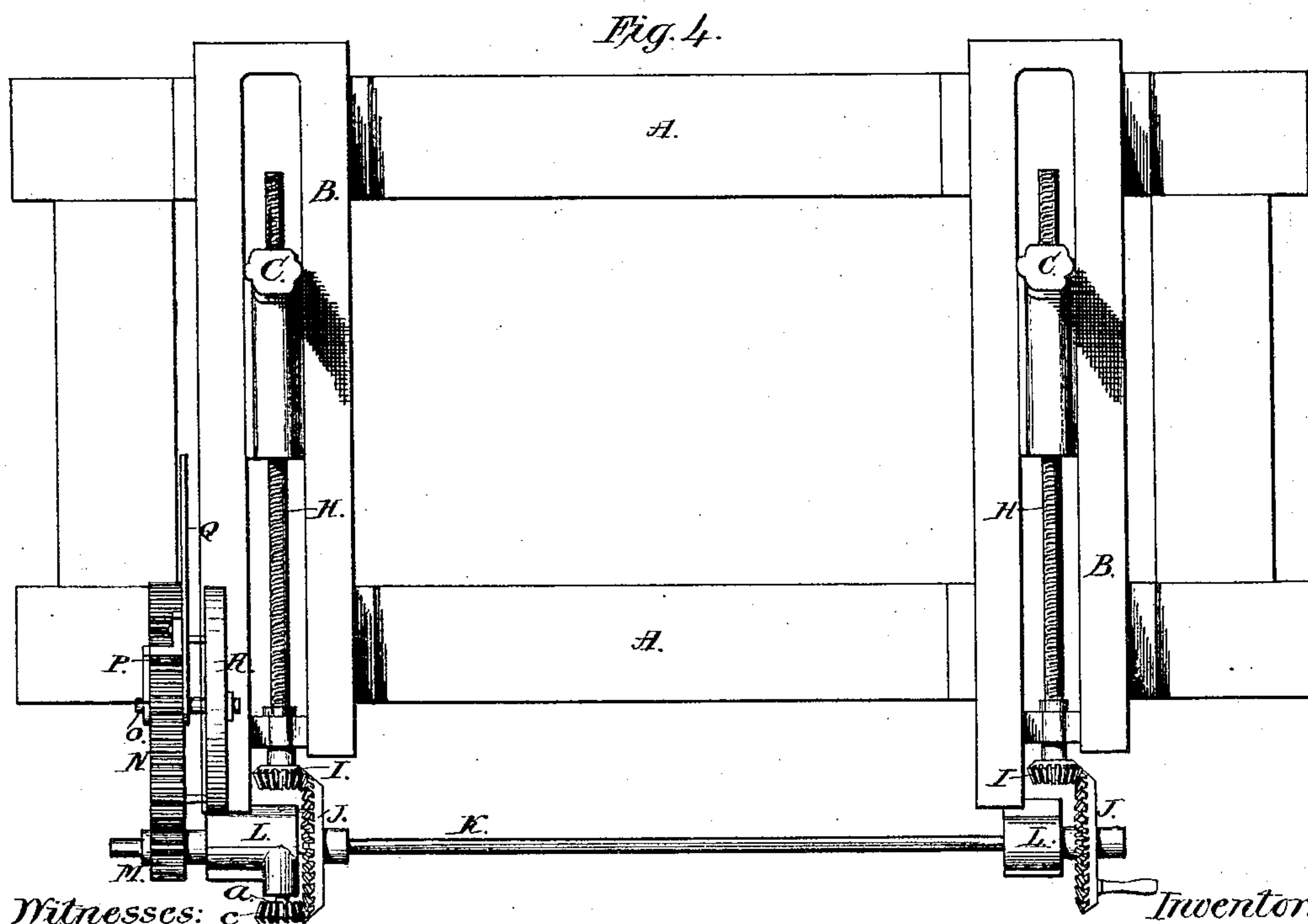
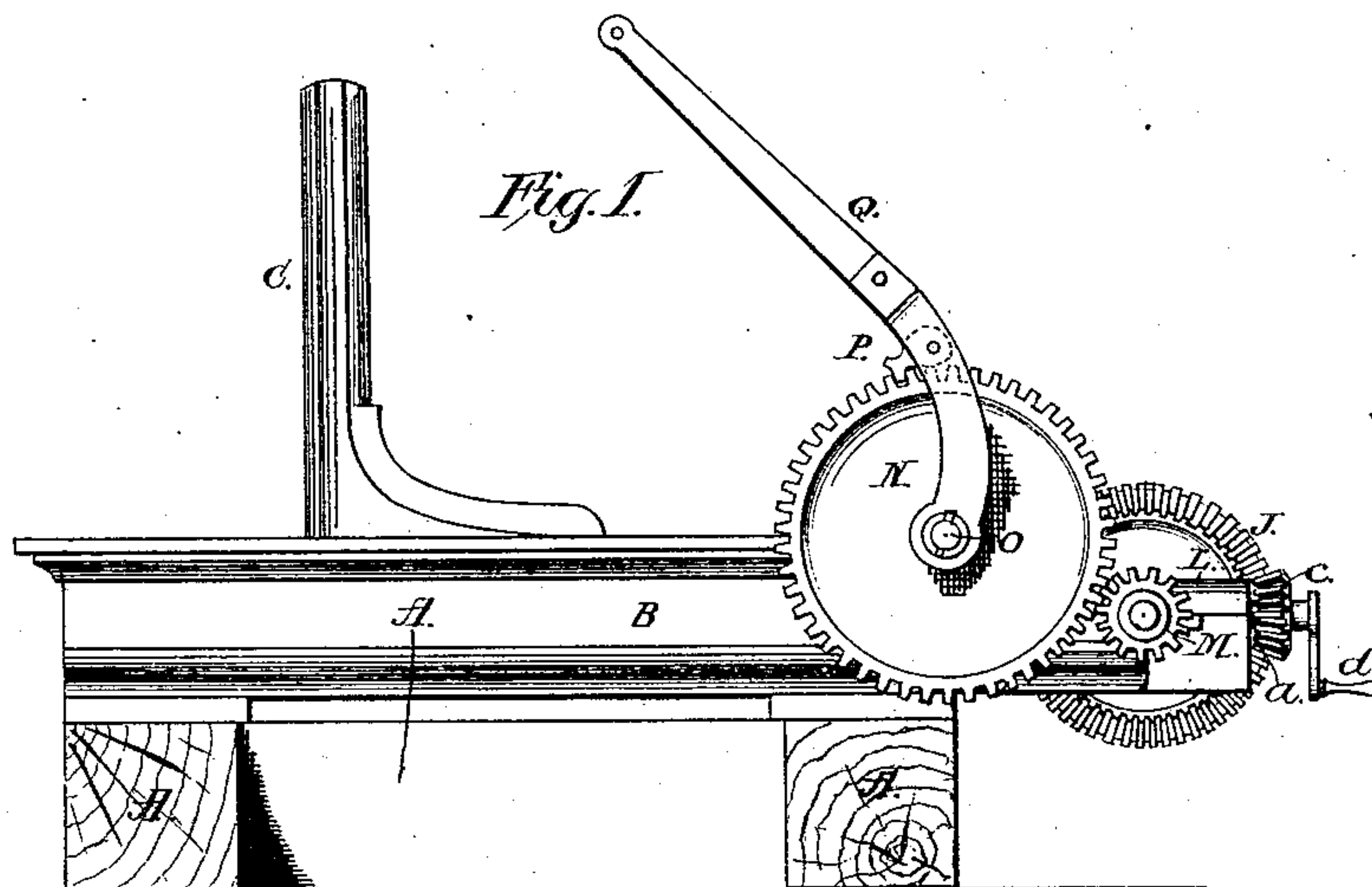


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Saw-Mill Head-Blocks.

No. 157,043.

Patented Nov. 17, 1874.



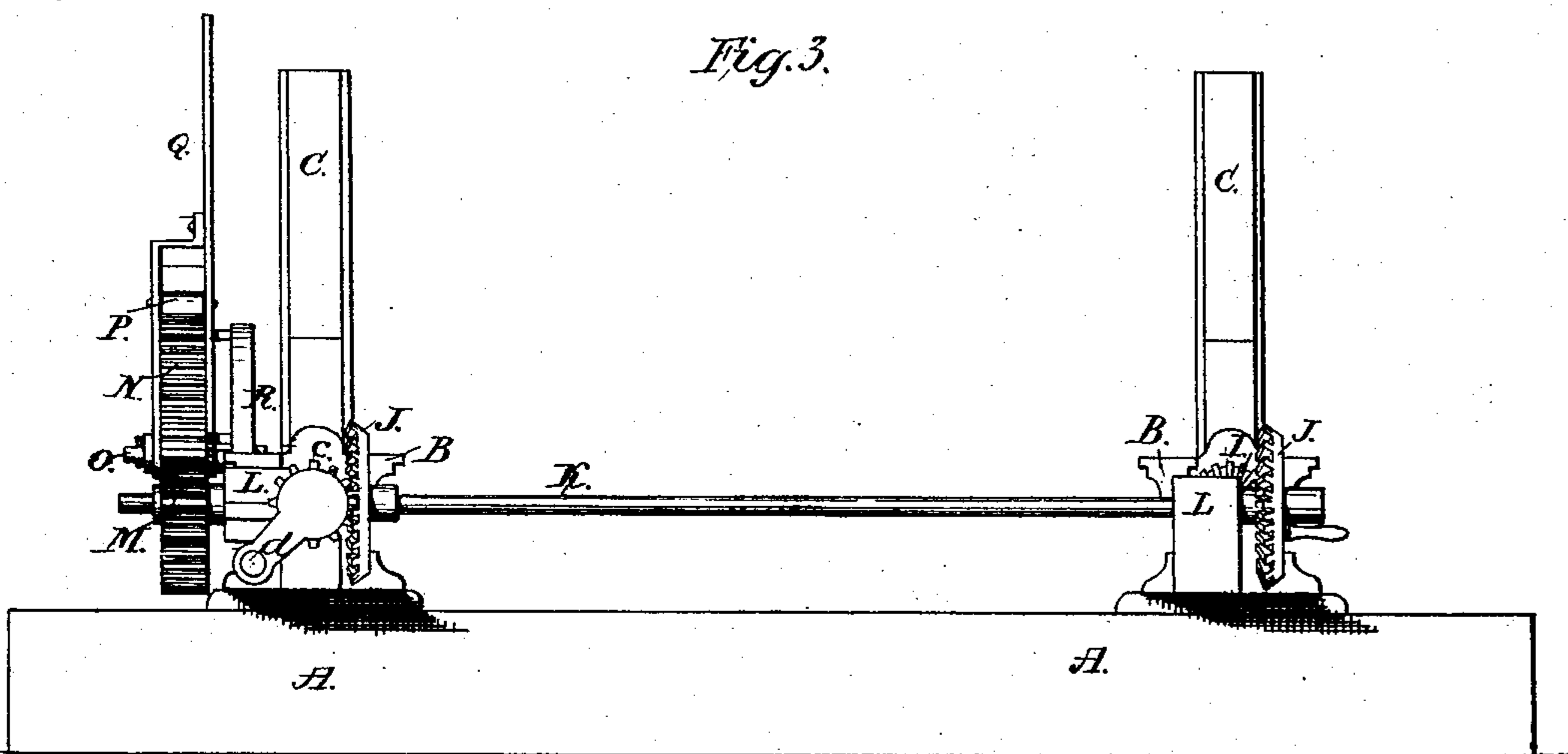
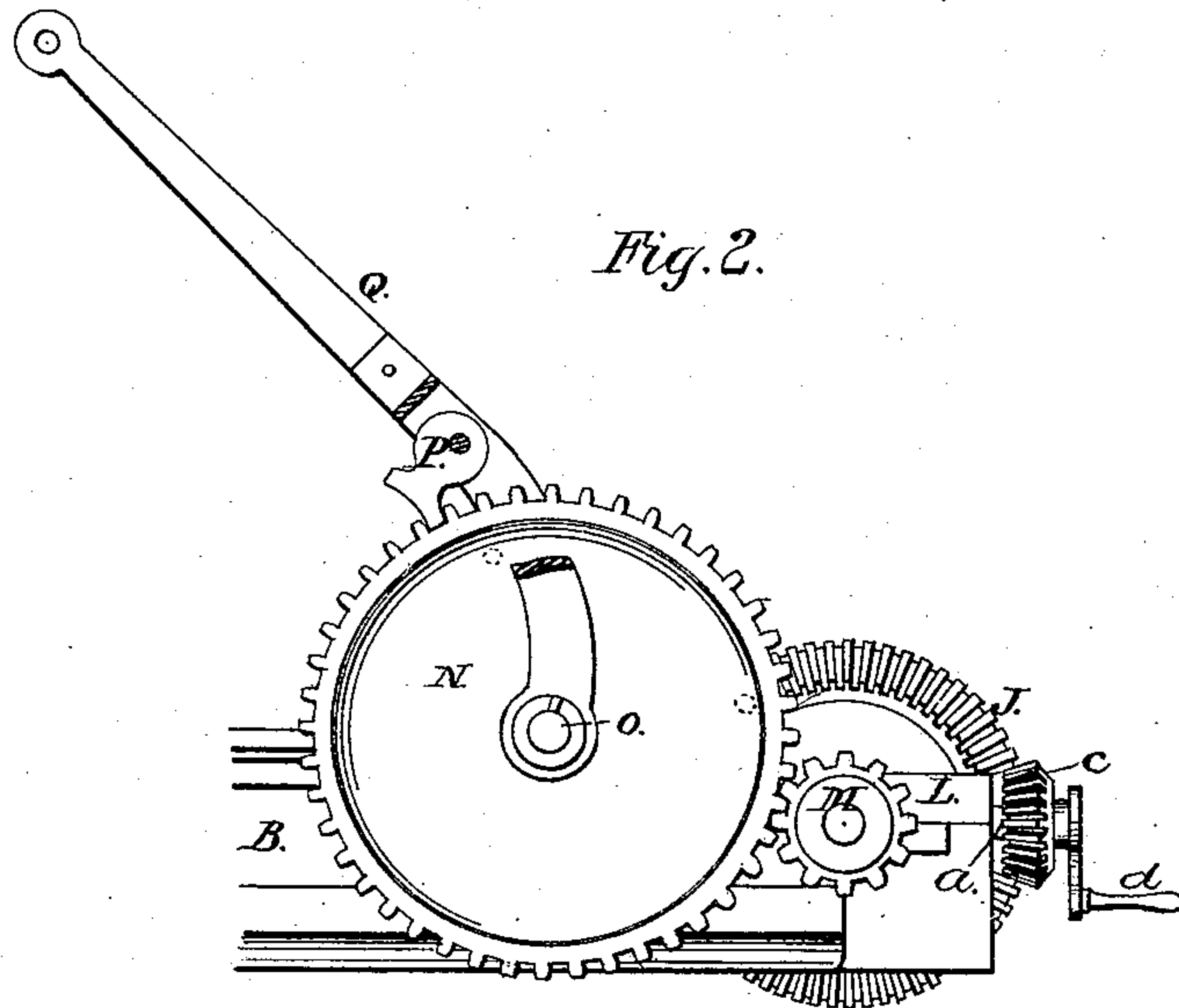
Witnesses:  
Jd.  
W. McCallum  
William Crooked

Inventor:  
P. H. Wait

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Witnesses:

W. H. Hallin  
William C. Mosher

Inventor:

P. H. Wait

# UNITED STATES PATENT OFFICE.

PHILIP H. WAIT, OF SANDY HILL, NEW YORK.

## IMPROVEMENT IN SAW-MILL HEAD-BLOCKS.

Specification forming part of Letters Patent No. **157,043**, dated November 17, 1874; application filed June 30, 1873.

*To all whom it may concern:*

Be it known that I, P. H. WAIT, of Sandy Hill, Washington county, New York, have invented a new and useful Improvement in Saw-Mill Head-Blocks; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

The nature of my invention relates to an improvement in head-blocks for saw-mills; and it consists in securing a stand to the side of one of the head-blocks to carry an operating ratchet-gear. It also consists in the arrangement and combination of devices which will be more fully described hereafter.

Figure 1 is a side elevation of my invention. Fig. 2 is an enlarged view of the operating-ratchet and the connecting parts. Fig. 3 is also a side elevation of my invention, and Fig. 4 is a plan view of the same.

A represents the carriage upon which the head-blocks B are placed, the said blocks being provided with the knees C, which are moved back and forth by the double-threaded screw-shafts H in the usual manner. On the rear end of each of the screws is placed a beveled pinion, I, which meshes with a beveled gear, J, placed upon the horizontal shaft K, which extends along in the rear of the carriage, and is journaled in the boxes L on the head-blocks. Upon one end of the shaft K is secured a spur-pinion, M, which gears with the ratchet-wheel

N placed upon the stud O, which stud projects horizontally outward from the side of the head-block. This stud is provided with a pin or other movable means of holding the ratchet in position, so that the ratchet can be removed whenever desired to operate the knees by hand. Attached to the ratchet N is an operating-lever, Q, which carries a reversible pawl, P, the length of the movements of the lever being regulated by pins stuck in the sector R.

When it is desired to operate the knees by hand the ratchet-wheel N is taken off the stud, and the shaft *a* placed at right angles to the shaft K, and, carrying the beveled pinion *c*, is turned by means of the handle *d*.

By attaching the wheel N to the side of the head-block the knees can be operated from the side of the carriage, instead of from the back, as heretofore, and by making the wheel removable the knees can be operated either by hand or by ratchet and lever.

Having thus described my invention, I claim—

The wheel N and lever Q secured to the side of the head-block, in combination with the shaft K, spur M, beveled gears J, pinions I, screws H, shaft *a*, and pinion *c*, substantially as shown and described.

The above specification of my invention signed by me this 16th day of June, 1873.

P. H. WAIT.

Witnesses:

W. M. COLLIN,

WILLIAM E. MOSHER.