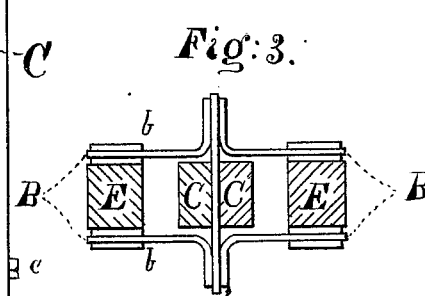
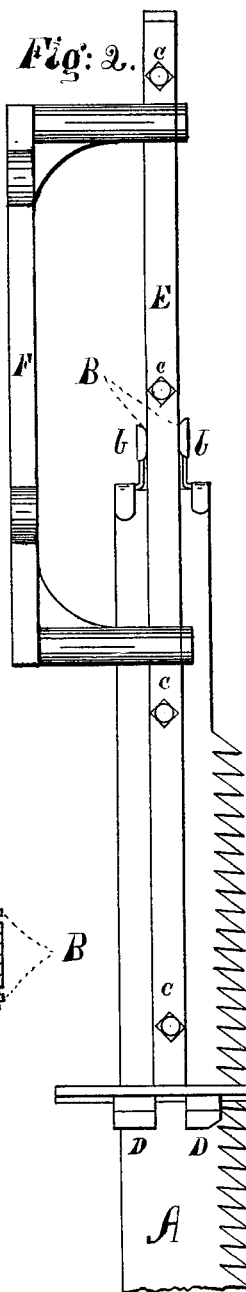
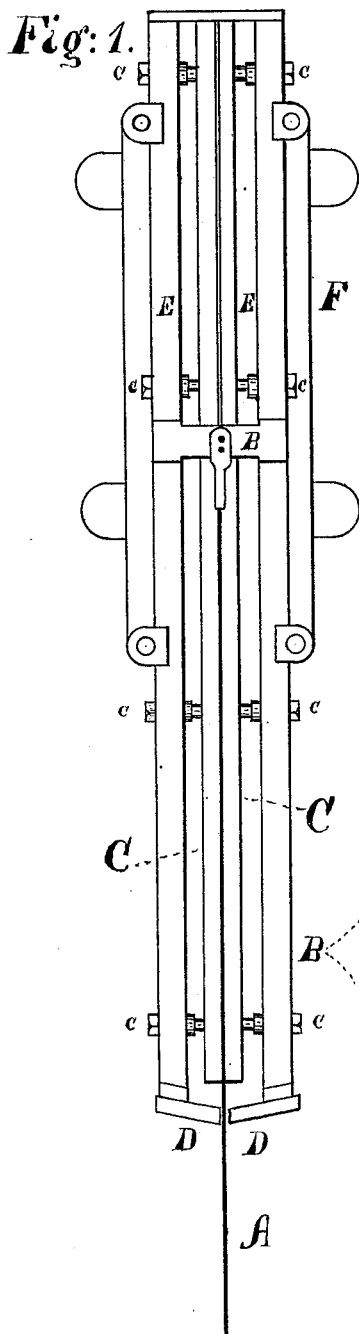


F. A. & C. W. OLDS.
Saw-Mill Guides.

No. 198,208.

Patented Dec. 18, 1877.



WITNESSES
Whitney
Louie Shaw

INVENTORS
Francis A. Olds, *Charles W. Olds*
per *Bradford*
Attorney

UNITED STATES PATENT OFFICE.

FRANCIS A. OLDS AND CHARLES W. OLDS, OF MARTINSVILLE, INDIANA.

IMPROVEMENT IN SAW-MILL GUIDES.

Specification forming part of Letters Patent No. **198,208**, dated December 18, 1877; application filed June 16, 1877.

To all whom it may concern:

Be it known that we, FRANCIS A. OLDS and CHARLES W. OLDS, of the town of Martinsville, county of Morgan, and State of Indiana, have invented certain new and useful Improvements in Saw-Mills, of which the following is a specification:

Reference is had to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts.

Figure 1 is a front view of our invention. Fig. 2 is a side view thereof. Fig. 3 is a transverse sectional view, showing the arrangement of the cross-head more perfectly.

The mills in which our invention is intended to be used are those known as "muleys;" and its objects are to provide means whereby thinner saws than those heretofore worked can be used without their being liable to spring and tremble, as thin saws usually do, and to provide a new form of cross-head specially adapted to be used with this invention.

The first object is accomplished by placing inside the usual frame for supporting the upper guides two strips or slides, which shall run from said guides up to or beyond the top of the saw, and which shall be so situated that the entire length of that part of the saw above said guides shall be steadied and stiffened by them. The lower part of the saw, being in the cut in the log, is steadied by its own kerf. Thus the entire saw is kept nearly rigid in its position.

The second object is accomplished by attaching to the front and rear edges of the top end of the saw two separate cross-arms, instead of the ordinary cross-head in the center.

In the drawings, A represents a muley-saw;

B, the cross-head, constructed of the two parts *b b*; C C, the slides against which the saw A runs; D D, the ordinary saw-guides; E E, the ordinary sliding frame used to support said guides and the top end of the saw; F, studs forming a part of the permanent frame used to support the upper part of the mill; *c c c c c c c c*, bolts or pins used to adjust the slides C C, and to hold them in their proper positions.

As before stated, our invention enables us to use a thinner saw than has been usually worked in mills of this description; and the advantages, briefly, are: a thin saw costs less, requires less power, is more easily kept in order, and wastes less lumber in the form of saw-dust, than a thick one. We can also use a greater feed, and consequently do more work than the ordinary mill, by reason of the great steadiness of motion imparted by the slides.

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

1. The adjustable saw-guide, composed of the slides C C and the adjusting-bolts *c c c c*, in combination with the frame E E, arranged substantially as herein shown and described, and for the purposes specified.

2. The cross-head B, made of two separate parts, and attached and operated substantially as herein set forth.

In witness whereof we have hereunto set our hands and seals at Martinsville, Indiana, this 11th day of June, A. D. 1877.

FRANCIS A. OLDS. [L. S.]
CHARLES W. OLDS. [L. S.]

In presence of—
HENRY H. OLDS,
JOHN W. COX.