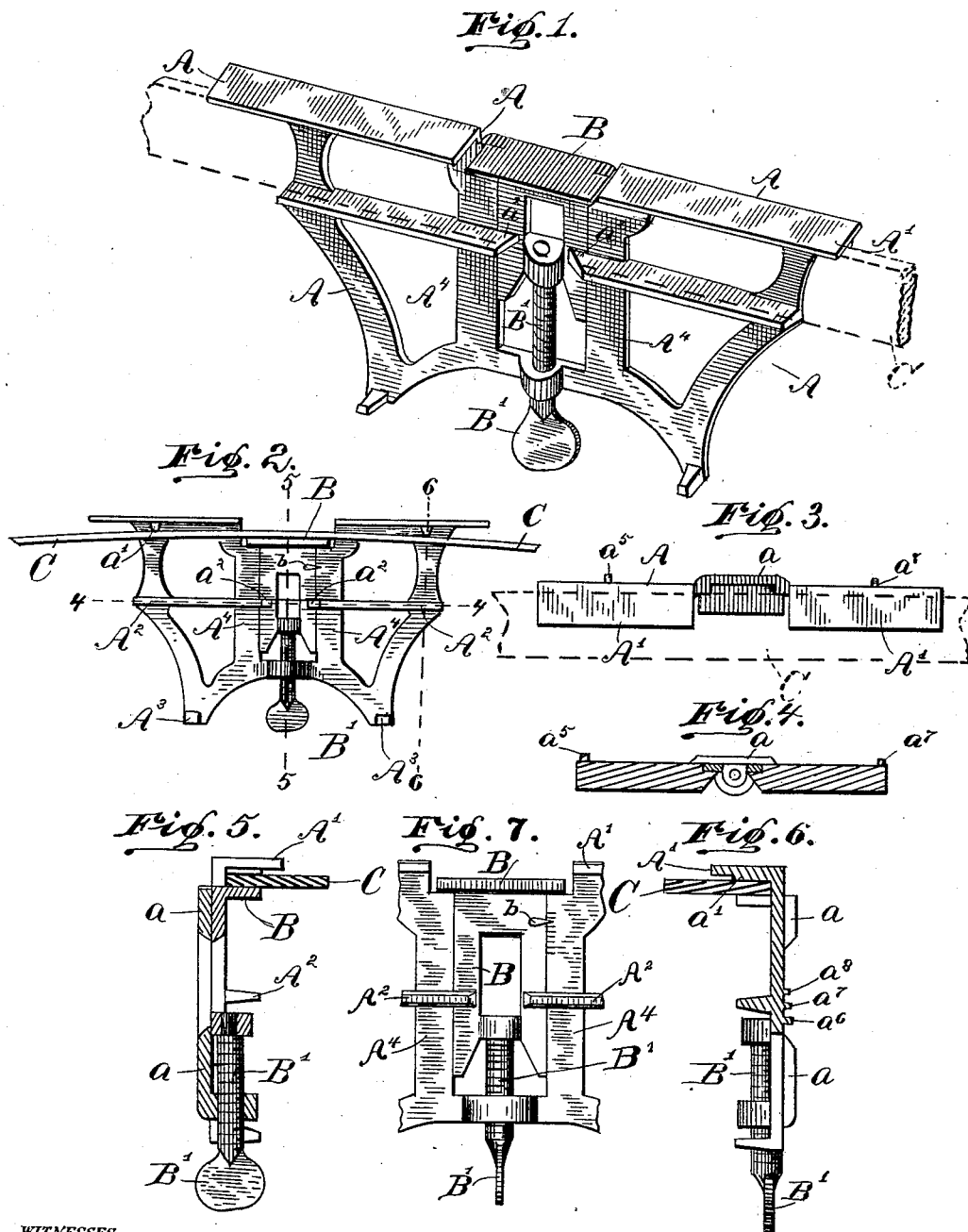


(No Model.)

N. H. ROBERTS.
SAW JOINTER AND GAGE.

No. 422,316.

Patented Feb. 25, 1890.



WITNESSES.

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NATE H. ROBERTS, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO THE E. C. ATKINS & COMPANY, OF SAME PLACE.

SAW JOINTER AND GAGE.

SPECIFICATION forming part of Letters Patent No. 422,316, dated February 25, 1890.

Application filed July 11, 1889. Serial No. 317,180. (No model.)

To all whom it may concern:

Be it known that I, NATE H. ROBERTS, a citizen of the United States, residing at Indianapolis, in the county of Marion and State of Indiana, have invented certain new and useful Improvements in a Combined Saw Jointer and Gage, of which the following is a specification.

My present invention consists in certain improvements upon tools used for jointing and setting saws, whereby the construction is simplified and the cost lessened, while a very efficient and easily-operated tool is produced, as will hereinafter be more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a perspective view of a device embodying my said invention, the file in position to joint the sides of the points of the teeth of the saw, being shown therein by means of dotted lines; Fig. 2, a front elevation of the same, the file being shown in position to joint the ends of the points of the teeth, and sprung up and curved somewhat, as when used with circular saws; Fig. 3, a top or plan view of Fig. 2; Fig. 4, a horizontal sectional view, looking downwardly from the dotted line 4 4 in Fig. 2; Fig. 5, a vertical sectional view, on an enlarged scale, looking toward the right from the dotted line 5 5 in Fig. 2; Fig. 6, a view similar to Fig. 5, looking toward the left from the dotted line 6 6 in Fig. 2; and Fig. 7, a detail view showing the indicator more plainly.

In said drawings, the portions marked A represent the main frame of the device; B, a sliding portion, which serves both as a clamp to hold the file in the device in either position and as a gage for jointing the clearing or raking teeth, and C the file.

The frame A is in the main a light skeleton casting having appropriate flanges and projections. The upper flange A' extends out far enough beyond the other flanges, so that it may rest upon the points of the teeth when the file is used for jointing the sides of the points of the teeth, as it does when in the position shown in Fig. 1. It has two small projections a' on its under side, which extend out only an equal distance to the other flanges,

against which the upper surface of the file rests when said file is in the position shown in the other figures. When in this position, resting on these two narrow points, it is adapted to be sprung somewhat by forcing the part B against its center, as shown in Fig. 2, and thus adapt the device better to use with circular saws. Of course, however, when used with straight saws, only sufficient clamping force is employed to hold this file in place and not to spring it. The other flanges A² and the points A³ rest against the surface of the saw when the device is being used as a jointer, as will be readily understood.

The part B is of hardened metal, and is adapted for use as a gage by which to joint the ends of the clearing or raking teeth when the device is used with crosscut-saws, in an ordinary and well-known manner. By means of its adjusting-screw B' it can be accurately adjusted to position for this purpose, as well as in clamping the file in each of its two positions, and is thus enabled to serve three distinct purposes. It is held in position between the back portions a of the frame A and inwardly-projecting ends a² of the flanges A², and is guided by edges between said two parts of the frame A on the inner sides of its two vertical bars A⁴. Upon this part B, I also put an index hand or pointer b, and adjacent to it on the frame A, I put suitable index-marks. By this means I am enabled to determine accurately the adjustment of the gage for the raking or clearing teeth and to return it to the desired position for this purpose at any time. It will be understood, of course, that varying kinds of timber require a variation in these clearing or raking teeth, and by this means I am able always to return to any desired adjustment or to vary it accurately without difficulty.

On the rear side of this device I form one projection a⁵ at one end and a series of projections a⁶ a⁷ a⁸ at the other. The projection a⁵ and the portion a rest against the face of the saw, and one or the other of the projections a⁶, a⁷, or a⁸ serves as a gage in setting the saw-teeth. When this use is made of the device, it is most conveniently not only turned around, but turned at right angles with its position when used as a gage, with the end having the three small projections upward.

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

1. The combination, in a saw-tool, of the
5 frame A, having flanges A' A², and the part B, secured in a way in said frame A, and an adjusting-screw B', by which said part B is operated, said parts being arranged, as described, to clamp said file in either position,
10 and said part B being also arranged to serve as an adjustable gage for the clearing or raking teeth.

2. The combination of the frame A, having flanges A' and a central slide, a part B, mounted
15 in said central slide, and an adjusting-screw B', mounted in a screw-threaded bearing in said frame A and secured to said part B, substantially as set forth.

3. The combination of the frame A, having
20 flanges A' A² and projections A³, the adjustable part B, mounted in a slide in said frame A, an adjusting-screw B', by which said part is adjusted, and a file adapted to be clamped in the device, substantially as set forth.

4. The combination, in a saw-tool, of the
25 frame A, having central projecting portions a, the projection a⁵ at one end and two or more similar projections of unequal length upon the other end, substantially as shown and described.

5. The combination, in a saw-tool, of the
30 adjustable gage for the clearing or raking teeth, and an index-scale by which the adjustment may be accurately determined, substantially as set forth.

6. The combination, in a saw-tool, of the
35 frame A, containing a central slide, an adjustable clearing or raking tooth gage B, mounted in said slide, means for adjusting said gage, and an index for determining said
40 adjustment, substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this
6th day of July, A. D. 1889.

NATE H. ROBERTS. [L. S.]

Witnesses:

C. BRADFORD,

E. W. BRADFORD.