

W. A. L. Kirk,

Drag Saw.

N^o 40,279.

Patented Aug. 8, 1865.

Fig 1

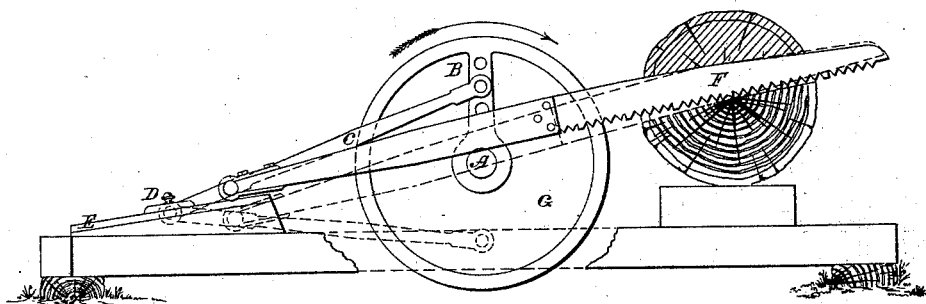
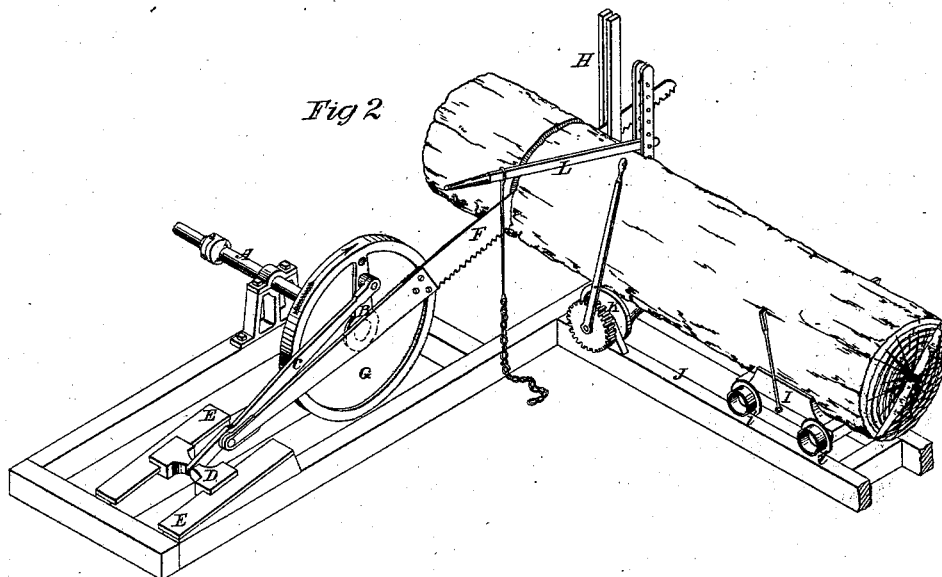


Fig 2



Witnesses:

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UNITED STATES PATENT OFFICE.

WM. A. L. KIRK, OF HAMILTON, OHIO.

IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 49,279, dated August 8, 1865.

To all whom it may concern:

Be it known that I, WILLIAM A. L. KIRK, of Hamilton, Butler county, Ohio, have invented a new and useful Improvement in Machines for Crosscutting Logs; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a mechanical arrangement whereby the saw receives a combined reciprocating and rocking motion similar to that imparted by hand, so as to cut wholly from the center of the log outward and to clear the kerf of sawdust at every stroke, the same resulting in a smooth, rapid, and effective cut.

Figure 1 is a side elevation of a machine embodying my invention. Fig. 2 represents, by perspective view, a somewhat more complex machine embodying the same principle.

A is a shaft, rotated in direction of arrow by steam, or horse, or other power, and having a crank, B, for the attachment of a pitman, C, whose other extremity is pivoted to a cross-head, D, which is confined to a rectilinear path at right angles to the shaft A by means of customary ways E.

The combined reciprocating and rocking motion of the saw F is obtained by pivoting it to the pitman C at some point intermediate be-

tween the extremities of the latter, the said point of attachment being selected at a greater or less distance from the cross-head D, according to the amount of rocking motion desired. This distance, when about one-fifth of the length of the piston, I have found to be effective.

The shaft A may carry a fly-wheel, G, and the wrist of the crank may project therefrom, as in the illustration.

A yoke, H, may be employed for restraining the saw to its proper vertical plane.

I represents a log-truck provided with wheels i, which occupy a railway, J.

K is a roller, on which the front end of the log is supported and by which it is set forward.

L is a clamp for securing the log in place.

While disclaiming novelty in the general principle of imparting a rocking motion to a drag-saw,

I claim and desire to secure by Letters Patent—

The arrangement herein described of the crank B, pitman C, and cross-head D, with a saw or saw-bar connected to the pitman at a point intermediate between the said crank and cross-head, for the purpose specified.

In testimony of which invention I hereunto set my hand.

Witnesses: WM. A. L. KIRK.

GEO. H. KNIGHT,
JAMES H. LAYMAN.