(Model.)

G. S. GARDINER & J. W. McAULEY.

SAW GUIDE.

No. 320,550. Patented June 23, 1885.

Fig. 5

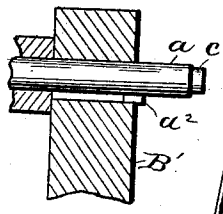
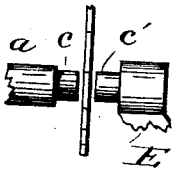


Fig. 1.

Fig. 4.



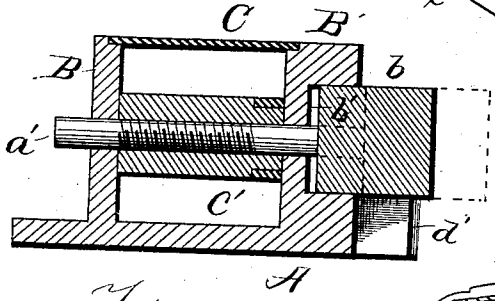
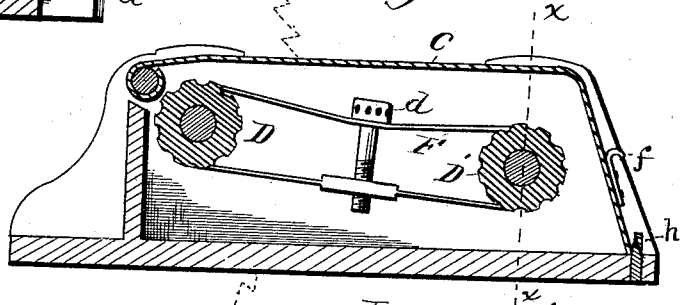


Fig. 3.

Fig. 2.



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UNITED STATES PATENT OFFICE.

GEORGE S. GARDINER AND JAMES W. McAULEY, OF LYONS, IOWA.

SAW-GUIDE.

SPECIFICATION forming part of Letters Patent No. 320,550, dated June 23, 1885.

Application filed October 13, 1884. (Model.)

To all whom it may concern:

Be it known that we, GEORGE SCHUYLER GARDINER and JAMES W. McAULEY, citizens of the United States of America, residing at Lyons, in the county of Clinton and State of Iowa, have invented certain new and useful Improvements in Guides for Circular Saws, of which the following is a specification, reference being had therein to the accompanying drawings.

Our invention relates to improvements in guides for circular saws, constructed so that the saw may be readily removed from its arbor, and the parts which operate the guide-pins are inclosed and protected in a chamber, as hereinafter fully set forth.

In the accompanying drawings, Figure 1 is a perspective view of our improved devices, showing the lid of the inclosing-chamber in a raised position. Fig. 2 is a longitudinal vertical section with the lid closed. Fig. 3 is a cross section on line *x x* of Figs. 1 and 2. Fig. 4 is a top view of the guide-pins detached, with saw between them. Fig. 5 is a cross-section on line *y y* of Fig. 1.

A designates the bed-plate of a box, inclosed by the sides B B′ and the hinged lid C, forming the chamber C′.

D D′ are fluted or corrugated nuts, provided with central threaded holes to receive the threaded bolts *a a′*, extended through the nuts and having bearings in the sides B B′. The outward portion of the bolt *a* is provided with a feather, a^2, extending into and sliding in a groove in the side B′, to prevent the bolt from turning with the nut. The bolt *a′* is formed on the arm E, the rear portion, *b*, of which arm is angular, fitting in the angular recess *b′* in the side B′, to hold the arm firmly in place. The outer end of the bolt *a* and the forward end of the arm E are provided with guide-pins *c c′*, made of any suitable anti-friction material.

F designates a spring-band of metal or any suitable material, extending around the smooth portions of the nuts D, which band is provided with a tightening screw bolt, *d*.

The lid C is provided with a lift, *f*, and the lid is held in the closed position by the pin *h*, formed on or fastened to the bed-plate A.

The guide-pins *c c′* are readily adjusted by means of the nuts D, by turning of which the bolts *a a′* are slid inward or outward, as required.

The hinged lid is kept closed (except when the guide-pins are being adjusted) for the purpose of protecting the devices within the chamber from dust or dirt.

When it is desired to give the saw a "lead" from the log, the set-screw *d* is loosened, and the nut D is turned backward the required distance, and then the nut D′ is turned backward till the pin *c′* presses the saw to or near the pin *c*. If the lead is required to be toward the saw, the above-named operation is reversed. When the pins are set in the required position, the set-screw *d* is tightened so that the nuts will securely hold the pins in place.

When it is desired to remove the saw from its arbor, the set-screw *d* is loosened, and the nut D′ is turned forward till the angular portion *b* of the arm E passes out of the recess *b′*, allowing the arm to be raised, as shown in dotted lines. When the arm E is turned downward in its normal position, the lower surface of its rear part rests upon the projection *d′* formed on the side of the box, which aids in holding the arm firmly in position.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a saw-guide, the combination of the nuts D D′, having threaded holes extended longitudinally through the nuts, the threaded bolts *a a′*, extended through the nuts, the spring-band F, extended around smooth portions of the nuts, set-screw *d*, extended through the band, the adjustable arm E, formed with the threaded bolt *a′*, and having the angular portion *b*, the angular recess *b′*, formed in the box A, and the guide-pins *c c′* on the bolt *a* and arm E, substantially as and for the purposes described.

2. The combination, with the box formed of the bed-plate A, sides B B′, and lid C, of the nuts D D′, having threaded holes extended longitudinally through the nuts, the threaded bolts *a a′*, extended through the nuts, the spring-band F, extended around smooth portions of the nuts, set-screw *d*, extended through the band, the adjustable arm E, formed with the threaded bolt *a′*, and having the angular

portion *b*, the angular recess *b'* formed in the box A, and the guide-pins *c c'* on the bolt *a* and arm E, the nuts, band, and set-screw being inclosed within the box, substantially as and for the purpose set forth.

3. The combination, with the box having the angular recess *b'* and the projection *d'*, the threaded nut D, threaded bolt *a*, extended through the nut, and the guide-pin *c* on the end of the bolt, of the adjustable arm E, provided with the guide-pin *c'*, and having the threaded bolt *a'*, and the angular portion *b'*, formed on the arm, substantially as and for the purposes described.

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

GEORGE S. GARDINER.
JAMES W. McAULEY.

Witnesses:
WILLIAM HOLMES,
WM. W. SANBORN.