(No Model.)

A. T. MORRIS.

Sawing Machine.

No. 234,886. Patented Nov. 30, 1880.

Fig. 1.

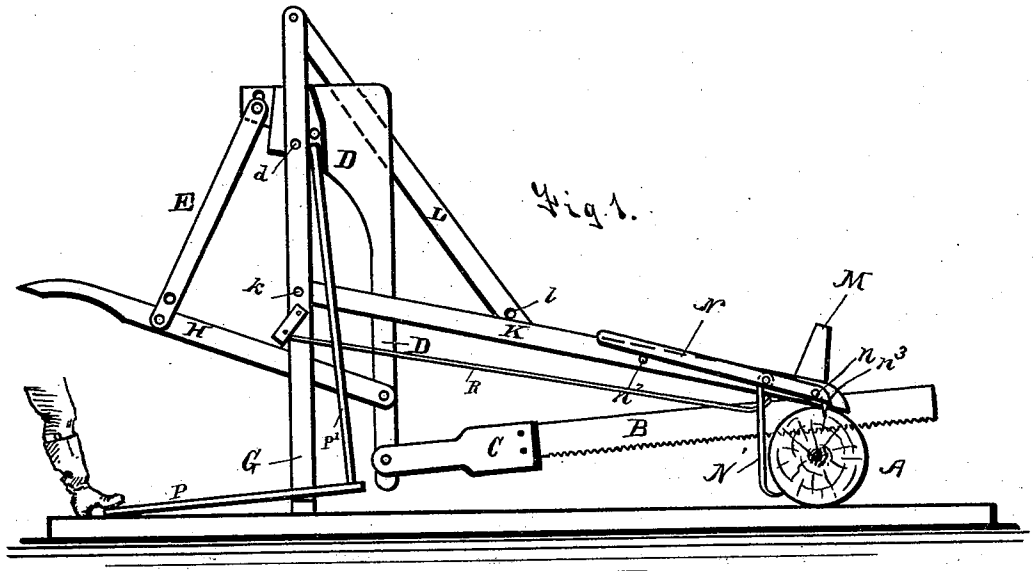
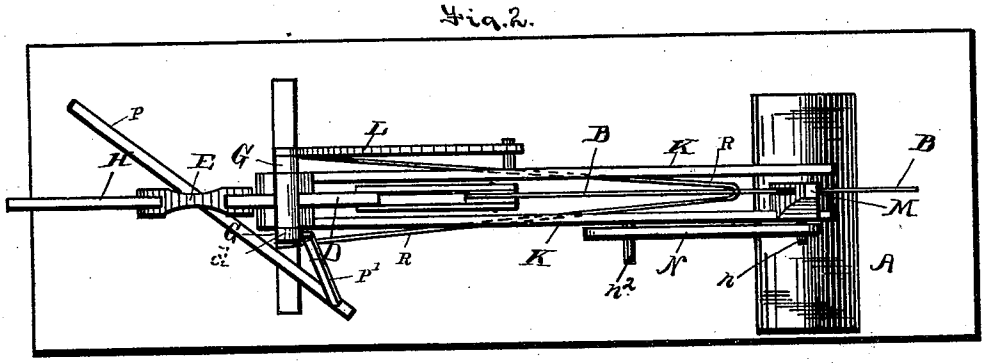


Fig. 2.



WITNESSES

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ALMON T. MORRIS, OF TIFFIN, OHIO.

SAWING-MACHINE.

SPECIFICATION forming part of Letters Patent No. 234,886, dated November 30, 1880.

Application filed August 9, 1880. (No model.)

To all whom it may concern:

Be it known that I, ALMON T. MORRIS, of Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Sawing-Machines; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

In the drawings, Figure 1 is a view, in side elevation, of a sawing-machine constructed according to my invention. Fig. 2 is a plan view of the same.

A represents the log in process of being cut. B represents the saw; C, the pitman connecting the saw with the pivotal lever D. This pivotal lever D is pivoted to the uprights G at *d*. One arm of the pivotal lever being connected directly to the pitman C, and also to the end of the lever H, the other arm of the pivotal lever is connected with the hand-lever near the handle by means of the connecting-rod E.

G G are two uprights, adapted to support the pivotal lever D and permit the same to operate between them. K K are frame-pieces extending from the uprights G G to the log. They are pivoted to the uprights G G at *k*, and are adapted to be raised or lowered at their outer extremities, as the size of the log may require.

L is a strap pivoted to the top of the uprights G G, and at the other end attached removably to the frame K K, to which it is also pivoted. It may be provided with several pin-holes, *l*, which will permit of its connection with the frame-pieces K K.

At the other extremities of the frame-pieces K K and over the log is attached the head-block or guide M, through which the saw travels until it is buried in the log. This head-piece or guide M keeps the saw in its proper place as it begins to enter the log.

For the purpose of temporarily attaching my saw-frame to the log, I provide a device very much like an ordinary cant-hook, as shown in Fig. 1, at N. It consists of a lever, N, pivoted to the frame-piece K at *n*, and provided with a hook, N′. At its outer extremity, and upon the under side of the lever N, it is also provided with a spike-pin, n^3.

When the hook N′ is driven into the log for the purpose of holding it to its proper position the lever N is sustained by the pin n^2 in the frame-piece K.

To assist in steadying the saw, and also to add weight to it at the point where it comes in contact with the log during the operation of sawing, I provide a rod, R, pivoted to the upright G, and having its other extremity resting upon the top of the saw immediately over the log. This rod may have a single arm attached to one of the uprights G, or it may be provided with two arms attached to the uprights G G.

P is a lever, pivoted to the foot of the upright G, at one end of which is attached an arm, P′. The upper end of this arm P′ is attached to the upright G.

The object of this portion of my device is to steady the frame-work of the machine during the operation of sawing, and is accomplished by placing the foot upon the outer extremity of the lever P, as shown in Fig. 1, when the base supporting the uprights G G will act as a fulcrum for this lever P, which, at its other extremity, is bearing against the arm P′, and is connected with the upper portion of the upright G.

The operation of my device is as follows: The head-piece M is placed on the log at the point where the same is desired to be cut. The lever N being free, the point of the hook N′ is placed against the log. The spike-pin n^3 rests upon the top of the log. The lever N is now raised, when the hook N′ is driven into the lower portion of the log and the spike-pin n^3 is forced into the top of the log. The lever N is now held in position by the pin n^2 in the frame K. The rod R is dropped upon the saw B, where it adds weight and materially assists in cutting. The foot of the operator is placed upon the lever P, as shown in Fig. 1, which operation, through the lever P′, steadies the top of the machine. The handle H is now manipulated until the log is sawed in two, when the operation is repeated.

By placing the pivot *d* at or near the under side of the pivotal lever D, as shown in Fig. 1, the saw is more quickly raised, and this

avoids the necessity of a handle, H, passing through the distance otherwise required to give the same length of sweep to the saw.

What I claim is—

1. The combination, with the bar K, pivoted at one end to the standard G, the free end of said bar adapted to rest on the log, of the cant-hook lever N, pivoted at one end to the bar K, said cant-hook lever having a cant-hook, N′, pivoted thereto and provided with a stud, n^3, on the lower edge of its short arm, and a stud, n^2, inserted in the bar K, for retaining the long arm of the cant-hook lever in place, substantially as set forth.

2. In a sawing-machine, the combination, with a vertical lever having its lower extremity pivoted to the saw-shank, and its upper extremity provided with an extension in rear of its fulcrum, of a handle having its forward extremity pivoted to the lower portion of the lever, and a connecting-rod having its upper extremity pivoted to said rear extension of the lever, and its lower extremity pivoted to the rear portion of the handle, substantially as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALMON T. MORRIS.

Witnesses:

JNO. CROWELL, Jr.,

W. E. DONNELLY.