

No. 612,575.

Patented Oct. 18, 1898.

R. SIMOT.
CABLE STOPPER.

(Application filed Sept. 15, 1897.)

(No Model.)

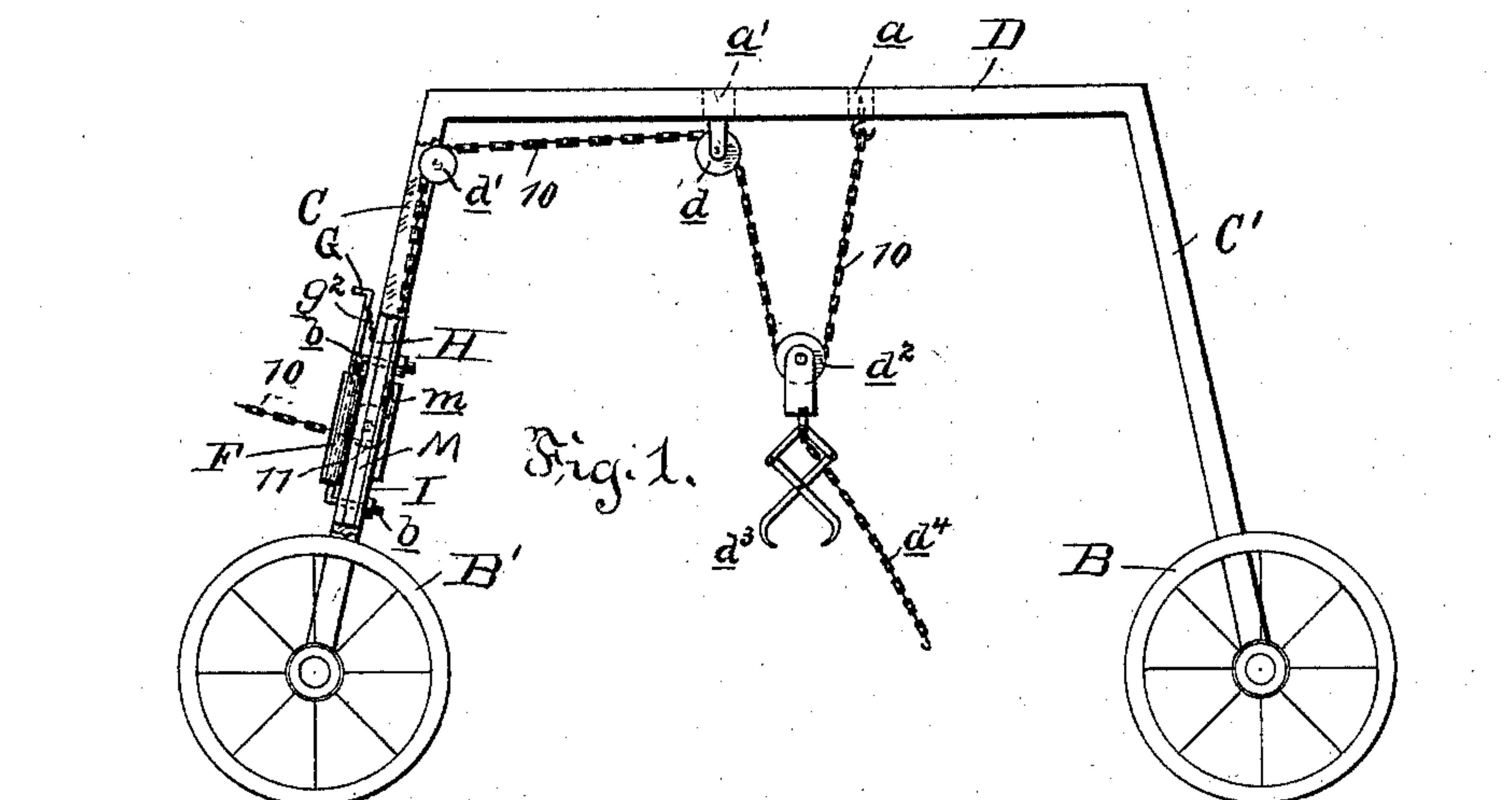


Fig. 5.

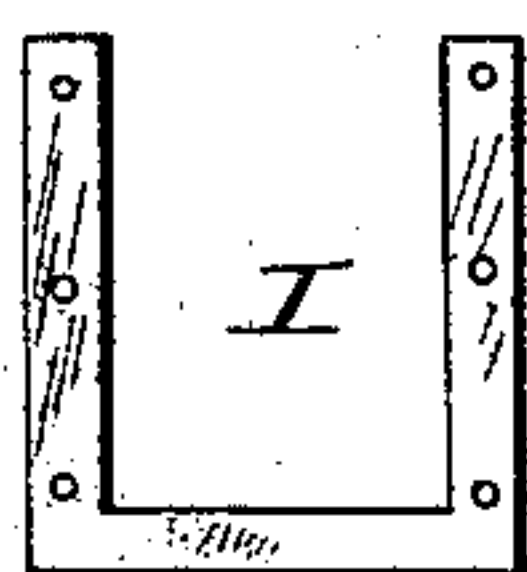


Fig. 6.

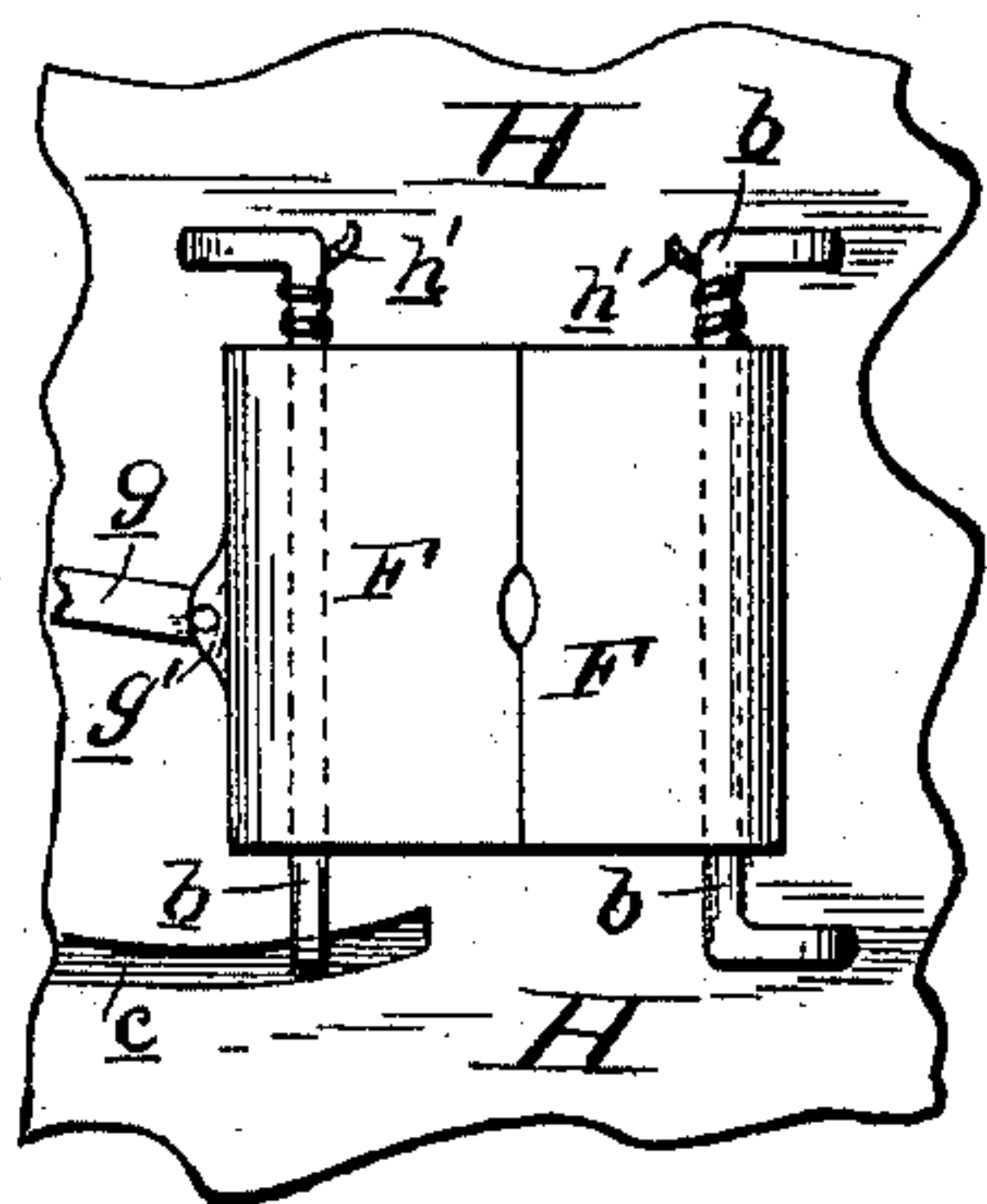
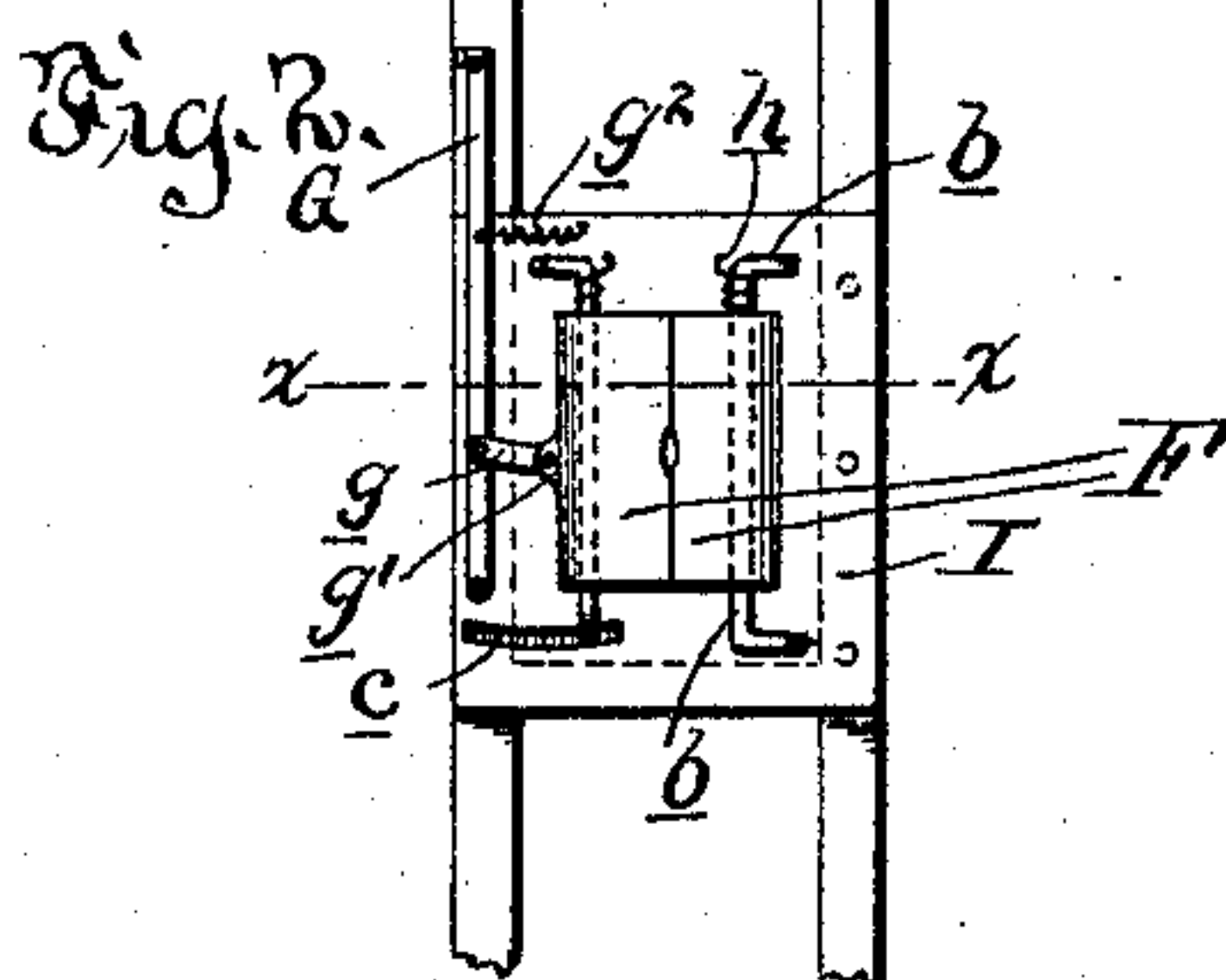
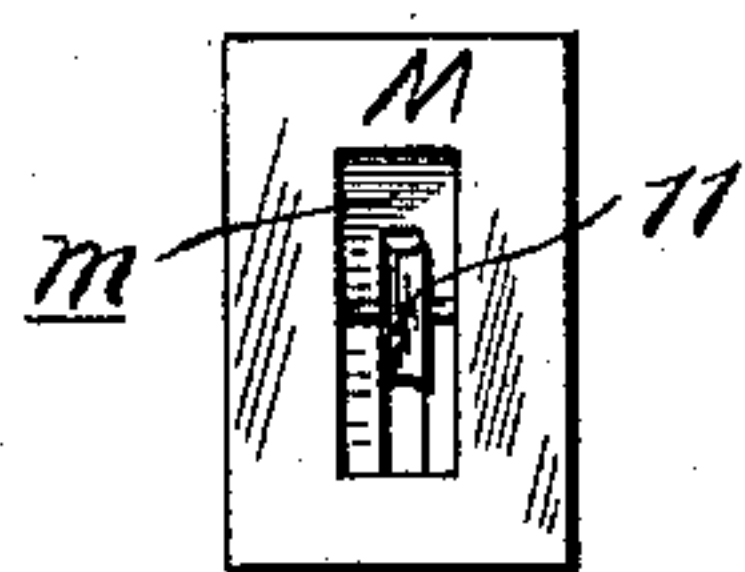
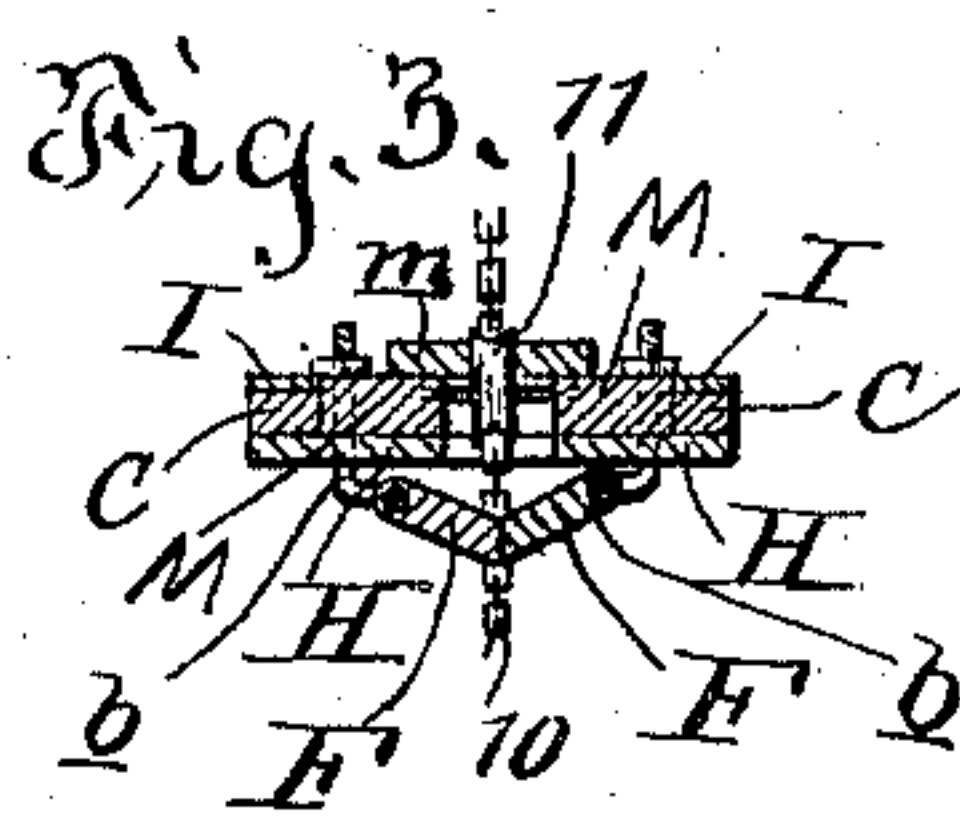


Fig. 4.



Witnesses;
J. H. Milano,
M. A. Kearney

Inventor;
Roy Simot,
By *J. H. Milano*
Att'y.

UNITED STATES PATENT OFFICE.

ROY SIMOT, OF HOLTON, MICHIGAN.

CABLE-STOPPER.

SPECIFICATION forming part of Letters Patent No. 612,575, dated October 18, 1898.

Application filed September 15, 1897. Serial No. 651,804. (No model.)

To all whom it may concern:

Be it known that I, ROY SIMOT, a citizen of the United States, residing at Holton, in the county of Muskegon and State of Michigan, have invented a new and useful Cable-Stopper, of which the following is a specification.

My invention relates to improved mechanism for gripping at any desired point a rope or cable having a weight suspended from one end thereof, commonly known as "cable-stoppers;" and the invention is especially designed and applicable to stump or tree moving machines.

It is adapted to provide for instantly and automatically securing the elevated stump or weight the moment the raising chain or cable ceases lifting the same or the movement of the chain or cable is stopped and to hold the weight or stump thus suspended in readiness for removal to its final destination; also, to provide for the ready release of the raising or lifting chain or cable to allow the lowering of the stump or weight to the ground and to allow of the independent lateral movement of the front bolster and axle, permitting the latter to "tip" up and down, as circumstances require.

The invention therefore consists of automatically gripping or engaging jaws adapted to act on the weight or stump lifting or raising chain or cable and means for readily disengaging or releasing said jaws.

The scope of my invention extends, as above indicated, to means for automatically and instantly gripping or securing the weight raising or elevating chain or cable when the latter is under strain or stress at the instant the pull or strain on said chain ceases, comprising spring-actuated jaws arranged upon a carrying frame or truck, one upon each side of said chain or cable; secondly, to means in the form of a spring-lever connected to one of said jaws to shift or laterally move said jaw away from the opposite jaw and automatically return said jaw to its engaging or original position. Other parts associated with these features will be treated as incidental to the invention and as means to an end.

In the accompanying drawings, disclosing the preferred form of carrying out my invention, Figure 1 is a side-view of the invention

as applied to a frame and hoisting mechanism. Fig. 2 is a front view of a portion of said frame, showing the complete mechanism. Fig. 3 is a sectional view on the line $x x$ of Fig. 2. Fig. 4 is an enlarged detail view of the gripping-jaws, and Figs. 5, 6, and 7 are details of construction.

A suitable carrying-frame comprising in its general construction a horizontal subframe D, secured upon front and rear leg portions C C', is mounted in the rear upon wheels B and in the front upon corresponding wheels B'. The sundry individual or detail parts of the carrying-frame, such as cross and diagonal braces and connecting-pieces, need not be referred to herein, as the same are as would suggest themselves in the putting together of the principal or main members of said carrying-frame.

The front uprights or leg portions C of the carrying-frame are braced or connected by any suitable means, preferably the U-shaped metallic piece or brace I, secured to the rear side thereof in any suitable way.

Between the leg portions C is secured a back portion M, faced by a plate H, fastened to the front side of said portions C, said block portion and plate having coincident openings therein to provide for the passage thereof through of the weight or stump lifting chain or cable 10, a pulley 11 being hung in the opening in said block, under which said chain or cable passes. The chain 10 has one end suitably secured to a cross-piece a of the portion D of the carrying-frame and is thence passed over a pulley d , suitably hung from a second cross-piece a' of said portion of said frame, and over a second pulley d' , similarly hung in position as the aforesaid pulley. Intermediary of the pulleys $d d'$, however, said chain or cable is passed under and suspends a pulley and block d^2 , as commonly practiced, said block and pulley having suspended therefrom grappling-hooks d^3 , with a chain d^4 , to effect suitable connection with a stump or weight or other body to be elevated.

F F are suitable jaws, rectangular in their general construction, hung or pivoted upon the front side of the plate H, one at each side of the chain-opening therein, with the pin-tles $b b$, upon which they are hung or pivoted,

passing therethrough from end to end, the edges of said pintles being carried through said plate and screw-threaded portions engaging nuts on the rear side thereof as a preferable way of securing said pintles in position. These pintles are sufficiently extended at their upper ends above the jaws F to provide for the application thereto of coiled springs $h' h'$, with their ends secured or connected to said jaws and bearing upon said plate H, respectively, to put said jaws under pressure and cause them to automatically grip or engage the lifting chain or cable 10, passing through the opening in said plate and its backing-block, as seen in Figs. 2 and 4. The pindle of one of the jaws F has its lower end let into a lateral slightly upwardly inclined slot c in the plate H to permit that end of the jaw to also have lateral movement or be moved away from its fellow jaw, whereby the grip of the jaws upon the lifting chain or cable may be released.

G is a hand-lever pivoted at its lower end to the plate H and connected by a link g to a clasp g' , compassing or sleeved upon the pintles of the laterally-movable one of the jaws F F to provide by the requisite movement of said hand-lever for the convenient lateral movement of said jaw for the purpose aforesaid. Said hand-lever is held by a spring g^2 , connected thereto and to the plate H, so as to automatically return the laterally-movable jaw to its original or normal position after the release of said hand-lever.

The rear side of the chain passage or opening in the block M may be guarded, as shown at m in Fig. 4, to cause the chain to maintain its proper relative position to the pulley 11, under which it passes, as aforesaid.

It will be observed that after having suitably grappled the stump or weight upon winding the lifting-chain 10 or pulling upon it—it may be by hitching a horse thereto, as usual—said stump or weight will be elevated or lifted, and thus held by the gripping action of the jaws F upon said chain, the jaws instantly and automatically gripping the chain the moment the pull upon the latter is released, as is apparent. The machine is now moved with the stump or weight to the desired point to dispose of the stump or weight. In order to release the grip of the jaws upon said lifting-chain, the hand-lever G is moved outward, withdrawing the laterally-movable jaw from the chain. By now relaxing the chain the stump or weight can be lowered to the ground and be ungrappled, the machine then being ready for a like operation.

Having thus fully described the invention,

what is claimed, and desired to be secured by Letters Patent, is—

1. In a cable-stopper, gripping-jaws, one adapted to have lateral movement at its lower end in a direction opposite that of the grip, and a hand-lever connected to said laterally-movable jaw and adapted to be automatically returned with said jaw to its original position, substantially as described.

2. In a cable-stopper, the combination of the opposed jaws hung upon pintles suitably secured in position, springs applied to said pintles and adapted to hold said jaws under pressure, said jaws adapted to automatically grip the lifting chain or cable, substantially as described.

3. In a cable-stopper, the combination jaws hung upon pintles suitably secured in position, one of said pintles arranged in a lateral slot, and the spring-held hand-lever connected by a link to a clasp compassing or sleeved upon the pindle arranged as aforesaid, substantially as specified.

4. In a cable-stopper, the combination of the opposed jaws arranged on pintles springs attached to the pintles adapted to exert pressure upon said jaws, one of said pintles arranged in a lateral slot, a hand-lever, a link connection between the hand-lever and a clasp sleeved upon the pindle, and the spring adapted to automatically return said hand-lever, with the laterally-movable pindle and jaw to its normal position, substantially as specified.

5. In a cable-stopper, opposing jaws, springs for normally forcing said jaws together, and means for moving one of said jaws laterally in a direction opposite that of the tension of the springs to separate the jaws, substantially as described.

6. In a cable-stopper, spring-actuated opposing jaws hung upon pintles suitably secured in position, an offset at the end of one of said pintles engaging a slot to permit of the lateral movement of one of the jaws, and means for separating the jaws, substantially as described.

7. In a cable-stopper, the combination of opposing jaws, springs forcing said jaws together, bearings for one of said jaws whereby it may have movement in a direction opposite that of the tension of the springs, and means for operating said jaws, substantially as described.

ROY SIMOT.

Witnesses:

PETER SIMOT,
LAVINA BARNEY.