

F. R. JORDAN.
SAW FILE GUIDE.
APPLICATION FILED SEPT. 7, 1910.

1,023,428.

Patented Apr. 16, 1912.

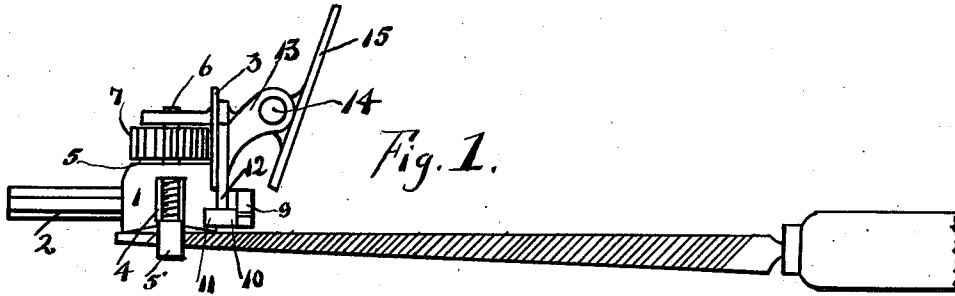


Fig. 2.

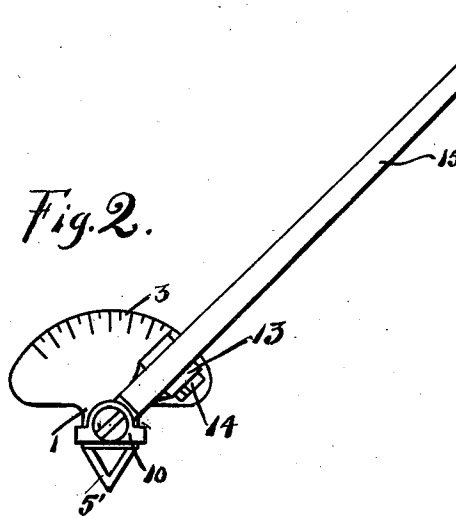


Fig. 3.

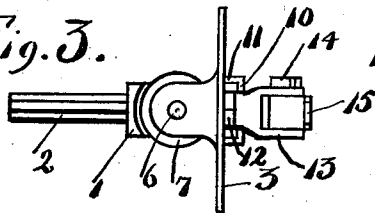
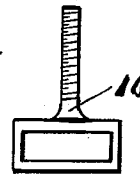


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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SAW-FILE GUIDE.

1,023,428.

Specification of Letters Patent.

Patented Apr. 16, 1912.

Application filed September 7, 1910. Serial No. 580,849.

To all whom it may concern:

Be it known that I, FRANK R. JORDAN, a citizen of the United States, residing at Ocean Beach, in the county of San Diego and State of California, have invented a new and useful Saw-File Guide, of which the following is a specification in such full and clear terms as will enable those skilled in the art to construct and use the same.

10 This invention relates to an attachment for saw files and its object is to provide means whereby the person using the file may correctly judge at all times the proper angle at which to hold the file to properly sharpen the teeth of the saw.

15 It is to be observed that in filing a saw that the saw clamp or vise must be placed above the height of the chest in order that the person may be able to properly operate the file in drawing the same back and forth across the teeth. This places the file below the eyes in such a position as to enable the user to very readily judge the angle at which to hold the file in the horizontal plane, but 25 it also places the file in such a position as to make it very difficult to judge the angle in the vertical plane, while it is still more difficult to judge the precise angle at which to hold the faces of the file with respect to rotation about its own axis. This invention 30 therefore, seeks to provide means whereby the angle of the axis of the file in the vertical plane may be readily judged and also to provide means whereby the proper slope of the cutting sides of the file with respect 35 to rotation around its own axis may be determined to give the necessary rake to the teeth.

40 Another object of the invention is to produce a device which will be very light and which will be easily operated without a bench or other auxiliary aid to the saw clamp.

45 In the drawings in which the same numeral of reference is applied to the same portion throughout the several views, Figure 1 is a side elevation of the file having the attachment applied thereto, the guide bar being shortened for purpose of illustration. 50 Fig. 2 is an end elevation of the attachment. Fig. 3 is a plan view of the attachment, and Fig. 4 is a view of a clamp for holding flat files.

55 The numeral 1 represents the main block to which the several parts comprising the attachment are secured. This block has a

graduated sector 3 at one end and has a projecting finger piece 2 at the other end. The block is provided with a vertical slot 4 and with a horizontal slot 5 above the 60 vertical slot. Slidable in the vertical slot is the file clamp 5'. Said file clamp is adapted to hold either flat or triangular files as may be deemed desirable. This file clamp has a threaded shank 6 which is passed 65 through a milled nut 7, said milled nut lying in the horizontal slot in the block 1. Thus the file may be firmly secured in the file clamp by tightening the milled nut. At the lower part of the graduated sector there 70 is a screw 9 which is threaded into the block 1. A washer 10 having wings 11 to prevent it from turning, is placed upon said screw. The washer 10 bears upon the shank 12 of 75 the guide arm 13, said guide arm having a point to determine the position of the file with respect to the cut of the teeth desired.

The shank 12 has the screw 9 passed therethrough and is movable in the plane 80 of the graduated sector. Secured on the upper end of the arm 13 is the guide bar 15. Said guide bar is pivoted on the screw 14 to move in a plane at right angles to the face of the graduated sector plate. This 85 guide bar may be of any convenient length to enable the user of the device to easily determine at what angle the file should be held and with the two adjustments thereof the position of the file with respect to the 90 saw is determined in planes other than that which the eye may determine readily from the file itself. Thus, if this attachment be applied to the file and the file held in front 95 of the person it can be easily seen at what angle the file axis is placed with respect to the plane the saw in the clamp presents. The precise position of the file in both the 100 other desired planes is also at once apparent, that is, if a three cornered file is used, one side of it may be desired to be held almost vertical as in the case of a rip saw, in which event the guide bar will be turned 105 to one side or the other, and the axis of the file may be desired to be held quite steep or very flat. The desired slope of the axis of the file is given by moving the guide bar 15 in the plane at right angles to the sector. It is to be understood that in practice it is very 110 easy to hold the guide bar vertical since the eye becomes adept in judging vertical lines, and this is the position the guide bar is intended to be used in. When flat files are to

be used, the clamp shown at 16 is used instead of this clamp 5', said clamp having a rectangular file holding portion instead of the triangular one shown in the other 5 figures.

It will be understood that suitable figures may be placed upon the graduations upon the arc shaped plate, should it be so desired to indicate the proper position to place the 10 guide bar in when using flat files or triangular files.

Having thus described my invention what I claim as new and desire to secure by Letters Patent of the United States, is as follows: 15

1. In a saw file guide, a file clamp, a finger hold therefor, and a guide bar carried by said file guide, said guide bar being pivoted to move in a plurality of planes substantially radial to the axis of the file to be held 20 by the clamp, as set forth.

2. In a saw file guide, a block, a file clamp secured thereto, a finger hold extending from said block, a graduated segment plate extending substantially at right angles to the 25 axis of the file being held in the clamp, an arm pivoted to said block and movable in

a plane substantially at right angles to the axis of the file in said clamp, and a guide bar pivoted to said arm and movable in a 30 plurality of planes substantially radial to the aforesaid axis, as set forth.

3. In a saw file guide, a block, a file clamp secured thereto, a graduated segment plate on said block and extending substantially 35 at right angles to the axis of the file to be held in said clamp, an arm pivoted on an axis substantially parallel with the aforesaid file axis, a washer in contact with the arm and having points to prevent its rotation 40 by said arm, and a guide bar pivoted to said arm on an axis transverse to the file axis whereby the guide bar is movable in a plurality of planes radiating from the 45 aforesaid file axis, as set forth.

In testimony whereof I have hereunto set my hand this 27th day of Aug. A. D. 1910, in the presence of the two subscribed witnesses.

FRANK R. JORDAN.

Witnesses:

MARK C. MOORE,
H. JARVIS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."