No. 698,842. Patented Apr. 29, 1902.

J. METCALFE & T. BELL.

CABLE GRIP.

(Application filed Oct. 18, 1901.)

(No Model.)

Fig. 1.

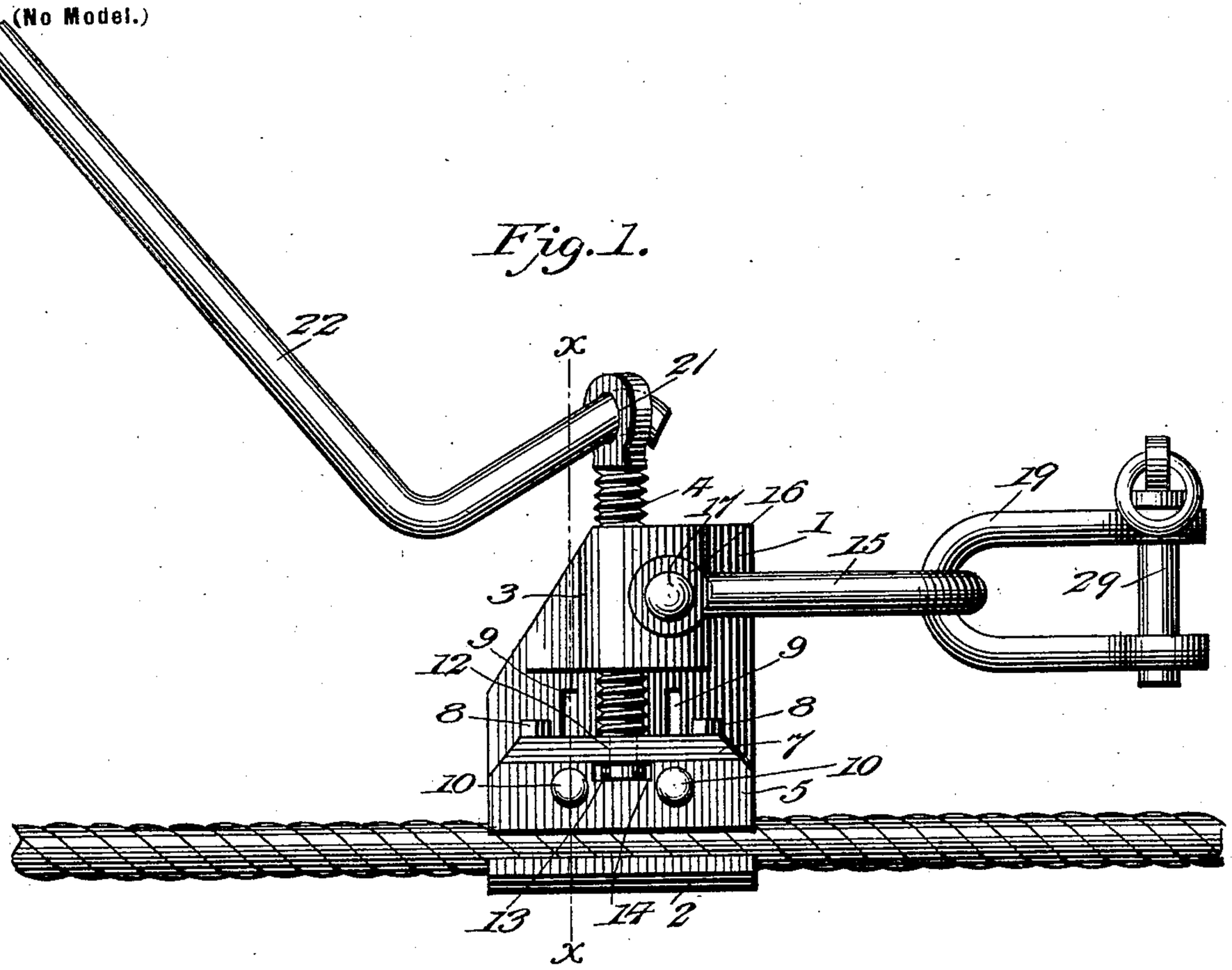
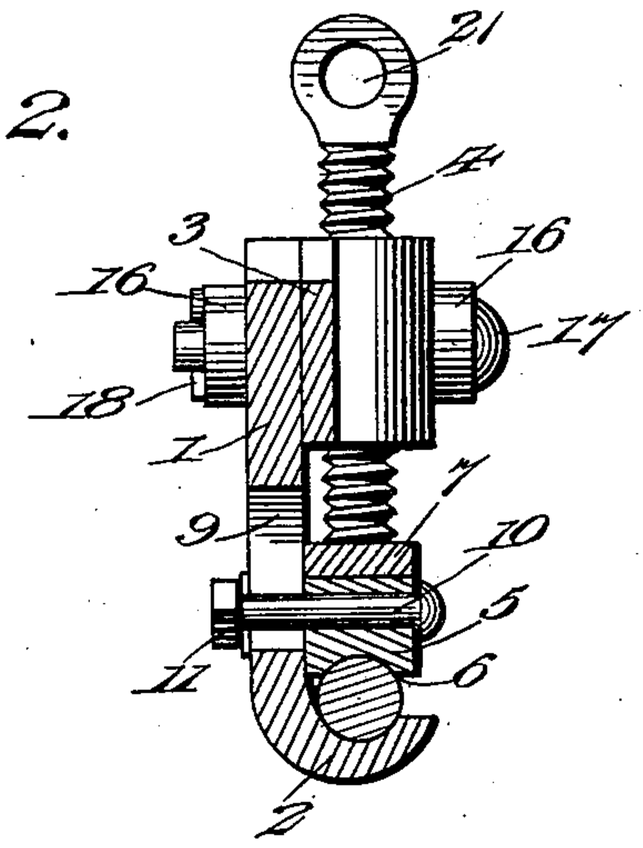


Fig. 2.



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UNITED STATES PATENT OFFICE.

JOHN METCALFE AND THOMAS BELL, OF ROSCOE, PENNSYLVANIA.

CABLE-GRIP.

SPECIFICATION forming part of Letters Patent No. 698,842, dated April 29, 1902.

Application filed October 18, 1901. Serial No. 79,178. (No model.)

To all whom it may concern:

Be it known that we, JOHN METCALFE and THOMAS BELL, citizens of the United States, residing at Roscoe, in the county of Washington and State of Pennsylvania, have invented certain new and useful Improvements in Cable-Grips; and we 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 improvements in cable-grips.

The object of the present invention is to simplify and improve the construction of grips for mining-cars and the like and to increase their durability and efficiency and at the same time to enable them to be operated with great rapidity in engaging and releasing a cable.

Another object of the invention is to provide a device which will enable any of its parts when worn to be readily removed without discarding the rest of the device.

The invention consists in the construction and novel arrangement and combination of parts, hereinafter described, illustrated in the accompanying drawings, and pointed out in the appended claims.

Referring to the drawings, Figure 1 is a side elevation of our improved device, and Fig. 2 is a sectional view taken on line $x\ x$ of Fig. 1.

Referring to the drawings, 1 designates a frame or body having its lower end bent upwardly to form a stationary jaw 2, with a curved hooked lower end and having its upper end provided with a shoulder 3, having an internally-screw-threaded opening through which passes a screw-bolt 4, which is adapted to be rotated to open and close a movable jaw 5, which coöperates with the stationary jaw 2.

The lower surface of the movable jaw is concaved, as at 6, so as to receive the upper side of the cable snugly therein.

7 designates a plate secured to the upper side of the jaw 5 by vertically-arranged screw-bolts 8.

Within the frame or body 1, intermediate its ends, are provided a pair of vertically-arranged guide-slots 9 9, which are engaged by a pair of horizontally-disposed bolts 10 10, which pass through the movable jaw 5, by which means the movable jaw is prevented from moving laterally. The free ends of the bolts 10 10 are provided with securing-nuts 11 11 or other securing means.

The lower end of the screw-bolt 4 passes through and is swiveled in a central opening 12 in the plate 7 and has its lower end provided with a nut, linchpin, or other securing means. In the drawings I have shown a linchpin 13 as the securing medium, and in order that the nut can be inserted in position or removed the lower portion of the plate surrounding the central opening 12 thereof is cut away to form an elongated slot 14.

The shoulder 3 is provided with an opening adapted to receive a coupling device 15, consisting of a looped bar having its inner ends provided with eyes 16, adapted to receive a coupling-bolt 17, which is screw-threaded to receive a nut 18, whereby the coupling device is detachably secured to the said eye.

19 designates a clevis having its ends provided with eyes for the reception of the coupling-pin 20, which is adapted to be secured to the car.

In order that the screw-bolt 4 may be operated from the car, we provide its upper end with an eye 21, which can be readily engaged by a lever 22, so as to rotate the said screw-shaft.

The invention has the following advantages: The grip, which is simple and inexpensive in construction, is positive and reliable in operation, and by means of the coupling-loop between the car and cable the cars are enabled to be hauled equally as well downhill as uphill. The jaws are readily adjusted to grip the cable and the parts when worn can be readily replaced without discarding the rest of the device.

Although we have shown the preferred form of our invention herein, we reserve the right to make such changes in the form, proportion, size, and the minor details of construction within the scope of the appended claims without departing from the spirit of this invention.

We claim—

1. In a cable-grip, the combination with the body portion thereof having vertical slots therein, a screw-threaded shoulder, a stationary jaw having at its lower end a curved

hook, a movable jaw connected to the slots having a concaved lower surface and an elongated slotted upper surface, a detachable plate secured to the movable jaw over the slotted plate, a screw-bolt coacting with screw-threads of the shoulder and with the detachable plate, and a head at the lower end of said bolt seated in said elongated slot, substantially as specified.

2. In a cable-grip, the combination with the body portion thereof having vertical slots therein, a screw-threaded shoulder at the upper end of the body portion, a stationary jaw secured to the shoulder having vertical slots and a curved hooked end, of a movable jaw connected to the slots of the stationary jaw and having a concaved lower surface and an elongated slotted upper surface, a detachable plate secured to the movable jaw over the elongated slot, a screw-bolt coacting with the screw-threads of the shoulder and with said detachable plate and means at the lower end of said screw-bolt seated in and adapted to operate in the said elongated slot, a coupling device connected to said shoulder and a lever connected to said screw-bolt to operate the movable jaw, substantially as specified.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN METCALFE.
THOMAS BELL.

Witnesses:
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P. B. WILSON.