No. 818,633. PATENTED APR. 24, 1906.

P. LORD.

SAW FILE.

APPLICATION FILED MAR. 11, 1905.

Fig. 1.

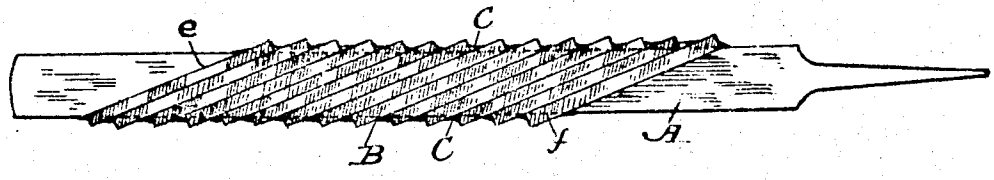



Fig. 2.

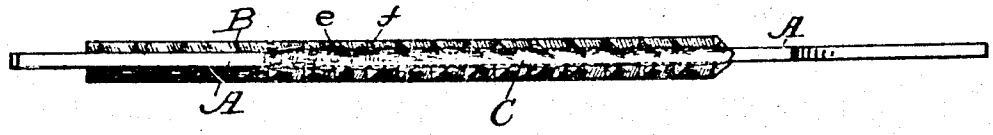



Fig. 3.

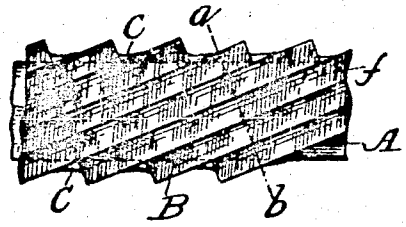



Fig. 6.

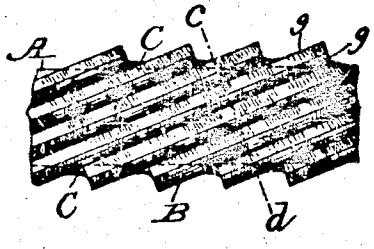



Fig. 4.

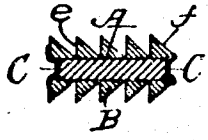



Fig. 5.

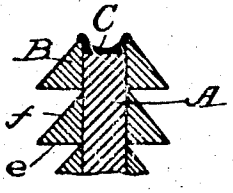
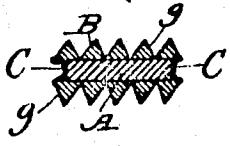



Fig. 7.




Witnesses;
E. N. Barker.
Wm. H. Newton.

Inventor;
Peter Lord.
By Albert A. Barker. Atty

# UNITED STATES PATENT OFFICE.

PETER LORD, OF WORCESTER, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO WILLIAM H. INMAN, OF WORCESTER, MASSACHUSETTS.

## SAW-FILE.

No. 818,633. Specification of Letters Patent. Patented April 24, 1906.

Application filed March 11, 1905. Serial No. 249,548.

*To all whom it may concern:*

Be it known that I, PETER LORD, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and useful Improvements in Saw-Files, of which the following is a specification.

Figure 1 represents a plan view of a saw-file embodying my improvements. Fig. 2 is a side or edge view thereof. Fig. 3 is an enlarged plan view of part of the file shown in Fig. 1. Fig. 4 is a transverse section through the file, taken on line *a b*, Fig. 3. Fig. 5 represents, upon a still larger scale than Figs. 3 and 4, a transverse section through one edge of the file to more fully illustrate my improvement; and Figs. 6 and 7 are similar views to Figs. 3 and 4, showing a modification in the construction hereinafter described, Fig. 7 being a transverse section on line *c d*, Fig. 6.

My invention relates to compound saw-files—that is, saw-files composed of a series of separate file-surface ribs or independent files placed at an angle side by side and fastened to a supporting-shank either upon one or both sides thereof.

The purpose of said invention is to provide a file of this class which may be made very cheaply and whereby as perfect and effective work may be produced as by a more expensively-constructed file.

Said invention consists in placing the series of separate ribs at an angle, side by side, loose against the side or sides of a shank having straight flat surfaces and then fastening said ribs to said shank by applying solder to the ends of the ribs and edges of the shank, as will be hereinafter more fully set forth.

In order that others may better understand the nature and purpose of my said invention, I will now proceed to describe it more in detail with reference to the accompanying drawings.

In said drawings, A represents the shank, and B the ribs attached thereto. Said ribs may be attached to one or both sides of said shank and may be of various shapes in cross-section, according to the work to be done therewith—as, for instance, for filing "splitting" or "band" saws the ribs are made of the shape shown by the first five figures of the drawings, with one side *e* at right angles to the shank and the other side *f* at an angle thereto, while if made for filing "cutting-off" saws both sides *g g* are made at an angle to the shank, as is shown in Figs. 6 and 7 of said drawings.

The ribs, of whatever shape they may be in cross-section, are placed side by side on the flat surface of the shank at an angle to the side edges thereof and are of the proper length to reach from edge to edge of the shank, as is shown by the plan views in the drawings. Having been thus placed on said shank, they are fastened rigidly and permanently thereto by applying solder C over the edges of the shank and ends of the ribs, as is best shown in Figs. 4, 5, and 7, thereby uniting said ends and edges in a secure and inexpensive manner. By the foregoing described construction the ribs may be made of any convenient long lengths and then cut into the required short lengths, the surfaces being cut in the usual way by means of a file-cutting machine, or emery may be applied to form the desired cutting-surfaces.

A saw may be sharpened very quickly by means of my improved file, as a number of teeth are sharpened at the same time, and the file thus acting and resting upon a number of teeth at once steadies the action thereof in drawing it back and forth in the filing operation and results in the teeth being filed in a uniform and perfect manner. The shape of the ribs and angle at which the file is held to the saw is of course governed by the angle at which the teeth are to be sharpened.

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

A saw-file comprising in combination, a shank, constituting the body and handle of the file, a series of separate ribs or short files placed parallel to each other side by side, on the surface of said shank, at an angle to the edges thereof, and means for fastening said separate ribs or short files in position, consisting in a mass of solder overlying the ends thereof and the edges of the shank, substantially as set forth.

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

PETER LORD.

Witnesses:
ALBERT A. BARKER,
E. N. BARKER.