

No. 690,668.

Patented Jan. 7, 1902.

D. W. SOLOMON.
COMBINED SAW JOINTER AND GAGE.

(Application filed Aug. 6, 1901.)

(No Model.)

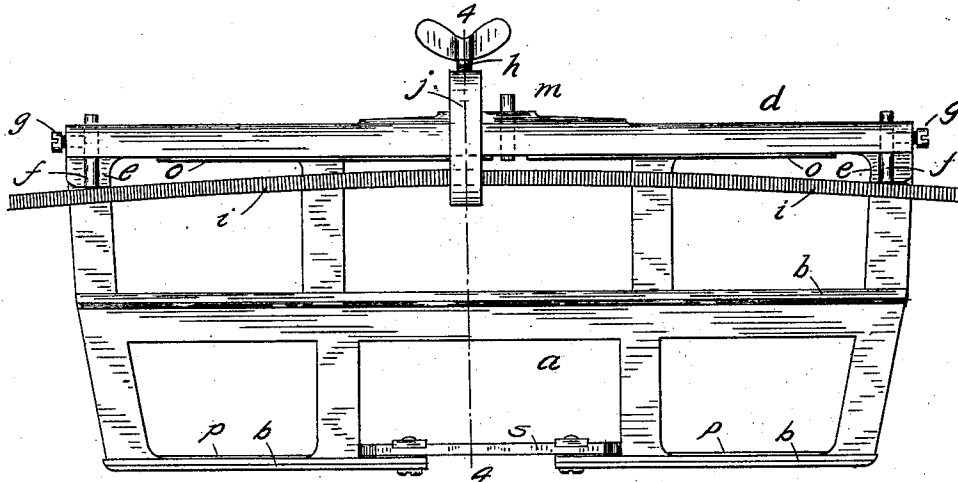


FIG. 1.

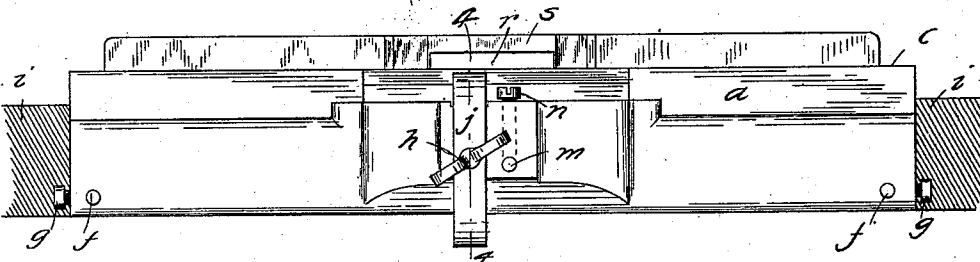


FIG. 2.

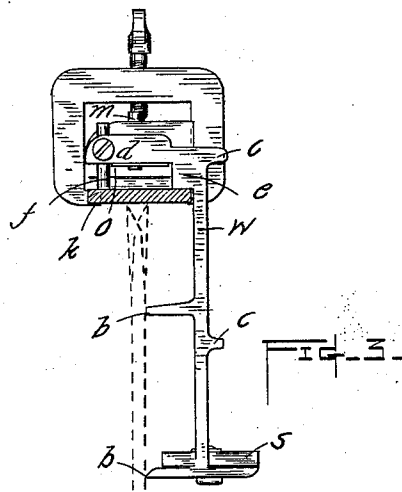


FIG. 3.

WITNESSES:

J. W. Th. Olain
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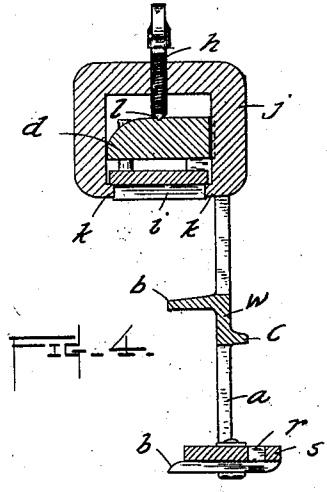


FIG. 4.

INVENTOR

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BY

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COMBINED SAW JOINTER AND GAGE.

SPECIFICATION forming part of Letters Patent No. 690,668, dated January 7, 1902.

Application filed August 6, 1901. Serial No. 71,044. (No model.)

To all whom it may concern:

Be it known that I, DAVID W. SOLOMON, a citizen of the United States, residing at Arlington, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in a Combined Saw Jointer and Gage, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to saw jointers and gages particularly intended for use upon crosscut-saws.

The object of the invention is to provide such an implement of strong and simple construction where the several parts are accurately adjustable to suit the saw being operated upon to accomplish the desired results, and particularly to provide means for jointing the cutting-teeth of the saw to uniform lengths transversely of the saw and to a fair curve or arc of a circle longitudinally thereof, such means including the file-bearing supports and clamp adjustably mounted to the implement-stock, whereby the saw can be put into such perfect condition as to insure its running true or straight, a result unattainable by other saw-jointers now in use. This object is accomplished in the construction and combination of parts hereinafter fully described and which is illustrated in the accompanying drawings, in which—

Figure 1 is a front elevation of the implement. Figs. 2 and 3 are respectively plan and end views thereof, and Fig. 4 is a cross-section on line 4 4 of Figs. 1 and 2.

The body or stock *a* of the implement consists of a frame having a series of horizontal-laterally-projecting strips *b* and *c* integral with and disposed upon the opposite sides of the vertical web *w* thereof and faced so as to present a flat surface on each side of the web for the saw to bear against while being operated upon. At the upper edge of the stock is a flange *d*, which projects transversely from the web, so as to extend outside of the plane of the faces of strips *b*, and positioned near the ends of and directly below the flange are four lugs *e* and *f*, which furnish bearing-supports for a file. The lugs *e* next to the web *w* are stationary, while the others, *f*, are vertically movable and formed of pins extending through holes provided and secured to any

set position by screws *g* inserted in threaded apertures in the ends of the said flange. A file *i* is held against the said file-supports by a clamp having a clamp-screw *h*, which extends through the clamp-yoke *j* and seats upon the top of the stock. The yoke straddles the flange *d* and engages with the file by the inwardly-projecting toes *k*, formed on the extremities of its pendent legs, overlapping and embracing the same. As files are usually made tapering, the aforesaid clamp is positioned, preferably, to one side of the mid-length of the stock, so that when the file is in the implement and tension put thereupon the file will be bent to a true arc of a circle and, to provide for saws of different thickness in the blade—that is, where they taper toward their back edge—the file is inclined so as to bring the face thereof at right angles to the medium line of the saw-blade when resting against the bearing-strips *b* aforesaid, and that the strain upon the file will be equally distributed upon its supporting-points, so as to prevent any twist of the file, I taper the bearing end *l* of the clamp-screw to allow a slight tilt or swing to the clamp to correspond with any change in the plane of the said supporting-points.

m is a pin protruding through a hole in the top of the stock and secured therein by a binding-screw *n*, so as to be adjustable for use as a gage-point when swaging the saw raker-teeth, the file being removed during this operation and the cutting-teeth, which have been previously jointed, rest against face-plates *o* of hard steel.

After the raker-teeth have been swaged to the gage height the implement is reversed and the strips *c* brought to bear against the blade of the saw, so that the face-plates *p* will rest upon the cutting-teeth, and each of the raker-teeth is successively inserted in the oblong aperture *r* of the block *s* to be individually jointed by drawing a file thereacross.

What I claim as new, and desire to secure by Letters Patent, is—

1. In a device of the class described, in combination with a frame having a series of saw-bearing strips disposed upon opposite sides of the web thereof, a file-supporting flange extending along one of the longitudinal edges of said frame and projecting transversely outside of the plane of the said saw-bearing

strips upon one side of the frame-web, an adjustable swage-gage extending through said flange, another flange disposed upon the opposite diagonal longitudinal edge to the afore-
5 said flange and extending transversely outside of the plane of the bearing-strips upon that side, a raker-tooth jointing-block having an oblong aperture extending therethrough attached to the last-named flange, and a file,
10 of means to secure the said file to the said file-supporting flange so that the file can be bent to an arc longitudinally of the frame and of the entire length thereof, and means to change the inclination or slant of the file
15 transversely of the frame, such means including a clamp having a yoke which straddles the upper portion of the frame with inwardly-projecting toes at the lower extremities thereof to overlap and engage the said file and a
20 clamp-screw which extends through the yoke and bears upon the frame, and supports for said file positioned beneath the file-supporting flange adjacent to the ends thereof two of said supports being adjustable as to height,
25 substantially as described.

2. In a device of the class described, in com-

bination with a file, a frame having a series of saw-bearing strips disposed upon the web thereof, and a flange extending along one of the longitudinal edges of said frame and projecting outside of the plane of the said bearing-strips transversely of the frame; of supports for said file comprising two fixed bearings and two adjustable bearings disposed, respectively, upon the inner and outer edges of the said flange and a clamp straddling the said flange and adapted to draw the file against the said supports, substantially as and for the purposes set forth.

3. In a device of the class described, in combination with a frame and a file, of adjustable bearing-supports for said file comprising pins extending through a flange of said frame and binding-screws for securing said supports to any set position.

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

DAVID W. SOLOMON.

Witnesses:

PIERRE BARNES,
JOHN N. PERKINS.