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O. D. SIMMONS.
DEVICE FOR TURNING LOGS.
APPLICATION FILED DEC. 29, 1904.

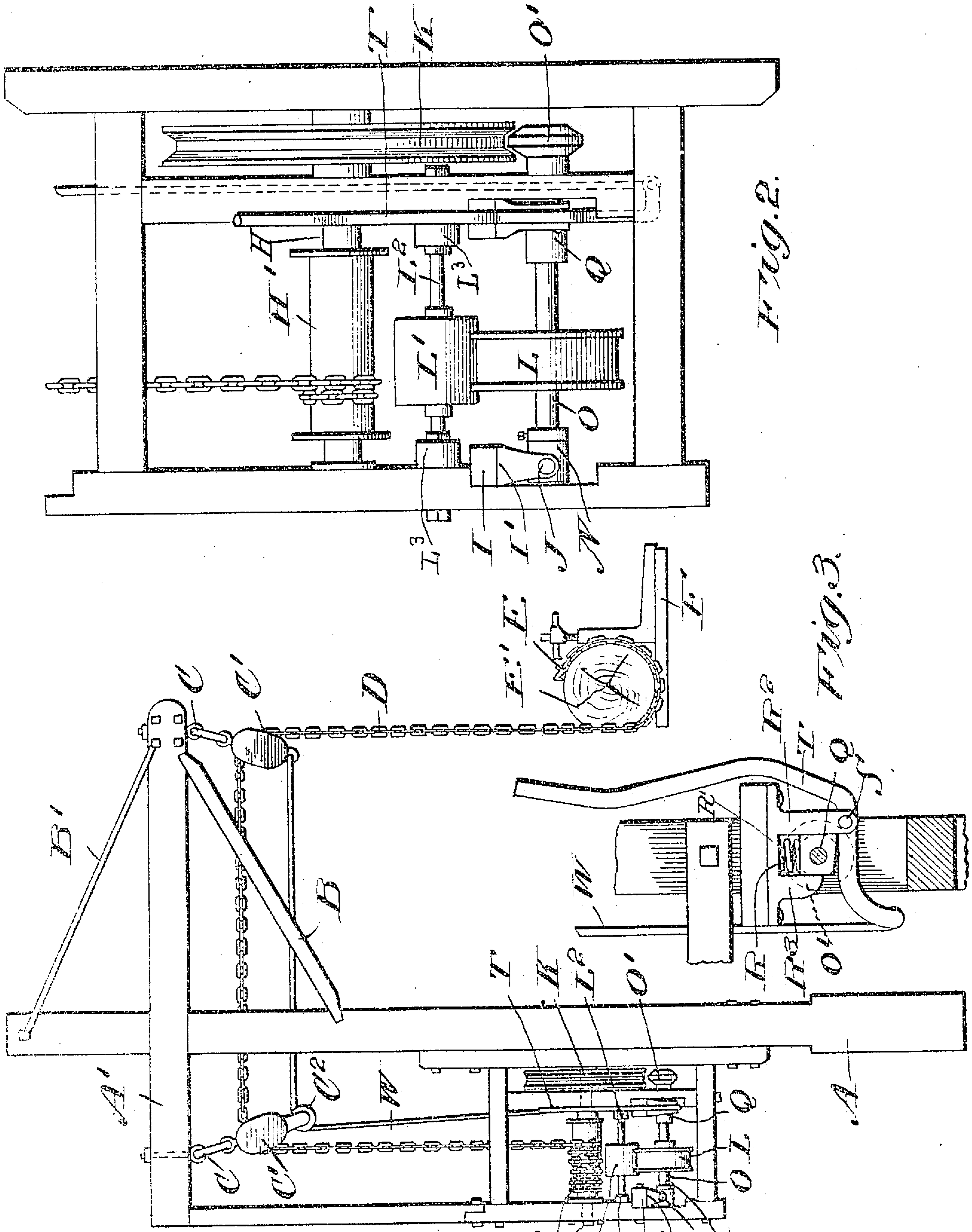

Fig. 1.

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No. 787,125. Patented April 11, 1905.

UNITED STATES PATENT OFFICE.

OSCAR D. SIMMONS, OF SUGARGROVE, WEST VIRGINIA.

DEVICE FOR TURNING LOGS.

SPECIFICATION forming part of Letters Patent No. 787,125, dated April 11, 1905.

Application filed December 29, 1904. Serial No. 238,319.

To all whom it may concern:

Be it known that I, OSCAR D. SIMMONS, a citizen of the United States, residing at Sugargrove, in the county of Pendleton and State of West Virginia, have invented certain new and useful Improvements in Devices for Turning Logs; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains 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.

This invention relates to new and useful improvements in apparatus for turning logs, and comprises simple and efficient means whereby logs may be turned by the simple manipulation of frictional-actuated mechanism under the ready control of an operator; and it consists in various details of construction and combinations and arrangements of parts, which will be hereinafter fully described and then specifically defined in the appended claims.

My invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of the apparatus, showing the same as applied in readiness to turn a log. Fig. 2 is an enlarged detail view of the frictional feeding apparatus, and Fig. 3 is a sectional view showing parts of the invention in elevation.

Reference now being had to the details of the drawings by letter, A designates an upright beam or post having a cross-piece A′ at the top thereof, and B designates a brace secured at its lower end to the post A and at its upper end to the outer end of the cross-piece A′. A brace-rod B′ is fastened to the upper end of the post A and its other end to cross-piece A′, as shown in the drawings.

C designates eyebolts, which are fastened to the cross-piece A′ and carry pulley-blocks C′, to which are mounted pulleys.

D designates a chain or cable which passes over the pulleys mounted in said pulley-blocks and has a hook E secured to one end thereof, designed to engage a log E′, resting upon the table F.

Secured to one side of the post A is a framework in which is mounted a shaft H, to which a reel H′ is keyed, and K designates a grooved friction-wheel, which is also fixed to the shaft H. Secured to a block I, which is fastened to said framework, are lugs I′, carrying a pin J, upon which is pivotally mounted a bearing N, in which an end of the shaft O is mounted. Said shaft O also has a bearing in a chambered block Q, which has a vertical movement, thus allowing the end of the shaft carrying a friction-wheel O′ to be raised into contact with the friction-wheel K or withdrawn from engagement therewith. A spring R is interposed between said block Q and the bottom of a plate R′ and is adapted to normally hold the friction-wheel O′ out of contact with the friction-wheel K. An arm R^2 projects from said plate R′ and carries a pin S, upon which an operating-lever T is pivotally mounted. Said lever, it will be observed, is bent substantially at right angles, with curved ends, and said block Q is adapted to rest upon the horizontally-disposed portion of said lever, whereby as the handle end of the lever is drawn away from the frame the block may be lifted, and with it the shaft and friction-wheel O′. A second arm R^3 projects from the plate R′ and is parallel with the arm R^2 and serves to hold the block Q in place as it is raised and lowered.

A pulley L is fixed to shaft O and to which power may be applied for operating the apparatus, and an idler or guide pulley L′ is mounted upon a shaft L^2 and has bearings in blocks L^3, said pulley L′ being provided to hold the belt upon the pulley L.

W designates a rope, one end of which is secured to the lever T, and said rope passes over a pulley C^2, which is held by the pulley-block C′, and its other end is fastened to a second pulley-block, which is mounted near one end of the cross-piece A′.

The operation of my device is simple and is as follows: The apparatus being set up entirely independent of the mill, when it is desired to turn a log the hook E is driven into the circumference of the latter, and the operator by either pulling upon the handle end of the lever or pulling down upon the rope intermediate the pulley-blocks C′ will cause the

friction-wheel O′ to be raised in contact with the friction-wheel K and impart a rotary movement to the reel, thereby causing the chain to wind upon the latter and the log to be turned as may be desired. After the log is turned the hook E′ may be disconnected therefrom and hung up on the post A out of the way of the operator.

While I have shown a particular form of apparatus illustrating my invention, it will be understood that I may vary the details of the same, if desired, without in any way departing from the spirit of the invention.

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

1. A log-turning device for sawmills comprising a post, a cross-piece secured thereto, pulley-blocks mounted upon said cross-piece, pulleys mounted upon said pulley-blocks, a reel, a chain winding about said reel and passing over said pulley-blocks and having a hook for attachment to a log, a friction-wheel rotating with said reel, a tilting rotatable shaft, a pulley for driving the same, a friction-wheel mounted upon said shaft, a block in which the vertically-movable end of said shaft has a bearing, a plate secured to the framework of the apparatus, a spring interposed between said block and plate, a guide for the block projecting from said plate, and a lever upon which said bearing-block rests, as set forth.

2. A log-turning device for sawmills comprising a post, a cross-piece secured thereto, pulley-blocks mounted upon said cross-piece, pulleys mounted upon said pulley-blocks, a reel, a chain winding about said reel and passing over said pulley-blocks and having a hook for attachment to a log, a friction-wheel rotating with said reel, a tilting rotatable shaft, a pulley for driving the same, a friction-wheel mounted upon said shaft, a block in which the vertically-movable end of said shaft has a bearing, a plate secured to the framework of the apparatus, a spring interposed between said block and plate, arms projecting from said plate forming guides for said block, and a lever pivotally mounted upon one of said arms and upon which lever said block rests, as set forth.

3. A log-turning device for sawmills comprising a post, a cross-piece secured thereto, pulley-blocks mounted upon said cross-piece, pulleys mounted upon said pulley-blocks, a reel, a chain winding about said reel and passing over said pulley-blocks and having a hook for attachment to a log, a friction-wheel rotating with said reel, a tilting rotatable shaft, a pulley for driving the same, a friction-wheel mounted upon said shaft, a block in which the vertically-movable end of said shaft has a bearing, a plate secured to the framework of the apparatus, a spring interposed between said block and plate, arms projecting from said plate forming guides for said block, and a lever pivotally mounted upon one of said arms and upon which lever said block rests, a rope secured to one end of said lever, a pulley about which said rope passes, and an anchorage for the other end of the rope, as set forth.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

OSCAR D. SIMMONS.

Witnesses:

GEORGE A. SIMMONS,

JAMES MC. SIMMONS.