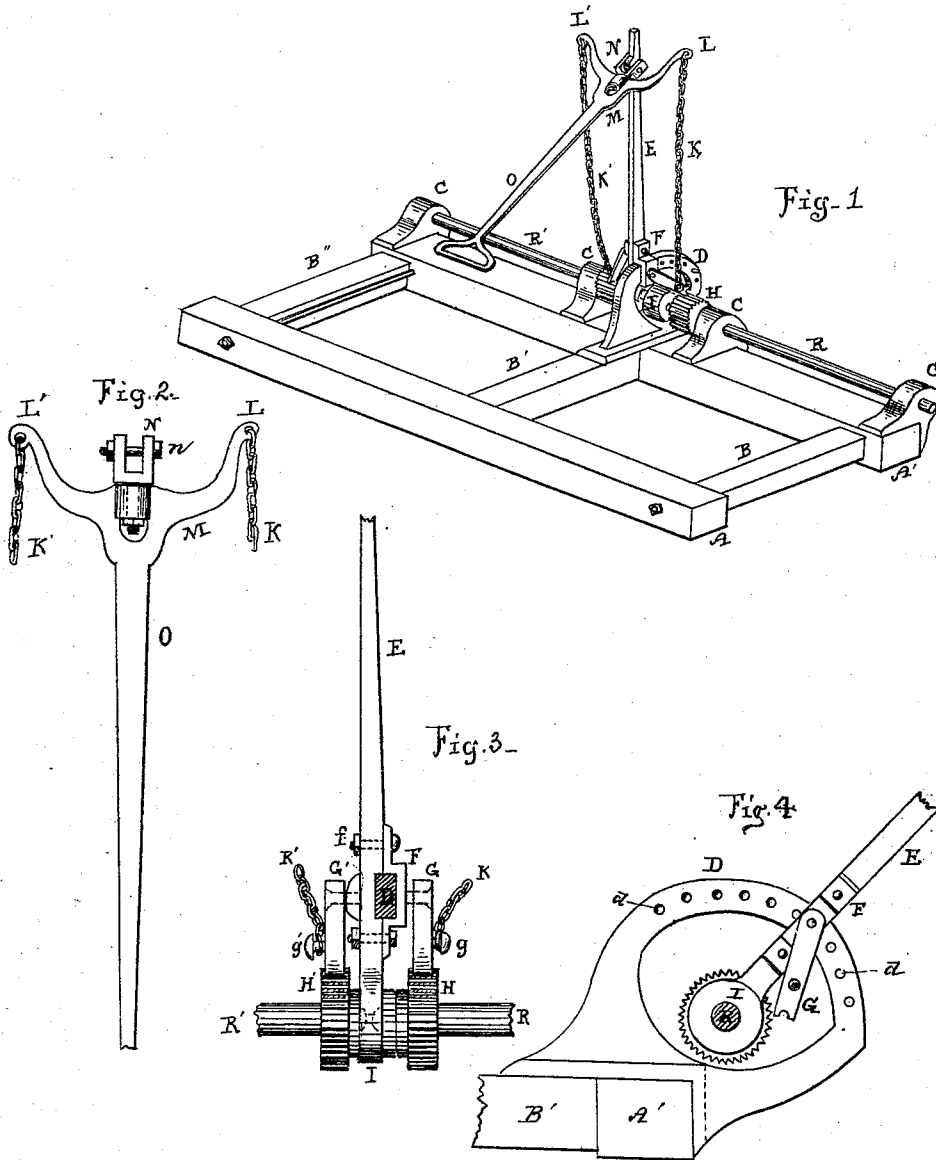


M. ALBERTSON.
Head-Blocks for Saw-Mills.

No. 151,738.

Patented June 9, 1874.



-WITNESSES-

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UNITED STATES PATENT OFFICE.

MILES ALBERTSON, OF ROHRSBURG, PENNSYLVANIA.

IMPROVEMENT IN HEAD-BLOCKS FOR SAW-MILLS.

Specification forming part of Letters Patent No. **151,738**, dated June 9, 1874; application filed April 29, 1874.

To all whom it may concern:

Be it known that I, MILES ALBERTSON, of Rohrsburg, in Columbia county and State of Pennsylvania, have invented certain Improvements in Head-Blocks for Saw-Mills, of which the following is a specification:

The object of this invention is to enable the sawyer, by means of a single hand-rod, which is provided with two arms, connected by a swivel-joint to an ordinary lever, and with two separate pawls, in such a manner as to give him full control for operating and adjusting the head-blocks, either simultaneously in forward or back motion, or one at a time, or give them a reverse motion separately at the same time with ease and accuracy without an assistant, to feed and adjust the log to the saw.

The accompanying drawings illustrate my improvement, in which—

Figure 1 shows my device for operating the head-blocks in connection with an ordinary carriage and set-rods and bearings. Fig. 2 shows the swivel-hinged hand-rod and parts on an enlarged scale. Fig. 3 shows the lever on the set-rods with the two ratchets and pawls and portions of the chain-connection. Fig. 4 shows the rod, ratchet, and pawl, and the lever in part with the graduated circular guide for adjusting the throw of the lever.

In order to illustrate the operation of my hand-rod in connection with the lever and pawls, I show a pair of ratchets, H H', on their respective set-rods R R', and bearings C mounted on an ordinary carriage used in saw-mills, marked A A' B B' B''. The central circular guide D, Fig. 4, with its perforations *d* for the check-pins, is to adjust the stroke of the lever E. This lever has the ordinary boss I for a fulcrum over the two separate ends of the said set-rods.

I do not deem it necessary to show the head-blocks with their rack and pinion and dog, jointly operated by the action of the ratchets on the set-rods, for the purpose of holding, adjusting, or feeding the log to the saw, as these parts are not claimed by me. I shall therefore confine my description to my improved manner of operating the ratchets that give motion to the head-blocks.

I employ a hand-rod, O, Fig. 2, which has a perforated boss or head, M, to receive the

round stem, connected with a clevis-hinge, N, connected to the lever E by a pivot-bolt, *n*, by which connection the lever is actuated back and forth on its fulcrum I and over the circular guide D. The combination of the head M and hinge N forms also a swivel-joint, by which the hand-rod can be revolved. The head of this rod is provided with two arms, L L', with a terminal eye, to which a chain, K K', is attached, or its equivalent, to operate the several pawls G G', one on each side of the lever E, and over the ratchets H H', with which they engage. These pawls swing freely on their pivots, and have each a headed pin, *g g'*, to which the chains, or their equivalent, K K' are connected, and governed by their connection with the arms of the hand-rod.

This arrangement enables the sawyer from his central stand-point to operate the ratchets single-handed, in full view of the scale and index on the sides of the head-blocks, so that he can readily move one end of the log in either direction, or feed it up to the saw, at pleasure. In short, by a twist or sudden jerk, he can throw one or both pawls on one side or the other, or reverse them, so as to act simultaneously in one direction, or alternately in opposite directions, or hold one or the other off, while only one is engaged to operate in either direction.

Thus, by the agency of this swivel action, in connection with an ordinary lever and pawls, the functions of three different levers can be performed, and an assistant can be dispensed with. It is, besides, simple, efficient, and readily managed, without special skill or complication of parts, and is deemed both a novel and highly useful invention.

I am aware of the patent of Dennis Lane, No. 44,100; but the devices therein shown I do not claim.

What I claim as my invention is—

The hand-rod O, having a swivel-head, M, and arms L L', in combination with the stem or clevis-hinge N, lever E, double-acting pawls G G', and chains K K', or their equivalents, arranged substantially in the manner and for the purpose specified.

MILES ALBERTSON.

Witnesses:

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