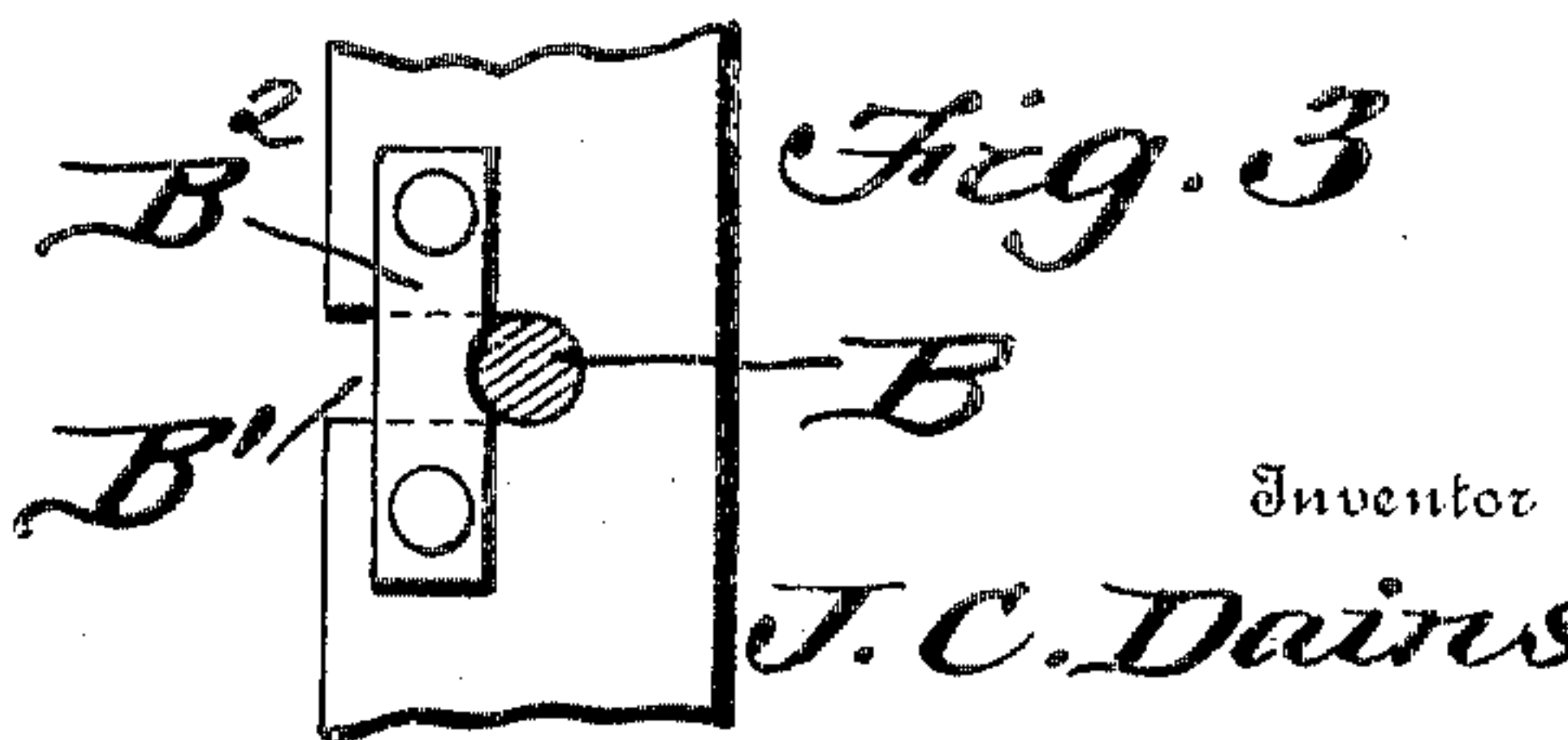
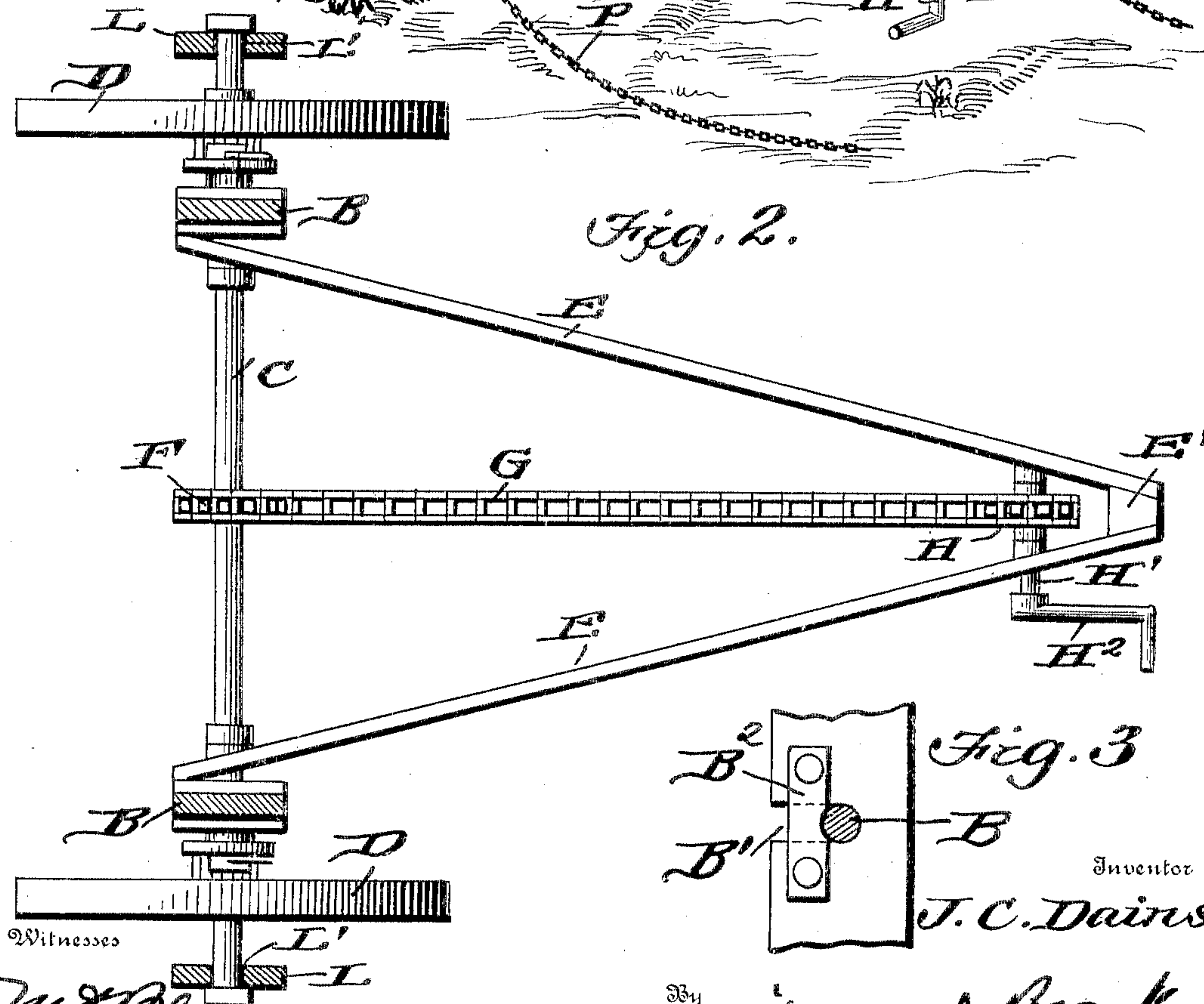
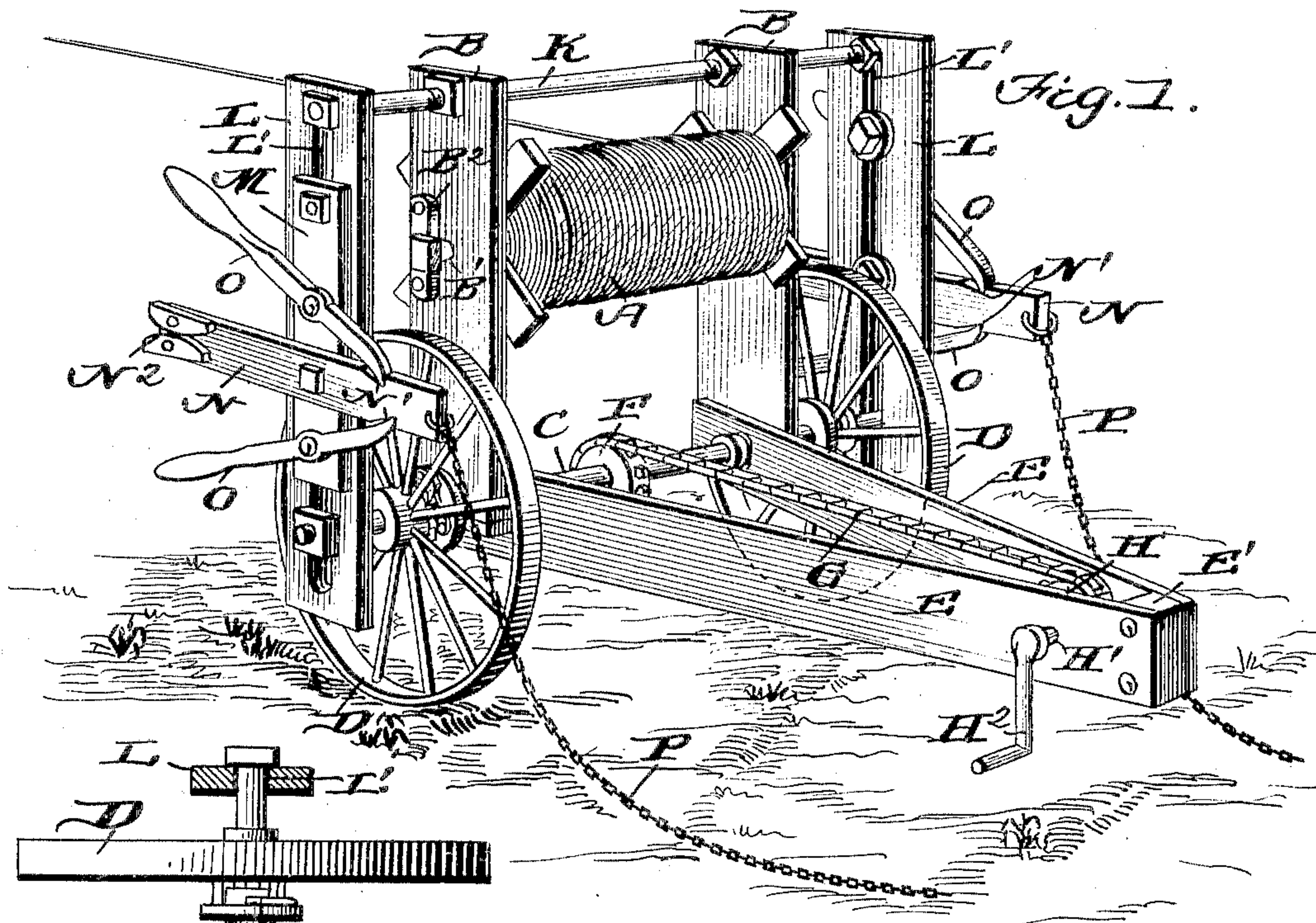


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PATENTED JULY 4, 1905.

J. C. DAINS.  
WIRE REEL AND STRETCHER.  
APPLICATION FILED FEB. 25, 1904.




  
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JOHN CALVIN DAINS, OF CLARYVILLE, MISSOURI, ASSIGNOR OF ONE-HALF TO WILLIAM A. HAMMOND, OF ST. LOUIS, MISSOURI.

## WIRE REEL AND STRETCHER.

SPECIFICATION forming part of Letters Patent No. 793,921, dated July 4, 1905.

Application filed February 25, 1904. Serial No. 195,243.

*To all whom it may concern:*

Be it known that I, JOHN CALVIN DAINS, a citizen of the United States, residing at Claryville, in the county of Perry and State of Missouri, have invented a new and useful Wire Reel and Stretcher, of which the following is a specification.

This invention is an improved construction of wire reel and stretcher, the object being to provide a simple and efficient device by means of which the wire can be unreeled and laid out along a line of fence and then stretched tight before being connected to the fence-post; and with this object in view the invention consists in the novel features of construction and combination, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of a wire stretcher and reel constructed in accordance with my invention. Fig. 2 is a sectional plan view, and Fig. 3 is a detail view, showing the manner of fastening the reel in the upright.

In carrying out my invention I employ an ordinary reel A, the axle of which is mounted in notches B' of the parallel uprights B, the axle of the reel being held in the notches B' by means of plates B<sup>2</sup>. Passing through the lower ends of the uprights B is the axle C, having the ground-wheels D arranged thereon, the hubs of said wheels being provided with pawl-and-ratchet mechanism, so that the device can be rolled along in one direction without rotating the axle C. The axle C also passes through the horizontal beams E, which are connected to the lower ends of the uprights B, and said beams converge toward their outer ends and are rigidly connected to a spacing-block E', arranged between their forward ends. A sprocket-wheel F is mounted upon the axle C and around which passes a sprocket-chain G, said chain passing also around a sprocket-wheel H, mounted upon a shaft H', journaled in the beams E adjacent their outer ends, said shaft H' being provided with a crank-handle H<sup>2</sup>, and by turning this crank-handle the sprockets will be operated and the axle turned. By means of this con-

struction after the machine has been moved along for the purpose of unreeling the wire all slack can be taken up by chocking the reel and turning the crank-handle so as to give the machine a more powerful movement than could be exerted by one man pulling the machine.

In order to thoroughly tighten or stretch the wires, I employ a stretching device at each side of the machine. The upper ends of the upright are connected by means of a rod K, which extends beyond said uprights at each end, and connected to the ends of this rod are the depending standards L, slotted vertically, as shown at L'. A block M is adjustably connected to each depending standard, so that the said block can be raised or lowered, as desired. A bar N is pivoted to the block M, and levers O are also pivoted to each block above and below the bar, the ends of said levers engaging notches N', produced in the bar adjacent one end, a chain P being connected to said bar at that end, and a wire-gripping device N<sup>2</sup> is attached to the bar at the opposite end. The end of the axle also extends beyond the wheel and enters the lower portion of the slot L'.

When it is desired to stretch the wire, the chain P is fastened to one of the fence-posts and the wire to be stretched is engaged by one of the grippers N<sup>2</sup>, the block M having been adjusted to the proper height. By means of the levers O the bar N may be swung upon its pivot-point and the wire engaged by the grippers N<sup>2</sup> brought into the proper position. Should the end of the bar N be swung upwardly for this purpose, referring to the end carrying the grippers N<sup>2</sup>, the block M would be lowered so that the pivot-point would be slightly below the normal plane of the wire. To swing the wire into its normal plane, by movement of the bar N on its pivot-point, the wire would be drawn forward, and thus stretched, the amount of stretching depending on the distance of the pivotal point below the plane to be occupied by the wire.

To stretch a top wire, the lower lever O is disengaged from the notch N', cut in the under side of the bar N, and the upper lever O is



grasped by its handle portion, which portion is drawn upwardly or forwardly, the lower or inner end portion of the said upper lever O remaining in engagement with the notch N',  
5 cut in the upper edge of the bar N, and as the bar N is swung on its pivotal point by downward pressure of the inner end of the upper lever O in engagement with its notch N' the end of the bar N carrying the wire-grip-  
10 ping device N<sup>2</sup> will swing upward and forward, the bar N tending to place itself parallel with the block M, and this upward-and-forward movement of the end of the bar N having the grippers will stretch the top wire.  
15 To stretch a bottom wire, the operation is reversed, the inner end of the upper lever O being disengaged from its notch N' and the handle portion of the lower lever O is grasped and forced downward, the inner end of the  
20 lower lever O remaining in engagement with its notch N' and moving upward as the free handle end moves downward. This forces the wire grip-carrying end of the bar N downward and forward and stretches the lower  
25 wire. To stretch a middle wire, the block M is adjusted vertically either upward or downward, so as to throw the bar N when in a horizontal position above or below the plane of the wire to be stretched, and the wire is  
30 then stretched in the same manner as a top or bottom wire, as the case may be.

It will be obvious that when both levers O are in engagement with their respective notches the bar is in a horizontal position, and  
35 when one lever is to be operated it is only necessary to first disengage the one not grasped or to be used in stretching the wire, as the

other one will disengage itself as the bar N swings upon its pivotal point.

Having thus fully described my invention, 40 what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described comprising a frame, a vertically-adjustable block carried by the frame, a pivoted bar carried by 45 the block, a chain attached to one end of the bar, grippers secured upon the bar adjacent the opposite end, and means for swinging the bar upon its pivot-point.

2. A device of the kind described comprising 50 a frame, mounted upon wheels, and carrying a wire-reel together with means for propelling said frame, the slotted depending standard at each side of the frame, the adjustable blocks, the bars pivotally connected to 55 the block, and having wire-gripping devices, at one end and a chain at the other end, and the levers pivoted to the blocks and adapted to engage the bars as set forth.

3. The combination with the uprights, axle 60 and horizontal beams, of the sprocket-wheel, chain, and crank-shaft, the rod attached to the upper ends of the uprights, the slotted depending standards connected to the ends of said rods, the adjustable blocks, the levers pivoted 65 thereto, the bar pivoted to the block between the levers, and carrying a wire-gripping device at one end, and a chain at the opposite end, as set forth.

JOHN CALVIN DAINS.

Witnesses:

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