HENRY R. MARTIN.

Improvement in Head-Blocks.

No. 115,492 Patented May 30, 1871.

Fig. 1.

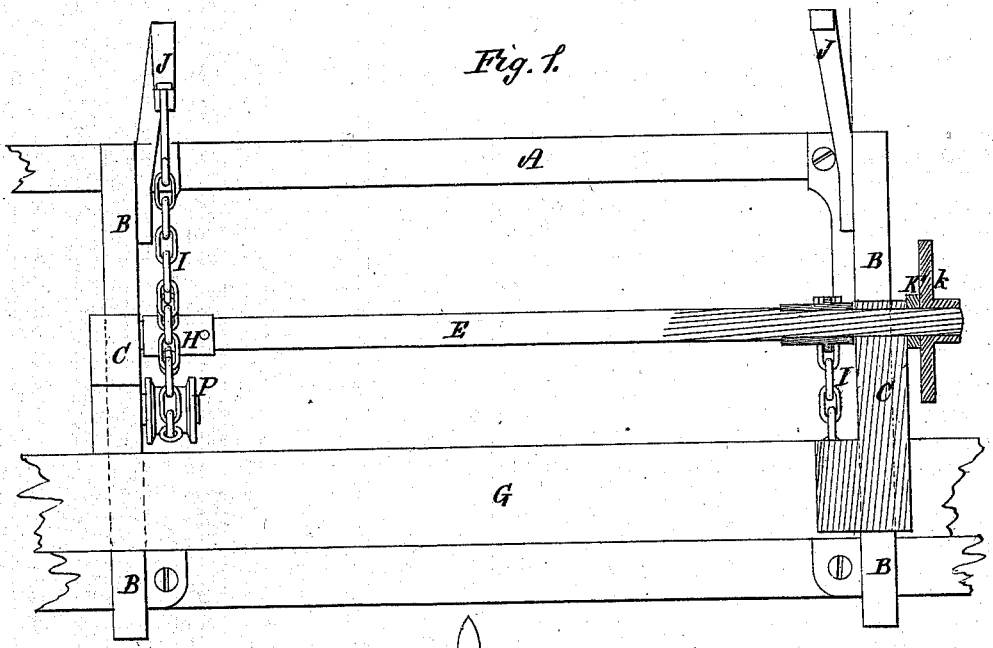
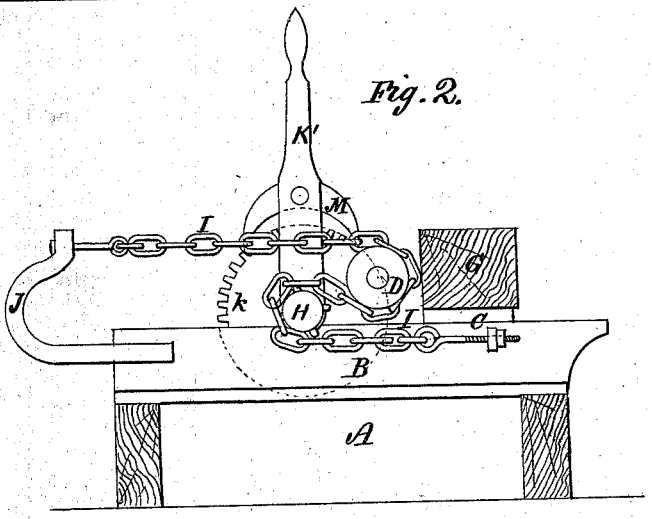


Fig. 2.



Witnesses.

Frank Fuller

Edward Griffith

Henry R. Martin.

by his Attorney

Frederick Curtis.

UNITED STATES PATENT OFFICE.

HENRY R. MARTIN, OF HILLSBOROUGH, NEW HAMPSHIRE.

IMPROVEMENT IN HEAD-BLOCKS.

Specification forming part of Letters Patent No. 115,492, dated May 30, 1871.

To all to whom these presents shall come:

Be it known that I, HENRY R. MARTIN, of the town and county of Hillsborough, in the State of New Hampshire, have made an invention of certain new and useful Improvements in Saw-Mill Mechanism; and do hereby declare the following to be a full, clear, and exact description thereof, due reference being had to the accompanying drawing making part of this specification, and in which—

Figure 1 is a plan, and Fig. 2 a vertical and transverse section of my improvement.

The log supporting and feeding or "setting" portion of the mechanism of a mill for sawing logs into boards, &c., consists, in general, of a long bed or carriage traveling in a path parallel to the axis of revolution of the saw, and upon which is erected the head-block, so called, which consists of two beams or blocks applied transversely to its upper part, the setting-beam which drives forward or feeds the log to the saw resting and sliding upon these transverse beams.

Nature and Purposes.

The purpose of my present invention is to originate a powerful, efficient, and easily-operated means of advancing or retracting the setting or feeding beam above named with respect to the head-block and the saw; and to this end I employ two chains, which travel about pulleys pivoted one to each end of the carriage, the opposite extremities of these chains being affixed, respectively, to the front and rear sides of the head-block, and being operated by sprocket-wheels mounted upon a long shaft which revolves in bearings also applied to the rear part of the head-block, as hereinafter explained, the revolutions of this shaft, in either direction, having the effect of imparting sliding movements of the setting-beam upon the head-block in a corresponding direction.

Construction and Operation.

The drawing accompanying this specification represents at A the lower frame or traveling-carriage of a log-feeding mechanism, this bed being deposited upon the platform or stage surrounding the saw, and being caused by suitable means to traverse the same in a path parallel to the line of revolution of the saw.

In carrying out my present improvements, I mount upon the top of the carriage A two transverse beams, B B, one to each end thereof, and securely bolt them in place thereupon. Upon the upper surface of these beams or ways I deposit the long bar G, usually denominated the setting-beam, and which slides thereupon and is disposed parallel to the longest plane of the carriage A, while to the rear side of each end of this bar I secure a block, C, which overlaps the adjacent way B, a spool-pulley, D, being mounted upon the inner face of each block, as represented. E in the drawing represents a long shaft disposed in longitudinal alignment with the carriage A, and revolving in bearings formed in or applied to each rear extremity of the beams B B, a sprocket-wheel, H, being mounted upon each end of the said shaft. I I in the accompanying drawing represent two chains, one to each end of the beam C, one end of each chain being affixed in an adjustable manner to the front portion of each beam B, while the rear end is secured to the upper termination of a curved standard or post, J, erected upon the rear end of such beam, such chain being passed about the adjacent pulley D and sprocket-wheel H, as shown in Fig. 2 of the drawing. To one extremity of the shaft E I affix a gear-wheel, K, and also mount upon it an upright vibratory arm or standard, K′, carrying a double-acting pawl, M, which takes into the teeth of a gear at one or the other of its ends, at the option of the operator, by means of a lever which is pivoted to such arm, and whose lower end enters a notch cut centrally in the upper edge of the pawl.

Pushing the standard or arm in one direction, the operator drives the carriage or bar G in a like direction; consequently the log resting upon the beams B B and abutting against the said carriage advances to or retreats from the saw.

A suitable dog is to be pivoted to the shaft E, and so as to take into and back the setting-beam in a given position while the log is being carried past the saw, while one or both

ends of each chain are to be secured to the beams B B in an adjustable manner, in order that the slack may be readily taken up.

Advantages.

The chains I I, attached and operated substantially as herein explained, constitute a powerful and equable means of feeding a log to the saw and holding it firmly in position while being sawed.

The device is very durable, cannot be disarranged, is easily operated, and may be produced at low cost; and one important feature attaching to it is the fact that no back-lash exists.

Claim.

I claim—

The chains I I and sprocket-wheels H H, mounted and operating, as hereinbefore explained, to actuate the log feeding or setting carriage of saw-mills.

HENRY R. MARTIN.

Witnesses:

SOLOMON MCNEIL,

C. F. GREENLEAF.