T. E. Chandler,

Head Block.

No. 97,357. Patented Nov. 30. 1869.

FIG. 1.

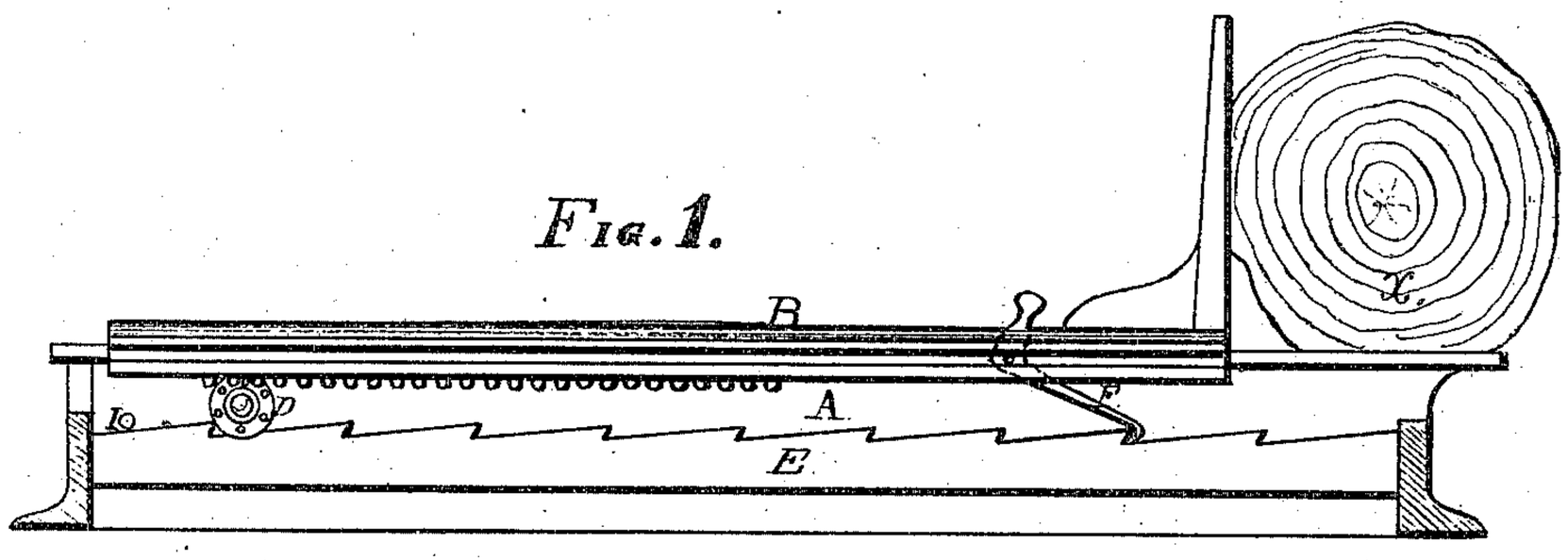


FIG. 2.

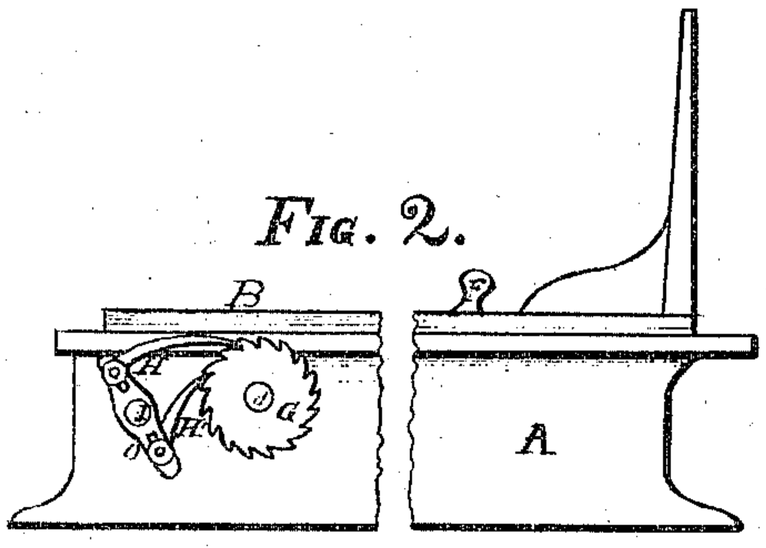
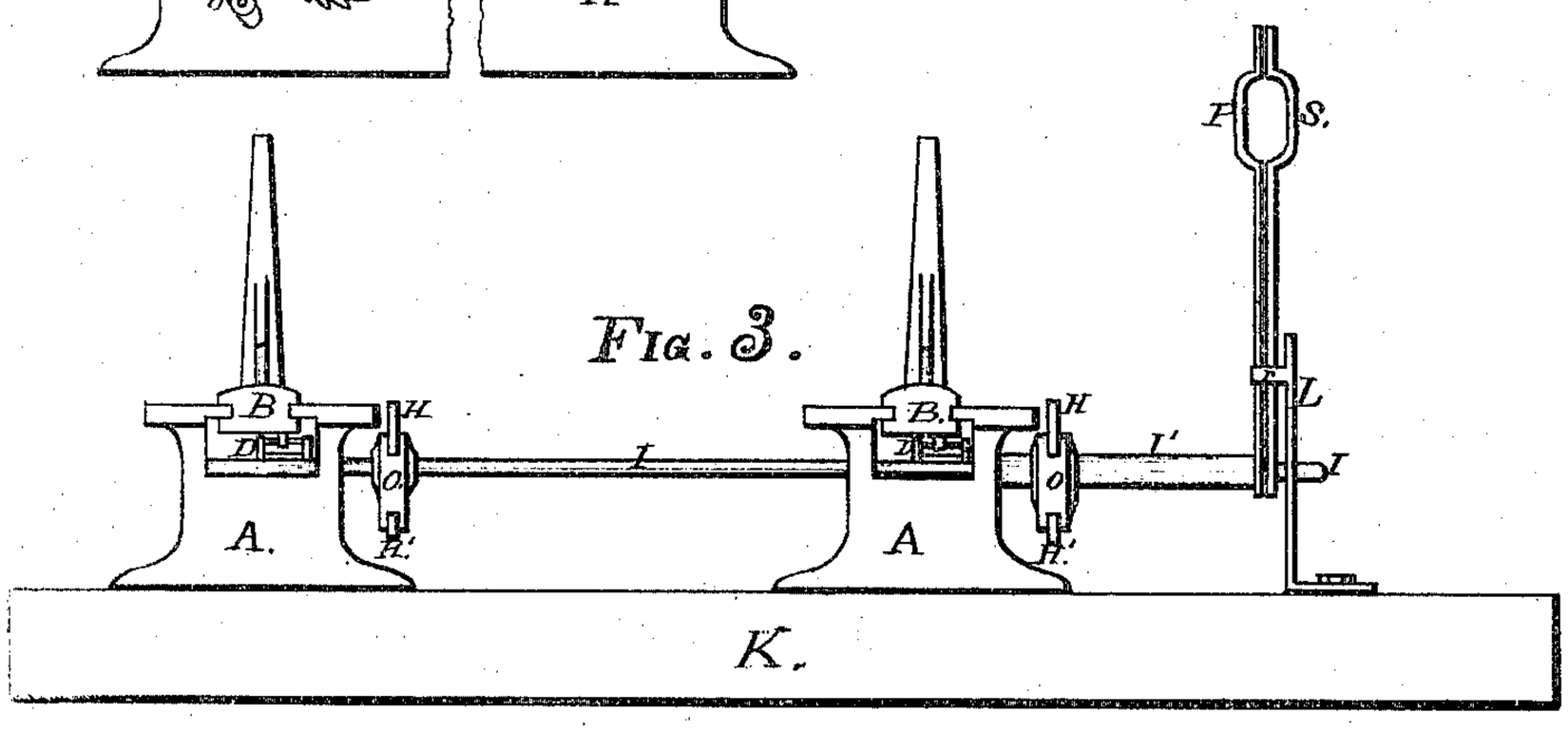


FIG. 3.



WITNESSES.

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THOMAS E. CHANDLER, OF INDIANAPOLIS, INDIANA.

Letters Patent No. 97,357, *dated November* 30, 1869.

IMPROVEMENT IN SAW-MILLS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS E. CHANDLER, of Indianapolis, in the county of Marion, and State of Indiana, have invented new and useful Improvements in Head-Blocks for Saw-Mills; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon, making part of this specification.

My invention relates to mode of moving and adjusting the log to the saw in saw-mills, and consists in arranging the devices, by which the knees are actuated to move the log, in such manner that the log may be moved up to the saw in a parallel line with it, as in sawing boards, or that either end of the log may be set forward, as in sawing fence-posts or other tapering timbers; the levers by which the device is actuated being situated at the head end of the carriage, so as to be under the control of one attendant, who is not required to change his position to set the log.

Figure 1 is a vertical longitudinal section of the head-block, taken just inside of one of the side plates of the bed or frame.

Figure 2 is a side elevation of the head-block, the middle portion being cut out, in order to shorten the figure.

Figure 3 is a side view of the log-carriage, showing end views of the head-blocks and the arrangement of my device for moving and adjusting the log.

Similar letters of reference indicate corresponding parts in the several figures.

The following description will enable skilled artisans to make and use my invention.

K is the log-carriage, on which the head-blocks are placed.

The head-blocks are composed of the bed or frame A and the knees B, the latter being grooved in the sides, to receive and slide on the tongues or flanges, formed in the top plate of the bed A, as shown in fig. 3.

The log X rests on the beds A, and is moved up and held to the saw by means of the knees B.

The knees are furnished with a cog-bar, C, fig. 1, on the under side, which engages with a pinion, D, on a short shaft, J, having its bearings in the two sides of the bed or frame A.

One end of shaft J projects through the side of the frame, far enough to receive the ratchet-wheel G, which is fixed on the projecting end of the shaft, as shown in fig. 2.

The knees B are actuated to move the log up to the saw by means of pawls H H′, hung in short levers O, fixed on the hollow rod I′, and on the long rod I, that engage with the ratchet-wheel G, motion being imparted to the pawls by means of the levers P and S, which are fixed, by their lower ends, to the hollow rod I′ and rod I, respectively, by which the attendant gives a reciprocating rotary motion to these rod

The long rod I extends through both head-blocks, as shown in fig. 3, one end of which rests in the upright L, near the fixed head-block, the other end passing through the movable head-block, so that the latter may be moved back and forth, as may be required, for logs of various lengths.

The rod I is grooved or key-seated, so that the lever O, in which the pawls are hung, may be moved to correspond with the head-block.

The short levers O are slotted, near the ends, in which the pawls H H′ are hung, so that the latter may be moved to or from the rods, in order to adjust the reach of the pawls to actuate the ratchets G alike.

A ratchet-bar, E, is attached to the inside of one of the side plates of the bed A, the notches in which are the same distance from the saw-end of both head-blocks, and a hooked lever, F, is hung in the knee B, so as to engage with the notches in the ratchet-bar E, for the purpose of setting the knees at the same starting-point, without requiring adjustment by the figured scale, usually made on the upper surface of the bed A.

It will be readily understood, that by moving both of the levers, P and S, simultaneously, both ends of the log will be moved up to the saw, in a parallel line with it, as in sawing boards; and that by operating either of the levers P S separately, either end of the log may be moved forward, as may be required, as in sawing fence-posts or other tapering timber.

I am aware of the patent granted to Charles Roberts, January 21, 1868, for improvement in saw-mills, and make no claim to the devices therein set forth.

Having thus fully described my invention,

What I claim as new, and desire to secure by Letters Patent, is—

The arrangement, herein described, of levers P S, shaft I, and hollow shaft I′, in connection with levers O, pawls H H′, ratchet G, and pinion D, for actuating the knees B, as set forth.

THOMAS E. CHANDLER.

Witnesses:

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