

A. SIPPLE.
SAW SHARPENER.
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996,732.

Patented July 4, 1911.

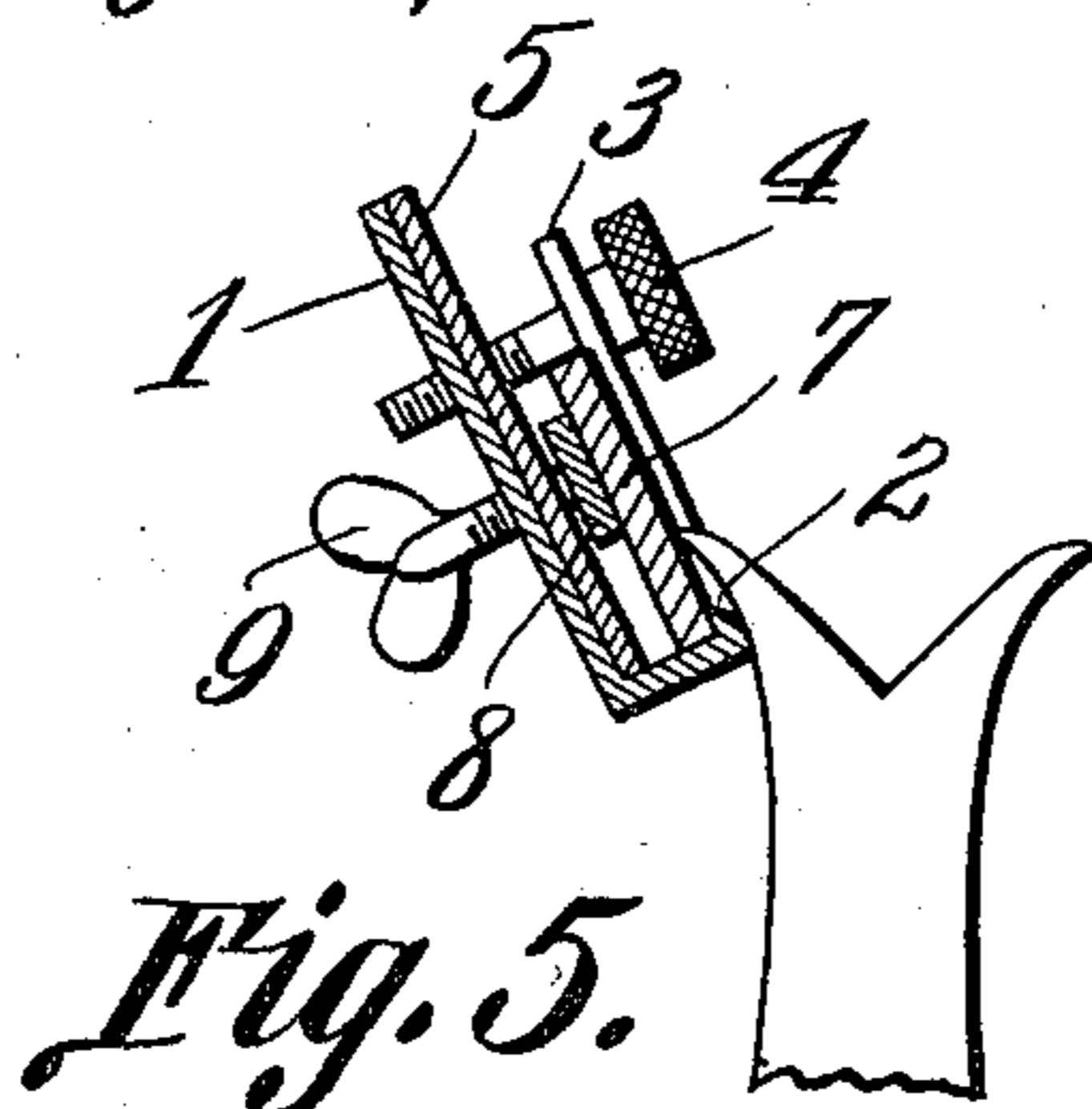
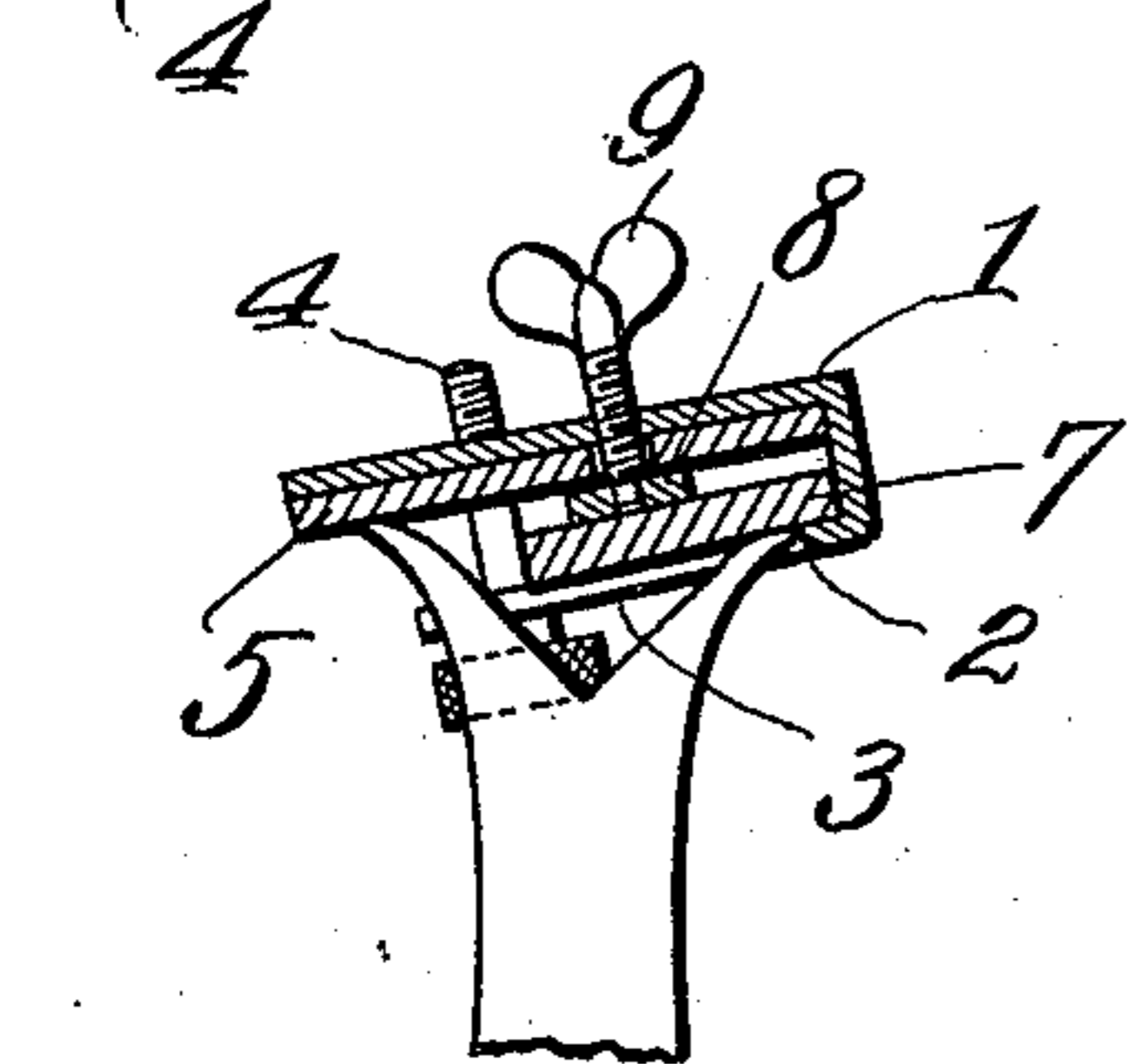
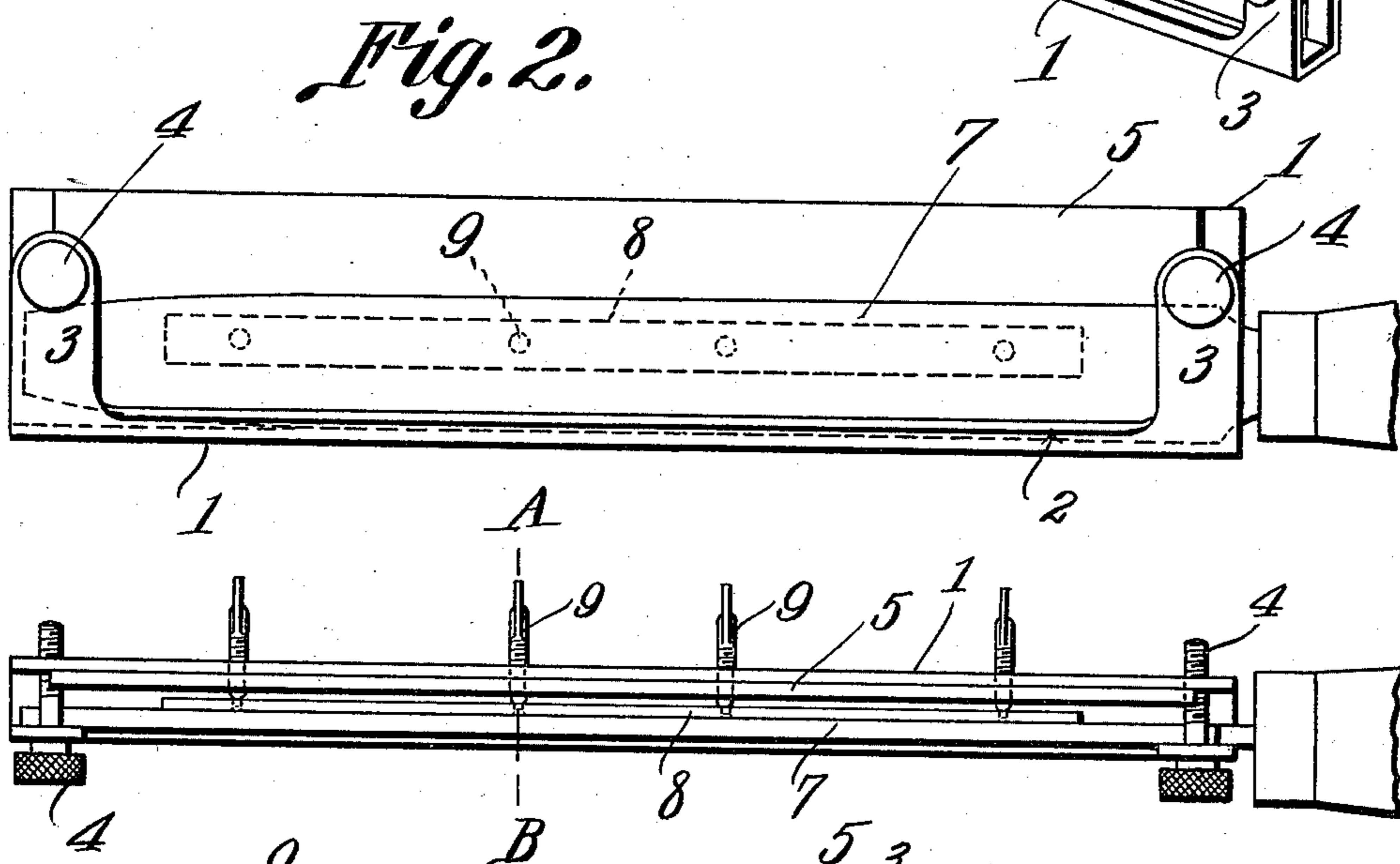
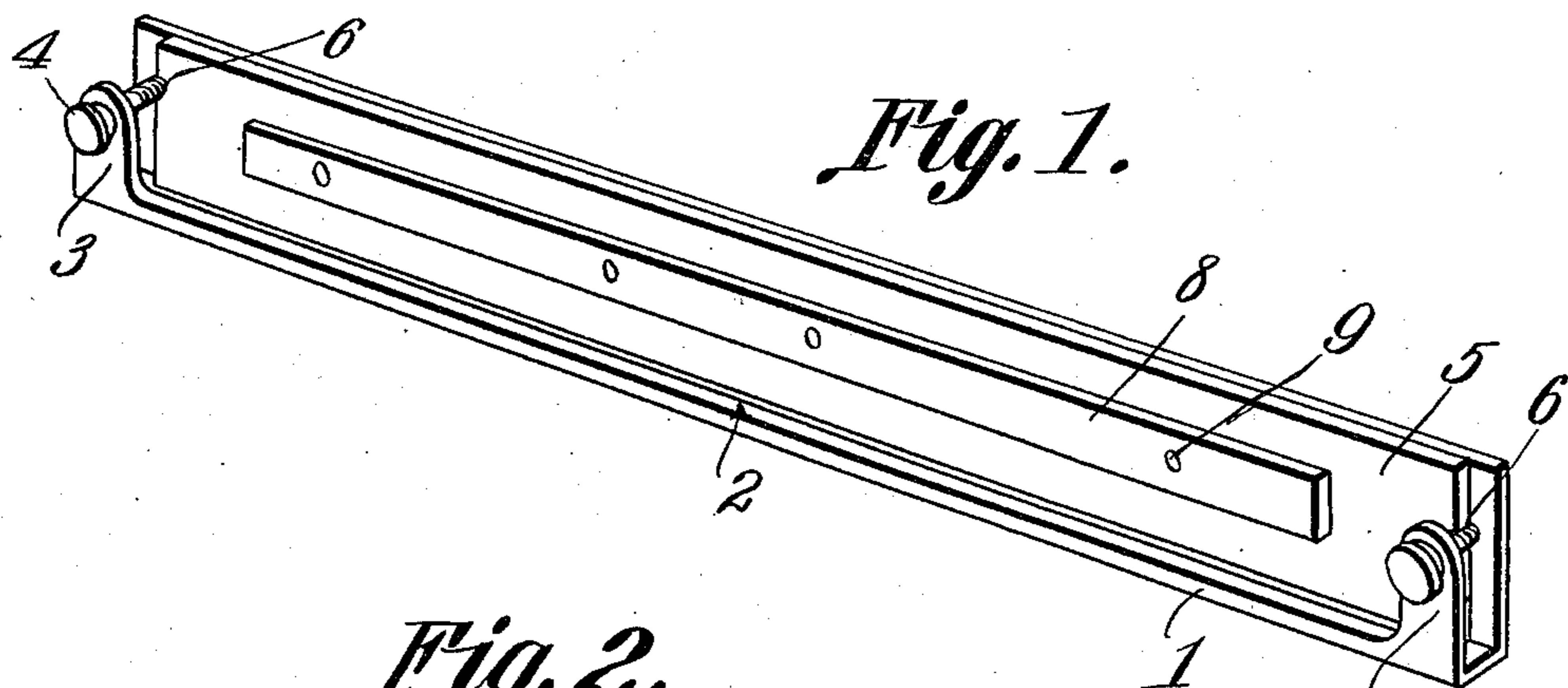


Fig. 4.

Fig. 5.

Witnesses

J. D. Dooling
Arthur H. Brown

Alvie Sipple

Inventor,

by

C. A. Snow & Co.

Attorneys.

UNITED STATES PATENT OFFICE.

ALVIE SIPPLE, OF ELGIN, OREGON.

SAW-SHARPENER.

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To all whom it may concern:

Be it known that I, ALVIE SIPPLE, a citizen of the United States, residing at Elgin, in the county of Union and State of Oregon, have invented a new and useful Saw-Sharpener, of which the following is a specification.

This invention relates to devices particularly designed for sharpening the raker teeth of cross cut saws.

One of the objects of the invention is to provide a device of this character including a file holder by means of which a file can be held in proper position to dress both the upper and lower inclined faces of each point of the raker tooth.

With these and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter more fully described and pointed out in the claims.

In the accompanying drawings the preferred form of the invention has been shown.

In said drawings: Figure 1 is a perspective view of the combined guide and holder with the file removed. Fig. 2 is a side elevation of the device, the file being arranged therein. Fig. 3 is an edge view of the device, the file being shown in position. Fig. 4 is a section on line A—B of Fig. 3, and showing the relative positions of the parts when filing the upper inclined edge of one of the points of a raker tooth. Fig. 5 is a similar view showing the positions of the parts when filing the lower inclined edge of a point of a raker tooth.

Referring to the figures by characters of reference 1 designates a longitudinally channeled holder and guide, preferably formed of spring metal and having one side cut away longitudinally as indicated at 2, to form terminal arms 3, which are parallel with the opposed side of the holder. Clamping screws 4 extend through these arms and into the opposite side of the holder. Back of the open side of said holder is arranged a guide plate 5 the ends of which are insertible between the arms 3 and the opposite side of the holder, there being notches 6 in the end of this plate constituting seats for the screws 4.

An ordinary file such as is used for sharpening saws is adapted to be placed between the plate 5 and the open side of the holder,

as indicated at 7, the small end of this file projecting between one of the arms 3 and the plate 5 and between the bottom of the holder and the screw 4 while the stem of the file projects beyond the opposite end of the holder and extends between the bottom of said holder and the adjoining screw 4. It will be apparent therefore that these screws will positively hold the file against displacement and will also prevent the plate 5 from getting out of position. An adjusting strip 8 extends longitudinally along one face of the plate 5 and is engaged by adjusting screws 9 which are mounted within openings in the closed side of the holder and extend loosely through openings 10 in the plate 5. By means of these screws, the strip 8 can be shifted to clamp the file against the arms 3.

By referring to Figs. 4 and 5 it will be noted that the free longitudinal edges of the plate 5 and of the closed side of the holder, extend beyond the adjoining longitudinal edge of the file. This is advantageous for the reason that, when the file is being used for sharpening one edge of a raker tooth, as in Fig. 4, the exposed face of the plate will come into contact with the tooth and thus prevent injury to the tooth. As shown in Fig. 4, when it is desired to sharpen the upper inclined edge of the point of a raker tooth, the clamping strip 8 is adjusted against the file so as to clamp it firmly against the arms 3. The point of the raker tooth is then inserted into the holder so as to bring the upper inclined edge of the point to be sharpened, into contact with the exposed face of the file. The corresponding edge of the other point will thus come against the plate 5 and will ride thereon as the holder is reciprocated, the file, at the same time, cutting away the contacting edge so as to properly dress it and sharpen the tooth. By means of the screws 9 the adjusting strip 8 can be forced against the file so as to press the said file against the arms 3 and the longitudinal edge of opening 2. The angle at which the file is held relative to the plate 5 can be regulated by means of the screws 4 which control the springing of the arms 3 relative to the balance of the holder. Obviously, should these be held parallel with the plate 5 by the screws 4, the working face of the file would also be held parallel with said plate. However, by

loosening the screws 4, the arms 3 will yield under the pressure of the file thereagainst until such yielding movement is stopped by the screws 4. In this event the file will
 5 be clamped against the arms 3 at predetermined angle relative to the plate 5. In this manner, the pitch to which the point of the tooth is to be dressed can be readily regulated. To file the lower inclined edge
 10 of the point of the tooth, the said tooth is placed in the holder as indicated in Fig. 5.

It can be seen that the device herein described is very simple in construction and constitutes efficient means for properly hold-
 15 ing and guiding the file while sharpening a raker tooth, it serving to prevent the file from notching or otherwise injuring the tooth and thus reducing its efficiency.

Various changes can of course be made in
 20 the construction and arrangement of the parts without departing from the spirit or sacrificing any of the advantages of the invention as defined in the appended claims.

What is claimed is:

25 1. A device of the class described, including a longitudinally channeled file receiving member including spaced arms, a combined guide and wear plate connected to said member, means for adjusting the arms to
 30 different angles relative to the wear plate, and an adjustably mounted clamping strip within said member for binding a file upon the arms, said guide and wear plate being

wider than the file and adapted to project beyond one edge thereof. 35

2. A device of the class described including a longitudinally channeled member, a guide plate detachably mounted thereon, spring arms extending from said member, means for adjusting the arms to predeter-
 40 mined angles relative to the guide plate, a clamping strip, and means carried by said channeled member and the strip for shifting said strip to bind a sharpening device upon the arms, said guide plate being wider than
 45 the file and adapted to project beyond one longitudinal edge thereof.

3. A device of the class described including a channeled member, spring arms extending therefrom, means engaging the arms
 50 for adjusting them relative to the member, a wear plate carried by said member and detachably engaged at its ends by said means, and an adjustably supported clamping strip
 55 carried by the member for binding a file upon the arms, said wear plate being wider than the file and adapted to project beyond one longitudinal edge thereof.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses. 60

ALVIE SIPPLE.

Witnesses:

ANDY THOMPSON,
 JESSE W. COATS.