

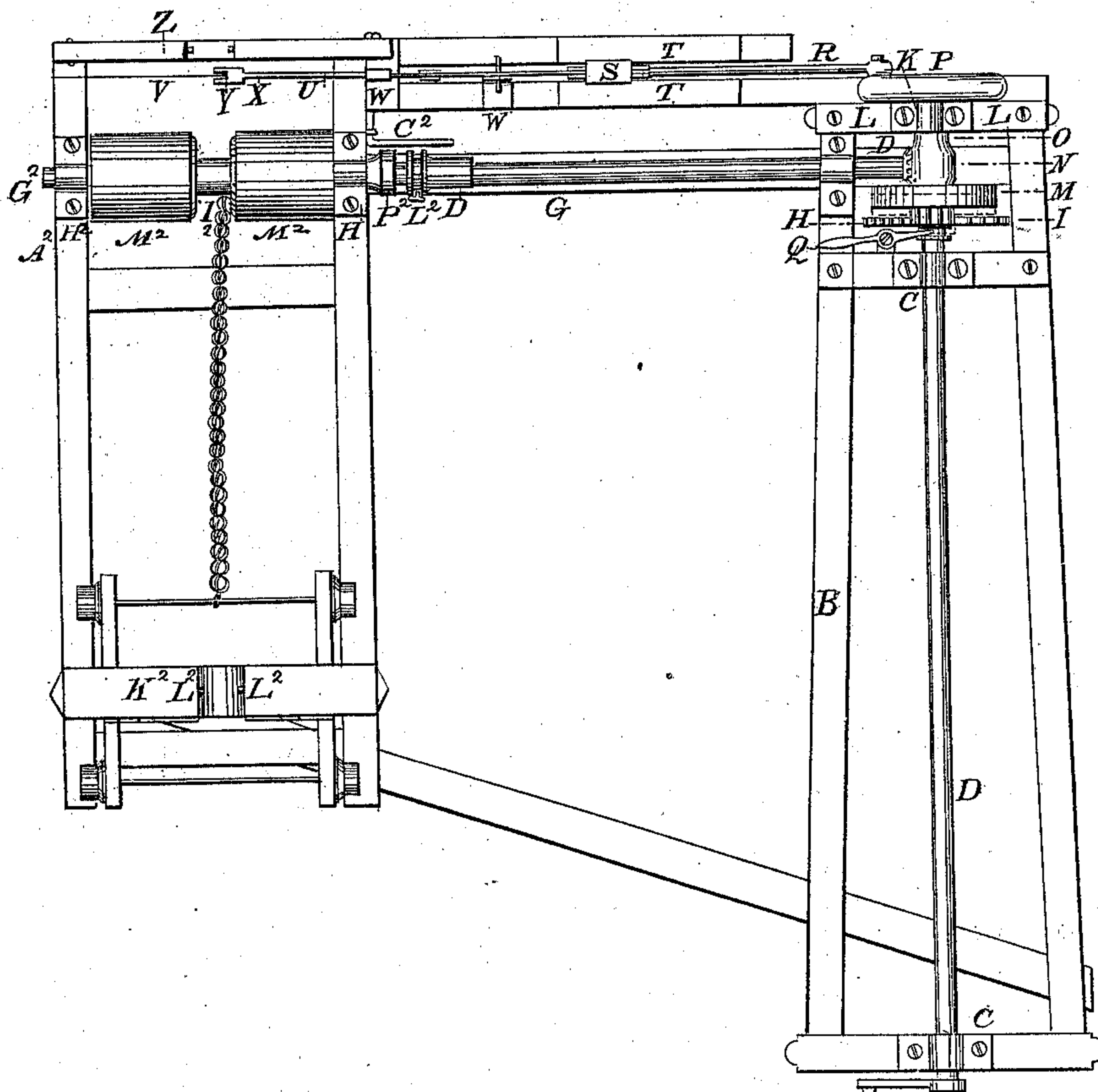
*P.L. Shepler,*

*Drag Saw.*

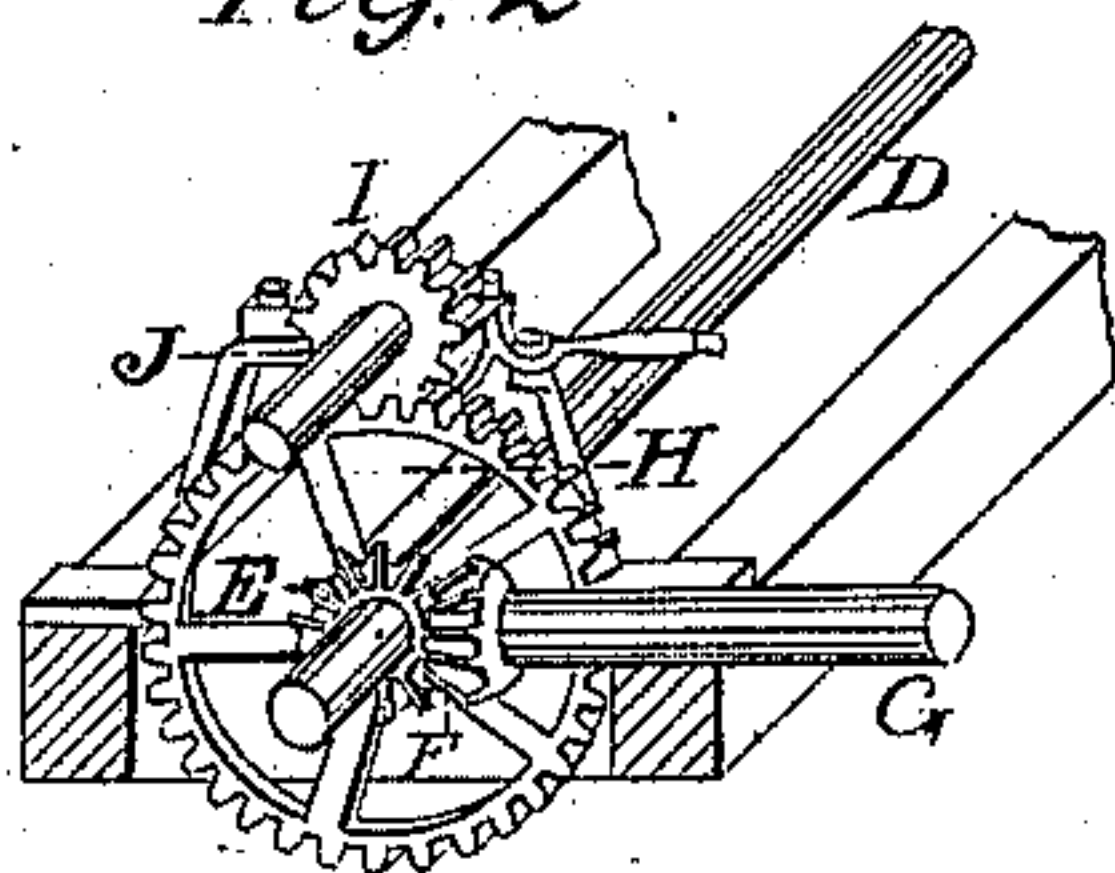
*N<sup>o</sup> 81,418.*

*Patented Aug. 25, 1868.*

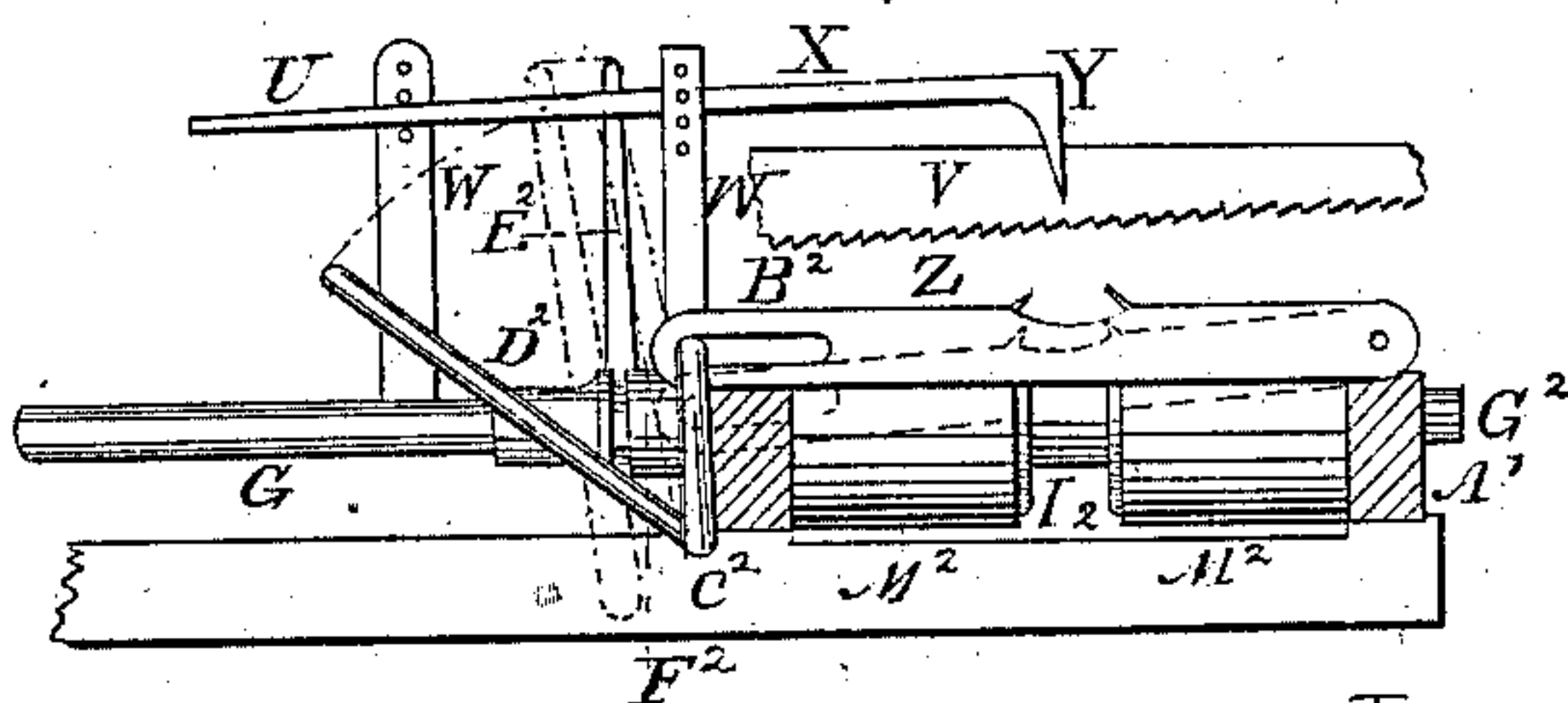
*Fig. 1*



*Fig. 2*



*Fig. 3*



*Witnesses*

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*H. F. Everts*

*Inventor*

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*Per Attorney*

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# United States Patent Office.

PIUS LEE SHEPLER, OF WHITEHOUSE, OHIO.

*Letters Patent No. 81,418, dated August 25, 1868.*

## IMPROVEMENT IN SAWING-MACHINES.

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

### TO WHOM IT MAY CONCERN:

Be it known that I, PIUS LEE SHEPLER, of Whitehouse, in the county of Lucas, and State of Ohio, have invented a new and useful Improvement in Sawing-Machines; and I do declare that the following is a true and accurate description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, and being a part of this specification.

Figure 1 is a plan view of my apparatus.

Figure 2 is a perspective view of the method of communicating motion.

Figure 3 is a side elevation of the saw-guide, and dog, and rest; also, showing drums.

The same letters indicate like parts in each figure.

The nature of this invention is to adapt any kind of power that may be desired, to driving circular saws and drag-saws, in such a manner that both may be used at the same time, or either separately, as required.

In order to accomplish this end, I construct a suitable frame, A, to sustain the working parts of the apparatus. Upon this frame A is secured the frame B, upon which runs, in suitable boxes, C, the driving-shaft D, to the outer end of which any desired power may be attached.

E is a bevel-gear, rigidly attached to this shaft, and engages with bevel-gear F, also rigidly attached to shaft G, and gives motion thereto.

H is a gear-wheel, also rigidly attached to the shaft D, and engages with the pinion I, and gives motion to the shaft J, which runs in suitable boxes, K, attached to the bearings L, placed upon the frame B.

The pinion I is loosely sleeved upon the shaft J, and should be attached to the band-wheel M, which, in turn, should be attached to the half of the clutch N, so that all would form but one piece in effect, and all loosely sleeved upon the shaft J.

The other half of the clutch, O, is rigidly attached to the shaft J, at the outer end of which should be attached the fly-wheel P.

Q is a crotched lever, intended to be used to engage and disengage the two halves, N and O, of the clutch.

The pitman R is connected by a proper wrist-pin to fly-wheel P, and, at its opposite end, to the cross-head S, which has a reciprocating motion between the ways T, supported upon proper bearings.

U is an arm, one end of which is attached to the cross-head S, while the other is secured to the drag-saw V, which passes between, and is held in place by the vertical guides W.

X is a lever, fulcrumed to the vertical guides W, its outer end being provided with a dog, Y, which is slotted, so that while assisting to hold the log being operated upon, it will also, by means of the slot, guide and steady the outer end of the drag-saw.

Z is a rest, pivoted to the carriage-frame A'', and provided with a slot, B'', within which works the arm of the curved lever C'', and by means of which the end of the log may be elevated or depressed at pleasure.

The shaft G is provided with a sleeve, D'', operated in its forward or backward movement by the lever E'', and forms one-half of a clutch, the other half, F'', of which is rigidly secured to the shaft G'', running in proper boxes, H'', upon the carriage-frame A''. Upon this latter shaft is rigidly fastened the spool I'', around which winds the chain or rope J'', the other end of which is attached to the carriage K'', which is constructed in the usual manner, and provided with dogs, L'', by means of which the log is held in place.

Upon either side of the spool I'', and upon the same shaft, are loosely sleeved the drums M'', which will revolve independently of each other, and upon which the log rests. By means of these drums, I am able to draw back the carriage without moving the log, as, the drums being sleeved, the shaft and spool are allowed to revolve without giving motion to the drum.

By means of a band-wheel, M, and a suitable belt, motion may be given to a circular saw when desired.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination of the drums M'', shaft G'', spool I'', chain J'', and carriage K'', all arranged to operate as herein described and shown.

2. The rest Z, when provided with a slot, B'', and operated by means of the curved and bent lever C'', all as and for the purpose described and shown.

Witnesses:

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