

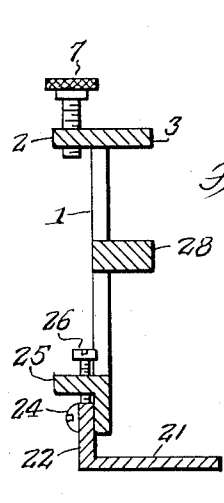
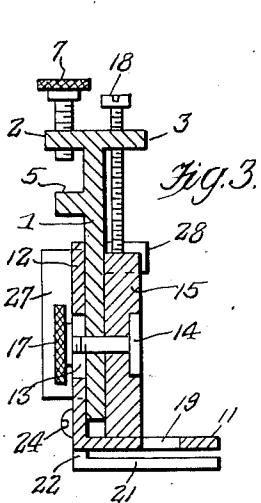
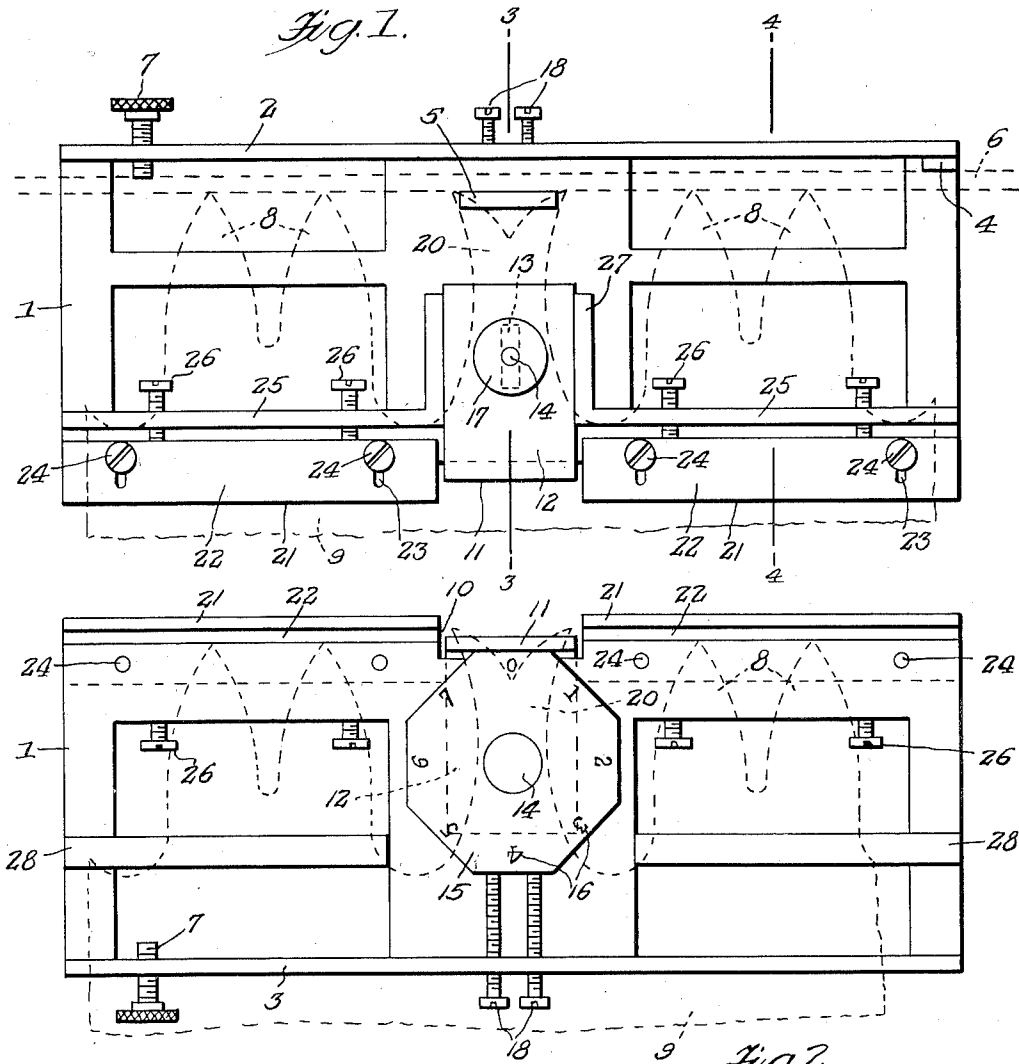
March 20, 1934.

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1,951,773

RAKER TOOTH GAUGE

Original Filed April 9, 1931



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UNITED STATES PATENT OFFICE

1,951,773

RAKER TOOTH GAUGE

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Original application April 9, 1931, Serial No.
528,899. Divided and this application Septem-
ber 7, 1932, Serial No. 632,058

1 Claim. (Cl. 33—202)

The present invention relates to new and use-
ful improvements in raker tooth gauges particu-
larly for use on cross cut saws, said invention
constituting a division of the subject matter of
a patent granted to me on June 13, 1933 and
numbered 1,913,614.

The primary object of the present invention is
to provide, in a manner as hereinafter set forth,
a raker tooth gauge embodying a novel construc-
tion, combination and arrangement of parts
through the medium of which any desired adjust-
ment within a given range may be expeditiously
attained.

Other objects of the invention are to provide a
raker tooth gauge of the aforementioned char-
acter which will be simple in construction, strong,
durable, highly efficient and reliable in use, com-
pact, light in weight and which may be manu-
factured at low cost.

All of the foregoing and still further objects
and advantages of the invention will become ap-
parent from a study of the following specification,
taken in connection with the accompanying draw-
ing wherein like characters of reference desig-
nate corresponding parts throughout the several
views, and wherein:—

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

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

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

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

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 di-
rections 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 ad-
jacent side of the frame 1. A file 6 rests on
the lug 6 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 downward-
ly in a manner to urge the other end thereof up-
wardly 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 posi-
tion.

The file 6 is, of course, of greater width than
the lugs 4 and 5. The file 6 is for operative en-
gagement with the cutting teeth 8 of the saw 9 in
the manner illustrated to advantage in broken
lines in Figure 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 in-
tegrally 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 recep-
tion 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, as illus-
trated to advantage in Figure 3 of the drawing.
A polygonal gauge block 15 is mounted eccen-
trically 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 gauge block 15 is adapted for operative
engagement with the lower side of the gauge
plate 11 in the manner illustrated to advantage
in Figure 2 of the drawing for facilitating the
adjustment of said gauge plate to the desired po-
sition, and for supporting said gauge plate in ad-
justed 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 gauge block 15.

Keepers in the form of screws 18 are threaded
through the flange 3 for engagement with the ro-
tatable gauge block 15 in a manner to secure said
block against rotation when in adjusted position.

The gauge plate 11 is provided with a longitu-
dinally extending slot 19 for the reception of the
raker teeth of the saw 9, only one of which is
shown in broken lines in Figures 1 and 2 of the

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drawing, same being indicated by the reference numeral 20.

Flanges 21 are mounted on said other marginal portion of the frame 1 on opposite sides of the notch or recess 10 through the medium of the right angularly disposed supporting portions 22 having vertical slots 23 therein for the 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 gauge 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 21 and threaded therethrough are 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.

The guide flanges are also, of course, formed integrally with the frame 1. The frame 1 is still further provided with 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 28 are adapted for abutting engagement with one side of the saw 9 when the raker teeth 20 of said saw are being filed.

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.

After the various elements are adjusted as de-

sired, the raker teeth are, of course, inserted through the slot 19 and the upwardly projecting portions thereof are filed in an obvious manner.

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 construction may be had which will fall within the scope of the invention as claimed.

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

A raker tooth gauge comprising an elongated frame, a gauge plate adjustably mounted on the frame and extending laterally therefrom at substantially right angles thereto, means for securing the gauge plate in adjusted position on the frame, a pair of stop flanges adjustably mounted on one of the longitudinal marginal portions of the frame adjacent to and on opposite sides of the gauge plate, said flanges including right angularly disposed supporting portions for abutting engagement with one side of the frame, said supporting portions having slots therein, screws extending through the slots and threaded into the frame for adjustably securing the supporting portions to said frame, substantially L-shaped stationary flanges, formed integrally on said one side of the frame and extending at right angles thereto, each L-shaped flange including a long arm and a short arm, the long arm being arranged adjacent the inner longitudinal edge of each supporting portion of the first mentioned flanges, and the short arms being arranged transversely of the frame and spaced apart to form guiding means for a portion of the gauge plate, and screws threaded through the long arms of said flanges and engaging the inner edges of the supporting portions of the first named flanges for adjusting said flanges when the first mentioned screws are loosened.

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