J. NEUROTH.

CIRCULAR SAW SET.

APPLICATION FILED JAN. 15, 1906.

1,001,880. Patented Aug. 29, 1911.

FIG. 1.

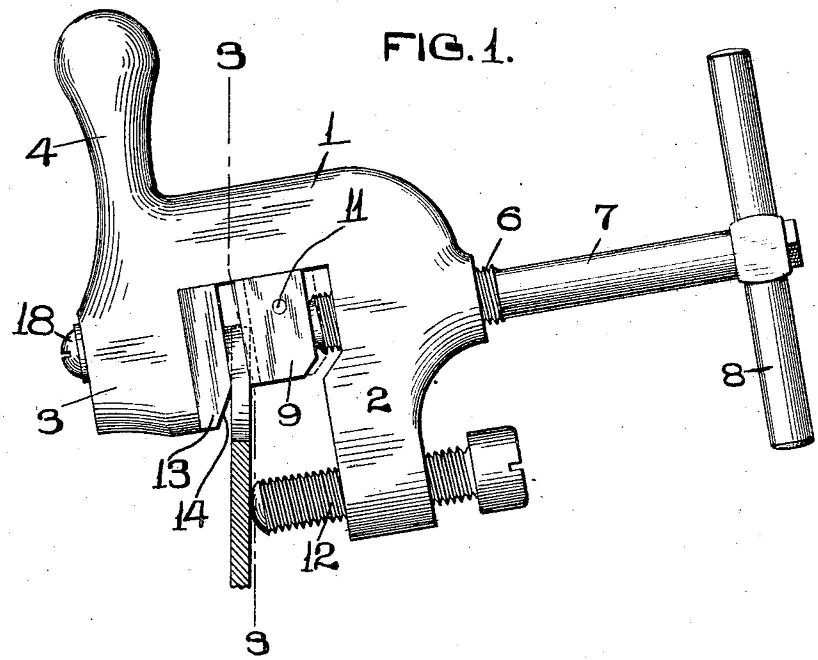


FIG. 2.

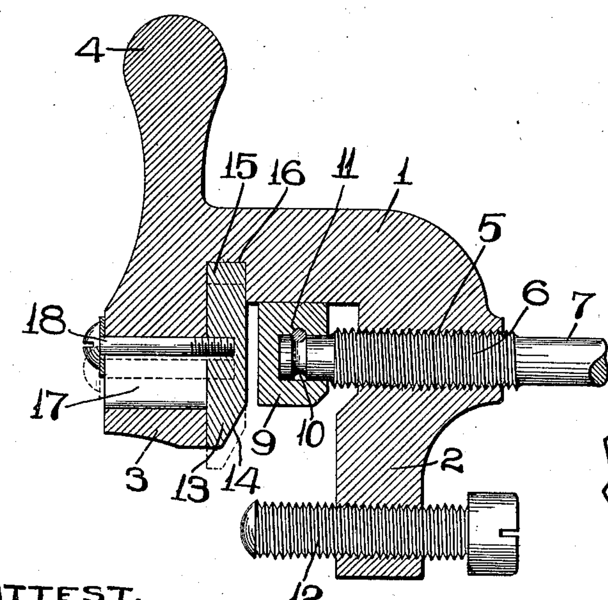
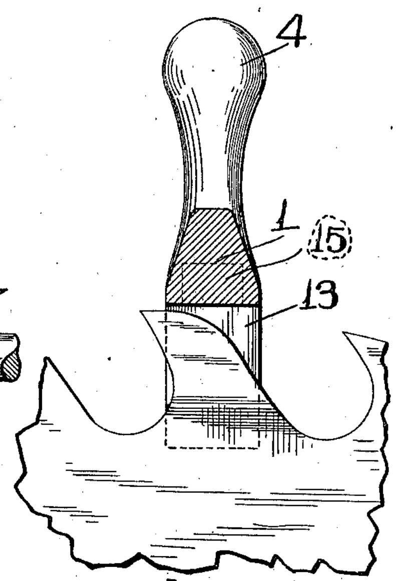


FIG. 3.



ATTEST.

H. G. Fletcher.

M. P. Smith

INVENTOR.

JOHN NEUROTH.

BY Higdon & Longan, ATT'YS.

UNITED STATES PATENT OFFICE.

JOHN NEUROTH, OF ST. LOUIS, MISSOURI.

CIRCULAR-SAW SET.

1,001,880. Specification of Letters Patent. **Patented Aug. 29, 1911.**

Application filed January 15, 1906. Serial No. 296,045.

To all whom it may concern:

Be it known that I, JOHN NEUROTH, citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Circular-Saw Sets, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to a circular-saw set, and the object of my invention is to provide a simple, inexpensive device by means of which the teeth of circular saws can be very readily and accurately set or deflected to one side as required for use.

A further object of my invention is to construct a simple device wherein a gage is made use of to insure a corresponding set or angle to each tooth as it is acted upon by the device.

To the above purposes, my invention consists of certain novel features of construction and arrangement of parts, which will be hereinafter more clearly set forth, pointed out in my claim, and illustrated in the accompanying drawings, in which:—

Figure 1 is a side elevation of my improved saw-set, and showing it in position upon the edge of a circular saw; Fig. 2 is a vertical section taken longitudinally through the center of my improved saw-set; Fig. 3 is a vertical section taken upon the line 3—3 of Fig. 1.

Referring by numerals to the accompanying drawings:—1 indicates a frame of my improved saw-set which is somewhat in the shape of an inverted letter **U**, with the rear arm or shank 2 somewhat longer than the front arm or shank 3. Formed integral with the top side of the front end of the arm 1 is a handle 4. Formed through the upper portion of the rear shank 2 is a screw-threaded aperture 5 through which passes a screw threaded portion 6 of a rod 7 on the rear end of which is formed an operating handle 8. The forward end of this rod 7 extends into the space between the shanks 2 and 3, and located on said front end is a hardened metal jaw 9. Formed in the end of the rod 7 that extends into this jaw 9 is a peripheral groove 10, and passing transversely through the jaw 9 is a pin 11, the lower half of which passes through said groove 10, thus mounting the jaw on the rod 7 in such a manner as that said rod can freely rotate in said jaw and at the same time carry it backwardly and forwardly.

Passing horizontally through the lower end of the shank 2 and parallel with the rod 7 is a set screw 12 that performs the function of a gage when the tool is being used for setting the teeth of circular saws.

13 designates a hardened metal block that is arranged to be vertically adjusted on the rear face of the front shank 3, and the lower rear end of said block is cut away or beveled, as indicated by 14. The upper end of this block 13 is provided with a lug 15 that enters a corresponding recess 16 formed in the under side of the frame 1. Formed through the short shank 3 in alinement with the rod 7 is a slot 17, and passing through this slot is a set screw 18, the screw threaded end of which enters a corresponding aperture in the block 13. By means of this set screw the block 13 is vertically adjusted and held.

In the use of my improved device, the set screw 12 and block 13 are adjusted so as to give the proper set or inclination to the saw teeth, and to manipulate the tool the operator grasps the handle 4 in one hand, and with the other hand unscrews the rod 7 by means of the handle 8 so as to draw the jaw 9 away from the block 13. The tool is now positioned immediately over the edge of the saw with the tooth to be set positioned between the jaw 9 and the block 13, and with the face of the saw bearing against the point of the set screw 12. The operator now manipulates the rod 7 by means of the handle 8 so as to move the jaw 9 toward the block 13, and, as a result, the tooth engaged by said jaw is set or canted to one side, thus attaining the desired result. The jaw 9 is now withdrawn so that the device can be lifted from the edge of the saw, and the tool is now reversed and engaged upon the next adjacent tooth, and the same is set or canted in the opposite direction, and these operations are repeated until all of the teeth of the saw have been properly set. The block 13 is adjusted vertically so that the teeth can be set to greater or lesser depths. After the set screw 12 and the block 13 have been properly adjusted, all of the teeth will be set to the same angle, and this uniformity of setting the teeth insures better results and cleaner work when the saw is in use.

A device of my improved construction is simple, strong and durable, is easily operated, and can be used upon all sizes and kinds of circular saws.

I claim:

In a saw set, the combination with the substantially inverted U-shape frame, the arms of which are of unequal lengths, the inner face of the body portion of the frame being flat and the inner faces of the arms being at right angles to the first mentioned face, a vertically, adjustable jaw, having its lower, inner corner beveled, carried by the short arm of the frame, a substantially rectangular jaw positioned between the arms of the frame and prevented from turning by engagement with the flat face of the body portion of the frame, a threaded rod operating in a threaded seat through the longer arm of the frame, a connection between the threaded rod and the movable jaw, between the arms of the frame, for moving said jaw toward or away from the vertically, adjustable jaw by a rotation of said threaded rod, and an adjustable gage carried by the long arm of the frame, substantially as shown and for the purposes stated.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

JOHN NEUROTH.

Witnesses:

M. P. SMITH,

E. L. WALLACE.