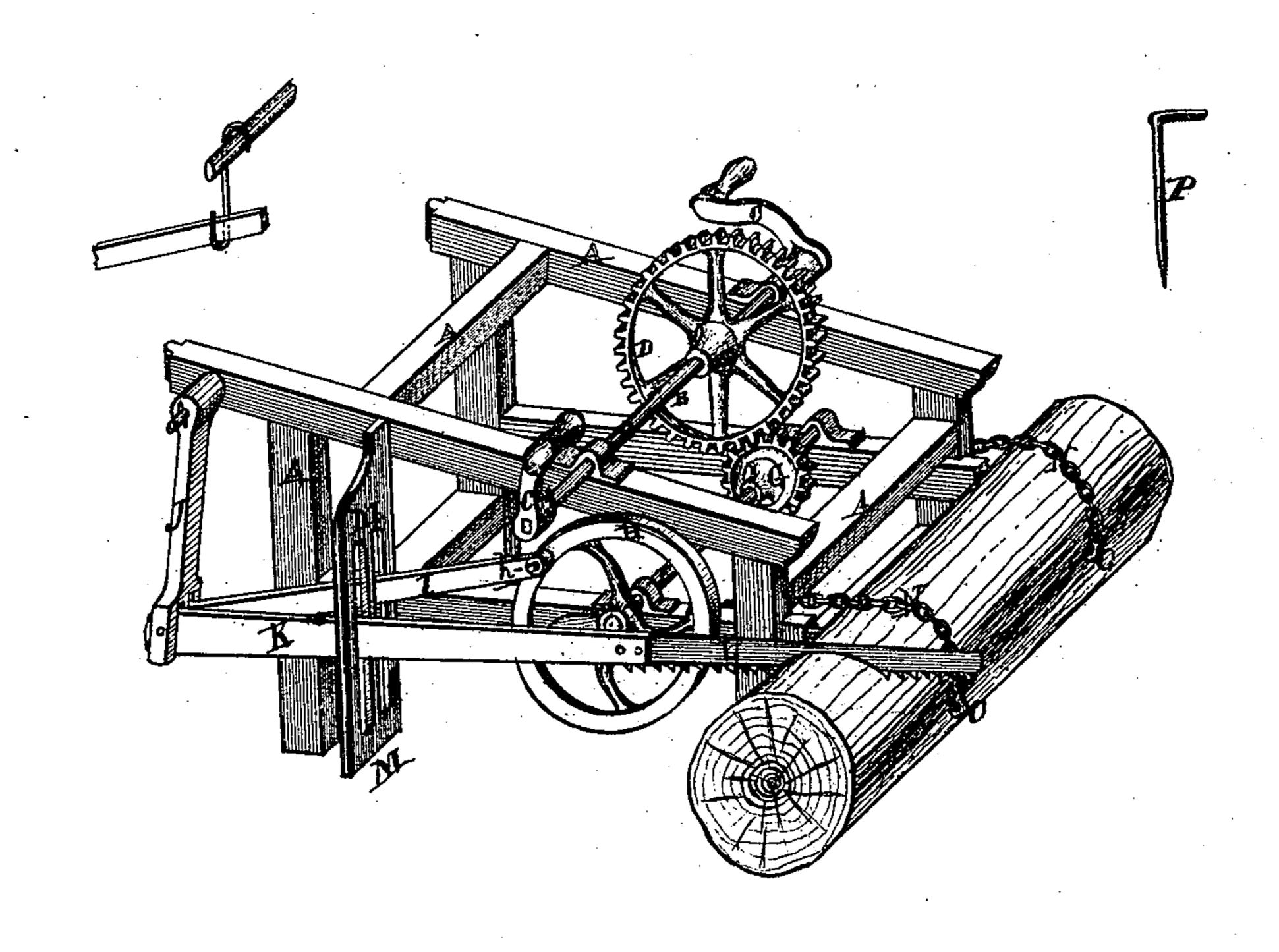
## Little & Lindberg,

Trag Saw.

NO. 103349.

Patented May 24.1810.



Witnesses: H. A. Oherts, Samb Bill Benjamin Little John Lundberg Per attorney Thos S. S. Sprague

## Anited States Patent Office.

BENJAMIN LITTLE AND JOHN B. LUNDBERG, OF COFFEE CREEK, IN-DIANA.

Letters Patent No. 103,349, dated May 24, 1870.

## IMPROVEMENT IN SAWING-MACHINE.

The Schedule referred to in these Letters Patent and making part of the same

To whom it may concern:

Be it known that we, BENJAMIN LITTLE and JOHN B. LUNDBERG, of Coffee Creek, in the county of Porter and State of Indiana, have invented a new and useful Improvement in Portable Drag Sawing-Machines; and we do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawing and to the letters of reference marked thereon, and being a part of this specification.

The drawing is a view of our invention in perspec-

tive.

The nature of this invention relates to an improved construction of portable drag sawing-machines, operated by manual power, and consists in the peculiar arrangement of the driving-gear, with relation to a pendulum, by which the necessary reciprocating motion is imparted to the saw-pitman.

In the drawing— A is the frame.

B, the main shaft, rotated by the hand cranks C. D is a spur-wheel, engaging with the pinion G on

the countershaft E.

H is a fly-wheel on the end of the countershaft E, to which, by the crank-pin h, is attached the connecting-rod I, by which motion is communicated to the pendulum J, to which pendulum is pivoted the sawpitman K, carrying the saw L.

M is a guide-frame, attached to the frame A, through which pass the connecting-rod and pitman, and which prevents any lateral motion of either.

N are chains, attached to the front of the frame, and provided at the end with dogs O, which hold the log in position for cutting.

When not in use, the saw may be suspended by a hook to the main shaft.

The rear standards of the frame A are provided with pins P, which may be driven into the ground or floor to hold the machine steady while in use.

The manner of operating this machine is very sim-

ple.

Being light and portable, it is carried to the log to be cut, which is made fast in front by the chains and dogs. The saw is then dropped into position, and the cranks C turned, by which an accelerated motion is imparted to the saw.

As shown in the drawing, this invention is to be

operated by manual power.

It may be also used as a stationary machine, when any power may be applied to it.

The advantages of this device are manifold:

Logs of any size may be cut by it without moving them. It renders sawing by manual labor less severe, and enables one or two men to do the same amount of sawing that could be accomplished by three or four times their number in the old method of sawing.

What we claim as our invention, and desire to se-

cure by Letters Patent, is-

The drag sawing-machine above described, consisting of the frame A, shafts B and E, gear-wheels D and G, fly-wheel H, connecting-rod I, pendulum f, pitman K, guide frame M, chains N, and dogs O, when each of said parts is constructed as described and shown, and all are arranged as and for the purpose set forth.

> BENJAMIN LITTLE. JOHN B. LUNDBERG.

Witnesses:

GEO. O. MANCHESTER, SAMUEL B. BELL.