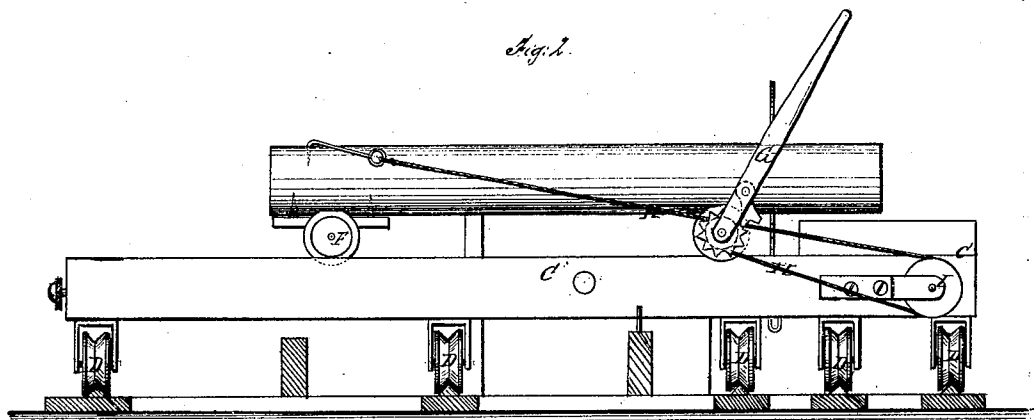
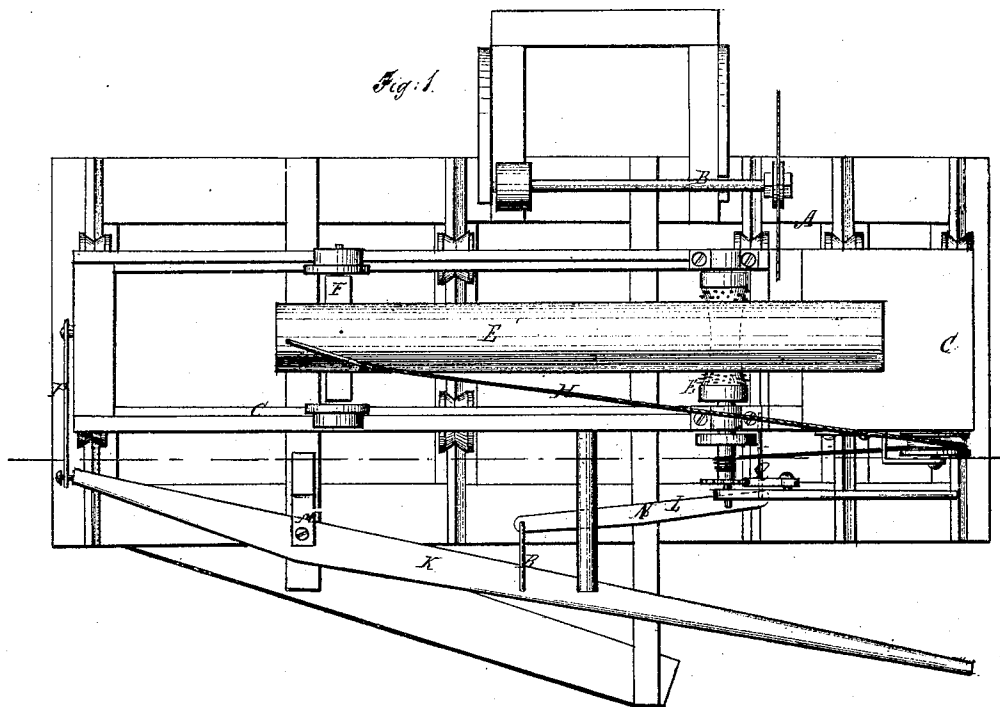


*F. Rhoad,*  
*Sawing Machine.*  
*No. 104,998.* *Patented July 5. 1870.*



Witnesses:

*Chas. Nida.*  
*S. J. Mabree*

Inventor:

*F. Rhoad*  
PER *Munn & Co*  
Attorneys.

# UNITED STATES PATENT OFFICE.

FREDERICK RHOAD, OF LIBERTY CENTRE, OHIO.

## IMPROVEMENT IN SAWING-MACHINES.

Specification forming part of Letters Patent No. **104,998**, dated July 5, 1870.

*To all whom it may concern:*

Be it known that I, FREDERICK RHOAD, of Liberty Centre, in the county of Henry and State of Ohio, have invented a new and Improved Sawing-Machine; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to improvements in sawing-machines for cross-cutting logs or timbers; and it consists in improved arrangements of feeding apparatus, both for feeding the logs lengthwise in front of the saw and to and from the saw.

Figure 1 is a plan view of my improved machine. Fig. 2 is a sectional elevation of the same.

Similar letters of reference indicate corresponding parts.

A represents the saw, and B the arbor thereof. They are arranged in the ordinary way.

C is the log-carriage, arranged perpendicular to the saw, and to move to and from it. For the latter purpose it is mounted on the wheels D, for which suitable tracks are provided in the ordinary way. The log-carriage is provided, near the saw, with a roller, E, with spikes to engage the log E', which is laid on it to be drawn to the saw when the roller is turned. The other end of the log is to rest on a small truck, F, running on the carriage to and from the saw, the said truck being pro-

vided with spikes, to be pressed into the log to hold it from slipping.

To feed the log forward, the roller E is provided with a lever, G, for turning it, and a cord, H; which winds on it when it is turned for moving the log. This cord passes over a guide-pulley, I, at one end of the carriage, and back to the rear end of the log, where it is hooked, as shown. By the use of this cord, in connection with the roller, the application of the force is such that the log cannot fail of being moved, as is sometimes the case when the roller only is used.

For moving the carriage forward and back, a long lever, K, and a short one, L, are used, the said levers being pivoted to the frame at M and N, and connected to the frame by links, and they are connected together by the link R, all arranged to act on the frame near each end, so as to move both ends alike, the said action being all produced by the one action of the link.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with the carriage C, of the feed-roll E, lever G, and cord H, all arranged for operation substantially as specified.

2. The combination, with the carriage C, of the levers K L, connected thereto and together, and arranged for operation substantially as specified.

FREDERICK RHOAD.

Witnesses:

E. T. COON,  
DANIEL MOORE.