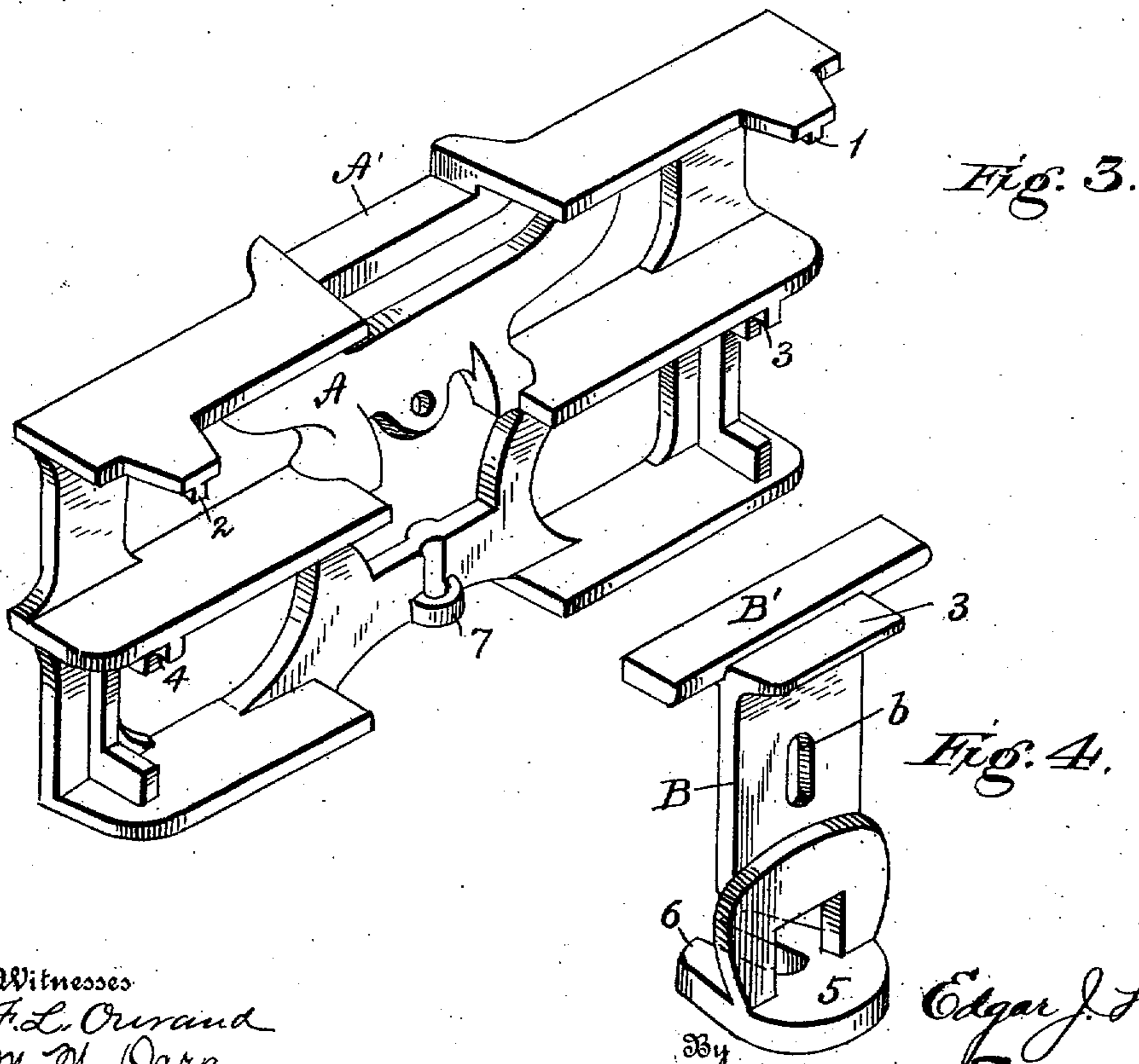
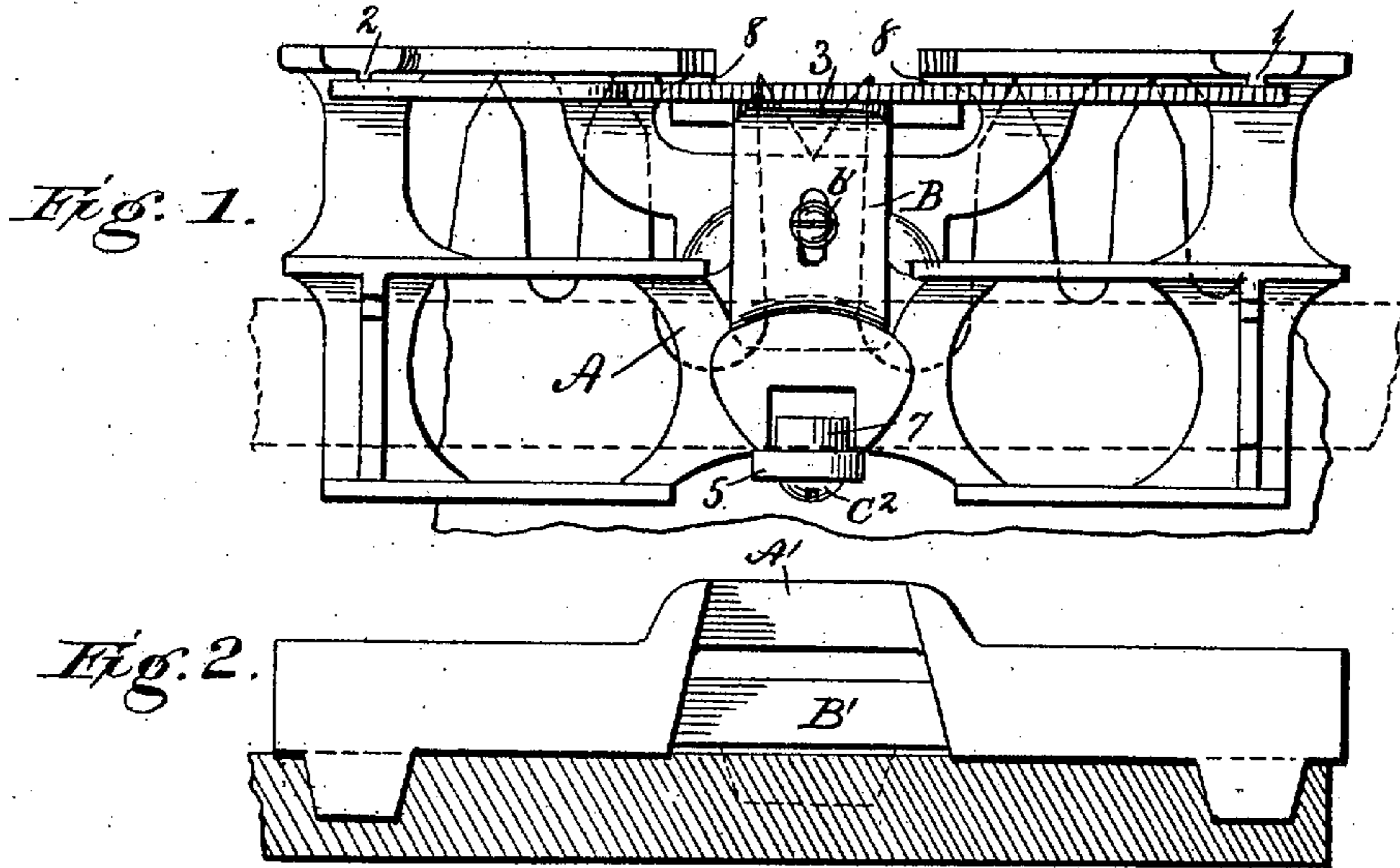


No. 883,641.

PATENTED MAR. 31, 1908.

E. J. HICKS.  
COMBINED SAW JOINTER AND GAGE.

APPLICATION FILED SEPT. 15, 1906.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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OF INDIANAPOLIS, INDIANA.

## COMBINED SAW JOINTER AND GAGE.

No. 883,641.

Specification of Letters Patent.

Patented March 31, 1908.

Application filed September 15, 1905. Serial No. 278,676.

*To all whom it may concern:*

Be it known that I, EDGAR J. HICKS, 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 Combined Saw Joints and Gages, of which the following is a specification.

My said invention consists in certain improvements in the details of construction of combined saw joints and gages of that general character shown in my former patent No. 731,901 and in Patent No. 596,416 to R. E. Poindexter, and other patents to the same parties, whereby a less expensive and equally effective construction is provided, all as will be hereinafter more fully described and claimed.

Referring to the accompanying drawings which are made a part hereof and on which similar reference characters indicate similar parts, Figure 1 is a front elevation of one of my improved saw joints, Fig. 2 a top or plan view of the same, Fig. 3 a perspective view of the frame or block of the tool, and Fig. 4 a perspective view of the file clamping slide.

In said drawings the portions marked A represent the base-block or frame of the tool and B the sliding clamping plate.

The general construction of the frame or base-block A is not widely different from that shown in Patent No. 596,416, above referred to. It is formed with projecting rests, 1 and 2 for the flat side of the file, which is clamped in one position, as shown in whole lines, between said rests and the projecting lip 3 on the upper end of the clamping plate B. It also has projections 3 and 4 which form rests for the top edge of the file when in the position indicated by the dotted lines, the lower edge of said file being engaged by the outwardly projecting lip 5 on the lower end of plate B. The general construction of the block or frame is such as to afford the required strength for the use to which it is to be put and at the same time be of convenient size for use in the hand of the operator and furnish appropriate rests for the tool when in operation.

The sliding clamping plate B is mounted in a vertical recess or way in the horizontal ribs in the center of the block by means of a slot *b* and a clamping screw *b'*, which permits of a limited sliding movement. It is also se-

cured by means of a screw *c*<sup>2</sup>, which passes through a bifurcated flange 6 which extends out at right angles on the rear side of the lower end of said plate and engages with a screw-threaded perforation in a lug 7 on the lower edge of said frame at the center of the vertical way.

The leading distinguishing feature in the construction shown in the present case over that shown in the Poindexter patent before referred to, consists in forming the gage plate in two parts, A' and B'. The part A' is cast in one piece with the frame A, while the part B' is cast in one piece with the sliding clamping plate B. The part A' cast with the plate A extends across the central recess in the top of the frame and joins the two sides of said frame at this point. The part B' is of a length adapted to extend across said recess and bear under the flanges of the top bar of the frame A on its front side. It is cast on the top of said plate B back of the flange 3 and is behind the rear edge of the file when the file is in place for jointing the points of the teeth. Liners 8 of paper, or any other material desired, may be used between the ends of the part B' and the under side of the ends of the top bar of the frame A to bring the top face of said part B' level and on a line with the top face of the part A'.

By forming the part B' in one piece with the plate B it may be cheaply formed of hard metal and is easy to harden so that its surface will resist the operation of the file in jointing the ends of the raker teeth where they project through the slot in the gage-plate formed between the said two parts A' and B'. By means of the screw *c*<sup>2</sup> and the liners 8, the top surface of part B' may be adjusted to the level desired and the set screw *b'* will serve to clamp the parts rigidly in adjusted position. Said part A' being rigid with the frame affords stiffness and strength to its top, binding the two sides of said top together. Its top surface is dressed off and fixed in the proper plane for the points of the clearing teeth when dressed. The part B' is adjusted into alinement with part A' and being hardened the file is allowed to rest flat upon its surface in operation and it thus resists the wear of said file.

The operation is as follows: The file is secured in either of the two positions as above described, and the tool used to joint the points or sides of the saw teeth as de-

sired and as is common with this character of tool. To file off the points of the raker teeth so as to insure uniform length in relation to the cutting teeth, the tool is placed  
5 upon the edge of the saw, as indicated by dotted lines, so that the raker tooth to be filed will project through the slot between the two parts of the gage-plate, the top bar of the frame A resting on its under face upon  
10 the cutting teeth on each side of said raker tooth. The gage-plate B' is adjusted to the level required to secure the desired length of the raker teeth, which are filed down, one after another to a level with the top face of  
15 said gage-plate, when they will all be of uniform length, both in relation to each other and in relation to the cutting teeth.

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

1. In a combined saw jointer and gage, the combination, of the frame formed with a recess in the top, a gage plate comprising two parts, one of which parts is formed in piece  
25 with said frame and connects the two parts

of its top on each side of said recess, and the other part of which is formed in piece with a sliding adjustable part, and means for adjusting and securing it, substantially as set forth.

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2. In a combined saw jointer and gage, the combination of the frame having a recess in its top, a gage plate comprising two parts, one part of which is cast with said frame and joins the two sides of the top of said frame on  
35 each side of said recess, its top surface being in a plane to serve as a gage for the clearing teeth, and the other part of said gage plate being of hardened metal and formed on the top of a sliding clamp and adapted to be ad-  
40 justed and secured with its surface in alignment with the said other part, and means for adjusting and securing said sliding clamp, substantially as set forth.

In witness whereof, I have hereunto set  
45 my hand and seal at Indianapolis, Indiana.

EDGAR J. HICKS. [L. s.]

Witnesses:

C. S. BARKER,  
H. O. WADDY.