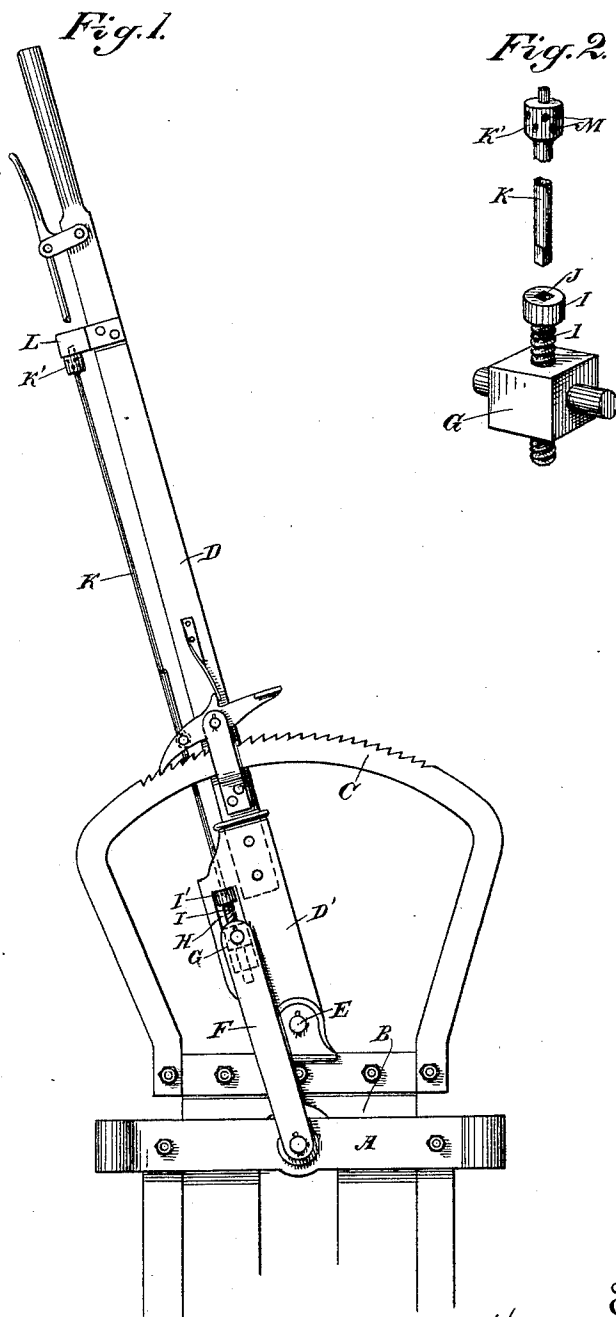


(No Model.)

H. H. LYNCH.
CABLE GRIP ADJUSTING DEVICE.

No. 468,064.

Patented Feb. 2, 1892.



Witnesses,
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UNITED STATES PATENT OFFICE.

HENRY H. LYNCH, OF SAN FRANCISCO, CALIFORNIA.

CABLE-GRIP-ADJUSTING DEVICE.

SPECIFICATION forming part of Letters Patent No. 468,064, dated February 2, 1892.

Application filed August 19, 1891. Serial No. 403,122. (No model.)

To all whom it may concern:

Be it known that I, HENRY H. LYNCH, a citizen of the United States, residing in the city and county of San Francisco, State of California, have invented an Improvement in Cable-Grip-Adjusting Devices; and I hereby declare the following to be a full, clear, and exact description of the same.

My invention relates to a device for adjusting cable-grips; and it consists of a take-up mechanism applied to the grip-lever and its connection with the stationary frame, whereby the wear of the gripping-dies may be compensated and the arc over which the lever is moved to open and close the grip remain substantially the same at all times.

Referring to the accompanying drawings for a more complete explanation of my invention, Figure 1 is a side elevation showing the application of my invention. Fig. 2 is a perspective view of the cross-head and the operating-screw.

A is the frame, which is bolted to supporting-timbers upon the car and which carries a part of the grip-actuating mechanism at the lower end.

B is a flat plate sliding between the sides of the frame A, which serves as guides therefor, the lower end of this plate acting in conjunction with the stationary portions of the frame to open and close the gripping-jaws so as to release or grip the cable. The gripping-jaws may be of any of the usual or known forms, and are not here shown.

C is the quadrant, which has its lower end bolted to the top of the plate B.

D is a lever, the lower end of which is secured in the socket D', the latter being fulcrumed to the lower part of the quadrant C, as shown at E.

F are links, the lower ends of which are fulcrumed to a pin or bolt in the top cross-bar of the frame A, there being one of these links upon each side, and they extend up on each side of the lower part of the quadrant C, and are connected with the sliding block or cross-head G. This cross-head is adapted to travel in the slot H, which is made in the socket-piece D', and by moving this cross-head up or down, the lever and the quadrant upon which it is carried will be correspond-

ingly moved to or from the stationary supporting-frame A.

It will be manifest that this movement, carrying with it, as it does, the plate B, will move this plate with reference to the lower part of the frame A, and will thus adjust the relative position of the parts which actuate the gripping-dies. In order to make these adjustments, it has hitherto been customary to employ a screw, which is situated beneath the floor of the car, and the gripman is obliged to get down to this point with a wrench to make the adjustments.

In my invention the cross-head G has a hole made through it and a screw-thread cut therein within which the screw I is fitted to turn. The lower end of this screw is stepped in the lower part of the guide-opening H, in which the cross-head G travels. The head I' at the upper end of this screw abuts against the upper part of the opening H and has a square socket J made in the end of it.

K is a rod, the lower end of which is made correspondingly square to fit into this socket. This rod extends up alongside the handle D, and its upper end is stepped in a lug or bar L, which is secured to the handle D near the upper end.

K' is an enlarged head having radial holes made through it, as shown, and by means of a short pin fitting these holes the rod K may be turned around, turning with it the screw I, and thus advancing the cross-head G in either direction upon the screw. By this construction it is rendered easy for the gripman to adjust the parts to the constant wear of the gripping-dies and without stopping or taking his attention off his business.

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

In a cable-gripping apparatus, the main stationary frame, the quadrant and quadrant-plate adapted to slide upon said frame and actuate the gripping-jaws at the lower end, a lever fulcrumed upon the quadrant and movable about its fulcrum, a cross-head sliding in a slotted guide upon the lower end of the lever, links connecting the cross-head with the stationary frame, a screw extending longitudinally from end to end of the slot and

passing through the cross-head and having
its upper end formed with a square socket, a
rod having the lower end made square and
adapted to engage the square socket in the
5 upper end of the screw, said rod extending
to the upper end of the grip-lever and having
a journal-box or step in which it turns, and
a head with means whereby the rod may be
turned and motion communicated from it to
10 the screw, whereby the cross-head is moved
up or down upon the screw and the quad-

rant and connected parts are correspondingly
moved with relation to the fixed portion of
the grip-frame, substantially as herein de-
scribed.

In witness whereof I have hereunto set my
hand.

HENRY H. LYNCH.

Witnesses:

S. H. NOURSE,
J. A. BAYLESS.