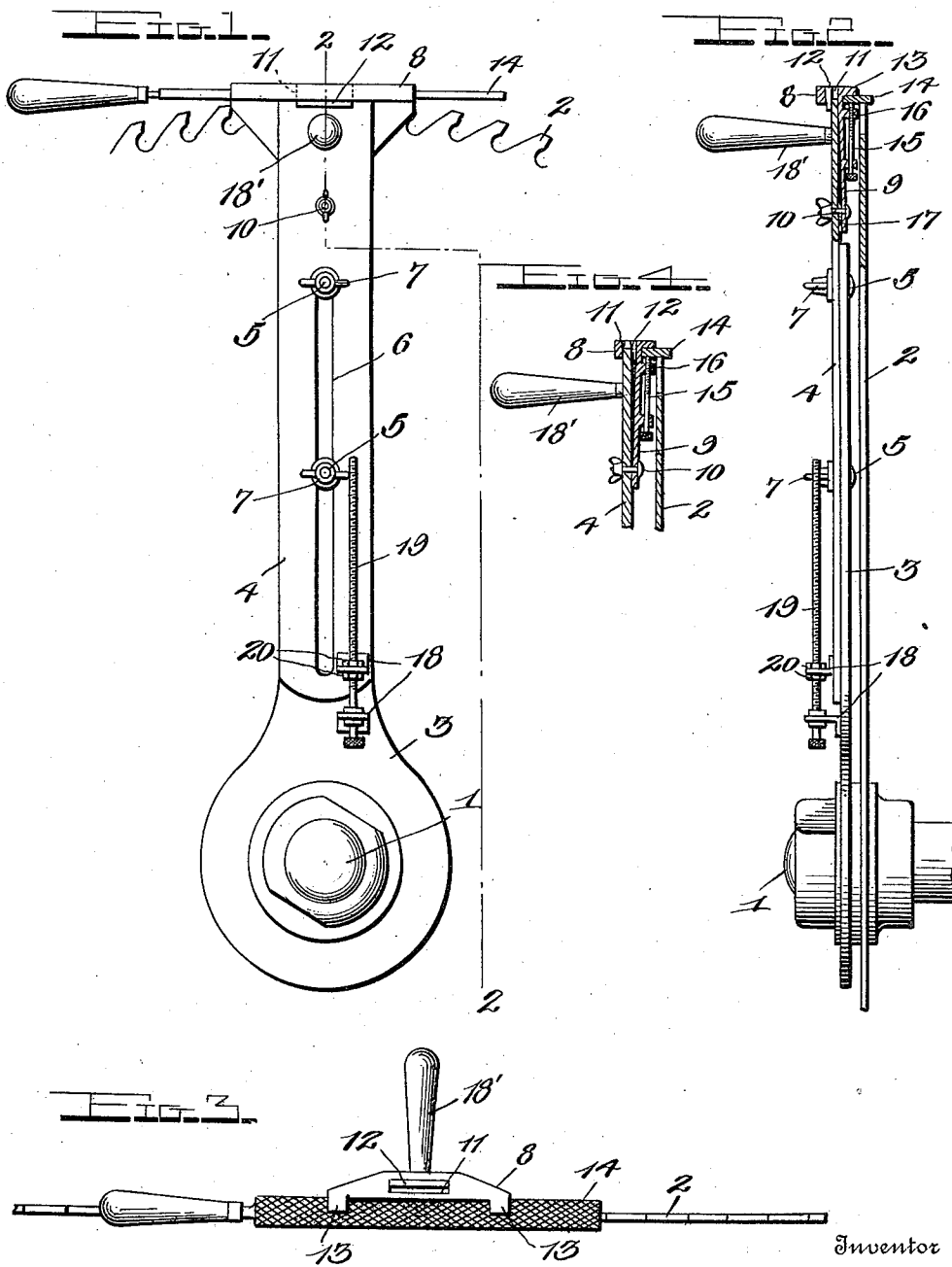


W. M. SELLERS.
 ROUNDER FOR CIRCULAR SAWS.
 APPLICATION FILED MAR. 2, 1912.

1,043,470.

Patented Nov. 5, 1912.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM M. SELLERS, OF MITCHELL, INDIANA.

ROUNDER FOR CIRCULAR SAWS.

1,043,470.

Specification of Letters Patent.

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Application filed March 2, 1912. Serial No. 681,160.

To all whom it may concern:

Be it known that I, WILLIAM M. SELLERS, a citizen of the United States, residing at Mitchell, in the county of Lawrence and State of Indiana, have invented certain new and useful Improvements in Rounders for Circular Saws, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to new and useful improvements in rounders for circular saws and has for its object to provide a device of this character for use in rounding and giving the required lead to circular saws so as to keep the working faces of the teeth, as nearly as possible, in a true circle.

Another object of the invention is to provide a device of this character which will possess advantages in points of efficiency and durability, is inexpensive of manufacture and at the same time is simple in construction and operation.

With the above and other object in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter more fully described, pointed out in the claim and shown in the accompanying drawings; in which,

Figure 1 is a side elevation showing my improved rounder mounted upon the arbor of a circular saw in position for operation; Fig. 2 is a sectional view on the line 2—2 of Fig. 1; Fig. 3 is an end elevation; and Fig. 4 is a detail sectional view showing the washer 17 removed and the wedge 12 arranged on the opposite side of the arm from that shown in Fig. 2.

Referring more particularly to the drawings 1 indicates the saw arbor upon which is mounted the saw 2. Secured to the arbor on the outer end thereof is the outwardly extending arm 3. An extension-arm 4 is provided and adjustably secured to the arm 3 by means of the threaded lugs 5 carried by the arm 3 and disposed in the elongated slot 6 formed in the arm 4, winged nuts 7 are threaded on said lugs to hold the arm 4 in an adjusted position.

A file holder is secured to the outer end of the extension arm 4 which comprises a body 8 having a reduced lower end 9 which is secured to the arm 4 by means of the set screw 10. The file holder 8 is provided at its upper end with an elongated opening 11 adapted to receive the upper end of the arm 4 and

a wedge 12 is arranged in said opening adjacent the end of the arm 4 to secure the holder to the upper end of the arm. Spaced flanges 13 are arranged upon the inner side of the body 8 and a file 14 is arranged between the flanges at the upper end of the body. An adjusting screw 15 is mounted in the threaded opening 16 in the lower of said flanges and having its upper end bearing against the file to hold the same securely in place.

To secure an accurate adjustment of the file holder so that the saw-teeth may be filed down to a fine degree, I provide two angular brackets 18, one of which is secured to the lower end of the arm 4, the other of said brackets being secured to the arm 3. A threaded adjusting screw 19 is mounted in the bracket on the arm 3 and having its threaded end engaged in a threaded opening formed in the horizontal portion of the bracket secured to the lower end of the arm 4. Jam nuts 20 are mounted on the threaded portion of said screw and arranged upon both sides of the horizontal portion of the last mentioned bracket.

In filing the saw to get the required lead I provide a washer 17 to be arranged between the lower end 9 of the file holder and the arm 4, said washer being mounted on the set screw 10. When this washer 17 is arranged in this manner the file will be disposed at an angle to the face of the saw teeth on one side. To adjust the file so that it will be disposed at an angle on the opposite side of the saw the washer 17 is removed and the wedge 12 is arranged between the file holder and the end of the arm 4 on the opposite side of the arm from that shown in Fig. 2.

In using the rounder it is to be operated by means of the handle 18' secured to the outer end of the arm 4.

In operation, the saw is to be turned backward and the file is moved back and forth over the backs of the teeth. This is continued until the working faces of all the teeth are brought in the same circular line. The device may be quickly mounted for operation upon the arbor of a circular saw of any dimensions, the extension arm 4 being adjustable radially to the axis of such arbor.

By this device circular saws may be sharpened very quickly and effectively, and the teeth will all be left of precisely the same size, thus enabling the saw to perform its

work more neatly and effectively and without danger of the saw-teeth being broken owing to an excess of length.

While I have shown and described the preferred form of my invention it will be obvious that various changes in the details of proportions may be resorted to for successfully carrying my invention into practice without sacrificing any of the novel features or departing from the scope thereof which is set forth in the appended claim.

What I claim is:—

In a device of the character described, the combination of an outwardly extending arm mounted upon a saw arbor, an extension arm, having an elongated opening formed therein, threaded lugs carried by the first arm and arranged in said opening, winged nuts threaded on said lugs to hold said extension arm in an adjustable position, a file holder having an elongated opening to re-

ceive the outer end of said extension arm, a wedge arranged in said opening adjacent the arm to secure the holder to the outer end of the extension arm, spaced flanges formed on the inner side of said holder, a file arranged between said flanges, a set screw threaded into the lower of said flanges and engaging the file to hold the same in place, said wedge being arranged upon either side of the arm so that the file will be disposed at an angle to the backs of the saw teeth, and means carried by the first arm and adjustably connected to the extension arm to secure an accurate adjustment of the file.

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

WILLIAM M. SELLERS.

Witnesses:

LAWRENCE B. SANDERS,
WHEELER R. RICHARDSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."