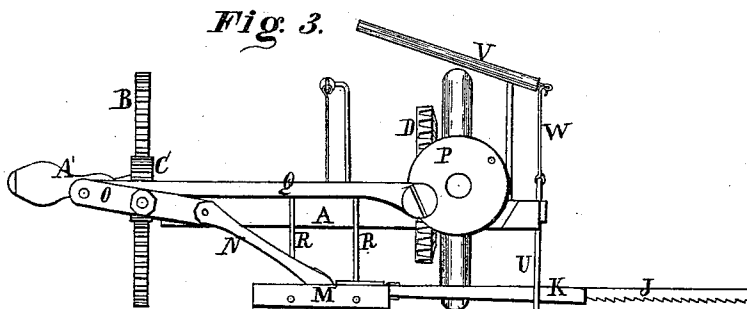
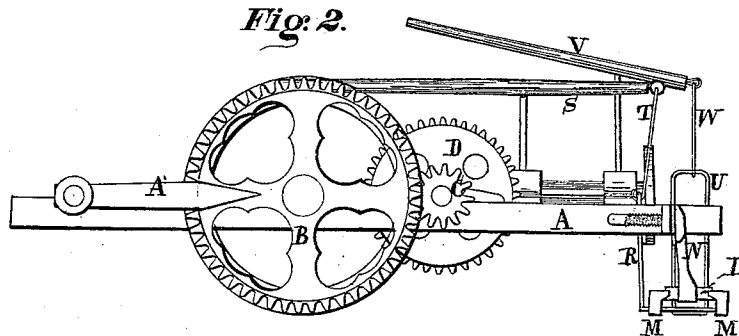
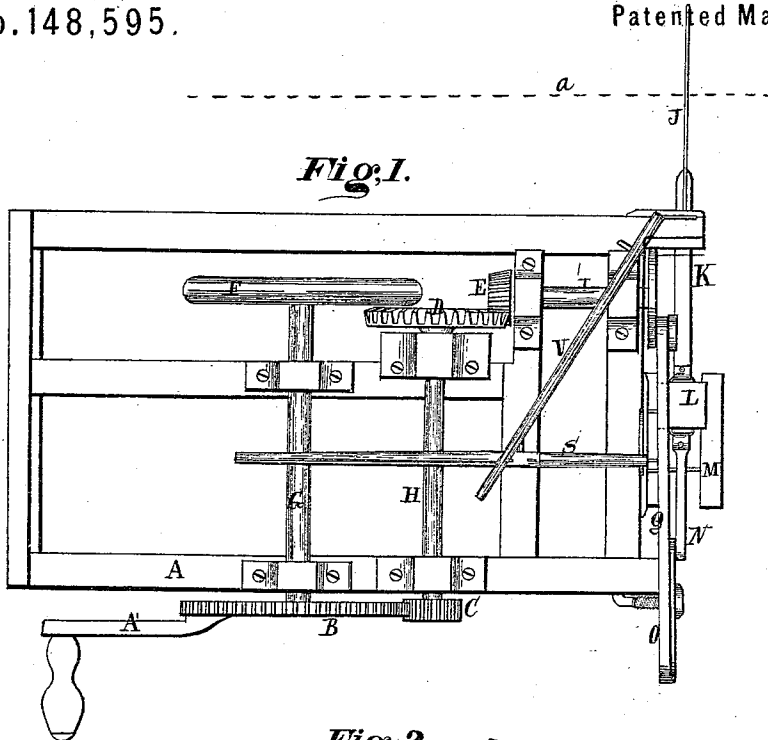


G. R. CANNON & T. CRAWFORD.
Hand Sawing-Machines.

No. 148,595.

Patented March 17, 1874.



Witnesses:
M. R. Wright.
A. D. Cornell.

Inventor:
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Attys.

UNITED STATES PATENT OFFICE.

GEORGE R. CANNON AND THOMAS CRAWFORD, OF SEVILLE, OHIO.

IMPROVEMENT IN HAND SAWING-MACHINES.

Specification forming part of Letters Patent No. **148,595**, dated March 17, 1874; application filed February 2, 1874.

To all whom it may concern:

Be it known that we, G. R. CANNON and TH. CRAWFORD, of Seville, in the county of Medina and State of Ohio, have invented certain new and useful Improvements in Hand Sawing-Machines, of which the following is a description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a plan view of the machine. Fig. 2 is a side view. Fig. 3 is a front elevation.

Like letters of reference refer to like parts in the several views.

The object of this invention is for cross-cutting logs, the machine being operated through certain mechanism by hand, the construction and operation of which are as follows:

A is a frame, in which is mounted the gearing for driving the saw. Said gearing consists of the cog-wheel B and pinion C, beveled wheel D, and pinion E, and fly-wheel F, all of which are secured to the shafts G H I, respectively, and in such relation to each other as shown in Fig. 1. J is the saw, secured in the end of the arm K. Said arm is attached to a cross-head, L, fitted to and moving in the ways or guides M. Also, to the cross-head is attached one end of a link, N, and the opposite end is attached to one arm of the lever O, pivoted to the end of the frame. The lever referred to is vibrated by the crank P, to which it is connected by the rod *g*. The cross-head and ways referred to are secured to an adjustable stirrup, R, fitted loosely to the end of the frame A, so that it is permitted to slide vertically for raising and lowering the cross-head and ways by means of the lever S, attached thereto by the cord T, for a purpose presently to be shown. U is a yoke, through which the

end of the beam or saw-arm K passes, whereby said arm and saw are raised or lowered, by raising or lowering the cross-head and ways through the lever V, attached thereto by the cord W.

The practical operation of the machine is as follows: The log to be operated upon is laid lengthwise of the frame, as indicated by the dotted lines *a*, Fig. 1. For this purpose the saw and cross-head are elevated by the levers S V, so as to bring the saw to the top of the log. The saw is now operated by turning the cog-wheel B, which, by its connection therewith, in the manner as above described, will cause it to work and saw into the log. The weight of the saw and arm is sufficient to feed it down into the log, and, when the log is cut through, the saw and cross-head are again raised by the levers S V, thereby allowing the log to be moved forward under the saw for another cut.

The machine is intended to be operated by hand, and, in consequence of the arrangement and combination of the gearing, it can be run with but little power applied to the crank A.

What we claim as our invention, and desire to secure by Letters Patent, is—

The stirrup R, yoke U, levers S V, cross-head L, and ways M, in combination with the pitman N, vibrating lever O, connecting-rod Q, and crank-wheel P, substantially as and for the purpose set forth.

GEO. R. CANNON.
THOMAS CRAWFORD.

Witnesses:

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