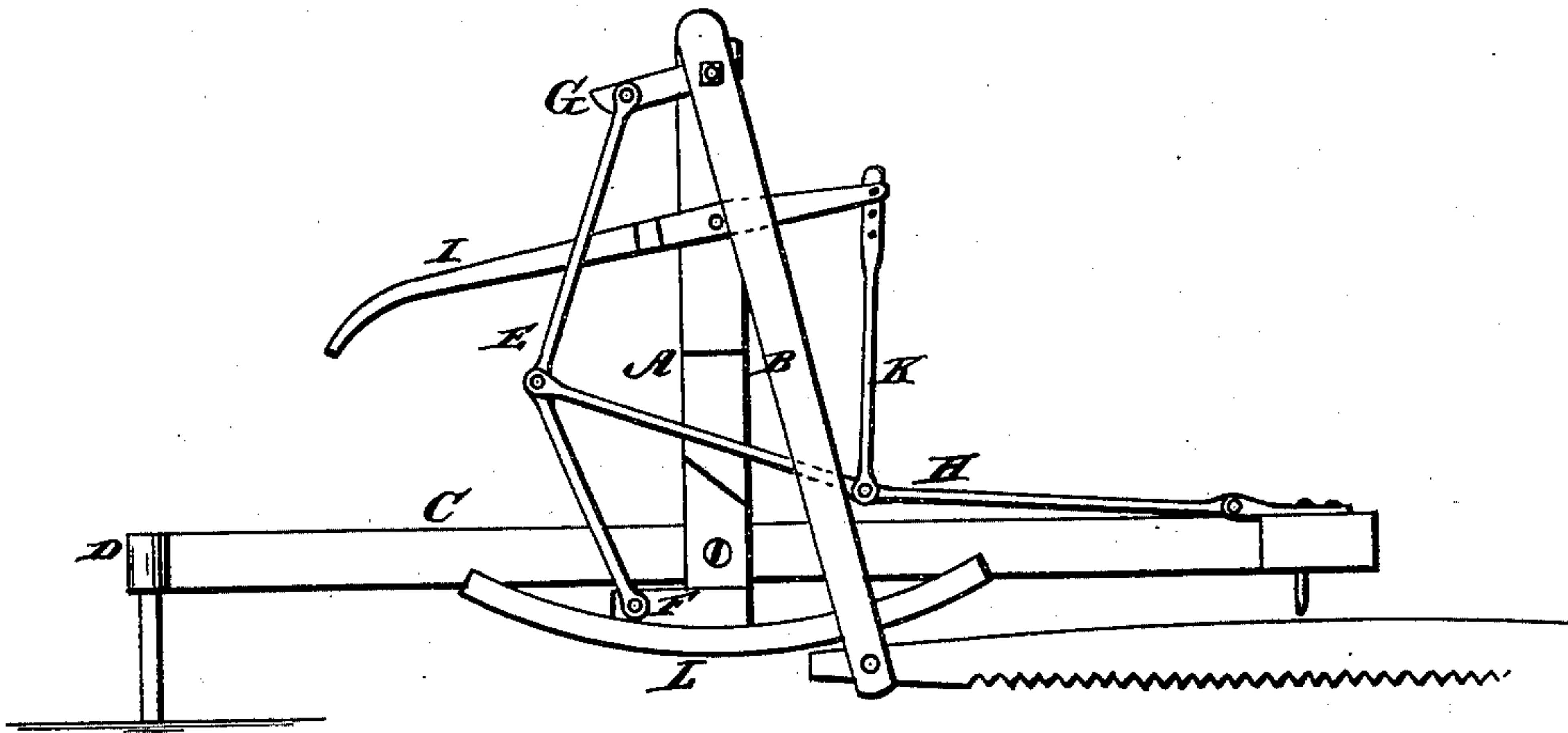


J. H. SOULE.
Drag Saw Mill.

No. 232,310.

Patented Sept. 14, 1880.



WITNESSES
Robert Everett
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UNITED STATES PATENT OFFICE.

JOEL H. SOULE, OF GEORGETOWN, NEW YORK.

DRAG-SAW MILL.

SPECIFICATION forming part of Letters Patent No. 232,310, dated September 14, 1880.

Application filed February 14, 1880.

To all whom it may concern:

Be it known that I, JOEL H. SOULE, of Georgetown, in the county of Madison and State of New York, have invented certain new
5 and useful Improvements in Drag-Saw Mills; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawing, making a
10 part of this specification, and to the letters and figures of reference marked thereon.

The figure of the drawing is a representation of a side elevation of my drag-saw.

The invention relates to means for operating drag-saws; and it consists, essentially, in
15 the combination of two toggles with a lever and a vibrating bar carrying the saw, all so arranged that the lever acts upon the knuckle of a horizontal toggle through the medium of
20 a connecting-rod, while the horizontal toggle acts upon the joint of a vertical toggle which connects with a horizontal link upon the upper end of a vertical vibrating bar carrying the saw, whereby the greatest power of the toggles
25 is alternately exerted for the purpose of reciprocating the saw, as hereinafter more fully set forth, and particularly pointed out in the claim.

A is the vertical standard, to which is pivoted the vibrating bar B, for carrying the saw.

30 The standard is mounted upon the usual bar C, provided at one end with the cross-bar D, having suitable feet, and at its remaining end with a pin which is inserted into the log to be sawed.

35 E designates the vertical toggle, which connects at its lower end with an arm, F, secured

to the standard, and at its upper end with a link, G, rigidly secured to the vibratory bar B.

H designates the horizontal toggle, the rear end of which is connected with the joint of the
40 toggle E, while its remaining end is pivoted at the forward end of the base-bar C.

The lever I, which is pivoted to the standard, and by means of which the devices are operated, is connected with the horizontal toggle
45 H by means of a connecting-rod, K.

The saw-blade is secured in any suitable way to the lower end of the vibratory bar B, which vibrates alongside of a curved guide-
50 bar, L.

The hand-lever, as here shown, is arranged in a vertical plane. It is evident, however, that it may be pivoted horizontally, but a slight change of the connection between the handle and the horizontal toggle being re-
55 quired.

Having thus described my invention, what I claim is—

The reciprocating saw, vibrating bar B, vertical toggle E, link G, horizontal toggle H,
60 pivoted lever I, and connecting-rod K, said members being combined and adapted to operate substantially in the manner and for the purposes set forth.

In testimony that I claim the above I have
65 hereunto subscribed my name in the presence of two witnesses.

JOEL H. SOULE.

Witnesses:

HENRY S. PHELPS,
CHARLES C. WAGNER.