

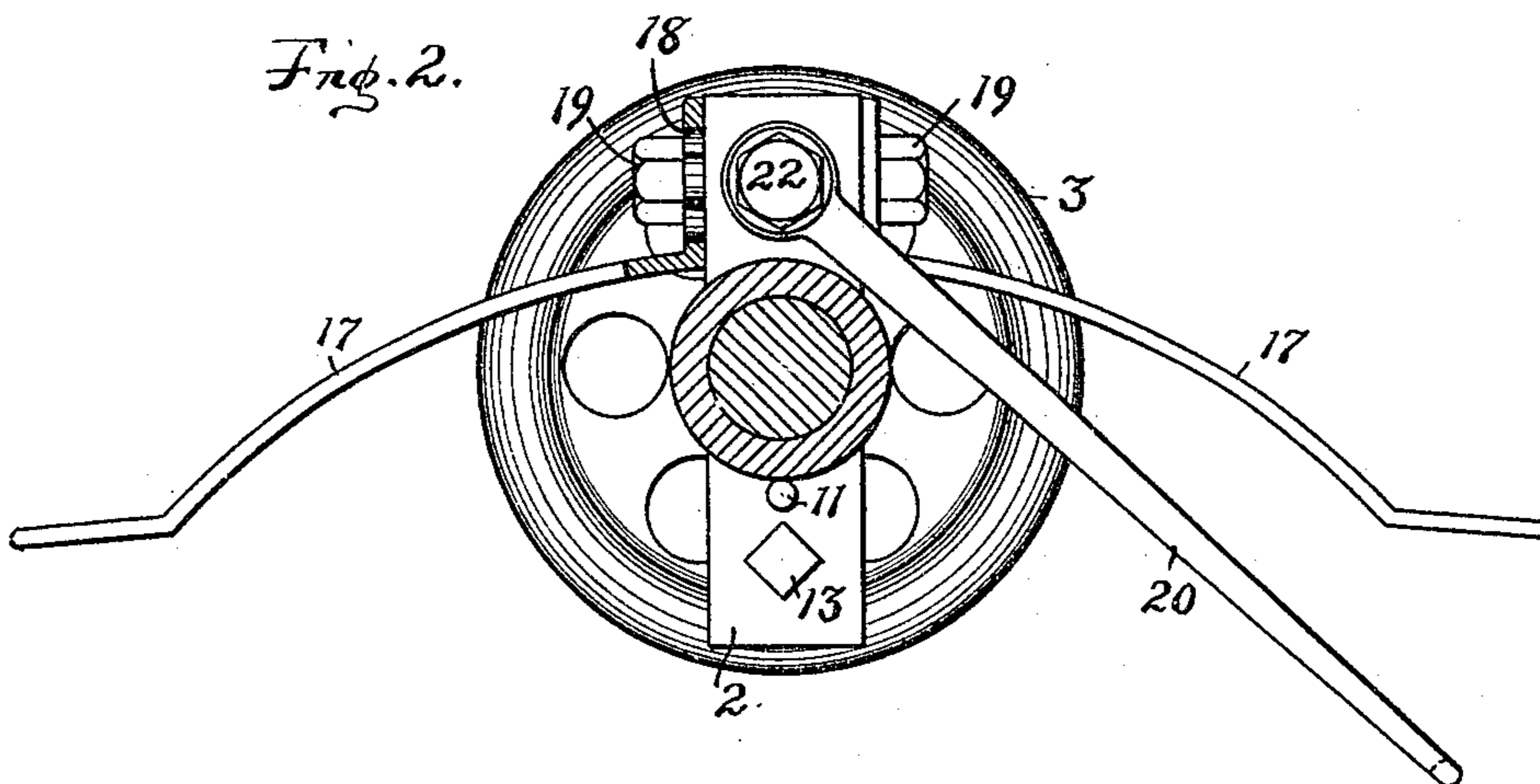
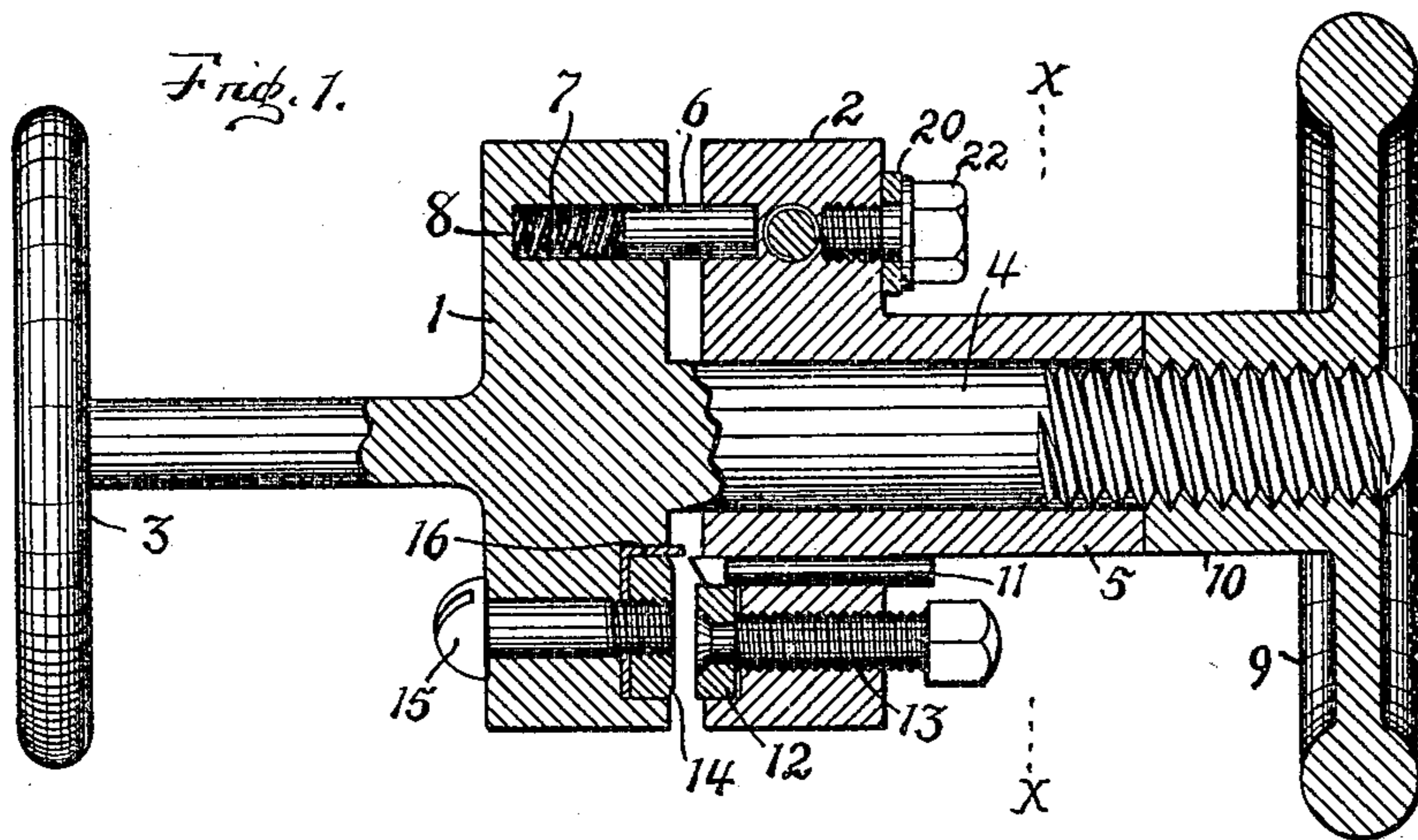
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PATENTED MAY 8, 1906.

A. V. SHAFER & A. C. RUBY.

SAW SET.

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AARON V. SHAFER AND ADAY C. RUBY, OF FORT WAYNE, INDIANA.

SAW-SET.

No. 819,939.

Specification of Letters Patent.

Patented May 8, 1906.

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To all whom it may concern:

Be it known that we, AARON V. SHAFER and ADAY C. RUBY, citizens of the United States of America, and residents of Fort Wayne, in the county of Allen and State of Indiana, have invented certain new and useful Improvements in Saw-Sets, of which the following is a specification.

This invention relates to improvements in saw-sets; and the object thereof is to provide an instrument by means of which the teeth of saws will become set quickly and uniformly. We accomplish this object by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of the device shown partly in central section. Fig. 2 is a view at right angles to that of Fig. 1 and in cross-section on the line xx thereof and showing also a portion of one of the guides in section, and Fig. 3 is a plan of the dog.

Similar numerals of reference indicate corresponding parts throughout the several views, and, referring now to the same, 1 and 2 are jaws, the former having a handle 3 fixed thereon and also a projecting stud 4 centrally disposed, and the latter having a sleeve 5 and being movably mounted upon said stud 4. A pin 6 is fixed in the face of the jaw 2 and extends into a socket 7 in the jaw 1 and is movable therein. A spring 8, located in said socket, acts against the end of the pin 6 and tends to move the jaw away from the other jaw. An operating hand-wheel 9, having a sleeve 10, has screw-threaded connection at the outer part of the stud 4, and the sleeve 10 thereof acts against the outer end of the sleeve 5 on said jaw 2, so that when the wheel 9 is properly turned the said jaw 2 will be driven toward the said jaw 1. It will be understood that because of the pin 6 and its relation with the two jaws the jaw 2 will be prevented from turning on the stud.

11 is a setting-die mounted in the lower part of the jaw 2, and 12 is an adjustable gage-die mounted in said jaw immediately beneath the setting-die. An adjusting-screw 13 is screw-threaded in the jaw 2 and has connection with the die 12, whereby the latter will become adjusted accordingly as the adjusting-screw 13 is manipulated. A matrix-block 14 is mounted in the lower part of the jaw 1 and is held in place by means of a screw 15. A gage-plate 16 is interposed between said matrix-block and jaw, with its upper part extending over the upper outer edge

of the former. The overhanging part of the gage-plate serves to hold the points of the teeth of the saw uniformly in relation with the matrix-block, as they are brought successively in position to be set. The purpose of the gage-plate 16 is to prevent the points of the teeth from becoming extended diametrically outward by the setting operator, and thus preserve uniformity in the height of the teeth.

Upon the sides of one of the jaws are secured oppositely-disposed guides 17, each having a vertical slot 18 in that part thereof which is secured to said jaw. Bolts 19 extend through said slots into said jaw, and thereby said guides are adjustably secured in place. The outer end of said guides 17 are intended to rest upon the toothed edge of the saw, and thereby hold the appliance in proper relation with the saw.

20 is a swinging dog having a finger 21 at its outer end and is loosely secured to one of the jaws by means of a bolt 22. The said dog drops into the teeth of the saw as the appliance is moved from tooth to tooth and serves to prevent the said appliance from moving backward from the tooth or set of teeth which are to be operated upon next in succession.

In using this invention the gage-die 12 is moved out or in by means of the screw 13, accordingly as it is desired to make the setting operation more or less effective. It will be observed that said gage-die is adjustable relative to the setting-die 11, and the set of the teeth of the saw will be proportionate as the setting-die projects over the active face of the gage-die. When the jaw is moved toward the jaw 1 during the setting operation, the saw will be held between the gage-die 12 and matrix-block 14, with the point of the tooth of the saw resting against the overhanging part of the gage-plate 16, and the setting-die will act against the adjacent tooth to an extent dependent upon the relative positions of the gage-die and setting-die. The setting-die will be prevented from mashing or flattening the tooth of the saw because of the gage-die coming into contact with the side of the saw.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. In a device of the class described, a jaw having a fixed handle, and a projecting stud; a matrix-block secured in one side of said

jaw; a movable jaw mounted upon said stud and having means in connection therewith to prevent said movable jaw from turning on said stud; an operating hand-wheel having
5 connection with said stud and being adapted to actuate said movable jaw; a setting-die mounted in said movable jaw; and an adjustable gage-die mounted in said movable jaw adjacent said setting-die.

10 2. In a device of the class described, a jaw having a projecting stud; a matrix-block secured in one side of said jaw; a gage-plate secured to the jaw and overhanging the outer face of said block; a movable jaw mounted

upon said stud; operating means to actuate 15 said movable jaw toward and from the other jaw; a setting-die mounted in said movable jaw, its active end being in a plane beneath the overhanging portion of said gage-plate; and an adjustable gage-die mounted in said 20 movable jaw adjacent said setting-die.

In testimony whereof we affix our signatures in presence of two witnesses.

AARON V. SHAFER.

ADAY C. RUBY.

Witnesses:

H. J. LAMPKE,

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