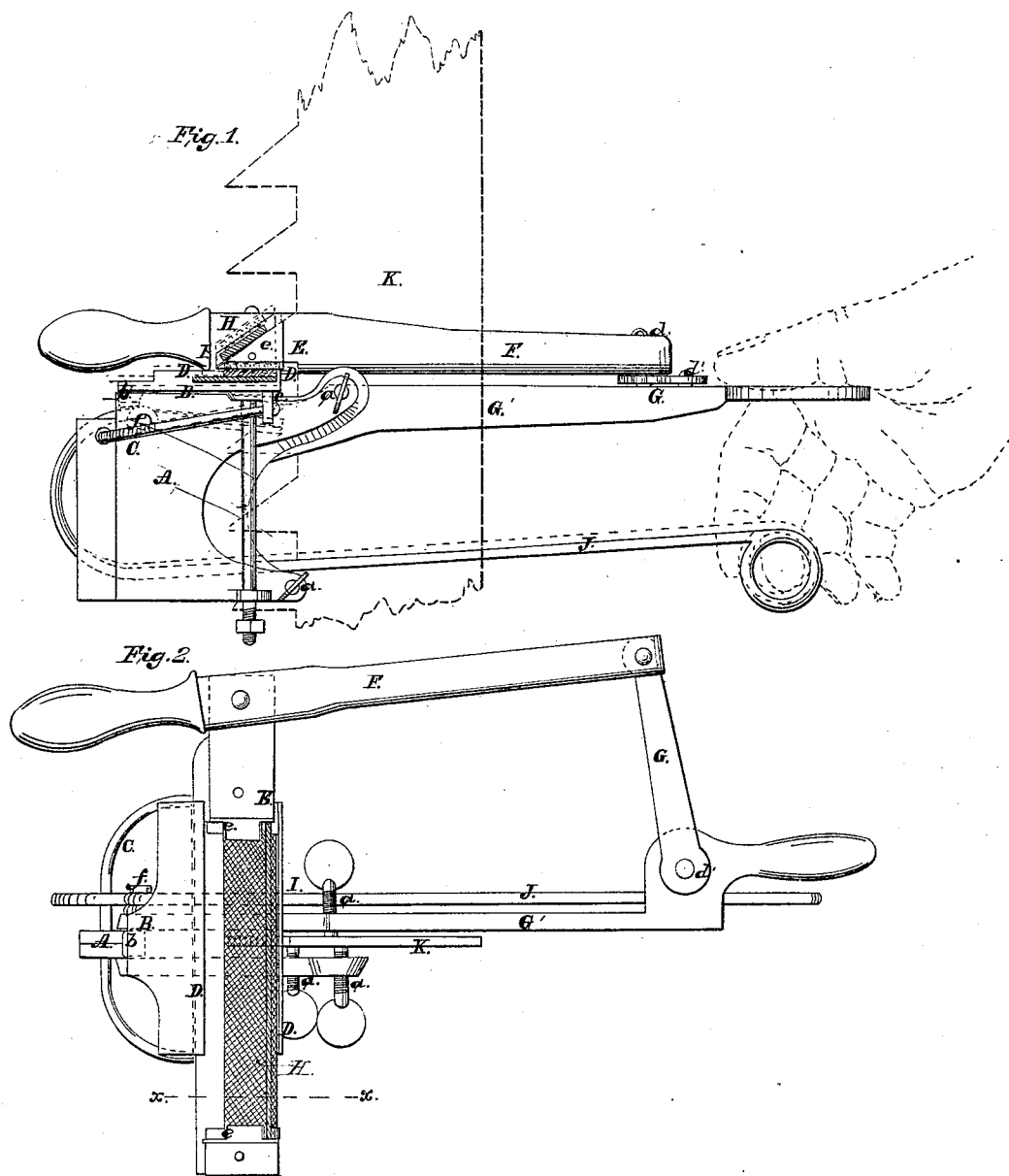


*A. M. Beardsley,*  
*Sharpening Reciprocating Saws,*  
*Nº 16,521,*  
*Patented Feb. 3, 1857.*



# UNITED STATES PATENT OFFICE.

A. M. BEARDSLEY, OF CONSTANTINE, MICHIGAN.

## FILING SAWS.

Specification of Letters Patent No. 16,521, dated February 3, 1857.

*To all whom it may concern:*

Be it known that I, A. M. BEARDSLEY, of Constantine, in the county of St. Joseph and State of Michigan, have invented a new and Improved Apparatus or Device for Filing Saws; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification in which—

Figure 1, is a side view of my improvement, the files and bed to which the files are attached being bisected transversely, as shown by the line (x) (x) Fig. 2. Fig. 2, is a plan or top view of ditto.

Similar letters of reference indicate corresponding parts in the two figures.

My invention consists in attaching two files to a reciprocating bed which works in or between adjustable or movable guides. One of the files is placed in an inclined position corresponding to the inclination of the upper sides or edges of the saw teeth, and the other is placed in a horizontal position corresponding to the under sides or edges of the teeth, so that both the upper and lower sides or edges of the teeth may be filed by merely operating the bed to which the files are attached, and raising or lowering the guides so that each file may act upon its proper side of the teeth.

To enable those skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A, represents a stock or clamp, which is formed of a piece of metal, having a slot in one edge to receive the edge of the saw on which the teeth are cut; the stock or clamp being secured on the saw by set screws (a). The upper edge of the stock or clamp has a recess made in it, and a plate B, is placed on the upper part of the stock or clamp, the back or outer part of said plate having a projection (b) attached to it, which projection fits in the recess in the upper edge of the stock or clamp. To the front part of the plate B, and to its under side there are attached two projections (c) (c) which fit over each side of the stock or clamp, one of these projections is shown in Fig. 1. The projections (b) (c) (c) serve as guides to the plate B, keeping it properly in place upon the stock or clamp.

C, is a bow formed of wire, and passing through the back part of the stock or

clamp, the front ends of this bow are attached to the projections (c) (c).

D, D, are guides attached to the upper surface of the plate B, and E, is a bed plate which is fitted and works between the two guides D, D. One end of said bed plate being attached to a lever F, one end of which is attached by a pivot (d) to a smaller lever G, which is connected by a pivot (d') to an arm G', attached to the stock or clamp A. To the bed plate E, there are attached two upright projections (e) (e) the upper edges of which are inclined or beveled, as shown clearly in Fig. 1, and H, is a file the ends of which are secured to the upper edges of the projections (e) (e) the file of course having the same inclination as the upper edges of the projections.

I, is a file which is secured upon the bed plate E, between the two projections (e) (e), the file I, being directly underneath the file H, space being allowed between the two files to receive the teeth of the saw, said space being rather larger than the saw teeth.

J, is a lever attached by a pivot (f), to one side of the stock or clamp A. One end of this lever bears against the under side of the plate B, and the opposite end extends outward and underneath the arm G'.

K, represents the saw, to which the device is attached. The socket or clamp A, is attached to the saw K, by the set screws (a) as before stated, so that one of the teeth of the saw is placed between the two files H, I, the lever F, is then moved laterally back and forth, and by gently pressing upon it, the upper inclined file H, will file the upper side or edge of the teeth, the inclination of said file corresponding to the inclination intended to be given the tooth. When the upper side or edge of the tooth is filed, the operator raises the outer end of the lever J, and the inner end of said lever will elevate the plate B, and consequently the bed plate E, and both files, and the lower file I, will be pressed against the lower side or edge of the tooth, the file I, filing, as the lever F, is operated, the lower edge of the tooth.

Thus it will be seen that both sides or edges of the tooth may be filed with but one adjustment of the device. The set screws (a) are then relaxed and the clamp or socket

again secured to the saw, so that the succeeding tooth may be operated upon, and so on till all the teeth are filed.

Having thus described my invention, what  
5 I claim as new and desire to secure by Letters Patent, is,

The two files H, I, arranged as shown, and attached to the reciprocating bed plate E, which works between guides on a mov-

able or adjustable plate B, the bed plate E, 10 being operated by the lever F, or its equivalent, and the plate B, by the lever J, substantially as shown for the purpose specified.

A. M. BEARDSLEY.

Witnesses:

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