

J. A. WEBER.
 REVERSIBLE FRICTION GEARING.
 APPLICATION FILED OCT. 28, 1911.

1,063,231.

Patented June 3, 1913.

Fig. 2

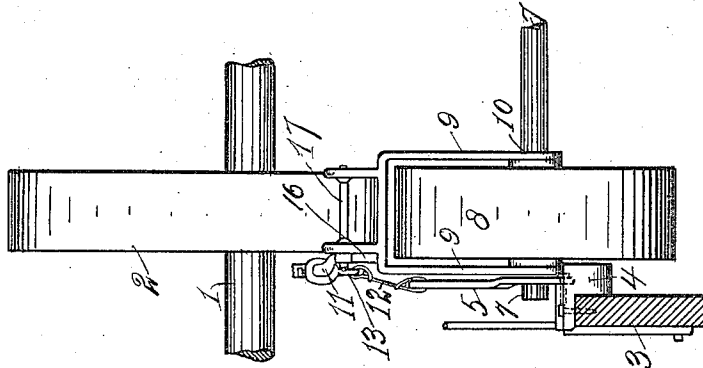
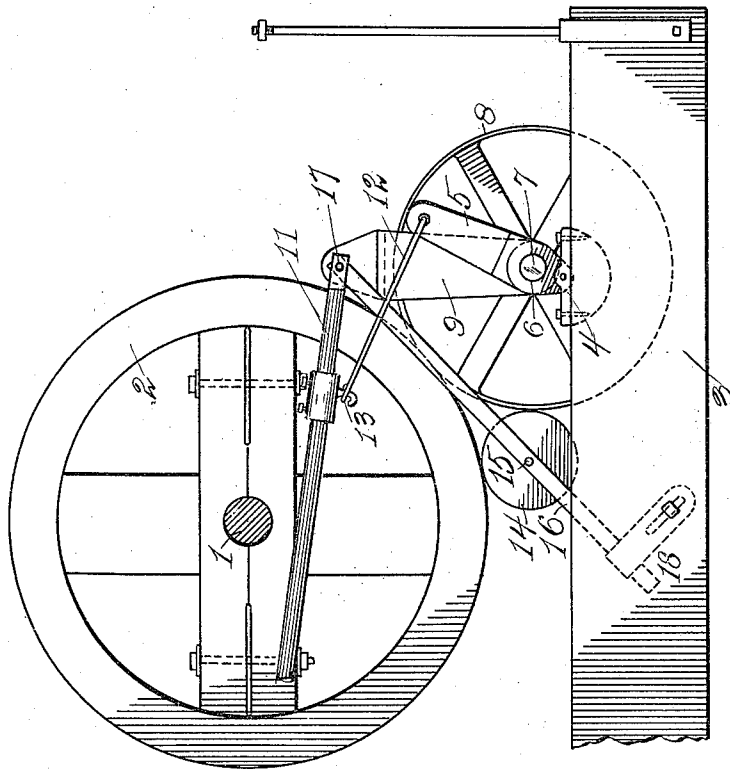


Fig. 1



WITNESSES.
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UNITED STATES PATENT OFFICE.

JOHN A. WEBER, OF TOLEDO, OHIO.

REVERSIBLE FRICTION-GEARING.

1,063,231.

Specification of Letters Patent.

Patented June 3, 1913.

Application filed October 28, 1911. Serial No. 657,302.

To all whom it may concern:

Be it known that I, JOHN A. WEBER, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have invented certain new and useful Improvements in Reversible Friction-Gearing; 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, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

In saw mills in which reciprocating toothed bars are employed to turn the logs on the log carriage, it is necessary to employ means for reversing the motion of the toothed bars, and it is desirable that this should be accomplished quickly and easily.

My invention is designed to furnish a gearing for the purpose indicated, and, more particularly, to provide a cheap, simple and effective reversing friction gearing in which the shaft which communicates motion to the log turner may be caused, by a slight movement of controlling mechanism, to revolve in either direction. I attain these objects by means of the construction and arrangement of parts hereinafter described, and shown and illustrated in the accompanying drawings, in which,—

Figure 1 is a side-elevation of my device, and Fig. 2, an end-view of the same seen from the right in Fig. 1.

Like parts are indicated by like numerals of reference in both figures.

In the drawings, 1 is the shaft upon the end of which a circular saw is mounted or which drives any sort of saw, which shaft rotates constantly in one direction. Upon this shaft is fixed a friction wheel 2. 3 is a base or frame which supports a box 4, upon which is pivotally supported the lower end of an upright swinging arm 5. In this rock-arm, near its lower end, is journaled, as at 6, one end of a shaft 7 which drives or communicates motion to the log turning mechanism. This shaft is so mounted as to have a slight horizontal play at the end which is journaled in the rock-arm. Upon the shaft 7 is fixed a friction pulley 8 close to and in the same vertical plane with the friction wheel 2.

A U-shaped member or stirrup 9 has its lower extremities pivoted, as at 10, upon the shaft 7 on opposite sides of the pulley 8. To the top of the stirrup 9 is pivotally secured a rod 11 leading to within convenient reach of the operator. The top of the rock-arm 5 is connected by a stout cord or rod 12 with the rod 11, as at 13.

14 is a friction pulley in close proximity to the pulleys 2 and 8, journaled as at 15 between two bars 16, of which but one appears in the drawing. These bars are pivoted at their upper ends to the upper end of the stirrup 9 upon the same pin 17, which forms a pivot for the rod 11. The lower end of the bars 16 have a sliding support, as at 18, upon the supporting frame 3.

When the rod 11 is drawn toward the operator, the rock-arm 5, through the cord 12, is caused to swing upon its pivotal support, bringing the faces of the pulleys 2 and 8 into operative contact and causing the shaft 7 to revolve in the desired direction. When the rod 11 is pushed away from the operator, the pull upon the rock-arm 5 is released and the pulley 8 moves out of contact with the pulley 2 as the pulley 14 is forced into frictional engagement with the pulleys 2 and 8, thus reversing the rotation of the pulley 8 and its shaft.

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

In a device of the described character, a driving friction-wheel, a rock-arm, a friction-pulley, a shaft for the pulley having one end supported in said rock-arm, a second friction-pulley mounted in close proximity to the wheel and the pulley first mentioned, a movable support for said second pulley, arms pivotally supported upon said shaft, a controlling rod pivotally connected with said arms, connections between said rod and said rock-arm, and a pivotal connection between said pulley-support and said arms.

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

JOHN A. WEBER.

Witnesses:

WM. C. BINNS,
LEONA KIBURTZ.