set forth.

3. In a saw-dresser, the improved file herein described, having a smooth bearing-face, 13, and having the rounded or beveled end surface, 14, leading to said bearing-face 13, substantially as set forth.

4. The combination of the framing, the file-supports thereon and adjustable toward and away from each other, and the screws for adjusting said file-supports, substantially as set forth.

5. The combination of saw-dressing files, a support for the back edge of the saw, such support being arranged below the files, whereby the back edge of the saw may form a straight-edge to guide the saw with relation to the files, and suitable framing, substantially as set forth.

6. In a device substantially as described, the combination of the main frame having slots 5, the guides C, having portions *c*, operating in slots 5, the screws for securing such guides, and the file-supports, substantially as set forth.

7. In a device substantially as described, the combination of the framing, the file-supports, the saw-supports E, and the screws for adjusting said supports, substantially as set forth.

8. The combination of the framing, the file supports or carriers, the files clamped therein and having smooth bearing-faces 13, and the rounded or beveled end surface, 14, and the support for the saw, substantially as set forth.

9. In a saw-dresser, the combination of the side frames, the file supports or carriers, the saw support and guides, and the connecting arch or arches, substantially as set forth.

10. In a device for dressing saws, the combination of the framing, the file-supports or carriers, the saw-support, and the pulleys O, substantially as set forth.

11. In a saw-dresser, the combination of the framing, the file supports or carriers having main plates provided with seats 10 for the files, clamp-plates 11, and set-screws 12, and screws for adjusting said file-supports, substantially as set forth.

12. The improved saw-dressing device herein described, consisting of the side frames having slots 5, the saw-guide having portions *c* fitting in said slots, the screws for securing said guides in position, the saw-supports E, the threaded screws or shafts for adjusting said saw-supports, the file supports or carriers, and the arch or arches connecting the upper ends of said side frames, substantially as and for the purposes specified.

13. In a saw-dresser, the framing and a support for the saw, combined with the files having smooth bearing-surface 13 and a cutting-surface adjacent the said bearing-surface, and supports or carriers for such files, whereby they may be held with their smooth and cutting surfaces, respectively, against the saw below the swage and in contact with the under face of such swage, substantially as and for the purposes specified.

GEORGE GLASS.

Witnesses:
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WM. CASSLER.