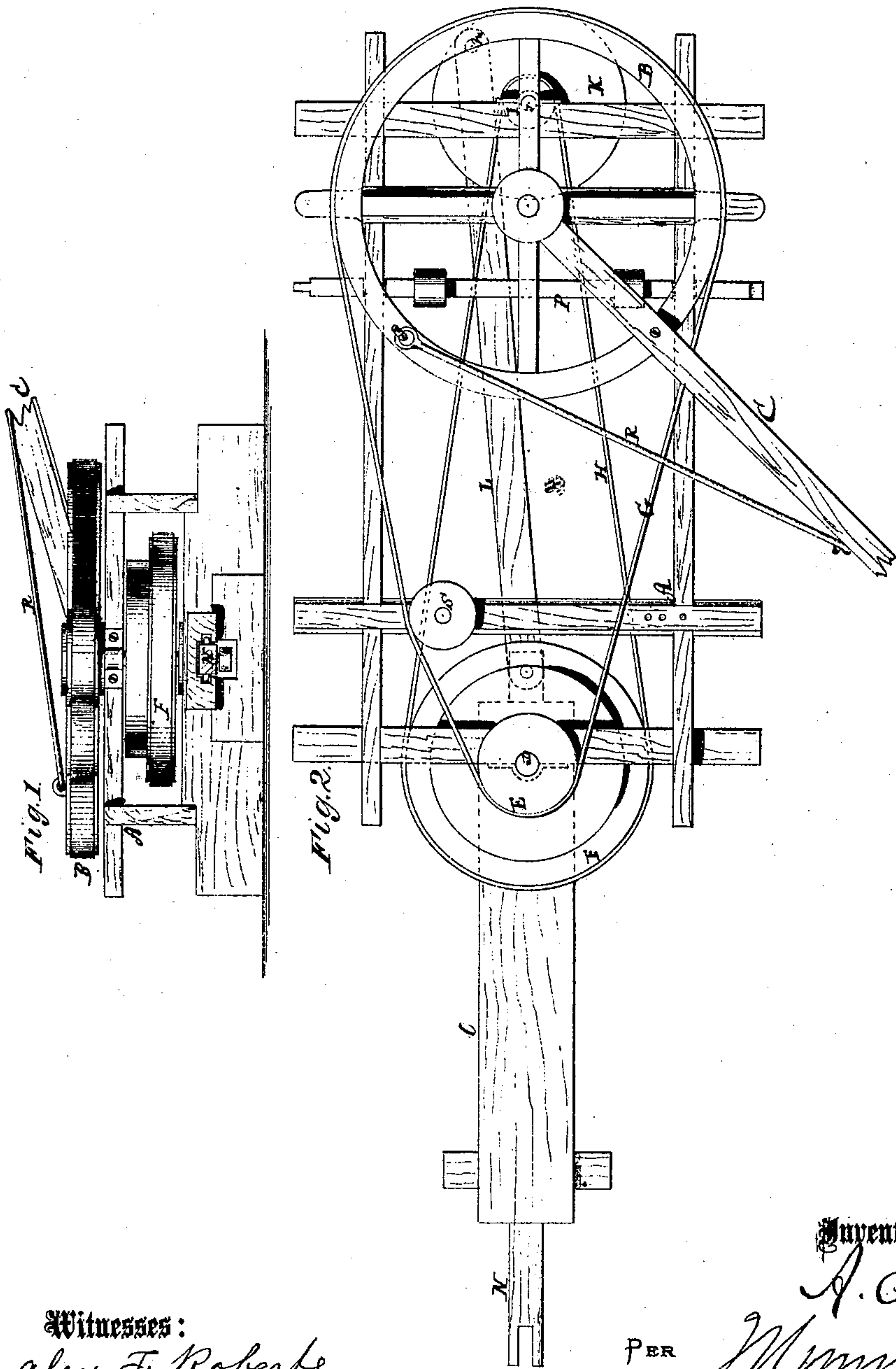


*A. Trone,*

*Horse Power.*

*No. 103,394.*

*Patented May 24. 1870.*



Witnesses:  
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# United States Patent Office.

ASA TRONE, OF NEBRASKA, OHIO.

Letters Patent No. 103,394, dated May 24, 1870.

## IMPROVED HORSE-POWER SAWING-MACHINE.

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

*To all whom it may concern:*

Be it known that I, ASA TRONE, of Nebraska, in the county of Pickaway and State of Ohio, have invented a new and useful Improvement in Combined Horse-Power and Sawing-Machines; and 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 drawing forming part of this specification.

This invention relates to a new and useful improvement in machines for sawing logs cross-cut by horse-power, the arrangement being such that the machine may be used for driving other machinery; and

The invention consists in the construction and arrangement of parts, as hereinafter more fully described.

In the accompanying drawing—

Figure 1 represents a top or plan view of the machine.

Figure 2 is a front-end view.

Similar letters of reference indicate corresponding parts.

A represents the frame, which is rectangular in form, made of wood or iron, and of suitable size and strength.

B is the driving or master-wheel, to which the power is applied by means of the lever C.

The shaft of this wheel drops into a step in the lower part of the frame, and revolves horizontally just above the top of the frame, so that the lever C sweeps over the entire machine.

At the forward end of the frame there is a vertical shaft, as seen at D, with a pulley, E, on its top end, near and above the top of the frame, and with a band-wheel F on its lower portion.

G is a belt from the master-wheel B, which passes around the pulley E, and revolves the shaft D and band-wheel F.

From the band-wheel F a belt, H, extends back be-

neath the master-wheel, around a pulley, I, which is attached to a vertical shaft, J, which carries the crank-wheel K.

L is a rod connected with the wheel K by a crank-pin, m, which rod extends forward beneath the machine, and connects with the slide N, to the end of which slide the saw is attached.

O is a trunk, covering the slide N, over which the horse steps in operating the machine. A quick, reciprocating motion is thus given the saw, which, for sawing logs or timber across the grain, is very effective.

P is a transverse shaft, which may be revolved from a pulley on the shaft D, for communicating motion to other machinery.

R is a draft-rod connected with the lever C, and with the rim of the master-wheel S in a tightening-pulley.

It will be seen that, by this arrangement, there are no gear or cog-wheels to break or get out of order, and that the machine will run without noise, and be most effective in its operation.

This machine is portable, and may be carried to the wood for sawing fire-wood, or for other purposes.

In sawing up a log or a tree, the machine may be moved along, or the log may be fed up to the saw on suitable ways provided for the purpose.

Having thus described my invention,

I claim as new and desire to secure by Letters Patent—

A portable sawing-machine, having the vertical shaft D, pulley, E, band-wheel F, pulley I, shaft J, and crank-disk K, arranged on the frame A, and with respect to the driving-wheel B, in the manner described.

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Witnesses:

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