

(No Model.)

C. H. NOTTER.
COMBINED CABLE GRIP AND LOCK.

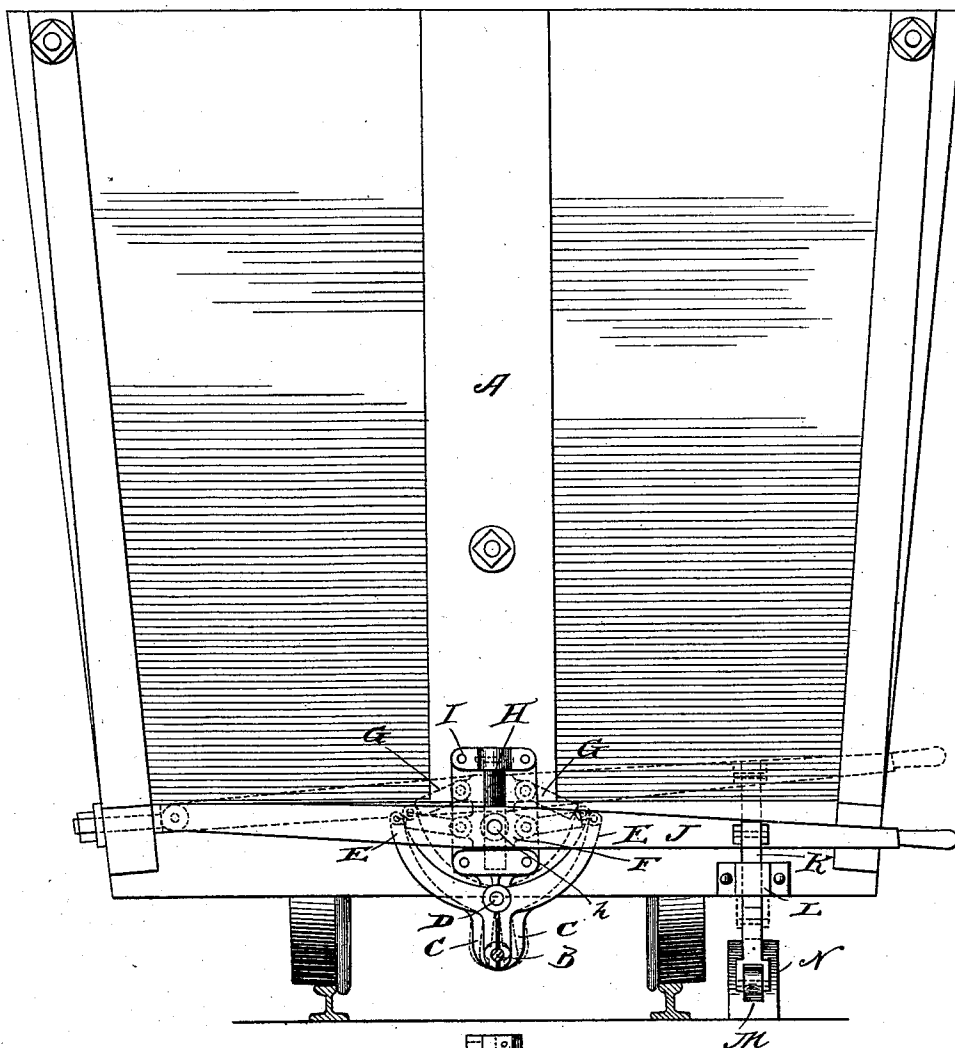
No. 537,224.

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Fig. 3.



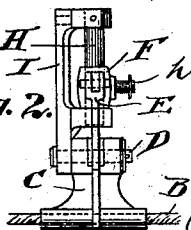
Fig. 1.



Witnesses,

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Fig. 2.



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UNITED STATES PATENT OFFICE.

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COMBINED CABLE GRIP AND LOCK.

SPECIFICATION forming part of Letters Patent No. 537,224, dated April 9, 1895.

Application filed August 24, 1894. Serial No. 521,195. (No model.)

To all whom it may concern:

Be it known that I, CHARLES H. NOTTER, of Chicago, Illinois, have invented certain new and useful Improvements in a Combined Cable Grip and Lock, of which the following is a specification.

This invention relates to a combined cable grip and lock, and is applicable to a variety of uses.

I have shown my invention as applied to a tram-car operated by a traction cable, and in this adaptation I have shown the gripping device as mounted upon the car and adapted to be operated manually to grip the cable to establish traction and to be automatically released in order to disconnect the car and cable.

In the accompanying drawings, Figure 1 is an end elevation of the tram-car, showing my gripping and releasing mechanism applied thereto. Fig. 2 is a detail view of the gripper, taken at right angles to the view shown in Fig. 1; and Fig. 3 is a detail of one of the levers of the gripper jaw.

In the drawings, A represents a tram-car, and B a traction cable. On the said car is mounted, in some convenient manner, a gripping mechanism which is composed of the gripping jaws C, C, pivotally connected together and to the car by means of a pin or bolt D. Said jaws have outwardly diverging and upwardly curved shanks E, which are pivotally connected with a sliding head block F by means of the arms G. Said head block is adapted to slide on a vertical bolt H carried in a casting I, which may be secured to the frame of the car. This head block carries a stud h, which passes through or is connected to a pivoted lever J, said lever having a downwardly depending arm K passing through a keeper L on the frame of the car and provided at its lower end with a roller M. A fixed obstruction or tripping block N is secured along the track in position to engage the roller. The gripping jaws are laterally widened, as shown in Fig. 2, so as to secure as much surface as desired.

In operation, when it is desired to establish traction, the head block will be forced down by means of the lever from the position shown by the dotted lines in Fig. 1 to the position shown by the full lines in Fig. 2. The gripping jaws will therefore impinge the cable, and it will be observed that the inner

ends of the links or short levers connecting the head block with the gripping jaw shanks pass below the plane of their outer ends and hence the jaws will be locked to the cable. The car moving on its way will pass over the tripping block or obstruction which will engage the roller, lifting the lever and with it the head block, thus rocking the gripping jaws on their pivots and dropping the cable.

In order to compensate for wear on the gripping jaws, I prefer to construct the short levers or links connecting the shanks with the head block in two sections having a threaded connection, as shown in Fig. 3, although other means may be employed for varying the length of these levers, and thereby making compensation for wear.

I claim—

1. A cable grip comprising a pair of pivoted gripping jaws, a sliding head block, links connecting the head block and the shanks of the gripping jaws, and means for moving the head block whereby to rock the gripping jaws on their pivots, said links being constructed in sections whereby they may be extended or shortened substantially as described and for the purpose set forth.

2. A cable grip comprising in combination a pair of gripping jaws adapted to rock about a fixed axis, a sliding head block and a stationary guide on which said block may slide, said gripping jaws having shanks diverging from each other and extending from the pivot, links or levers connecting the head block and the shanks of said jaws, a lever pivoted at one end and loosely engaging the head block whereby the latter may be lowered to carry the inner ends of said links below their outer ends and thereby to lock said jaws in engagement with the cable, substantially as described.

3. In a cable grip, the combination with the pivoted jaws, of a sliding head block, pivoted links connecting the head block and said jaws, a lever pivoted at one end and loosely engaging the head block and a projection on said lever adapted to engage a tripping block, substantially as described.

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Witnesses:

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