H. A. SHIPP.
CABLE GRIP.

No. 495,843. Patented Apr. 18, 1893. Fig. 4 Fig. 6 WITNESSES: INVENTOR I. a. Ship

ATTORNEYS.

United States Patent Office.

HENRY A. SHIPP, OF ATWATER, CALIFORNIA.

CABLE-GRIP.

SPECIFICATION forming part of Letters Patent No. 495,843, dated April 18, 1893.

Application filed July 13, 1892. Serial No. 439,883. (No model.)

To all whom it may concern:

Be it known that I, Henry A. Shipp, of Atwater, in the county of Merced 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 which is simple and durable in construction, very effective in operation and arranged to graduate the grip on the cable according to the load to be pulled.

The invention consists principally of a lever formed with single gripping jaws adapted to engage opposite sides of the cable, the said jaws being located on opposite sides of the fulcrum of the lever.

The invention also consists of certain parts and details, and combinations of the same, as will be hereinafter described and then pointed out in the claims.

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 all the figures.

Figure 1 is a side elevation of the improvement showing the cable gripped. Fig. 2 is a similar view of the same showing the cable in position to be gripped. Fig. 3 is an end elevation of the improvement as shown in Fig. 1. Fig. 4 is a side elevation of the improvement showing a modified form of the means for moving the slide. Fig. 5 is an enlarged sectional side elevation of the improvement on the line 5—5 of Fig. 6. Fig. 6 is a plan view of the same; and Fig. 7 is an end view of the same.

The improved cable grip is provided with the usual grip frame A, in which is fitted to slide vertically the slide B, adapted to be 40 moved by the usual mechanism under the control of the operator, the said mechanism consisting either of links and levers as shown in Figs. 1, 2, and 3, or of a screw, as illustrated in Fig. 4.

The slide B is pivotally-connected by a link C, with a lever D, fulcrumed at E on the grip frame A. This lever D carries two gripping jaws F and F', adapted to engage the cable G, at opposite sides as will be readily under-

stood by reference to Fig. 5, the said grip- 50 ping jaws being located on opposite sides of the fulcrum E of the lever, so that when a swinging motion is given to the latter, the jaw F moves upward against the cable G while the other jaw F' moves simultaneously 55 downward and presses on the cable in an opposite direction from that of the jaw F. Each of the jaws F and F' is provided with a suitable shoe or lining H, made of suitable material and preferably fastened in place by a pin 60 I, extending transversely through the jaw and the shoe. If the shoe is worn out it can be readily removed by withdrawing the pin I and a new shoe can be inserted and fastened in place, so that the lever D and its bearings 65. for the shoes can always be utilized without removing the same from the gripping frame. It will be seen that when the slide B is in an uppermost position as shown in Fig. 2, then the jaw F is a suitable distance below the ca- 70 ble G while the other jaw F' is a similar distance above the cable G so that the latter readily passes in position between the two jaws. Now, when the operator moves the slide B downward, the one jaw F engages the 75 cable on the under side while the other jaw F' engages the cable at the top, but a suitable distance away from the other jaw, as the two jaws are located on opposite sides of the fulcrum of the lever. It will be seen that when a 80 heavy grip is necessary then the slide B is moved down in its lowermost position so that the cable assumes a curved position between the jaws F and F', that is the jaw F moves it above the normal horizontal line while the 85 jaw F' moves the cable below the said normal line, and between the two jaws a firm grip is obtained on the cable so that no matter how heavy the load is, the grip is not liable to slip on the cable.

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

1. In a cable grip, the combination with the grip frame, and a slide movably held therein, 95 of a lever pivoted on the said grip frame and actuated from the said slide, and jaws held on the said lever, on opposite sides of its ful-

crum, the said jaws being adapted to engage the cable on opposite sides, substantially as shown and described.

2. The combination with the grip frame, 5 and a vertical slide therein provided with an operating mechanism, of a lever pivoted to the said frame, oppositely facing jaws on the lever at opposite sides of its pivot, removable

shoes in said jaws, and a link pivotally connecting the slide and the said lever, substan- 10 tially as set forth.

HENRY A. SHIPP.

Witnesses:

W. W. GIDDINGS, L. Drakeley.