

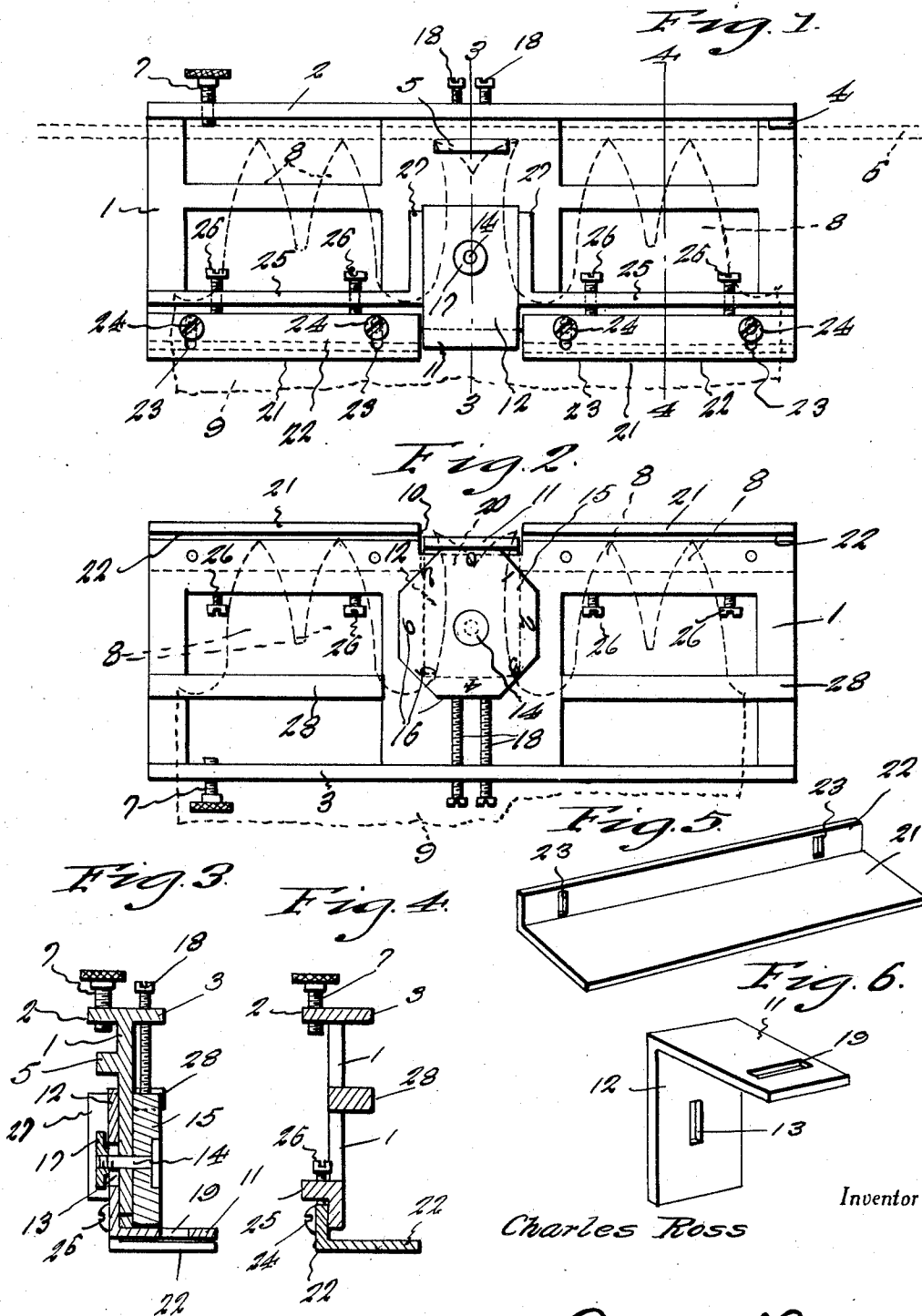
June 13, 1933.

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1,913,614

SAW JOINTER

Filed April 9, 1931



UNITED STATES PATENT OFFICE

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SAW JOINTER

Application filed April 9, 1931. Serial No. 528,899.

This invention relates to a saw jointer, particularly for use on cross cut saws and has for its primary object to provide, in a manner as hereinafter set forth, a device of this character embodying a novel construction and arrangement of parts, through the medium of which the cutting and raker teeth of the saws may be expeditiously filed in an accurate, uniform manner.

The foregoing and still further objects and advantages of the invention will become apparent from a study of the following specification, taken in connection with the accompanying drawing wherein like characters of reference designate like corresponding parts throughout the several views, and wherein:—

Figure 1 is an elevational view showing a jointer in accordance with this invention in position for filing the cutting teeth of a saw.

Fig. 2 is a view in elevation showing the jointer in position for filing the raker teeth of the saw.

Fig. 3 is a vertical cross sectional view taken substantially on the line 3—3 of Fig. 1.

Fig. 4 is a vertical cross sectional view taken substantially on the line 4—4 of Fig. 1.

Fig. 5 is a detail view in perspective of one of the adjustable flanges.

Fig. 6 is a detail view in perspective of the raker tooth gage plate.

Referring to the drawing in detail, it will be seen that the reference numeral 1 designates an elongated metallic frame which is preferably substantially rectangular in form.

The frame is also of skeleton form to render same light in weight. Formed integrally with one of the longitudinal marginal portions of the frame 1 and extending laterally in opposite directions therefrom are the flanges 2 and 3.

Depending from one end portion of the flange 2 is a lug 4 which is disposed slightly above the horizontal plane of an elongated lug 5 which projects from an intermediate portion of the adjacent side of the frame 1. A file 6 rests on the lug 5 and abuts the lug 4 and is secured in position through the medium of a set screw 7 which is threaded through the other end portion of the flange 2 for operative engagement with the file. As may be

apparent, the screw 7 is adapted to press one end of the file 6 downwardly in a manner to urge the other end thereof upwardly against the lug 4, thus causing said file to press or bear against each of the lugs 4 and 5 and in this manner the file is secured in position.

The file 6 is, of course, of greater width than the lugs 4 and 5. The file 6 is for operative engagement with the cutting teeth 8 of the saw 9 in the manner illustrated to advantage in broken lines in Fig. 1 of the drawing.

The other longitudinal marginal portion of the frame 1 has formed in an intermediate portion thereof a notch or recess 10 in which is operable a raker tooth gauge plate 11 having formed integrally therewith a right angularly disposed supporting leg or arm 12 which is secured for vertical adjustment on an intermediate portion of the frame 1 through the medium of a vertical slot 13 which is provided therein for the reception of a bolt 14 which is mounted on the frame 1. The bolt 14 projects beyond the opposite sides of the frame 1, and has one end headed, and illustrated to advantage in Fig. 3 of the drawing. A polygonal gage block 15 is mounted eccentrically for rotation on the headed end portion of the bolt 14 and has its outer side provided with suitable indicating numerals 16.

The other end portion of the bolt 14 is threaded and has mounted thereon a clamping nut 17 through the medium of which the gauge plate 11 is secured in adjusted position on the frame 1. The clamping nut 17 is, of course, engageable with the supporting leg or arm 12 of the gauge 11.

The gage block 15 is adapted for operative engagement with the lower side of the gauge plate 11 in the manner illustrated to advantage in Fig. 2 of the drawing for facilitating the adjustment of said gauge plate to the desired position, and for supporting said gauge plate in adjusted position. It will be noted that the gauge plate 11 and the rotatable gauge block 15 are mounted on opposite sides of the frame 1, the gauge plate 11 projecting through the notch or recess 10 above the gage block 15.

Keepers in the form of screws 18 are

threaded through the flange 3 for engagement with the rotatable gage block 15 in a manner to secure said block against the rotation in adjusted position.

5 The gauge plate 11 is provided with a longitudinally extending slot 19 for the reception of the raker teeth of the saw 9, only one of which is shown in broken lines in Figs. 1 and 2 of the drawing, same being
10 indicated by the reference numeral 20.

Flanges 21 are mounted on said other marginal portion of the frame 1 on opposite sides of the recess 10 through the medium of the right angularly disposed supporting portions 22 having vertical slots 23 therein for the
15 passage of the securing screws 24 which are threaded into the frame 1.

It will be noted that the supporting portions 22 of the adjustable flanges 21 are secured to the side of the frame 1 upon which the supporting leg or arm 12 of the gage plate 11 is secured. The adjustable flanges 21 extend across the frame 1 for engagement by the cutting teeth 8 of the saw 9 when the raker teeth of said saw are being filed. Longitudinally extending flanges 25 are formed integrally on one side of the frame 1 adjacent the free longitudinal edges of the supporting portions 22 of the adjustable flanges
20 21 and threaded therethrough are the screws 26 which provide positive supports for the adjustable flanges 21, and which also facilitate adjustment of said flanges 21. At their inner ends, the flanges 25 merge with the spaced, vertically disposed guide flanges 27 between which the supporting leg or arm portions 12 of the gauge plate 11 is operable.
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The guide flanges are also, of course, formed integrally with the frame 1. The frame 1 is still further provided with the integral laterally projecting flanges 28 which are longitudinally disposed and which have their free longitudinal edges flush with the outer edge of the flange 3. The flanges 3 and
30 28 are adapted for abutting engagement with one side of the saw 9 when the raker teeth 20 of said saw are being filed.
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It will thus be seen that the flanges 21 which are engaged by the cutting teeth 8 of the saw when the raker teeth of said saw are being filed, are adjustable as is also the gauge plate 11 and by reason of this fact, a wide range of adjustment is had.
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After the various elements are adjusted as desired, the raker teeth are, of course, inserted through the slot 19 and the upwardly projecting portions thereof are filed in an obvious manner.
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It is believed that the many advantages of a saw jointer constructed in accordance with this invention will be readily understood, and although the preferred embodiment of the invention is as illustrated and described, it is to be understood that changes in the details of constructions may be had which will
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fall within the scope of the invention as claimed.

Having thus described my invention, what I claim as new is:—

A saw jointer comprising a frame, a flange at one side of the top edge of the frame and disposed substantially at right angles thereto, said flange extending from one end of the frame to the other end thereof, a lug formed at one end of the flange and depending therefrom and having a flat lower end of considerable area, a longitudinally extending lug of considerable length formed on the central portion of said one side of the frame with its upper face flat and spaced below the plane of the lower end of the first-named lug, whereby a file can be placed lengthwise between the lugs with part of one face engaging the first-mentioned lug, and a part of the other face engaging the flat face of the second-mentioned lug, and a screw threaded through the other end of the flange for operative engagement with another part of the file to bind said file frictionally against the lugs.
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In testimony whereof I affix my signature.

CHARLES ROSS.

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