No. 658,219. Patented Sept. 18, 1900.

# G. C. NILES.

## CABLE GRIP.

(Application filed Feb. 14, 1900.)

(No Model.)

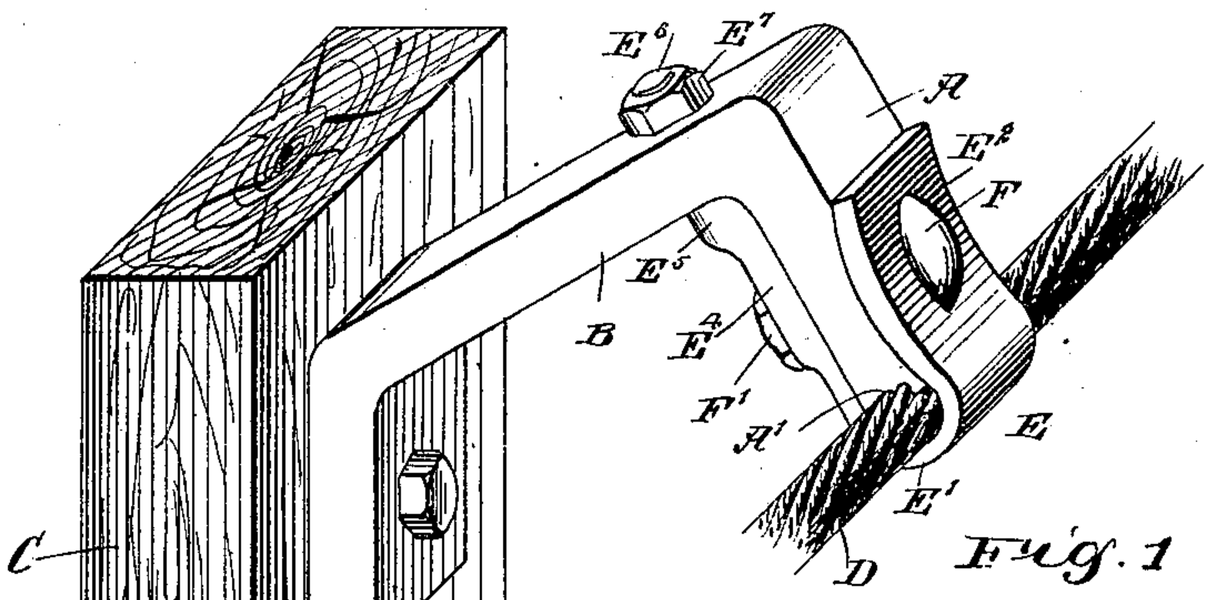


Fig. 1

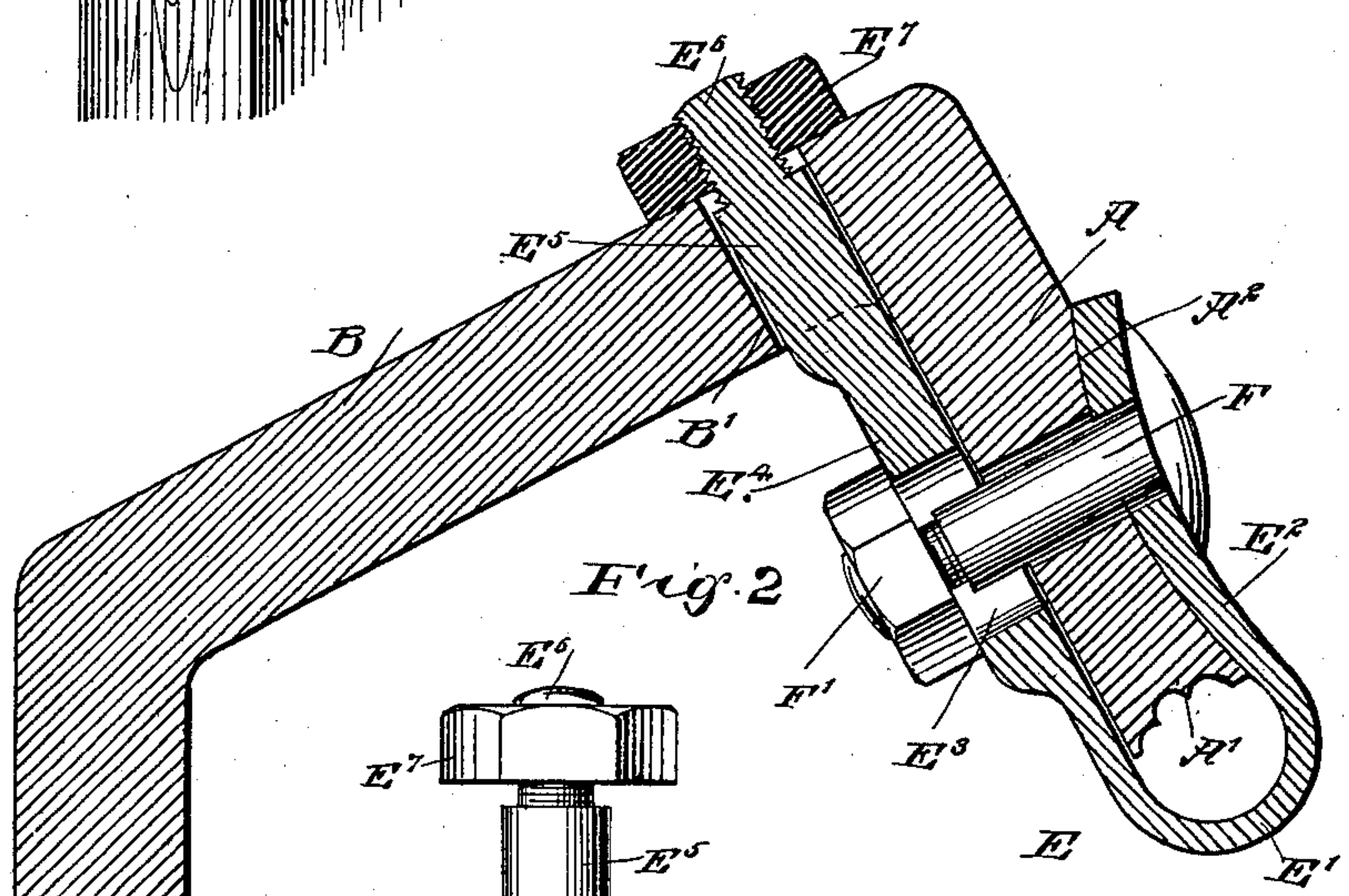


Fig. 2

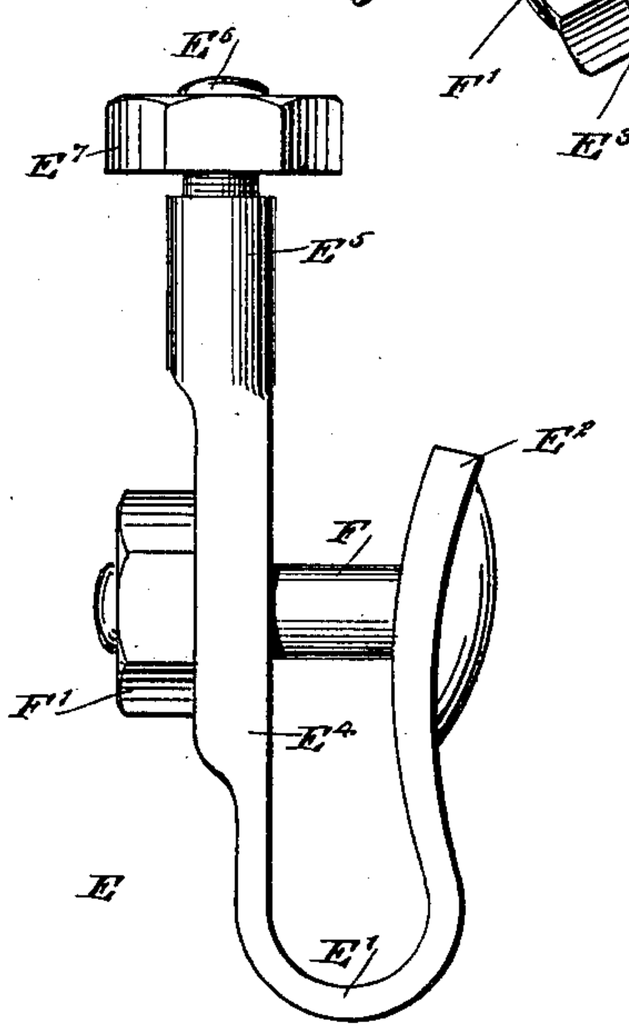


Fig. 3

WITNESSES:

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# UNITED STATES PATENT OFFICE.

GEORGE CUMMING NILES, OF BAYSIDE, CALIFORNIA.

## CABLE-GRIP.

SPECIFICATION forming part of Letters Patent No. 658,219, dated September 18, 1900.

Application filed February 14, 1900. Serial No. 5,221. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE CUMMING NILES, a citizen of the United States, and a resident of Bayside, in the county of Humboldt and State of California, have invented a new and Improved Cable-Grip, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved cable-grip for use on mining-cars and other vehicles to be propelled by a traveling endless or other cable, the grip being arranged to securely engage the cable and to allow of quickly tightening it to prevent the grip from slipping on the cable.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement as applied. Fig. 2 is an enlarged sectional side elevation of the improvement, and Fig. 3 is a side elevation of the clamping-band.

The cable-grip shown in the drawings has a fixed jaw A secured to or formed on a bracket B, bolted or otherwise fastened to the car C or other vehicle to be propelled over a suitable track by a cable D, engaging the free end A′ of the fixed jaw A. The free end A′ is shaped to fit part of the peripheral surface of the cable D and is also preferably serrated longitudinally to readily engage the strands of the cable, which latter is pressed in firm contact with the said end A′ by a clamping-band E, made U-shaped and having its middle or curved portion E′ engaging the remaining peripheral portion of the cable D directly in alinement with the jaw A. The end $E^2$ of the clamping-band E is engaged by a bolt F, held in the grip A, said bolt also extending through an elongated aperture $E^3$, formed in the other end $E^4$ of the clamping-band, as is plainly shown in Fig. 2. The end $E^4$ terminates in a round part $E^5$, having a threaded reduced portion $E^6$, on which screws a nut $E^7$, abutting against the top of the bracket B, the portion $E^4$ extending through an aperture B′ in the bracket to allow of drawing the said end $E^4$ upwardly to cause the bent middle portion E′ to firmly engage the cable and clamp the same in position against the end A′ of the jaw A.

It is understood that the bolt F holds the clamping-band in position on opposite sides of the jaw A, and when the nut F′ of said bolt is released and the nut $E^7$ is screwed up then the end $E^4$ is drawn upward for more firmly engaging the cable D and securely clamping the same in position on the end A′. When this adjustment has been made, the nut F′ is screwed up so as to firmly hold the two ends $E^4$ and $E^2$ in position on opposite sides of the jaw A. It is understood that in making the adjustment the resiliency of the middle or curved portion E′ permits the upward movement of the end $E^4$ to draw the said middle portion firmly in contact with the cable D for the purpose above explained.

The end $E^2$ of the clamping-band is preferably curved in a longitudinal direction and fits upon a correspondingly-shaped concaved face $A^2$ on the outside of the jaw A, so that the curved portion E′ properly fits upon the cable D when the clamping-band E is adjusted as above explained.

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

1. A cable-grip, comprising a fixed jaw and a clamping-band made U-shaped and between the members of which the jaw projects, said band engaging opposite sides of said fixed jaw, the middle portion of the band being arranged to engage the cable and clamp the latter against the free end of the said fixed jaw, means for clamping the ends of the band to the opposite sides of the jaw, and a bolt and nut on one end of the band, to adjust the latter relatively to the cable, substantially as shown and described.

2. A cable-grip, comprising a fixed jaw having a curved face and a clamping-band made U-shaped and engaging opposite sides of said fixed jaw, the middle portion of the band being arranged to engage the cable and clamp the latter against the free end of the said fixed jaw, means for clamping the ends of the band to opposite sides of the jaw, and a bolt and

nut on one end of the band, to adjust the latter relatively to the cable, the other end of the said clamping-band being curved in a lengthwise direction, to engage the curved face on the jaw, as set forth.

3. A cable-grip, comprising a bracket provided with a jaw projecting at an angle therefrom, said jaw being perforated and having a curved end, and a U-shaped clamping-band having members of unequal length and between which the said jaw projects, the longer member of the band being slotted and having its end screw-threaded, the screw-threaded end projecting through the perforation of the bracket and provided with a nut, and a bolt passing through the members of the band and the jaw and provided with a nut, substantially as described.

4. A cable-grip, consisting of a bracket provided with a jaw projecting at an angle therefrom, said jaw having a concave outer face, and provided with a curved and serrated end and with an aperture, and a U-shaped clamping-band having members of unequal length and between which the said jaw projects, the longer member of the band being slotted and having its end reduced and screw-threaded, the reduced and screw-threaded end projecting through the opening in the bracket and provided with a nut, the shorter member of the band being curved to fit upon the concave face of the jaw, and a bolt passing through the members of the band and jaw and provided with a nut, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE CUMMING NILES.

Witnesses:
W. W. STONE,
F. H. YOUNG.