J. C. THOMAS.

FILE.

APPLICATION FILED SEPT. 24, 1912.

1,066,340. Patented July 1, 1913.

Fig. 1.

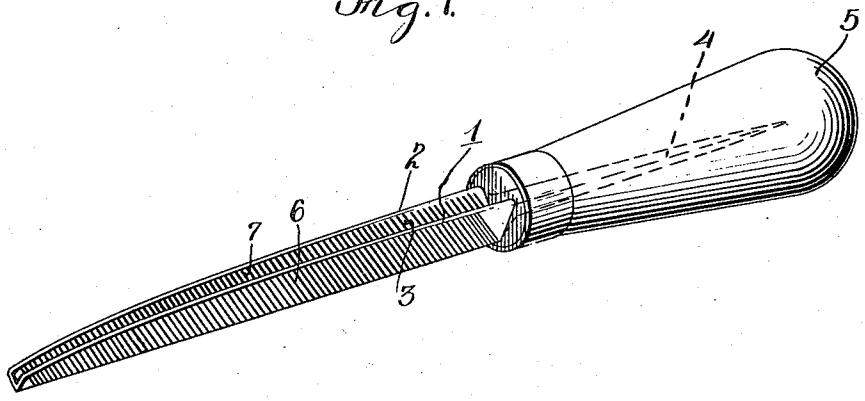


Fig. 2.

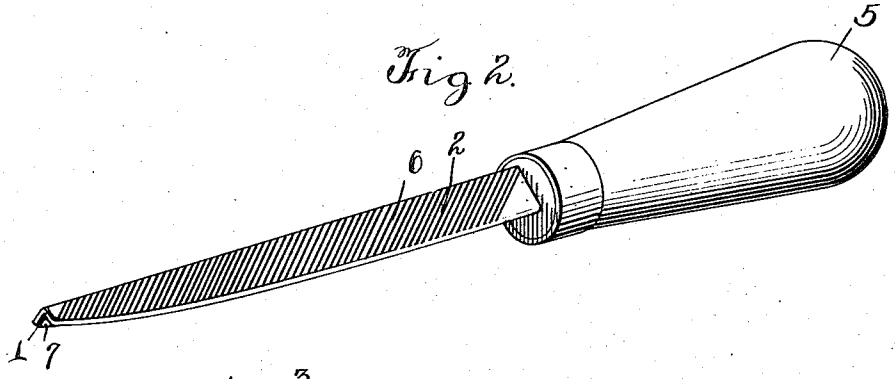


Fig. 3.

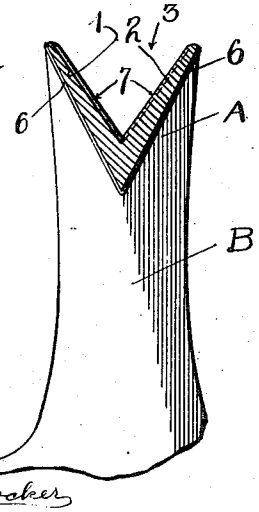
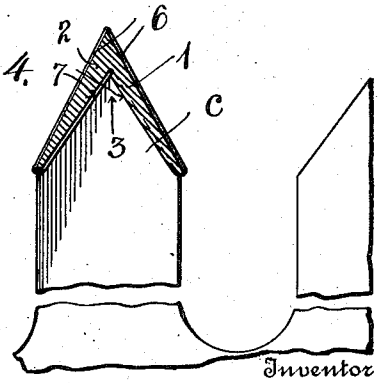


Fig. 4.



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UNITED STATES PATENT OFFICE.

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FILE.

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To all whom it may concern:

Be it known that I, JOEL C. THOMAS, a citizen of the United States, residing at Vernon, in the county of Lamar and State of Alabama, have invented new and useful Improvements in Files, of which the following is a specification.

This invention relates to files and particularly to one designed for sharpening the teeth of a cross cut saw, an object of the invention being to provide a reversible file which will have such transverse configuration as will permit of the effective filing of the cutting teeth of the saw when the file is in one position and which will also permit of an effective sharpening of the drag teeth when the file is in another position.

Another object of the invention is to provide a file wherein will be included companion angularly disposed walls whose companion sharpening surfaces terminate at the point of intersection of the walls and to arrange the said surfaces so as to increase the cutting efficiency immediately at the tip of the tooth.

Other objects will appear and be better understood from that embodiment of my invention of which the following is a specification, reference being had to the accompanying drawings forming part thereof, in which:

Figure 1 is a perspective view of the file looking into the concavity thereof. Fig. 2 is a view similar to Fig. 1 showing the position of the file reversed. Fig. 3 is a section through the file showing the application of the same to the drag tooth. Fig. 4 is a view similar to Fig. 3 showing the application of the file to the cutting tooth.

The file comprises a main body member which is preferably formed of a single piece of metal and provided with angularly disposed walls 1 and 2, the said member being substantially of V-form in transverse section so as to present an inner longitudinally extending concavity 3. The said main body member is provided at one of its extremities with a tang 4 which is fitted in any suitable well-known manner in the handle 5.

Each wall of the file is provided with cutting surfaces 6, being exteriorly located and similar cutting surfaces 7, the latter being interiorly located, or in other words, disposed in the concavity which is defined by the companion walls as hereinbefore described. The cutting surfaces 6 extend substantially transverse to the walls 1 and 2 and are preferably diagonally disposed with relation to the longitudinal plane of the file. The cutting surfaces 7 on the inner faces of the walls 1 and 2 are substantially identical with the surfaces 6, it being stated, however, that said surfaces 7 of the wall 1 are arranged in staggered relation to the similar surfaces 7 of the wall 2 so that the surfaces of the companion walls terminate in substantially intersecting planes and in overlapping relation immediately at the small end of the concavity 3.

With reference to Fig. 3 of the drawings it is said that the outer surfaces of the walls 1 and 2 are relatively arranged between the portions A of the drag tooth B so as to sharpen said portions as the file is drawn across the saw. With reference to Fig. 4 it is stated that the position of the file is reversed so that the point of the cutting tooth C is disposed in the longitudinal V concavity of the file, whereby the cutting surfaces 7 of the companion walls 1 and 2 will be positioned for effective cutting contact with the companion angularly disposed surfaces of the point of said tooth. In this position of the file the inner terminals of the cutting surfaces 7 extend slightly beyond the extreme point of the cutting tooth and as a consequence, said point is held against being rounded during the filing operation.

What is claimed as new is:

1. A file comprising a member of substantially V-form in transverse section and having its walls provided with internal and external cutting surfaces

2. A file provided with a substantially V-shaped concavity, the said concavity being extended throughout the length of the file and having its walls provided interiorly with sharpening surfaces, the surfaces of one wall being disposed in staggered relation with the surfaces of the other wall.

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

JOEL C. THOMAS.

Witnesses:

J. T. ALLEN,

J. T. MADDOX.