

(No Model.)

T. E. SPOTSWOOD.
LOG HOIST FOR LOG CARTS.

No. 575,383.

Patented Jan. 19, 1897.

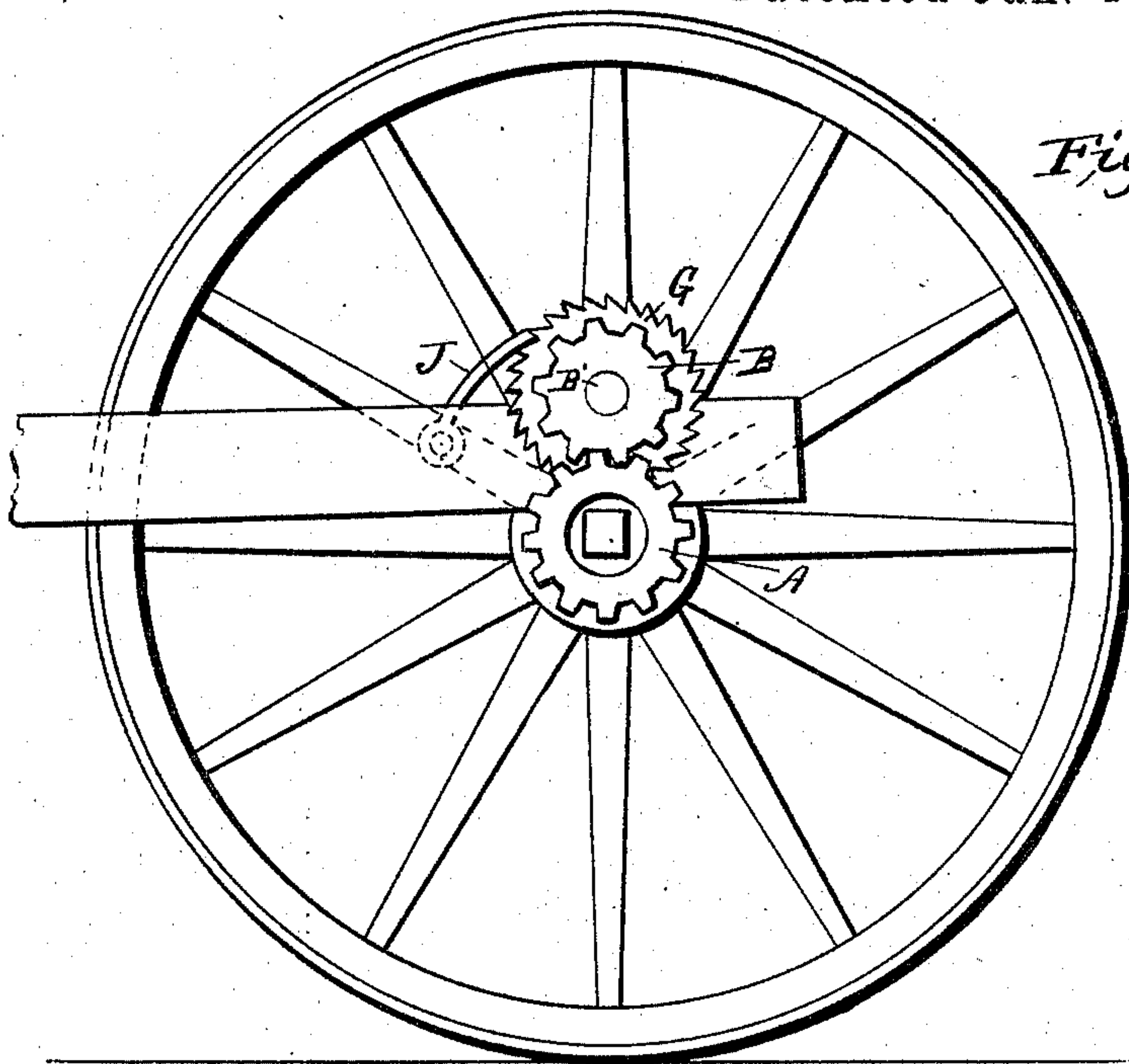


Fig. 1.

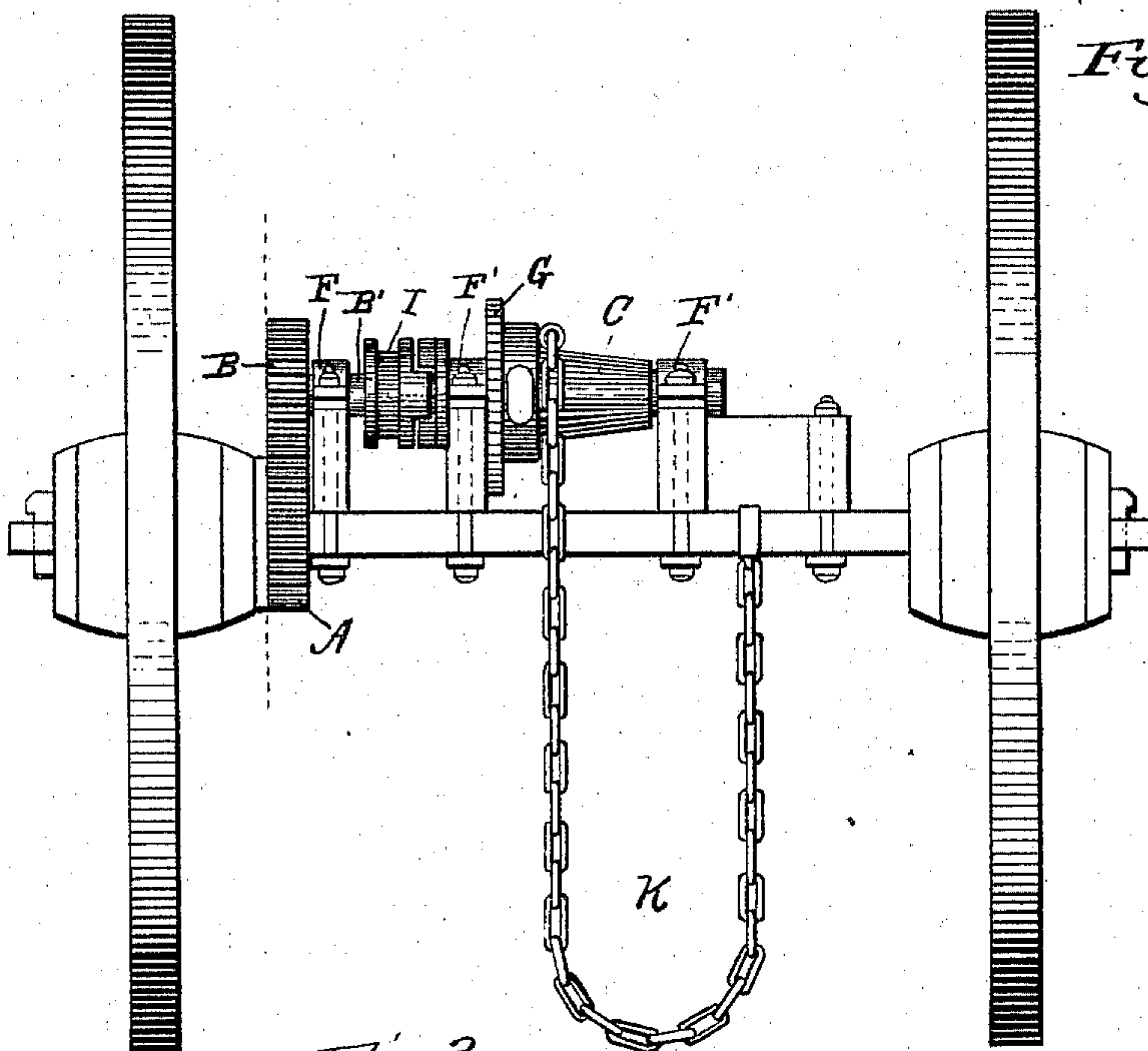
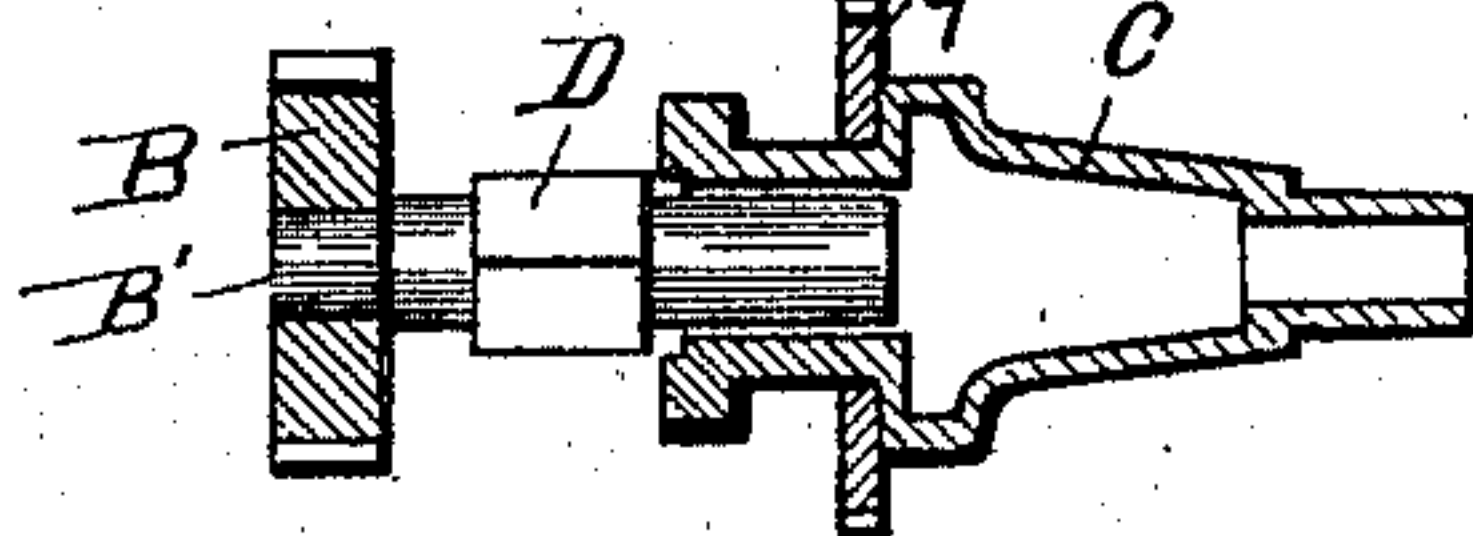


Fig. 2.

Fig. 3.



Witnesses
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UNITED STATES PATENT OFFICE.

THOMAS E. SPOTSWOOD, OF FAIRFORD, ALABAMA, ASSIGNOR OF ONE-HALF
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LOG-HOIST FOR LOG-CARTS.

SPECIFICATION forming part of Letters Patent No. 575,383, dated January 19, 1897.

Application filed May 11, 1896. Serial No. 591,154. (No model.)

To all whom it may concern:

Be it known that I, THOMAS E. SPOTSWOOD, a citizen of the United States, residing at Fairfield, in the county of Washington and State of Alabama, have invented certain new and useful Improvements in Log-Hoists, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in log-hoists, and its object is to provide means whereby the forward movement of the log cart or truck will automatically rotate the hoisting-drum and thereby raise the log from the ground, as more fully hereinafter set forth.

In the drawings, Figure 1 is a side elevation, the near wheel being removed; Fig. 2, a rear view, and Fig. 3 a detail longitudinal section, of the hoisting-drum and clutch-shaft.

Referring to the drawings by letters, A designates a gear-wheel affixed rigidly to the inner end of one of the hubs of the transporting-wheels, and B another gear meshing with said gear and secured on a counter-shaft B', journaled at one end in a bearing F and at its other inner end in the hollow journal of the hoisting-drum C, this hoisting-drum being journaled in two bearings F', all the bearings being mounted on beams secured rigidly on the axle. On a squared portion D of the shaft B' is mounted one section of a clutch I, and upon the adjacent end of the drum is carried the opposite section of the clutch, the section I being adapted to rotate with the counter-shaft, but to slide independently thereon. A ratchet-wheel G is secured on the drum and is engaged by a pawl J, pivotally mounted on the cart-frame. One end of the hoisting-chain K is connected to the axle and the other end is attached to the drum.

The operation will be evident from the foregoing. The chain being first passed under the log and attached to the drum, the slidable

clutch-section is moved into engagement with its twin section on the drum and the team is then driven ahead. As the cart-wheels revolve the rotative motion will be communicated to the drum through the intermediate gearing and the chain wound up and the log hoisted. When it is hoisted to the desired height, the clutch parts are disengaged by a lever or otherwise, leaving the gears and counter-shaft free to rotate independently of the drum, and the drum being prevented from unwinding the chain by means of the pawl and ratchet. To drop the log it is simply necessary to throw off the pawl from the ratchet.

Ordinarily the logs are raised by hand-power, a lever and ratchet devices being used, but this method is objectionable for the reason that it takes so much time, and also frequently causes accidents by the pawl slipping and permitting the lever to strike the men operating it. The present device obviates these objections by utilizing the forward motion of the cart to automatically hoist the log.

It is evident that the clutch may be operated by hand or automatically.

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

The combination with a cart or truck, of a gear mounted on one of the wheels, a counter-shaft carrying a gear meshing with said gear, a hoisting-drum carrying a ratchet-wheel and a clutch-section, a pawl, a hoisting-chain, and a movable clutch-section on said counter-shaft, substantially as described.

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

THOMAS E. SPOTSWOOD.

Witnesses:

J. M. VAN DUSEN,
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