No. 684,434. Patented Oct. 15, 1901.

T. JACOBS.

FILE ATTACHMENT.

(Application filed May 23, 1900. Renewed Mar. 7, 1901.)

(No Model.)

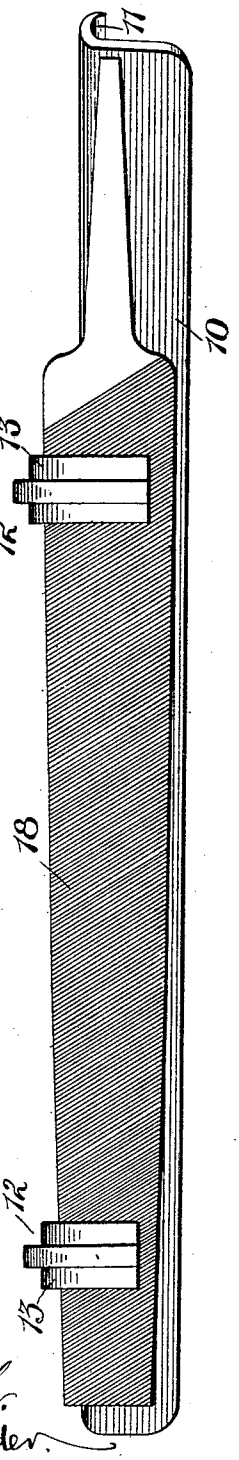

Fig. 1

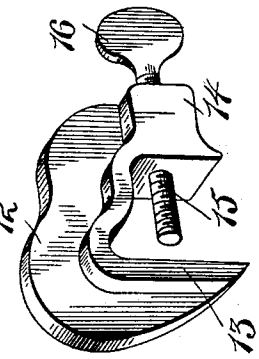

Fig. 3.

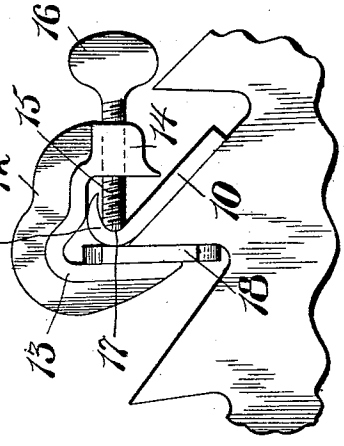

Fig. 2.

Witnesses.
Geo. E. Beech.
J. P. Alexander.

Inventor
Thomas Jacobs
By Hewsey & Robinson
Attorneys

UNITED STATES PATENT OFFICE.

THOMAS JACOBS, OF FRANKFORT, MICHIGAN.

FILE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 684,434, dated October 15, 1901.

Application filed May 23, 1900. Renewed March 7, 1901. Serial No. 50,269. (No model.)

To all whom it may concern:

Be it known that I, THOMAS JACOBS, a citizen of the United States, residing at Frankfort, in the county of Benzie and State of Michigan, have invented certain new and useful Improvements in File Attachments; and I do 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, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to an attachment for files to adapt them for sharpening saw-teeth or for any other use where it is desired to file an angular body.

The object of this invention is to provide a guide or bar that can be clamped to any part of a flat file without any alteration of the file whatever and also which can be clamped to the file at different angles for working on different-shaped objects, which angle can be changed without removing the bar or its clamping means from the file, and, further, to provide an improved form of clamp that will serve to securely hold the guide on the file at any desired angle and that will readily admit of adjustment of the bar angularly of the guide.

Referring to the accompanying drawings, in which the numerals of reference designate the same parts in the several views, Figure 1 shows a side view of a file having my preferred form of guide or bar clamped thereto. Fig. 2 is an endwise view of the same, showing it as in the act of filing a saw-tooth. Fig. 3 shows the improved clamping means.

The guide or bar 10 has along one edge an extension 11, shown as curved or trough-shaped, the curve being smallest at its joining with the flat part of the bar; but, if preferred, the extension may be a flat bar or consist of several flat surfaces angularly disposed, but preferably having the part connecting with the bar somewhat curved.

Any sort of a clamping device may be used that will have a flat side to engage the file and a screw having its extremity adapted to engage the valley of the guide and securely retain the guide at different angles of adjustment to the bar in position for guiding the file along a tooth of angular-shaped body, as shown in Fig. 2.

My preferred form of clamp is that shown in perspective in Fig. 3, comprising a substantially U-shaped frame 12, having a thumb-screw 15, operating in a threaded orifice in the enlarged portion 14 of the frame. The inner face of the part 13 is a plane surface and is at right angles to the screw 15. The middle portion of the frame 12 is made convex toward the screw, as shown.

In attaching the device the clamp is placed on the file against the side opposite from the one intended to be used, and then the guide is laid with its rounded edge against the file at the desired angle, having its curved extension bearing on the convex extension of the clamp. Then the screw is brought forward until its extremity, that is preferably rounded, engages the guide at the valley portion and forces the guide tightly and securely against both the file and also the middle portion of the clamp, which latter will serve especially to prevent angular displacement. While I have shown but two of these clamps in use, three or more may be used, if desired.

By having the guide to extend beyond the cutting portion of the file to the extremity or even farther this extremity, with the tang, forms a very convenient handle for the implement and supplants the handle usually required for the file.

Having thus described my invention, what I claim is—

The combination with a file, of a guide or bar having a trough-shaped extension along its longitudinal edge and clamps adapted to secure said bar to the file at different angles therewith, said clamp comprising a substantially U-shaped frame, and a screw operating in a threaded orifice in one leg of the frame, said frame having an extension at its inner middle portion adapted to form a support for the said extension of the bar, substantially as set forth.

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

THOMAS JACOBS.

Witnesses:
JAY MCARTHUR,
FRANK E. SNIDER.