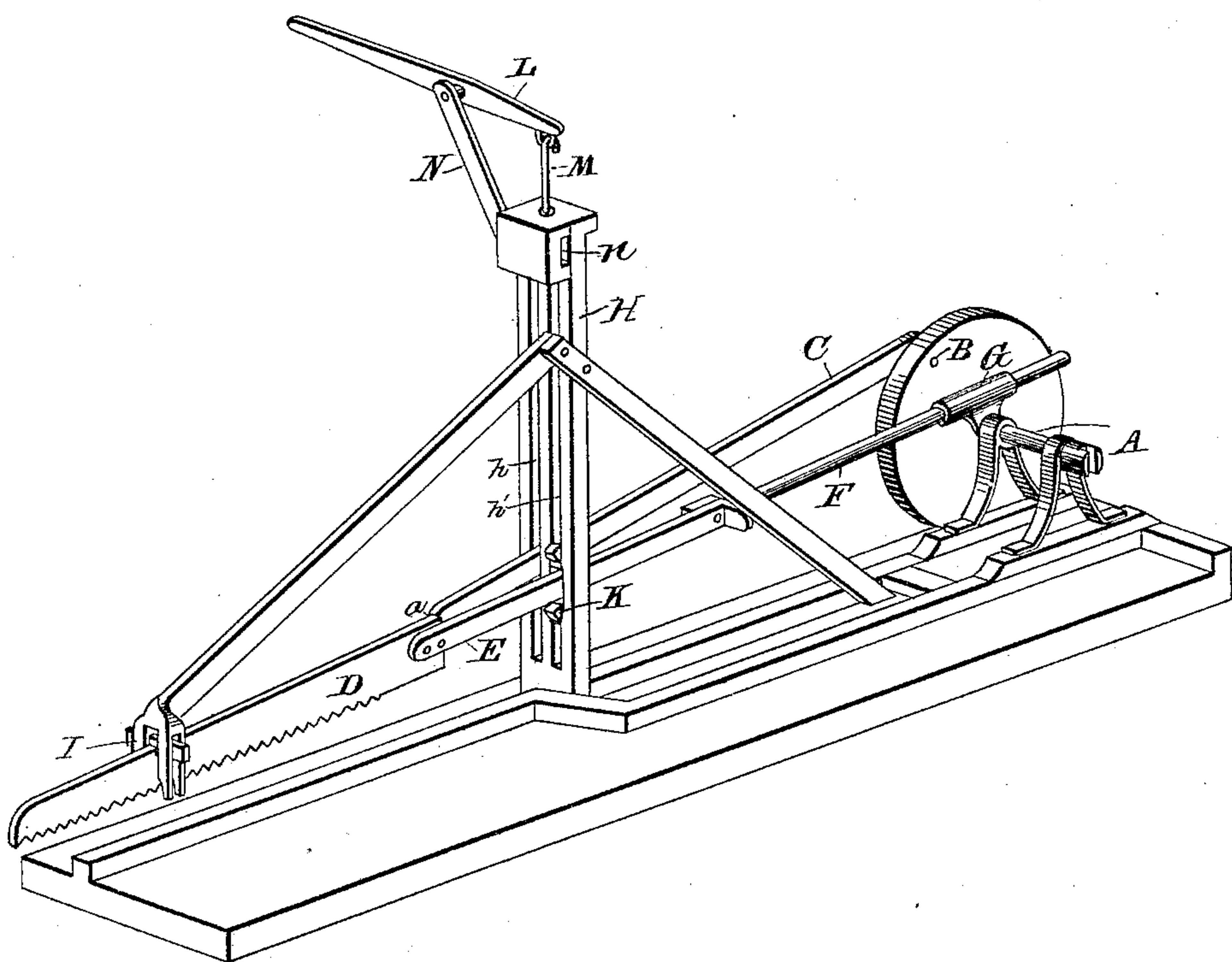


## SAWING MACHINE.

NO. 56,426.

Patented July 17, 1866.



# UNITED STATES PATENT OFFICE.

DONALD R. MACLENNAN, OF CINCINNATI, OHIO.

## IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. 56,426, dated July 17, 1866.

*To all whom it may concern:*

Be it known that I, DONALD R. MACLENNAN, of Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Crosscut-Sawing Machines; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

My invention consists in a certain novel, simple, and effective device for guiding the saw in its reciprocating motion, and in other devices whereby the saw can be fed to or relieved from the work by the simple operation of a detachable lever in the hands of the operator.

In the accompanying drawing my improvements are embodied in a perspective view of a crosscut-sawing machine.

A is the driving-shaft; B, the crank-wrist; C, the pitman, and D the saw. The saw is rigidly connected by means of the bar E to a sliding rod, F, which is fitted to reciprocate within a socket, G, the socket G being journaled to rock on the shaft A. The pitman is connected to the saw at *a* and slides within the slot *h* of the upright H.

I is the end guide for the saw. A sliding friction-roller frame, K, fitted to the slot *h'*, and connected to the hand-lever L by rod M, supports and guides the saw, the lever serving in the hands of the operator to elevate or depress the saw.

The lever is detachable at will, being supported on a fulcrum-piece or bracket, N, which

occupies, but can be easily withdrawn from, a socket, *n*. The lever is so arranged as to operate in a plane at right angles to the path of the saw, so as to be out of the way of the saw and pitman, and consequently both more accessible and more free from danger to the operator.

It will be seen that by the simple device of the rod F and rocking socket G the customary cross-heads and slides are dispensed with, that the pitman and saw are always in the same relative positions, and that the work is accomplished with the least amount of friction possible.

By the use of the lever L and rigid rod M the operator has full control of the saw at all times while in motion, and can at will force it in or out of the kerf, so as to utilize all available power, or to reduce the resistance to correspond with a reduction of force.

I claim herein as new and of my invention—

1. The rocking socket G, mounted directly on the drawing-shaft A, in combination with the guide-rod F, for the purposes specified.

2. The arrangement of the lever L, removable bracket N, socket *n*, rod M, and roller-box K relatively to each other and to the sawing apparatus A B C D E, as and for the purposes set forth.

In testimony of which invention I hereunto set my hand.

DONALD R. MACLENNAN.

Witnesses:

GEO. H. KNIGHT,  
JAMES H. LAYMAN.