

(No Model.)

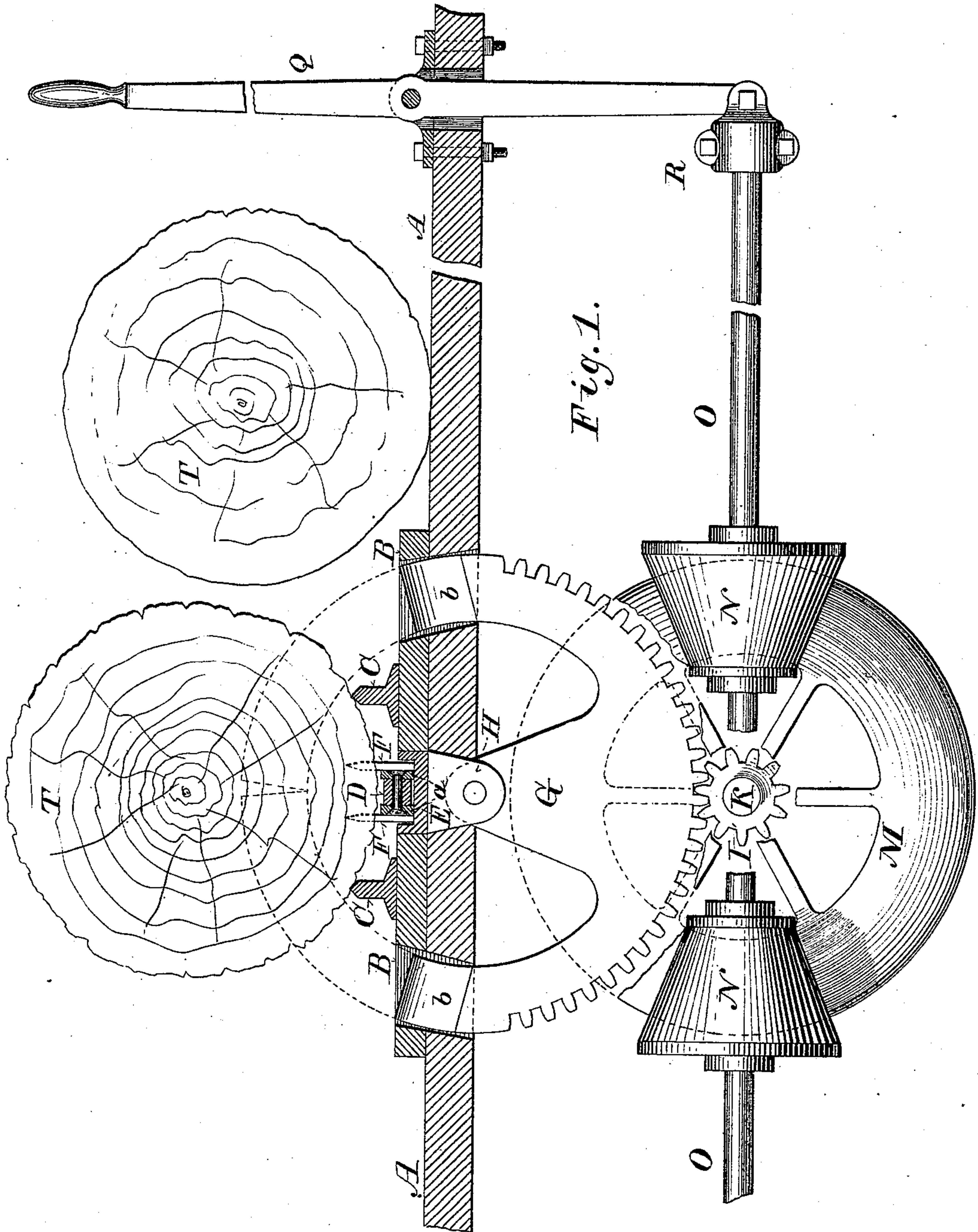
3 Sheets—Sheet 1.

G. WIBORN.

MACHINE FOR ROLLING LOGS.

No. 300,820.

Patented June 24, 1884.



Witnesses:
Chas. L. Goss.
Frank Regensdorf.

Inventor,
Gershom Wiborn,
per J. H. Bottom
Attorney.

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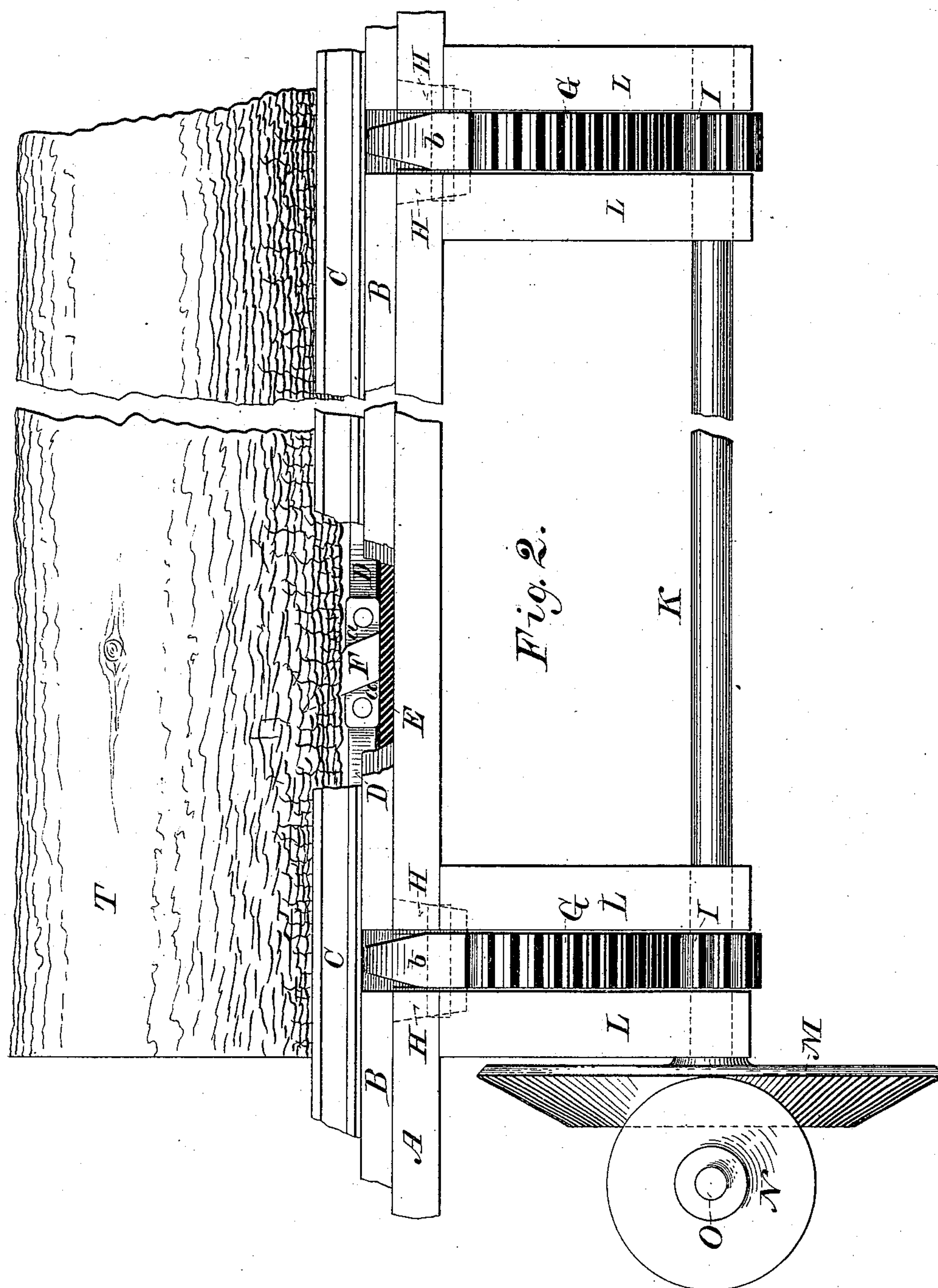
3 Sheets—Sheet 2.

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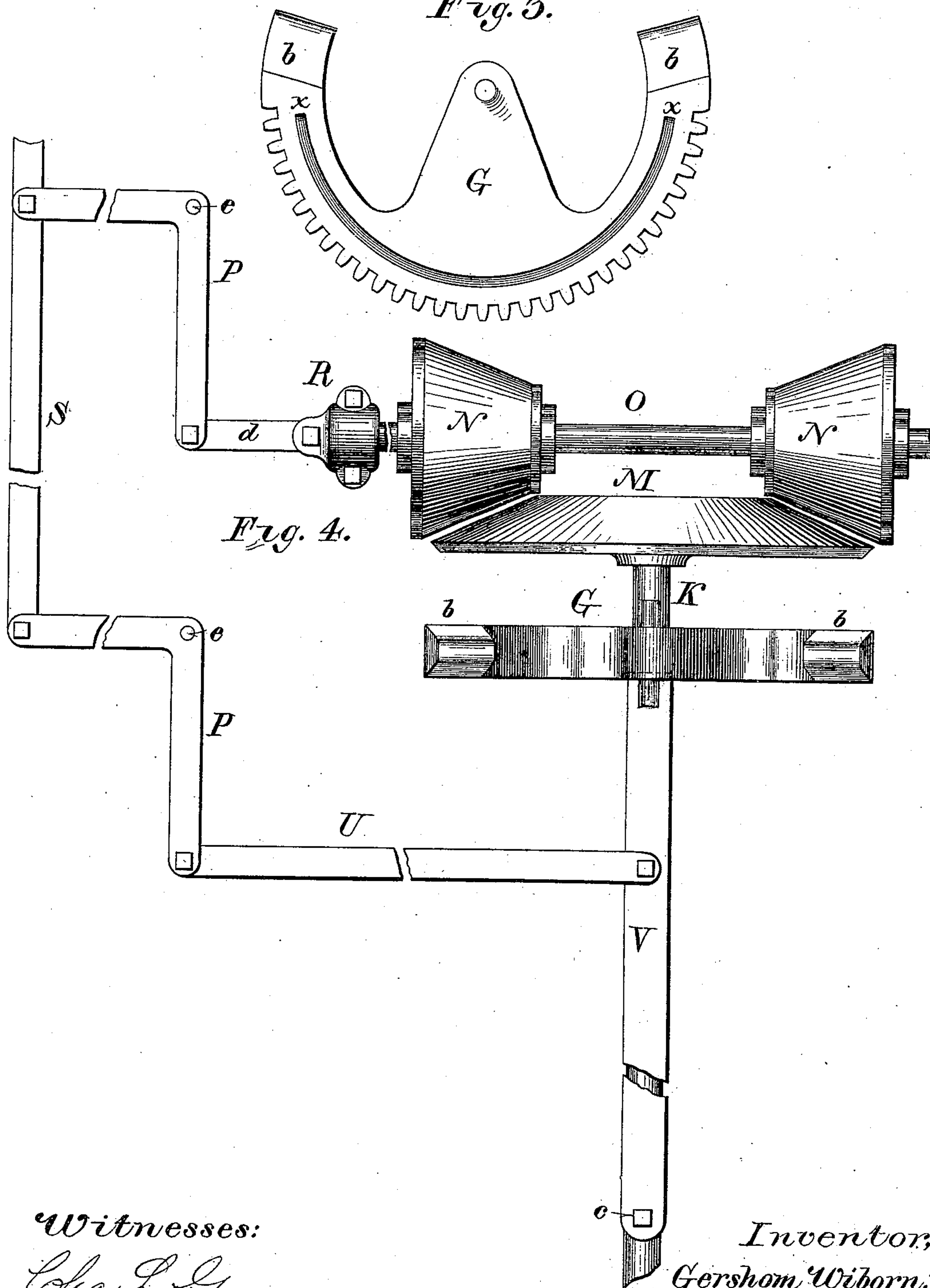
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Fig. 3.



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UNITED STATES PATENT OFFICE.

GERSHOM WIBORN, OF MANISTEE, MICHIGAN.

MACHINE FOR ROLLING LOGS.

SPECIFICATION forming part of Letters Patent No. 300,820, dated June 24, 1884.

Application filed September 4, 1883. (No model.)

To all whom it may concern:

Be it known that I, GERSHOM WIBORN, of Manistee, in the county of Manistee and State of Michigan, have invented certain new and useful Improvements in Machines for Sorting and Rolling Logs from the Conveyer in Saw-Mills; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to machines employed in saw-mills in connection with log-conveyers for sorting the logs and turning the same from the trough or rollers of the conveyer to either side upon the log-deck.

It consists, essentially, of two or more segmental wheels or rockers, so pivoted underneath the conveyer as to be rotated in either direction and raise and turn the logs to either side, together with the mechanism for operating the same.

The objects of my invention are, first, economy of labor, and, second, a surer and easier method of sorting and rolling the logs from the conveyer without stopping it.

In the accompanying drawings like letters refer to the same parts in each figure.

Figure 1 is an end view of my improved machine, showing the log-deck and conveyer in section. Fig. 2 is a side view of the same, also showing the log-deck in section, and with the front guide of the conveyer cut away, to show a portion of the conveyer-chain and one of its dogs. Fig. 3 represents the reverse side of one of the rockers grooved to receive the lever of the automatic arresting device, and Fig. 4 is a plan view of the mechanism for automatically arresting the motion of the rockers at a certain point in their revolution in either direction.

A A is the flooring forming the log-deck.

B B is a plank way, to which the conveyer-trough or rollers are attached.

C C are V-shaped guides secured to the plank way B, and forming the trough of the conveyer.

D is the conveyer-chain, which slides freely

in the channeled way E, sunk into the plank way B.

F F are strong iron dogs welded to the outside of the long links *a a* of the chain D.

G G are segmental wheels or rockers, pivoted at their centers to hangers H H, depending from the channeled way E. The rockers G G each consists of a broken cog-toothed arc or rim connected at the center by a radial arm or post with a central eye, and terminating on each side in the free arms *b b*, which rise, when the rockers are in their middle or neutral position, to about the surface of the plank way B B, as seen in Fig. 1. The flooring A and plank way B are cut away to permit of the rotation of the arms *b b* around and over the conveyer-trough, as shown by the dotted lines in the same figure.

I I are small spur-gears meshing with the rockers or segmental gears G G, and rigidly fixed upon shaft K, which has bearings in the post-hangers L L, or any convenient part of the frame-work of the mill.

M is a large bevel friction-wheel secured upon one end of shaft K, so as to be rotated in either direction by the two smaller bevel friction-wheels N N on shaft O, which is placed at right angles to shaft K, as shown in Figs. 1, 2, and 4. In Fig. 1 the wheel M is partially cut away, so as not to hide the gearing behind it; and in Figs. 1, 2, and 4 have sections of each elided to show the essential parts in condensed space.

Q is an actuating-lever rising above the log-deck in some convenient position, and pivoted to the flooring. Its lower end is pivoted to the box R on the end of shaft O, or to the bars connecting it with lever V, in such manner that the operator, by inclining the actuating-lever Q to one side or the other, may bring either of the small bevel friction-wheels N N into contact with the large friction-wheel M, and thereby cause the rockers or segmental gears G G to turn in either direction. To prevent the rockers G G from turning too far, I provide an automatic stopping device which throws the friction-wheels N N out of contact with the friction-wheel M when the rockers G G have reached a certain point in turning in either direction. The reverse side of one of the rockers G is provided with the segmental

groove $x x$, into which one end of the lever V is inserted, while the other end is pivoted at c to some convenient fixture.

P P are elbows, pivoted at their angles $e e$ to some fixed part of the mill, as shown in Fig. 4. A limb of one of the elbows P is connected with the box R by bar d , pivoted to each. A limb of the remaining elbow P is joined to the lever V by the bar U, while the remaining limbs of the elbows P P are connected by bar S.

My improved device operates as follows: As the log is brought by the conveyer over the rockers G G the operator presses the actuating-lever Q to one side or the other, according to the side upon which he desires to turn the log. One of the friction-wheels N is brought against the large friction-wheel M, and the rockers G G are thereby turned till the arms $b b$ strike the log and turn the same out of the conveyer-trough upon the log-deck A. Should the operator hold the lever Q down too long, so as to turn the rockers G farther than necessary, the shoulder at the end of the groove x will strike the lever V, which, acting through elbows P P and connecting-bars d , S, and U, will throw the friction-wheel N out of contact with the friction-wheel M, thereby preventing accidents or injury to the machine.

I do not wish to confine myself to the means herein shown of operating the rockers G G. I may use, instead of the friction-wheels N N and M, friction-wheels acting directly upon the rockers, or a system of pulleys and belts, or a system of levers.

Various effectual devices might also be substituted for the mechanism herein shown for stopping the rockers at certain points. In some cases, where a single saw is employed, it may be necessary to turn the logs out of the trough to one side only, when rockers with single arms $b b$ would be preferable or sufficient.

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

1. The combination, with a log conveyer and trough, of a rocker, G, pivoted at its center underneath and transversely to said trough, and provided with free terminal arm or arms

b , substantially as and for the purposes set forth.

2. The combination, with a log conveyer and trough, of the rockers G G, pivoted at their centers transversely underneath said trough, and provided with arms $b b$, and mechanism for rotating said rockers, whereby said arms are turned up on either side of said conveyer against the log, substantially as and for the purposes set forth.

3. The combination, with a log-conveyer, of the cog-toothed rockers G G, provided with the free arms $b b$, and pivoted in hangers H H underneath said trough, shaft K, and pinions I I, fixed upon said shaft K, and meshing with said segmental gears, together with mechanism for rotating said pinions, substantially as and for the purposes set forth.

4. The combination, with a log conveyer and trough, of the cog-toothed rockers G G, centrally pivoted underneath said trough, and provided with the terminal arms $b b$, adapted to be rotated about and over said trough, shaft K, pinions I I, keyed thereon, friction-wheel M, also keyed on said shaft K, small friction-wheels N N, mounted upon the transverse shaft O, and the actuating-lever Q, substantially as and for the purposes set forth.

5. The combination, with a log conveyer and trough, of a rocker, G, having terminal arms $b b$, and provided with the segmental groove $x x$, together with lever V, together with their connections, so arranged as to stop the rocker at certain points when turned in either direction, substantially as and for the purposes set forth.

6. The combination, with a log-conveyer, of the rocker G, having terminal arms $b b$, and provided with the segmental slot or groove $x x$, the lever V, elbows P P, friction-wheels N N and M, and their connections, all arranged to operate substantially as and for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

GERSHOM WIBORN.

Witnesses:

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FRANK REGENSDORF.