(No Model.)

2 Sheets—Sheet 1.

D. FRASER.

SAW GUIDE.

No. 394,110. Patented Dec. 4, 1888.

Fig. 1.

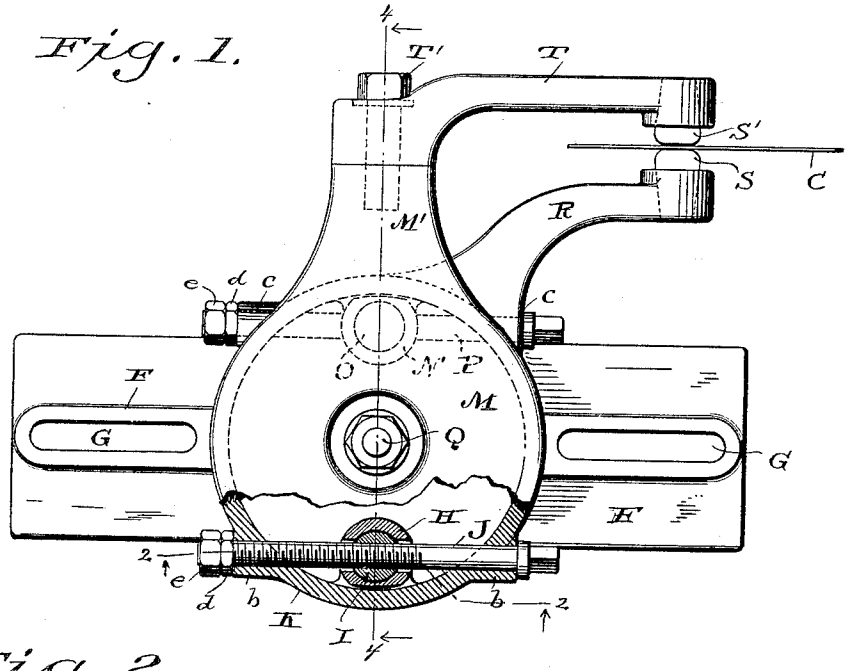


Fig. 2.

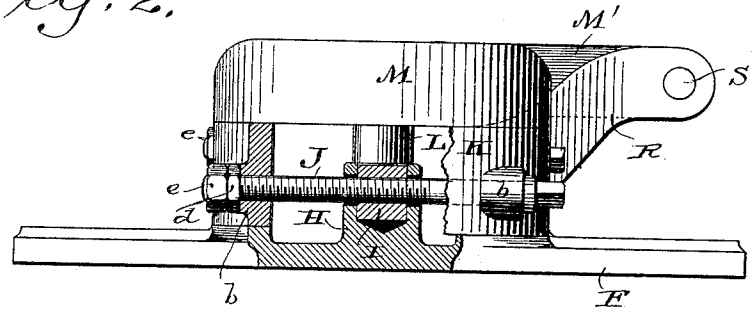
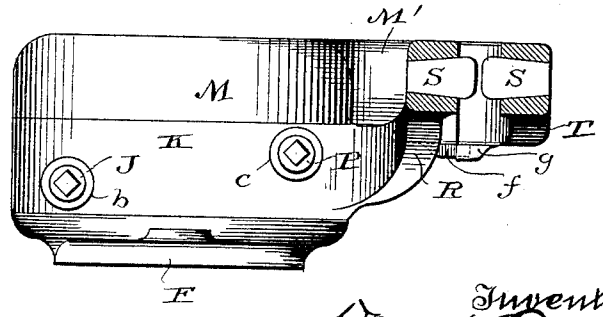


Fig. 3.



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(No Model.)

2 Sheets—Sheet 2.

D. FRASER.

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Fig. 4.

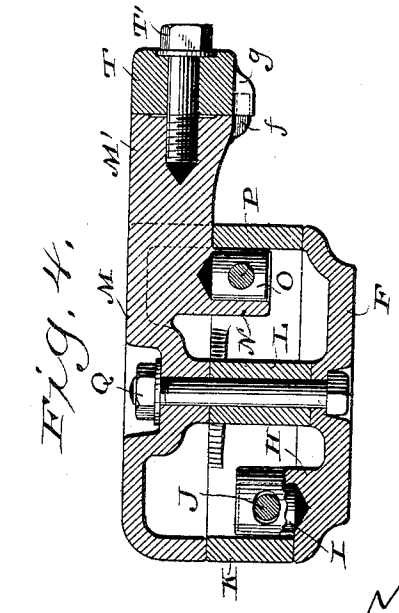


Fig. 5.

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UNITED STATES PATENT OFFICE.

DONALD FRASER, OF MILWAUKEE, WISCONSIN.

SAW-GUIDE.

SPECIFICATION forming part of Letters Patent No. 394,110, dated December 4, 1888.

Application filed July 5, 1888. Serial No. 278,992. (No model.)

To all whom it may concern:

Be it known that I, DONALD FRASER, of Milwaukee, in the county of Milwaukee, and in the State of Wisconsin, have invented certain new and useful Improvements in Saw-Guides; and I do hereby declare that the following is a full, clear, and exact description thereof.

My invention relates to saw-guides; and it consists in certain peculiarities of construction and combination of parts, to be hereinafter described with reference to the accompanying drawings, and subsequently claimed.

In the drawings, Figure 1 represents a plan view of a saw-guide constructed according to my invention and partly broken away to show certain of its parts; Fig. 2, a section on line 2 2, Fig. 1; Fig. 3, a rear elevation of my device; Fig. 4, a section on line 4 4, Fig. 1; and Fig. 5, a side elevation showing the application of my invention to a saw-mill.

Referring by letter to the drawings, A represents one of the floor-timbers, B one of the vertical standards, C the lower or main saw, and D the upper saw, of a circular-saw mill such as is in common use, said parts being shown to illustrate the application of my invention.

Secured to the floor-timber A by means of set-screws E is the base-plate F of my device, this base-plate being provided with slots G, that engage the set-screws and permit of said device being positively adjusted in a longitudinal direction. One side of the base-plate F is provided with an upwardly-extended socket, H, for the reception of a circular block, I, this block being provided with a horizontal opening, that is threaded to engage a longitudinal adjusting-screw, J, the latter having bearings *b* on a ring, K, that is supported on said base-plate and provided with a hub, L, as best illustrated in Fig. 4.

Supported on the ring K is the top plate, M, of my device, and this top plate is provided with a depending socket, N, for the reception of a circular block, O, the latter being provided with a horizontal opening, that is threaded to engage a longitudinal adjusting-screw, P, having bearings *c* on said ring. As best illustrated by Fig. 4, the sockets H N are diametrically opposed to each other, and the base-plate F, ring K, and top plate, M, are detachably united by a center bolt, Q. The sockets H N are necessarily provided with openings for the passage of the adjusting-screws J P, and these openings are somewhat elongated to permit a certain amount of play, for the purpose to be hereinafter described. The adjusting-screws have their rear ends squared to fit socket-wrenches J′ P′, (shown in Fig. 5,) and in order to prevent loose play of said adjusting-screws jam-nuts *d e* are arranged on their front ends.

Formed in one piece with the ring K is an arm, R, and the outer end of this arm is provided with a socket for a guide-block, S. The top plate, M, is provided with a lateral extension, M′, that is in turn provided upon its under side with a lug, *f*, and pivotally connected to the outer end of said extension by means of a set-screw, T′, is an arm, T, that is also provided with a lug, *g*, that opposes said lug *f* when said arm is in its normal position. The pivoted arm T is arranged to be opposite the arm R, and the outer end of said arm T is provided with a socket for a guide-block, S′.

When the adjusting-screw J is turned in either direction, there is a draw on the block I, and the ring K and top plate, M, being pivotally connected to the stationary base-plate F by means of the bolt Q, said ring and top plate will move on the said bolt or pivot and carry therewith the arms R T, that are provided with the guide-blocks S S′, the openings in the sockets H N for the passage of the adjusting-screws being elongated to permit of the pivotal movement just described. The ring K and top plate, M, move together, from the fact that both adjusting-screws have their bearings in this ring, and hence the adjusting-screw P, block O, and socket N form a connection between said ring and top plate. When the adjusting-screw P is turned in either direction, the draw is on the block O, and as the ring in this instance remains stationary the top plate, M, is moved on its axis independent of said ring.

The socket-wrenches J′ P′ are in a certain sense continuations of the adjusting-screws J P, and are employed for the purpose of adjusting the guide at a safe distance from the saw.

The arm T being pivoted, it can be readily swung back out of the way, as shown by dotted

lines, Fig. 5, when it is desirable to remove the saw C, thereby avoiding the necessity of having to change the position of the entire guide.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A saw-guide comprising a stationary base-plate, a top plate and interposed ring pivotally united to the base-plate and provided with arms arranged to come on opposite sides of the saw, diametrically-opposed sockets extending into the ring from said base and top plates, a circular block arranged in each socket and provided with a threaded opening, and adjusting-screws having their bearings on said ring and arranged to engage the openings in the blocks, substantially as set forth.

2. A saw-guide comprising a normally-stationary but longitudinally-adjustable base-plate, a top plate and interposed ring pivotally united to the base-plate and provided with arms arranged to come on opposite sides of the saw, diametrically-opposed sockets extending into the ring from said base and top plates, a circular block arranged in each socket and provided with a threaded opening, and adjusting-screws having their bearings on said ring and arranged to engage the openings in the blocks, substantially as set forth.

3. A saw-guide comprising a normally-stationary base-plate, a top plate and interposed ring pivotally united to the base-plate and provided with arms arranged to come on opposite sides of the saw, diametrically-opposed sockets extending into the ring from said base and top plates, a circular block arranged in each socket and provided with a threaded opening, and adjusting-screws having their bearings on said ring and arranged to engage the openings in the blocks, in combination with wrenches arranged to actuate said screws at a point more or less remote from saw-guide, substantially as set forth.

4. In a saw-guide, the combination of the top plate, M, provided with the lateral extension M′, having the lug *f* upon its under side, the pivotal arm T, provided with the lug *g* in opposition to the one *f*, and the set-screw T′, for retaining said arm in its normal position.

In testimony that I claim the foregoing I have hereunto set my hand, at Milwaukee, in the county of Milwaukee and State of Wisconsin, in the presence of two witnesses.

DONALD FRASER.

Witnesses:
S. S. STOUT,
N. E. OLIPHANT.