(No Model.)

H. NEIDHARDT.

SAW SET.

No. 603,536. Patented May 3, 1898.

Fig. 1.

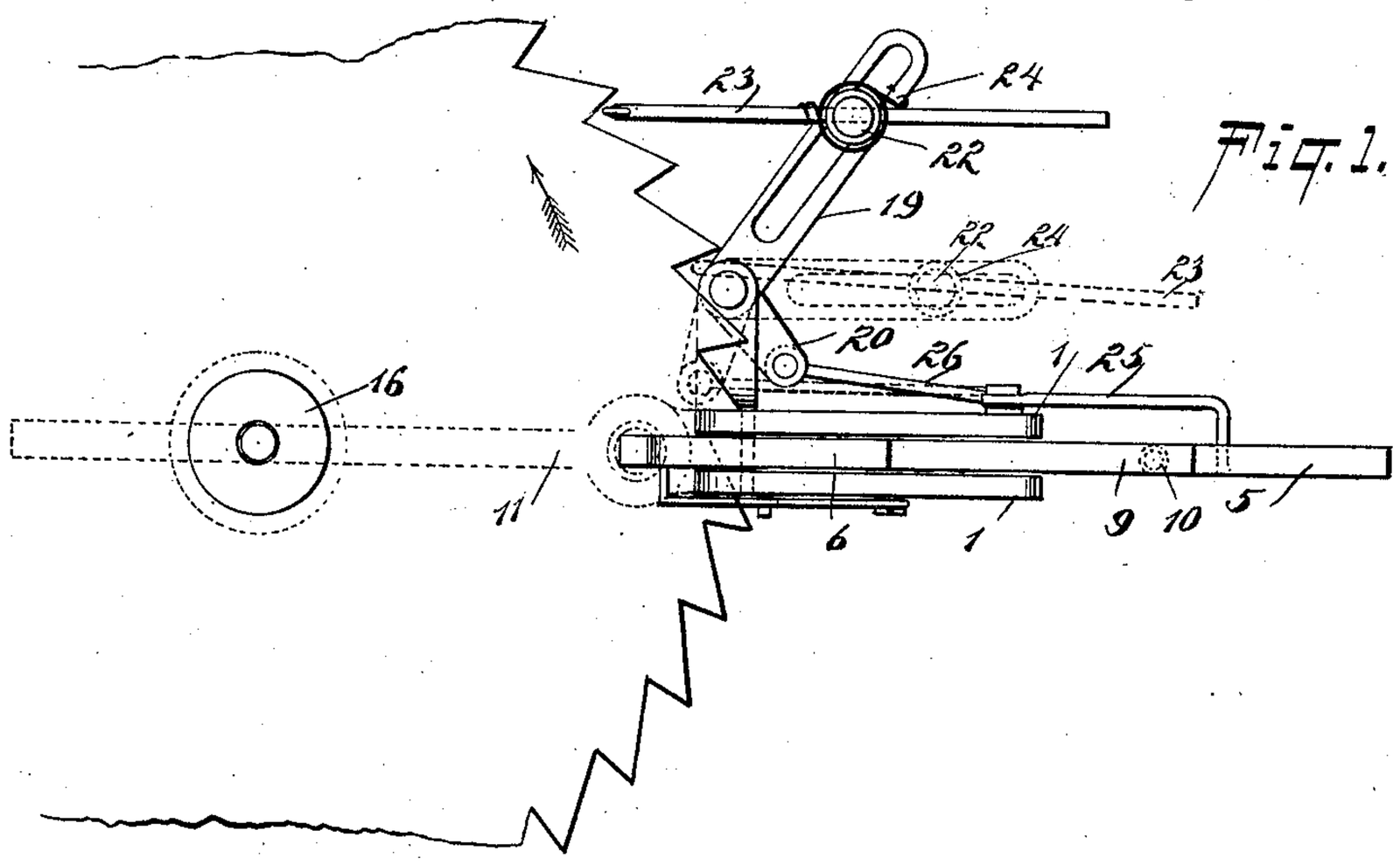


Fig. 2.

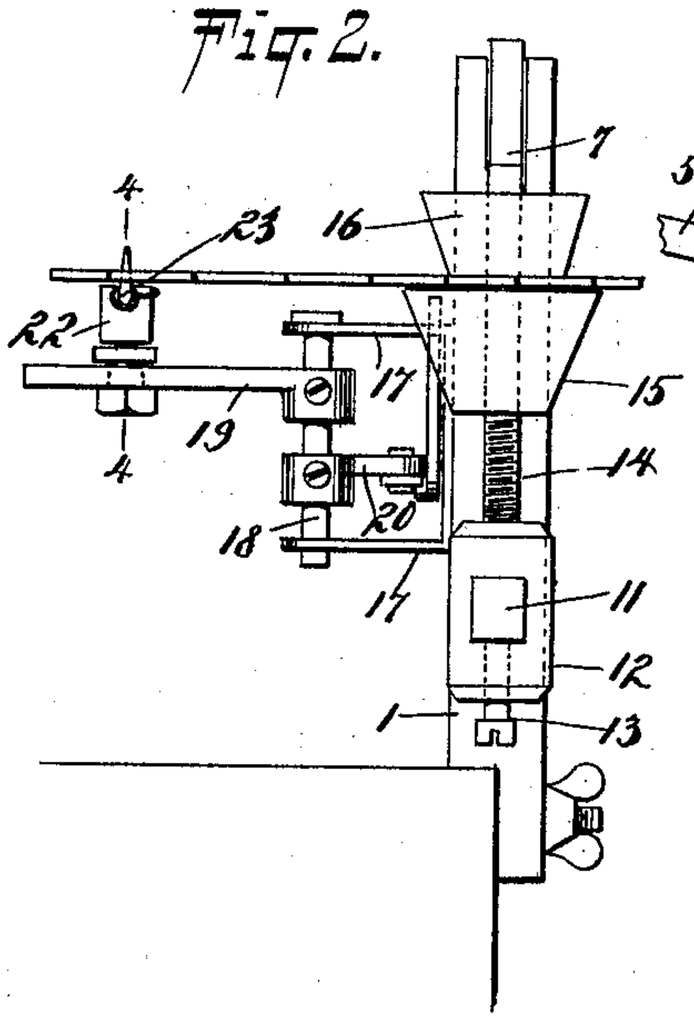


Fig. 3.

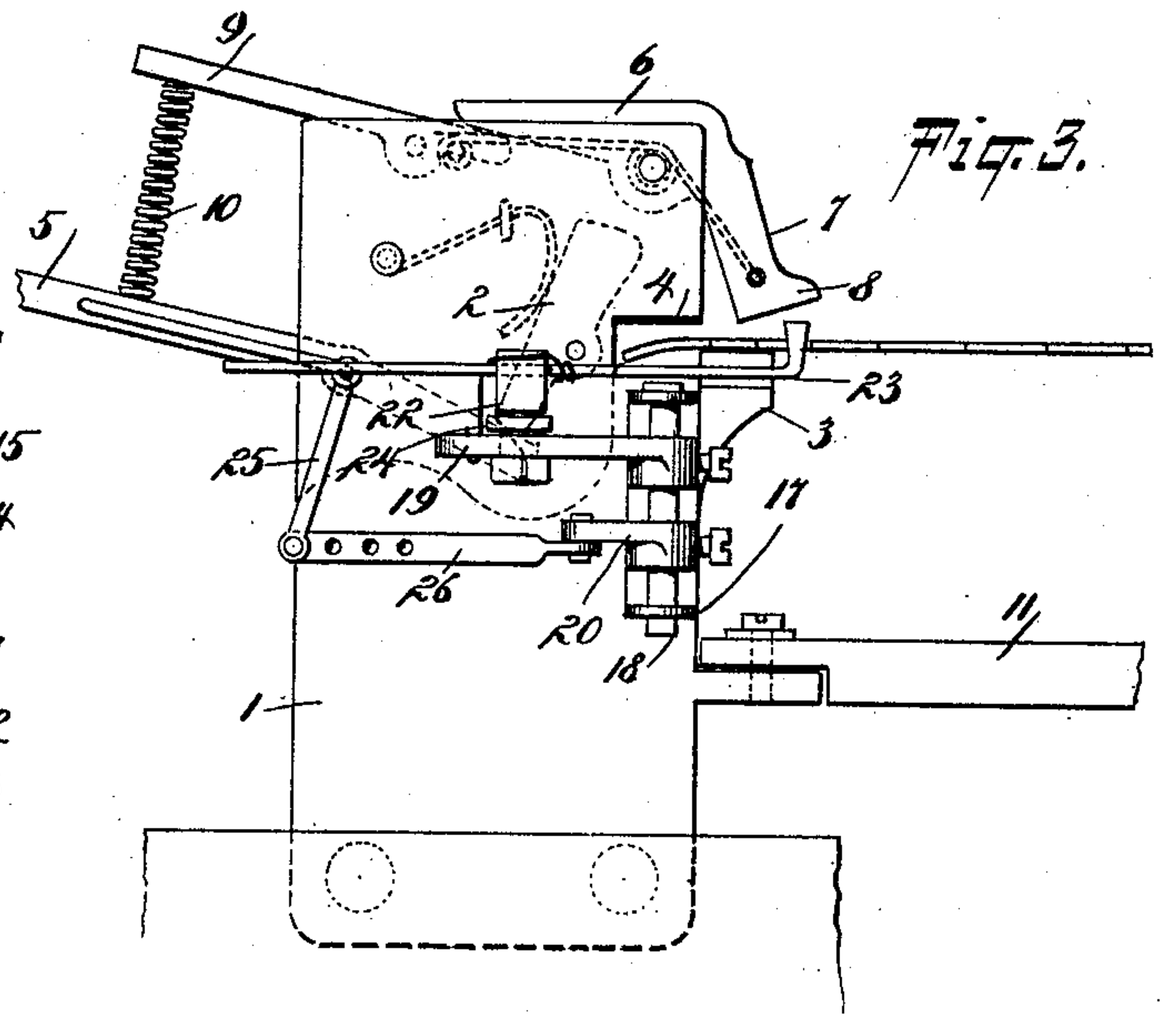
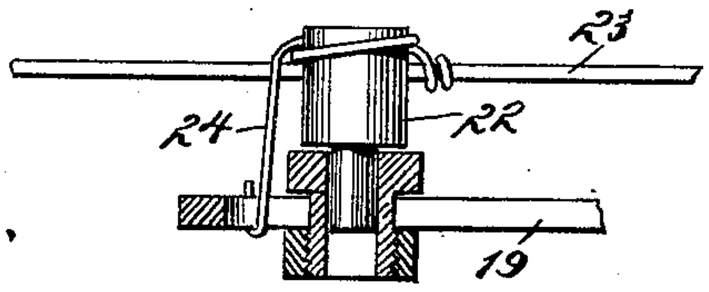


Fig. 4.



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SAW-SET.

SPECIFICATION forming part of Letters Patent No. 603,536, dated May 3, 1898.

Application filed December 1, 1897. Serial No. 660,375. (No model.)

To all whom it may concern:

Be it known that I, HENRY NEIDHARDT, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Saw-Set, of which the following is a full, clear, and exact description.

This invention relates to devices for setting the teeth of circular saws; and the object is to provide a simple means for automatically turning the saw to bring successive teeth in position to be set, and it is particularly an improvement on the saw-set for which I obtained Letters Patent under date of August 31, 1897, No. 589,267.

I will describe a saw-set embodying my invention, and then point out the novel features in the appended claim.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a top plan view of a saw-set embodying my invention. Fig. 2 is a front elevation thereof. Fig. 3 is a side elevation, and Fig. 4 is a section on the line 4 4 of Fig. 2.

Referring to the drawings, 1 designates a standard that may be secured to any suitable support—such, for instance, as to a bench—or it may be held in a vise. In the upper portion of the standard is pivoted a tooth-setting dog 2, designed to coact with the downwardly-inclined surface at the inner end of an anvil 3, secured in the standard. The side portions of the standard have openings 4 to allow for the passage of a saw over the anvil. The inner end of the tooth-setting dog 2 engages loosely with a pressure-lever 5, fulcrumed in the standard.

Pivoted in the standard 1 is a saw-holding lever consisting of a rearwardly-disposed portion 6 and a downwardly-disposed portion 7, having a foot 8 to engage upon the saw. This holding-lever is operated from the pressure-lever 5. The connection between the two levers, as here shown, comprises a pivoted lever 9, upon the inner portion of which the rearwardly-disposed portion 6 of the holding-lever engages, and the outer end of this lever 9 has a spring yielding connection 10 with the pressure-lever.

Mounted to swing laterally on the standard 1 is an arm 11, and mounted to slide on the arm is a block 12, which may be secured as adjusted by means of a set-screw 13. Extended upward from the block 12 is a post 14, vertically adjustable on which is a saw-support 15, having a conical cavity. Loosely mounted on the post 14, above the support 15, is a centering-block 16. This block 16 is made tapering or conical, so as to adapt it to the different sizes of arbor-holes in the saws.

Secured to one side of the standard 1 is a bracket 17, and mounted to rotate in the bracket is a shaft 18, adjustably mounted on which is a longitudinally-slotted arm 19, and also adjustably mounted on the shaft is a crank-arm 20. A set-screw 21 extends through and is adjustable along the slot in the arm 19, and having an axial movement on this set-screw is a block 22, which supports a saw-feeding rod 23, having its front end turned upward to engage with the saw-teeth. This rod 23 is longitudinally adjustable through the block 22, so as to adapt it to saws of different diameters, and a yielding rotary motion of the block carrying the rod is secured by means of a spring 24, secured at one end to the arm 19 and engaging at the other end with the block 22 or with the rod. This spring will allow the rod to swing outward as it rotates the saw and will return the rod after releasing a tooth to its position to engage another tooth.

An angle-lever 25, pivoted on the standard 1, has its horizontally-disposed member connected to the pressure-lever 5, and its depending member has a link connection 26 with the crank-arm 20.

The tooth-setting operation of this device is the same as described in my patent above referred to; but during the downward movement of the pressure-lever the shaft 18 will be rocked by the mechanism described, and the rod 23, engaging with a saw-tooth, will rotate the saw to bring the next tooth to be set in position to be operated upon. Therefore it is obvious that it is not necessary for an operator to touch or turn the saw manually.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

The combination with a saw-setting mech-

anism, comprising a pressure-lever of a rock-shaft, an arm mounted on said shaft, a block adjustable on said arm, a rod adjustable through the block, a spring connection between the arm and block and connections between the rock-shaft and pressure-lever whereby the shaft will be rocked by a downward movement of the lever, substantially as specified.

HENRY NEIDHARDT.

Witnesses:
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