(No Model.)

D. STOUT.

GRIP FOR CABLE RAILROADS.

No. 330,807. Patented Nov. 17, 1885.

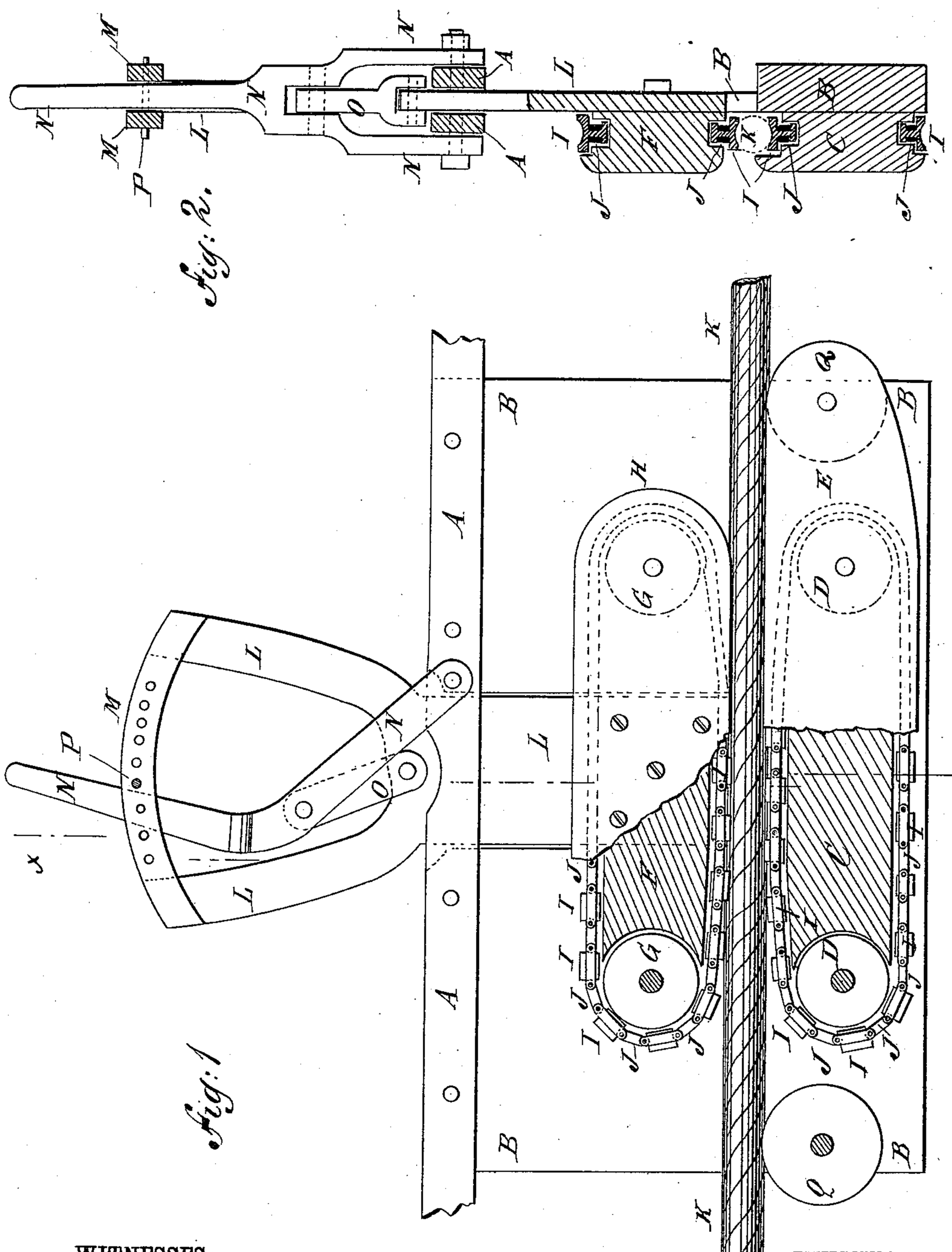

Fig. 1.

Fig. 2.

WITNESSES:

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GRIP FOR CABLE RAILROADS.

SPECIFICATION forming part of Letters Patent No. 330,807, dated November 17, 1885.

Application filed April 7, 1885. Serial No. 161,497. (No model.)

To all whom it may concern:

Be it known that I, DAVID STOUT, of Logan City, in the county of Pima and Territory of Arizona, have invented a new and useful Improvement in Grips for Cable Railroads and other uses, of which the following is a full, clear, and exact description.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side elevation, partly in section, of one of my improved grips. Fig. 2 is a sectional end elevation of the same, taken through the line *x x*, Fig. 1.

The object of this invention is to provide a grip constructed in such a manner as to engage with a moving cable without causing any sliding friction upon the said cable.

The invention consists of the combination of parts, including their construction, substantially as hereinafter fully set forth and claimed.

A A represent two bars, which are designed to be bolted to the frame of a car or to any other object that is to be moved by an endless cable. To and between the bars A is bolted the edge of a plate or frame, B, to the lower part of which is bolted, or upon it is formed, a block, C. The ends of the block C are concaved to receive pulleys D, which are pivoted to the plate or frame B, and to the cap-plate E, formed upon or attached to the said block C. Above the block C is placed a corresponding block, F, the ends of which are concaved to receive the pulleys G. The pulleys G are pivoted to cap-plates H, formed upon or attached to the block F. The faces of the pulleys D G and blocks C F are grooved to receive the shanks of the shoes I, the faces of which are made wide and are grooved or concaved, as shown in Fig. 2, to fit upon the cable K. The shoes I are connected by links J, forming endless chains of shoes. The block F is bolted or otherwise secured to a plate or bar, L, which slides in a slot or recess in the plate or frame B, and the upper end of which projects through the space between the bars A, and is forked, as shown in Fig. 1. To the ends of the branches of the upper end of the plate L are attached or upon them are formed two parallel bars, M, to form a slot to receive the lever N. The lever N is bent, as shown in Fig. 1, and its lower end is forked, as shown in Fig. 2, and is pivoted to the bars A. In the crotch of the lever N is pivoted the upper end of a link, O, the lower end of which is forked and is pivoted to the plate L at its crotch.

With this construction, by operating the lever N, the block F and its pulleys G can be raised to allow the cable K to be inserted or removed and lowered to grasp the said cable. The lever N can be secured in either position by a pin, P, passed through the holes in the bars M or by other suitable means.

To the plate or frame B and to the cap-plate E, at a little distance from the pulleys D, are pivoted pulleys Q, to guide and support the cable K as it passes to and from the grip.

With this construction when the cable K is grasped it will carry the endless chains of shoes I J with it, and any friction that may occur will be between the shoes I and the blocks C F, so that the cable will be protected from wear.

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

1. In a grip for cable railroads and other uses, the fixed and movable blocks or supports having pulleys at their ends, said blocks or supports and pulleys being encompassed by endless belts or chains of shoes, in combination with the sliding bar connected to one of the aforesaid blocks or supports and having a forked upper end, and the bent lever pivoted to a fixture and connected at its angle to a link connected to said sliding bar, substantially as and for the purpose set forth.

2. In a grip for cable railroads and other uses, the fixed and movable blocks or supports having longitudinal grooves or channels in their upper and lower surfaces, said channels or grooves having shoulders in their outer portions, in combination with the endless belts or chains of shoes encompassing said blocks or supports and pulleys, said shoes having

tongues upon their inner portions entering the said grooves or channels below the shoulders of the latter, said shoes also having widened portions resting upon the shoulders of said grooves or channels and having outer concaved surfaces, the sliding bar connected to one of the aforesaid blocks or supports and having a forked upper end, and the bent lever pivoted to a fixture and connected at its angle to a link connected to said sliding bar, substantially as described.

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Witnesses:
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