

(No Model.)

H. A. LEMON.
GRIP.

No. 560,417.

Patented May 19, 1896.

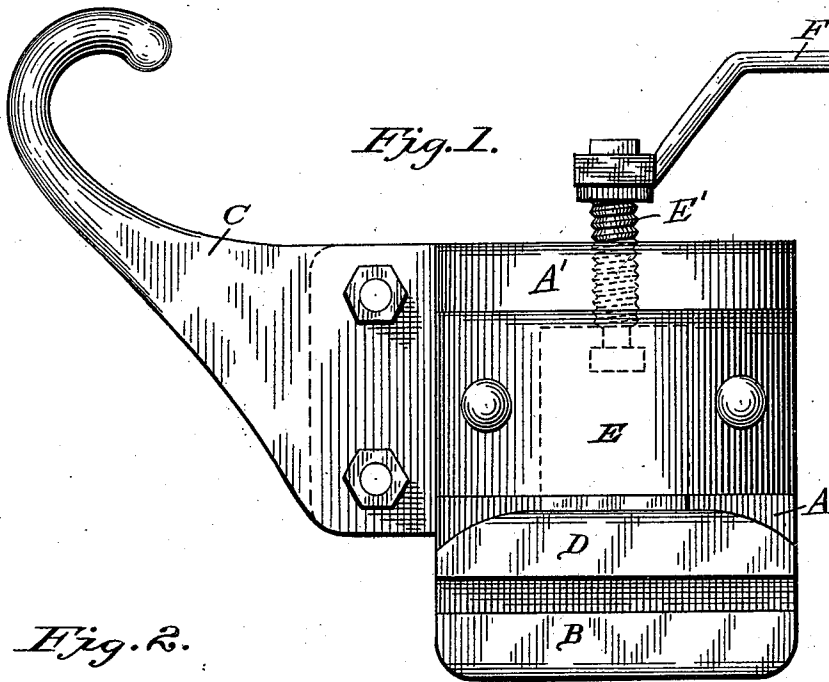


Fig. 2.

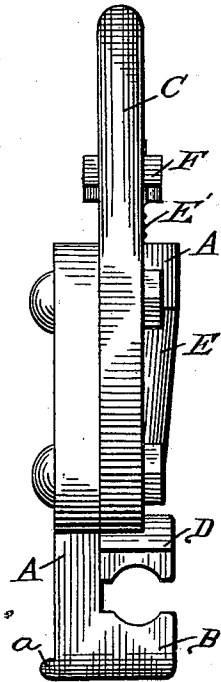


Fig. 3.

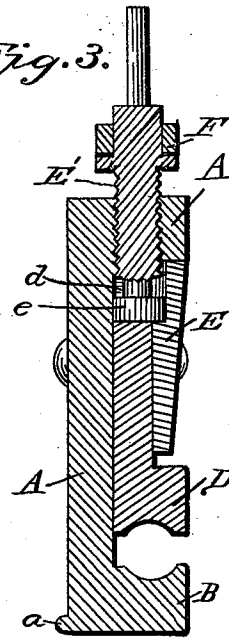
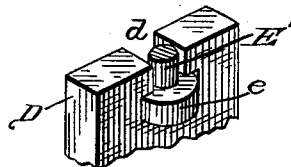


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

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GRIP.

SPECIFICATION forming part of Letters Patent No. 560,417, dated May 19, 1896.

Application filed September 19, 1895. Serial No. 563,023. (No model.)

To all whom it may concern:

Be it known that I, HUGH A. LEMON, a citizen of the United States, residing at Uniontown, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Grips; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to certain new and useful improvements in grips designed more especially for the use of gripping a cable to a wagon or train—as, for instance, in coke or coal regions where the endless-rope system is in use.

It has for its object, among others, to provide a simple and cheap grip which can be applied by the hauler standing on the front of the car, it being necessary only to manipulate a small wrench which tightens the grip on the cable.

The device in itself is very simple in its nature, composed of few parts and those readily assembled and easily operated.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be particularly pointed out in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a side elevation of my improved grip. Fig. 2 is an end view, and Fig. 3 a vertical section through the bolt. Fig. 4 is a perspective detail of the upper end of the movable jaw and the bolt engaging therewith.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the main or body portion of the device, which terminates at its lower end in a jaw B, the upper face of which is preferably rounded or concaved, as seen best in Fig. 2, while upon the rear face or edge is a rib *a*, designed to enable the grip to pass around either a right or left hand sheave. To the forward end of this body portion is bolted or otherwise firmly secured a hook C, adapted to engage in the front coupling of the first car, and upon the side of the said body portion is

mounted to slide the movable jaw D, held in place by the plate E, secured to the body portion by bolts or other suitable means and embracing the movable jaw, forming a guide therefor in its movements. The shank of the movable jaw is provided with an inverted-T-shaped slot or groove *d*, into which engages the round head *e* of a bolt E', which is threaded upward through the overhanging portion A' of the body part of the device, and its upper end is made square or otherwise to receive a removable wrench F. In practice the device is placed over the cable and the hook engaged in the coupling on the front car. The hauler then, while standing on the front of the car, places the wrench on the upper end of the bolt and by screwing it down moves the movable part of the grip or clutch downward and tightens the grip on the cable. A reverse movement of the screw disengages the clutch and allows the cable to pass loosely therethrough. It will thus be seen that by my improved form of grip the same may be applied to the cable without the necessity of the hauler standing on the ground in front of the car and endangering his life, as has been necessary by prior forms of grips for this purpose. The long bearing which the grip has upon the cable prevents the latter from kinking. The hook that engages in the coupling on the car is bent in such shape that it will hold back on a downgrade, pushing farther through the coupling and raising the cable.

The rib on the back of the grip serves to keep the rope and grip from rising over the top of the sheave when the grip is passing the latter, it being understood that the sheaves are larger at the top, which keeps the grip and rope down, the other side of the grip having the rope. The rope takes the place of the rib when the grip leaves the sheave.

The head *e* of the bolt E' is round, as shown in Figs. 3 and 4, so as to allow the bolt to be turned in the opening in the upper end of the movable jaw D, as will be best understood from reference to Fig. 4.

What I claim as new is—

1. The improved grip described, consisting of a body portion with a fixed jaw and a hook, and an adjustable jaw coöperating with the fixed jaw to hold the cable, the fixed-jaw hav-

ing a rib on its rear face, substantially as described.

2. The combination with the body portion having a jaw and a hook at its front end, of
5 a vertical movable jaw, a bolt engaged therewith, and a guard covering the shank of the movable jaw and a wrench for turning said bolt, substantially as described.

3. The combination with the body portion
10 having a jaw and a hook at its front end, of a vertically-movable jaw, a bolt engaged therewith, a wrench for turning said bolt, and a guide and guard plate covering the shank of the movable jaw, substantially as described.

15 4. The combination with the body portion

having fixed jaw, of the movable jaw having a substantially T-shaped opening at its upper end, and a bolt having a rounded head seated in said opening and adapted to be revolved to raise or lower the movable jaw, and
20 a removable guide and guard plate covering the shank of the movable jaw substantially as shown and described.

In testimony whereof I have signed this specification in the presence of two subscribers
25 ing witnesses.

HUGH A. LEMON.

Witnesses:

ELMER E. HANEY,

JOHN A. JONES.