

(No Model.)

2 Sheets—Sheet 1.

G. W. KUNZE.
JOINTER FOR CIRCULAR SAWS.

No. 586,442.

Patented July 13, 1897.

Fig. 1.

Fig. 5.

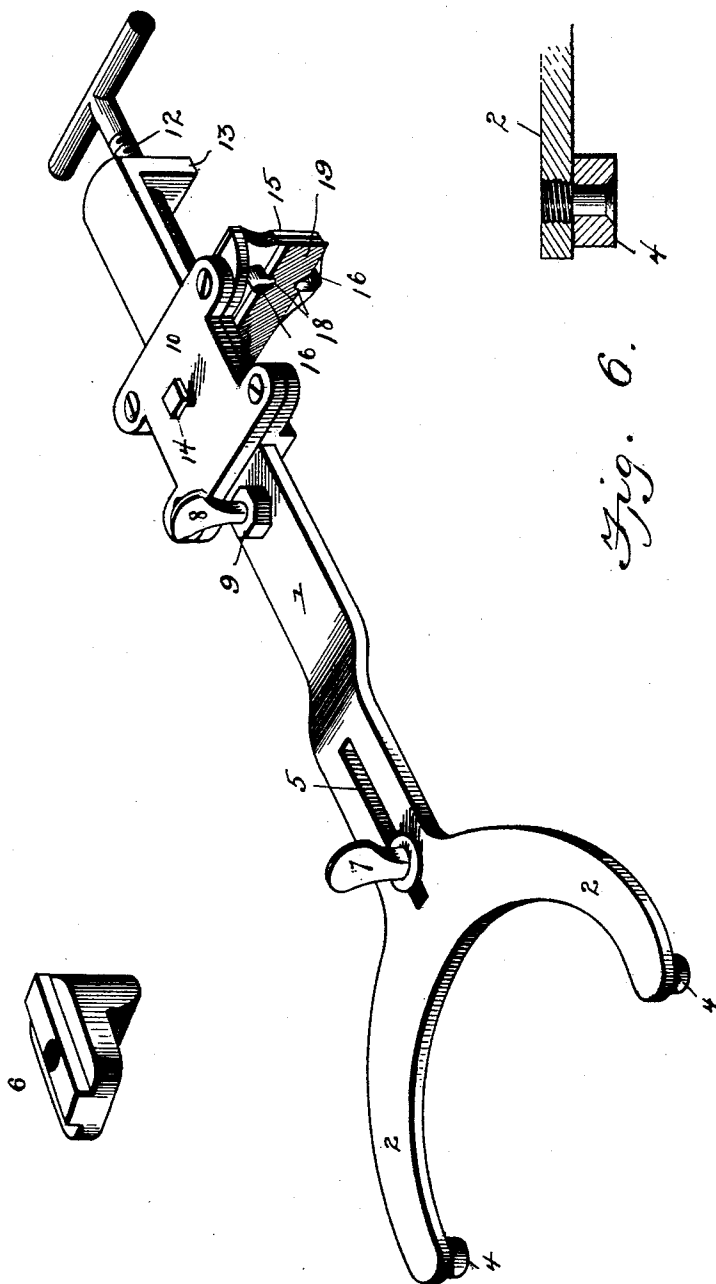


Fig. 6.

Witnesses
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Fig. 5

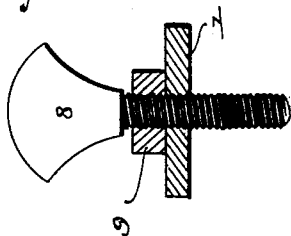


Fig. 2

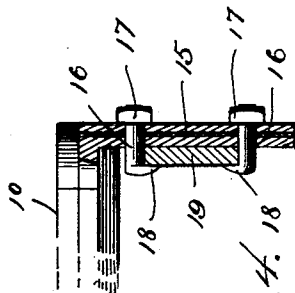
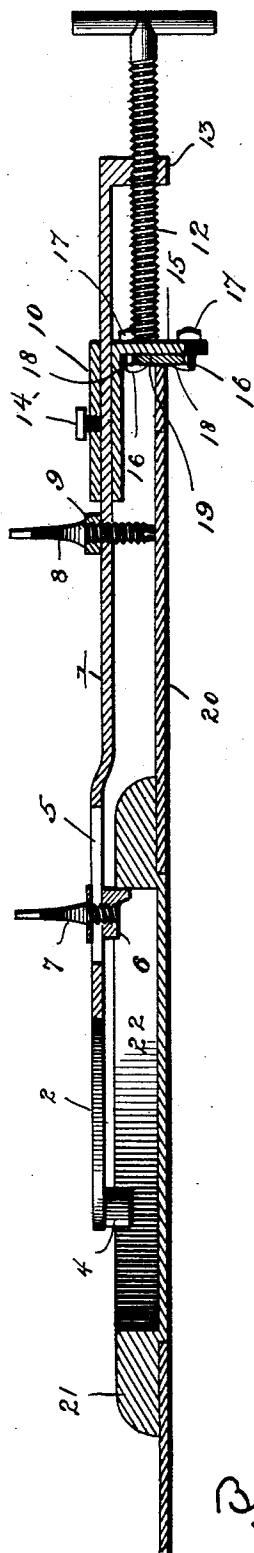


Fig. 4

Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE W. KUNZE, OF BRYANT, WASHINGTON.

JOINTER FOR CIRCULAR SAWS.

SPECIFICATION forming part of Letters Patent No. 586,442, dated July 13, 1897.

Application filed October 28, 1896. Serial No. 610,351. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. KUNZE, a citizen of the United States, residing at Bryant, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Jointers for Circular Saws; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to improvements in jointers for circular saws, and the object is to provide a device for jointing or truing up the teeth of circular saws rapidly and effectively.

To this end the novelty consists in the construction, combination, and arrangement of the same, as will be hereinafter more fully described, and particularly pointed out in the claim.

In the accompanying drawings the same figures of reference indicate the same parts of the invention.

Figure 1 is a perspective view of my improved saw-jointer. Fig. 2 is a longitudinal section of the same as applied to a saw. Fig. 3 is a perspective view of the adjustable stud. Fig. 4 is a cross-section of one end of the carriage. Fig. 5 is a detail view of the gage-screw, and Fig. 6 is a modification of one of the studs.

1 represents a frame the inner end of which is formed with semicircular arms 2 2, the inner face of each of which is provided with an integral stud 4, and 5 is a longitudinal slot in which is adjustably secured a stud 6 by means of the thumb-screw 7. The face of this stud is formed with a longitudinal tongue which slides freely in the slot 5 and preserves the alinement of the stud with the longitudinal portion of the frame.

8 represents a gage-screw secured in the frame, and it may be locked in position by its jaw-nut 9.

10 is a carriage sliding freely on the outer end of the frame, and it is longitudinally adjustable thereon by means of the screw 12,

adjustable in the integral angular arm 13 of the frame, and when said carriage is adjusted to its proper position it may be secured in place by the set-screws 14.

15 represents the integral right-angular arm of the carriage 10, and 16 16 represent four clamping-bolts adjustably secured in the arm 15 by means of the nuts 17 17. The inner end of each of these bolts 16 is formed with a lug or jaw 18, which projects over the parallel edges of a cutting-tool 19. In this instance the tool consists of a section of a flat file.

The manner of using the jointer will be readily understood by reference to Fig. 2, in which 20 represents the circular saw, 21 its collar, and 22 the annular groove in the collar. The studs 4 4 are first inserted in the collar-groove 22 and the stud 6 adjusted to correspond. The gage-screw 8 is then adjusted so that the cutting-tool 19 is at a right angle to the plane of the saw. The carriage 10 is then adjusted by means of the screw 12 with reference to the points of the teeth on the saw and the whole given an oscillating motion across the points of the teeth until all are exactly the same distance from the center, and the teeth can thus be jointed or "trued up" very accurately and rapidly.

Although I have specifically described the construction and relative arrangement of the several elements of my invention, I do not desire to be confined to the same, as such changes or modifications may be made as clearly fall within the scope of my invention without departing from the spirit thereof.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

A saw-jointer, comprising the bent frame or bar 1, the bifurcated end of which is formed with circular arms 2 2, provided with integral studs 4 4 on their outer ends, the longitudinal slot 5 located in the frame at the junction of the arms 2 2, the integral right-angular arm 13 on the other end of the frame, in combination with the stud 6 provided with the longitudinal tongue and the thumb-screw 7,

adapted to be adjustably secured in the slot
5, the lateral gage-screw 8 secured in the frame
1, the adjusting-screw 12 mounted in the in-
tegral arm 13 parallel with said frame, the ad-
5 justable carriage 10 encompassing said frame
and provided with a set-screw 14, and the cut-
ting-tool 19 detachably secured in said car-
riage at a right angle to the path of motion of

said carriage, substantially as shown and de-
scribed. 10

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

GEORGE W. KUNZE.

Witnesses:

L. N. JONES,

WILL H. VERD.