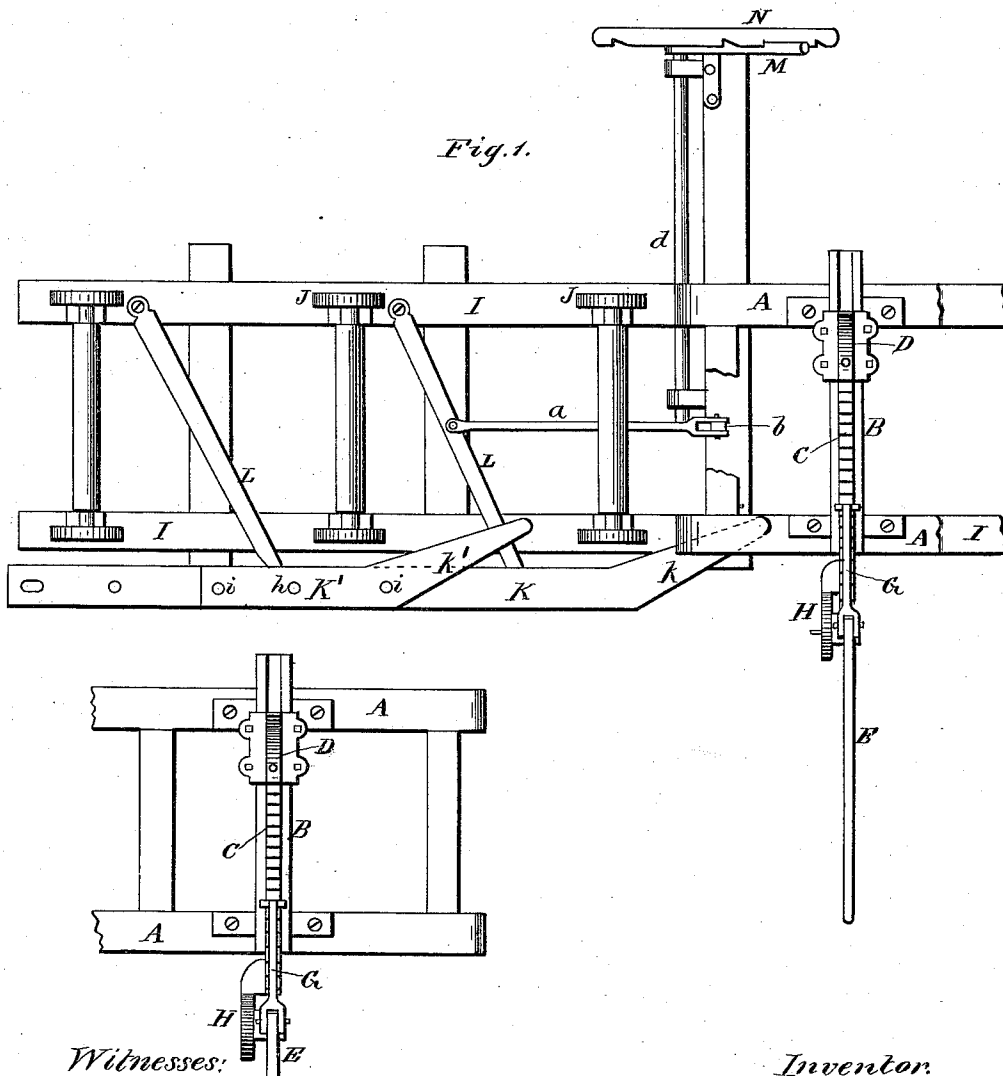


W. G. HEARN.
Saw-Mill Head-Blocks.

No. 152,748.

Patented July 7, 1874.



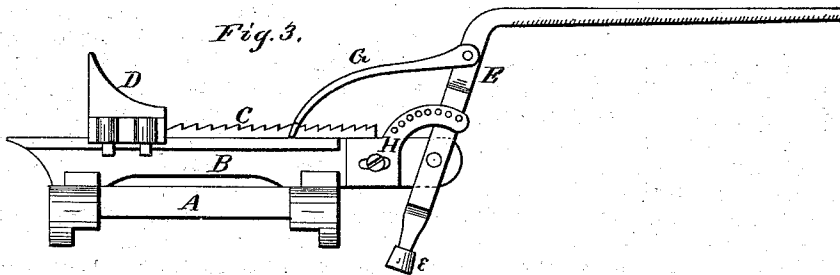
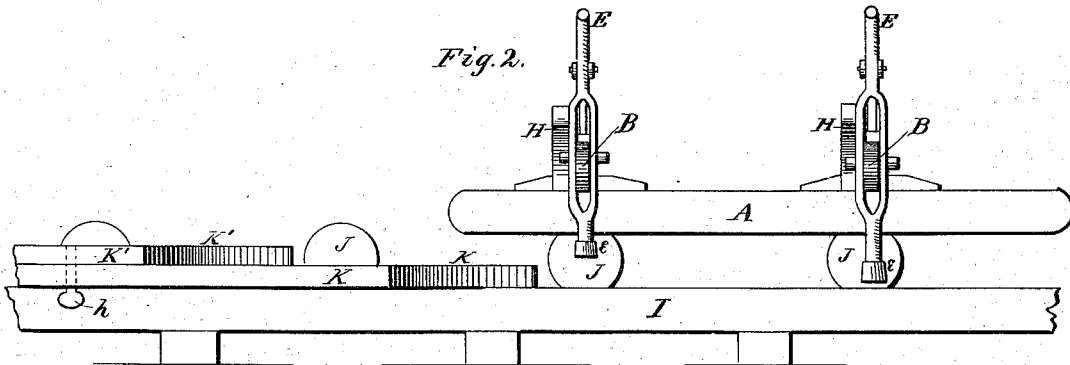
Witnesses:
Henry N. Miller
H. J. Du Hamel

Inventor:
W. G. Hearn.
Per H. J. Du Hamel
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Inventor:

Wm. G. Hearn.
Per. N. S. Abbott.
Attorney.

UNITED STATES PATENT OFFICE.

WILLIAM G. HEARN, OF DYER'S STATION, TENNESSEE, ASSIGNOR, BY MESNE ASSIGNMENTS, OF TWO-THIRDS HIS RIGHT TO JOHN C. A. GRIER AND SAMUEL H. THOMAS, OF SAME PLACE.

IMPROVEMENT IN SAW-MILL HEAD-BLOCKS.

Specification forming part of Letters Patent No. **152,748**, dated July 7, 1874; application filed June 2, 1874.

To all whom it may concern:

Be it known that I, WILLIAM G. HEARN, of Dyer's Station, county of Gibson and State of Tennessee, have invented certain new and useful Improvements in Saw-Mill Head-Blocks, of which the following is a specification:

The nature of my invention consists in the construction and arrangement of set-works for saw-mills, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a plan view of my set-works for saw-mills. Fig. 2 is a side elevation of the same, and Fig. 3 is an end view of the log-carriage.

A represents the log-carriage, upon which are two head-blocks, B B. Each head-block is grooved longitudinally on its upper surface for the reception of a rack-bar, C, which is permanently attached to the standard D, and slides therewith back and forth on the head-block. At the rear end of each head-block is pivoted an L-shaped lever, E, the upper end of which extends towards the rear, as shown. The vertical part of the lever is enlarged and slotted, so as to embrace the rear end of the head-block, and is there pivoted to the same. G represents a pawl, the front end of which is constructed so as to fall into and grasp the rack-bar C, and the rear end is forked to straddle the lever E, and be pivoted thereto below the angle. By means of these devices either standard may be moved forward by hand, as desired, and the motion of the lever is limited by means of pins inserted in holes on a segmental plate, H, which is adjustably attached to the side of the head-block. I represents the bed, provided with a series of wheels or rollers, J J, upon which the carriage A moves back and forth. On the rear side at one end of the bed is a "setting-bar," K, connected by means of two or more parallel pivoted bars, L L, to the front part of the bed. One of these bars is, by a rod, a, connected with a crank, b, upon the end of a shaft, d, which extends forward to a suitable point in front of the bed, and has upon its front end a

lever, M, by which it is operated, said lever being arranged to take into a curved rack-bar, N. The outer edge of the setting-bar K is perfectly parallel with the line of the log-carriage, except at the end where it forms an incline, k, as shown in Fig. 1. On top of the bar K is placed a second setting-bar, K', having a corresponding incline, k', at one end. The bar K' is fastened to the bar K by means of two dowel-pins, i i, and a headed screw or pin, h, which latter passes down through a slot in the bar K, and is turned to lock the bar K' thereon. The bar K' may be moved on said bar K according to the distance between the head-blocks on the carriage. By the movement of the lever M, the setting-bars K K' are moved and set at any desired distance from the line of movement of the log-carriage, and as the carriage moves, rollers e e, placed upon the lower ends of levers E E, simultaneously strike the two inclines k k', and, moving outward on the same, turn the levers on their pivots, so as to move the head-block standards D D forward the desired distance. As the carriage returns, after the log has been sawed, the levers fall back of their own weight, when the rollers e e pass inward along the inclines, and as the carriage moves forward again the standards and the log are again set in the same manner, and so on, the setting being always completed before the log reaches the saw.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The adjustable setting-bar K, having the incline k, and provided with the adjustable setting-bar K', having the incline k', in combination with levers E E for operating the standards D D, substantially as herein set forth.

2. The combination, with setting-bars K K', of the bars L L, rod a, crank b, shaft d, lever M, and rack-bar N, all substantially as and for the purposes herein set forth.

In testimony that I claim the foregoing as my invention I hereunto affix my signature this 29th day of May, 1874.

W. G. HEARN.

Witnesses:

SAMUEL H. THOMAS,
J. C. A. GRIER.