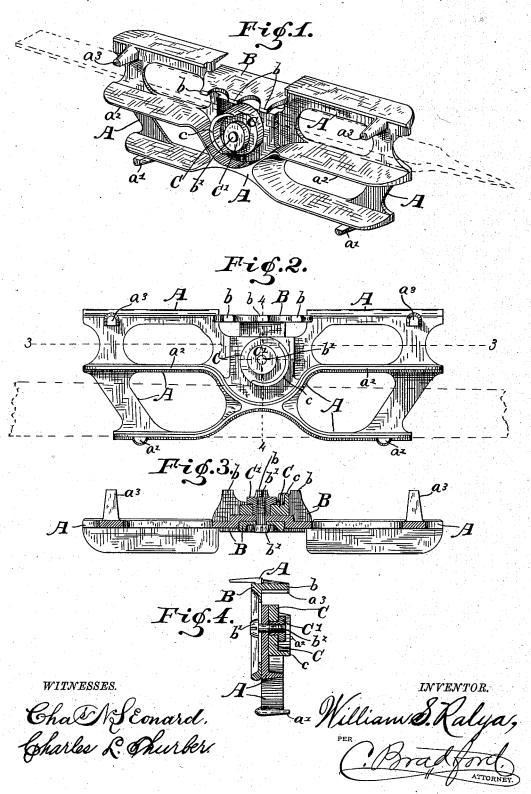
## W. S. RALYA.

## COMBINED SAW JOINTER AND GAGE.

No. 385,006.

Patented June 26, 1888.



## UNITED STATES PATENT OFFICE.

WILLIAM S. RALYA, OF INDIANAPOLIS, INDIANA, ASSIGNOR TO E. C. ATKINS & COMPANY, OF SAME PLACE.

## COMBINED SAW JOINTER AND GAGE.

SPECIFICATION forming part of Letters Patent No. 385,006, dated June 26, 1888.

Application filed May 20, 1887. Serial No. 238,834. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM S. RALYA, of the city of Indianapolis, county of Marion, and State of Indiana, have invented certain new 5 and useful Improvements in a Combined Saw Jointer and Gage, of which the following is a

specification.

The leading object of my said invention is to produce a saw-jointer simple in constructo tion, and which may be easily and quickly manipulated to secure or release the file. A further object is to produce an adjustable gage for the clearing teeth of crosscut-saws, and I prefer, also, to arrange so that the tool may be used as a gage in setting saws, all as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which 20 similar letters of reference indicate similar parts, Figure 1 is a perspective view of a tool embodying my improvements, the file which forms the operating part on the points of the saw-teeth in jointing the saws being shown in 25 dotted lines; Fig. 2, a side elevation, the file being shown in this view in dotted lines in the position it occupies when it is used to joint the sides of the saw-tooth points instead of their ends; Fig. 3, a horizontal sectional view 30 looking upwardly from the dotted line 33, and Fig. 4 a transverse sectional view looking toward the right from the dotted line 4 4.

In said drawings, the portions marked A represent the main frame of my tool, which is 35 usually a casting; B, an adjustable frame which serves as a clearing-tooth gage, and C a cam by which the file is secured in either one of

the two positions.

The casting or frame A has several bearing-40 surfaces, against which the file and the saw will rest when the tool is in use. When the tool is used for its most common purpose, (that of jointing the points of the saw-teeth,) the points or projections a' a' and the ledges  $a^2$  45  $a^2$  rest against the face of the saw, as will be readily understood, the file being clamped between the points or projections a a and the cam C. When the tool is used to joint the sides of the saw-tooth points, the file is placed 50 between the points or projections a' a' and the cam-wheel, while the points a a bear against

the side of the saw-plate instead of said points a' a'. The ledges  $\hat{a^2}$   $a^2$ , however, bear against the saw-plate when the tool is used in either

The adjustable frame B, which serves as the

clearing tooth gage, consists of a shank fitted in a suitable way (a groove is shown) in the side of the frame or casting A, and has preferably several points, b, extending out from its 60 upper end. When the file is altogether removed from the tool, said file may be used as a gage for setting the saws by permitting the points a' a' and ledges a' a' to rest against the saw-plate, as when the tool is used as a jointer 65 for the points of the teeth, and so adjusting this gage B that the points b thereon (or rather one of them) will just come to the position to which it is desired to set the tooth. In using this tool to trim the clearing-teeth of 70 a crosscut saw to the proper length, this part B is adjusted to the desired position by loosening the screw b', which passes through it,

and moving it up or down on said screw, it being slotted to permit this, as shown.

The cam C is preferably a cam-wheel simply, as shown, which preferably has a flange, c, on one side. It is mounted on a combined sleeve and cap, C', which also forms a nut for the screw b', and is thus held in position. It 80 is arranged to turn loosely on said sleeve, and thus, when it is desired to secure the file in either of the two positions, it is only necessary to place said file in the position desired and turn this cam-wheel until it bears tightly 85 against said file, when, as will be readily seen, it will be clamped securely in place. By pushing the file slightly in one direction or the other it may be either clamped more tightly or loosened, so as to be removed, as will be 90 readily understood. It will thus be seen that the file may be inserted or removed at pleasure without loosening or tightening any screws or other parts, the revolving of the cam-wheel C being all that is necessary. The tool is adapted, 95 as hereinbefore specified, to a variety of purposes, and is thus much more convenient to use than a tool adapted to a single use only.

Having thus fully described my said invention, what I claim as new, and desire to secure 100 by Letters Patent, is--

1. In a saw-jointer, the combination of the

frame and the clamp for the file, one jaw of which clamp is stationary and the other jaw of which is a cam, substantially as set forth.

2. In a saw-jointer, the combination of the frame with projections formed thereon, a file resting on said projections, and the cam arranged and secured to bear against the opposite side of said file and clamp it in position, substantially as set forth.

3. In a combined saw jointer and gage, the combination, with the frame, of a file clamp, bearing-points upon which the saw may rest, and adjustable points mounted to bear against the saw-teeth when they are being set, substantially as set forth.

4. A combined jointer and gage consisting of

a frame, A, and a frame, B, adjustably mounted thereon and secured in position by a single screw passing through a slot in said adjustable frame, said adjustable frame being seated 20 in a suitable way in said frame A.

5. The combination of the frame A, the adjustable gage-plate B, the cam-wheel C, the sleeve and cap C', and the screw b', substantially as set forth.

In witness whereof I have hereunto set my hand and seal, at Indianapolis, Indiana, this 14th day of May, A. D. 1887.

WILLIAM S. RALYA. [L. s.]

In presence of— C. Bradford, Charles L. Thurber.