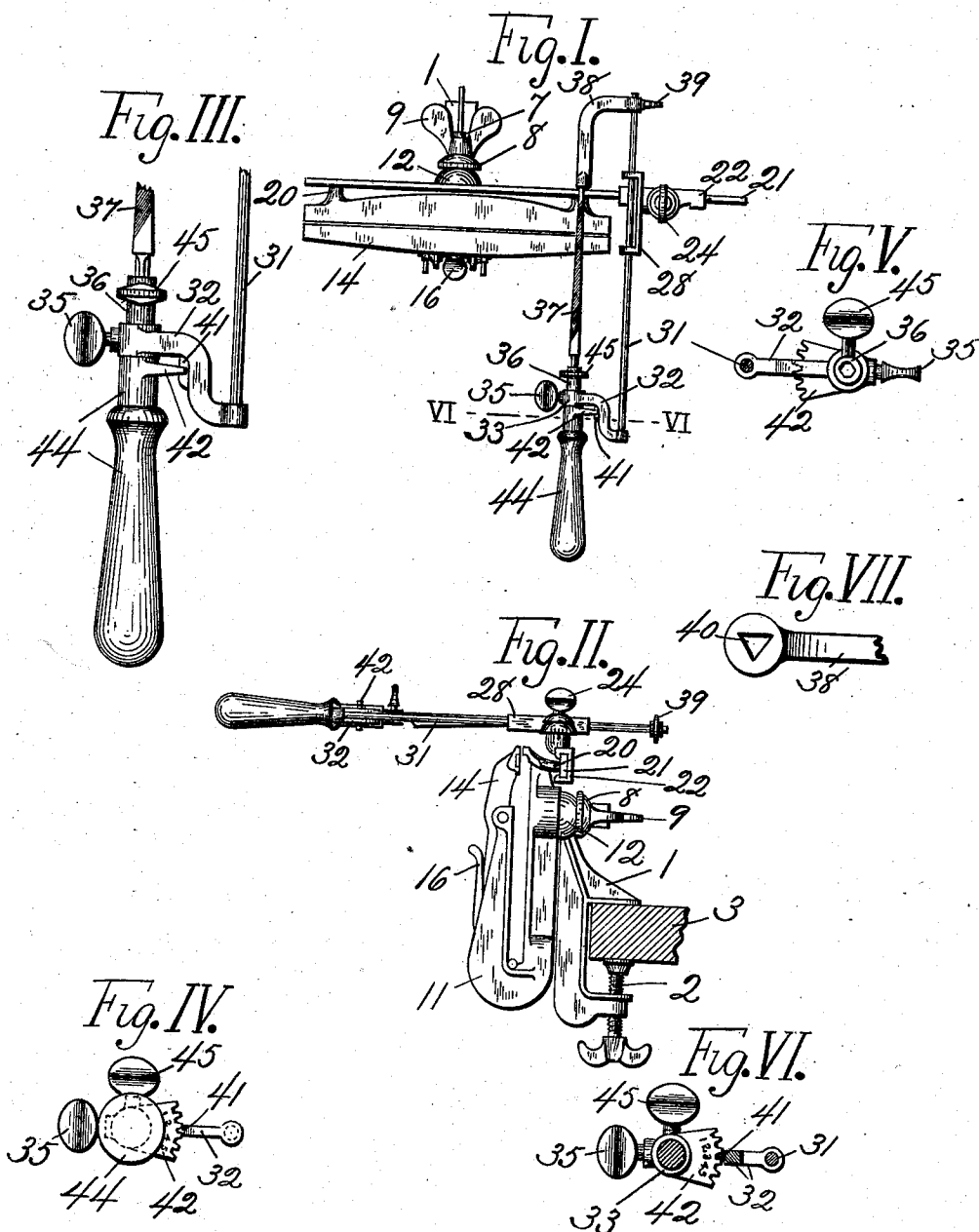


No. 867,926.

PATENTED OCT. 8, 1907.

W. M. POTTER.  
SAW FILING DEVICE.  
APPLICATION FILED DEC. 28, 1903.



WITNESSES:  
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# UNITED STATES PATENT OFFICE.

WILLIAM M. POTTER, OF SYRACUSE, NEW YORK, ASSIGNOR TO E. C. STEARNS & COMPANY,  
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## SAW-FILING DEVICE.

No. 867,926.

Specification of Letters Patent.

Patented Oct. 8, 1907.

Application filed December 26, 1903. Serial No. 186,736.

*To all whom it may concern:*

Be it known that I, WILLIAM M. POTTER, a citizen of the United States, residing at Syracuse, in the county of Onondaga and State of New York, have invented certain new and useful Improvements in Saw-Filing Devices; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to an improvement in saw-filing devices of the character shown in my application filed October 9, 1902, Ser. No. 126,542, and consists essentially of a notched segment on the file handle adapted to engage with a suitable rib on the file-holder, whereby the angle of the file with reference to the saw may always be positively and accurately fixed, and thus any particular pitch given to the teeth without variation.

My invention will be understood by reference to the drawing herewith in which the reference numerals of the specification indicate the corresponding parts in all the figures.

Figures I and II are respectively top plan and end elevation of a saw-filing device provided with my invention; Fig. III is a portion of Fig. I enlarged, showing my invention and the adjacent parts. Fig. IV is a corresponding elevation. Fig. V is a rear elevation of the parts shown in Fig. IV. Fig. VI is a cross section on line VI VI of Fig. I. Fig. VII is a detail view showing the socket to receive the tip of the file.

In the figures, 1 indicates the clamp of usual construction having integral ball 12 and thumb screw 2 to secure it on the bench 3; 11 is the vise adjustably secured on the clamp by means of bolt 7, clamping piece 8 and thumb-screw 9; 14 is the outer jaw suitably journaled on the body of the vise and operated by any suitable lever 16. The body of the vise may be provided with lugs 20 and track or guide-bar 21, to which is fitted the slide 22, having clamped on its upper end by means of thumb-screw 24, the yoke 28, in the perforated ears of which is fitted to turn and to reciprocate at any suitable angle across the saw, any suitable file holder; as here shown, composed of file rod 31, having at its inner end a fixed arm 32 provided with a collar or ring 33 and thumb-screw 35 to engage with the shank 36 of the file-handle 44 of file 37, and at the other end an adjustable arm 38 secured to the file rod by thumb-screw 39 and having triangular socket 40 to receive the file tip.

45 is a thumb-screw, which may be used on handle 36, to engage with file-shank.

My present invention relates more particularly to longitudinal rib 41 on outer arm and to notched segment 42 to coöperate therewith and fixed at any suitable point on the file-handle. The hook, or pitch, of the teeth is obtained by the angle at which the operative face of the file is arranged to them, in other words is regulated by the angle of such face to the perpendicular. Such regulation to obtain the desired pitch is effected by loosening thumb-screw 35, withdrawing the file-handle so that the segment will disengage from the rib, then rotating the file-handle till the proper adjustment is obtained, sliding it back into place and tightening the thumb-screw, when one of the notches engages with the rib. As the notches are indicated by different numerals, the same adjustment of the file and same pitch of teeth may always be obtained by engaging the same notch, indicated by the particular numeral, with the rib.

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

1. In a saw-filing device, the combination with a file having a handle, a file holder having a collar to receive the handle and a socket to receive the tip of the file, means to support the holder adjacent to the saw, a set-screw in the collar to clamp the file in the holder, of a longitudinal rib on the holder, and a notched segment on the file handle, said segment being arranged outside of said collar and at right angles to the rib so that its notches will engage with the rib when the file is clamped in operative position.

2. In a saw-filing device, the combination with the file having a handle, of a holder having a rod, an adjustable arm on the outer end of the rod having a socket on its inner end to receive the file tip, a thumb screw to secure said arm on the rod, a fixed arm on the inner end of the rod, a collar on the inner end of said fixed arm to receive the file-handle, said arms being curved so that their ends approach, a set-screw on the collar to engage with the file-handle, a short longitudinal rib on the fixed arm outside of the collar and a segment on the file handle arranged at a right angle to the rib and provided with notches to engage with the rib, whereby the file may be moved longitudinally to disengage the rib from the segment, and then readjusted by rotation on its axis and restored to operative position.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM M. POTTER.

Witnesses:

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M. E. GAGON.