

(No Model.)

J. B. BROWN.
DEVICE FOR LIFTING TRACTION CABLES.

No. 506,972.

Patented Oct. 17, 1893.

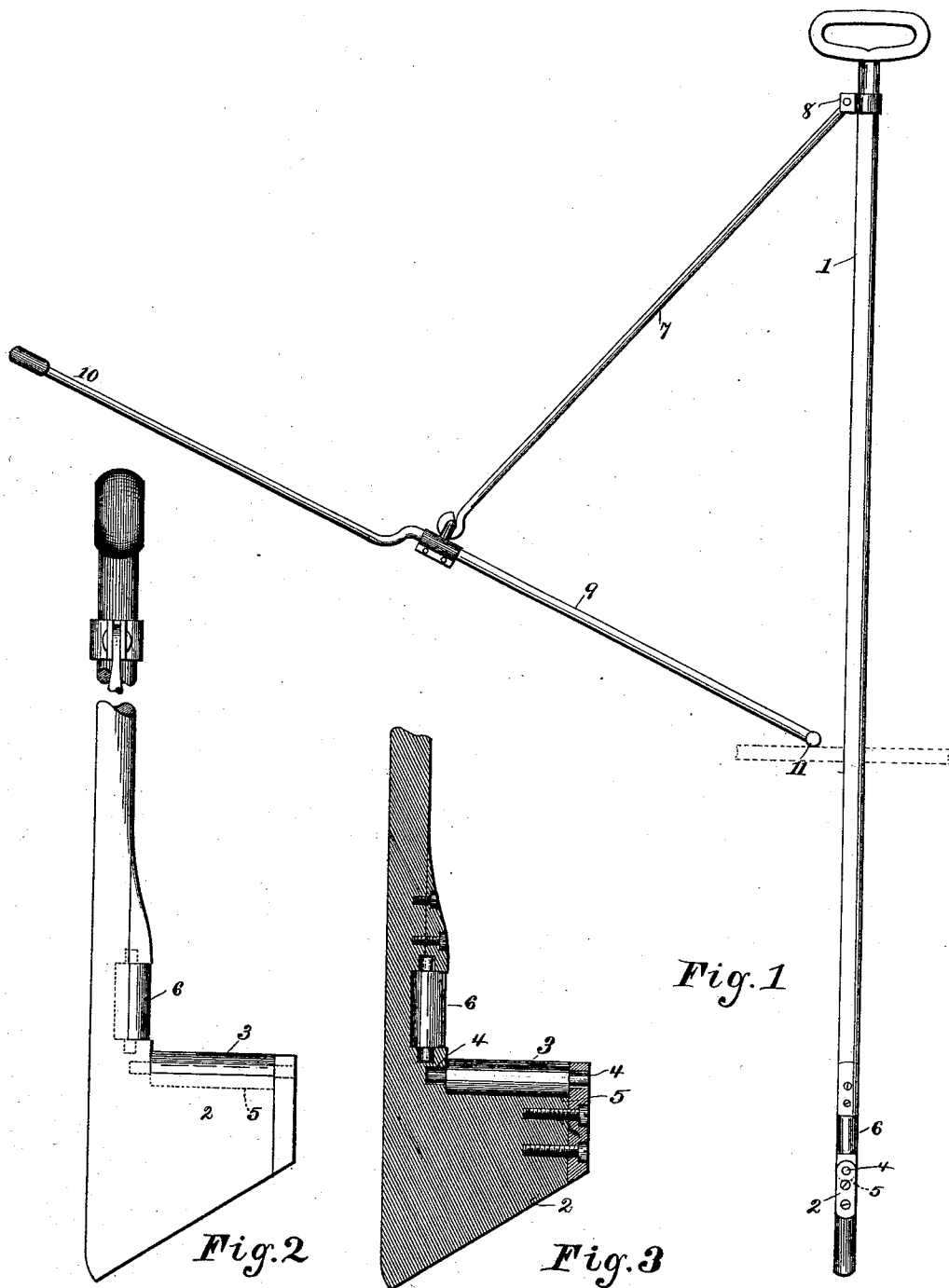


Fig. 1

Fig. 2

Fig. 3

Witnesses
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UNITED STATES PATENT OFFICE.

JAMES B. BROWN, OF WASHINGTON, DISTRICT OF COLUMBIA.

DEVICE FOR LIFTING TRACTION-CABLES.

SPECIFICATION forming part of Letters Patent No. 506,972, dated October 17, 1893.

Application filed June 26, 1893. Serial No. 478,883. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. BROWN, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Devices for Lifting Traction Cables, of which the following is a specification, reference being had to the accompanying drawings.

The object of my invention is to produce a device for raising a moving traction cable to a position by which it may be caught by the grip of a car, whereby the danger of drawing the tool in the cable slot, or of injuring the operator is reduced to a minimum and is practically altogether obviated.

In the accompanying drawings: Figure 1 is a side elevation of my device, showing means for raising and lowering it. Fig. 2 is a view taken at right angles thereto. Fig. 3 is a central vertical longitudinal section of the lower end of the lifter.

Referring to the figures on the drawings: 1 indicates the shank of the lifter and 2 a wing carried on one side thereof.

3 indicates a roller carried in suitable bearings 4 in the wing and embedded in a groove 5 in the upper end of the wing.

6 indicates a vertical roller carried in suitable bearings on the shank and in proximity to the roller 3.

Inasmuch as my device is one for lifting a traction cable it is essential that it be of a size which will admit of its ready introduction through the slot in which the grip works. Certain conditions as to the size of the parts, and particularly of the rollers, are thereby imposed. By embedding the rollers in grooves, as illustrated, and loosely pivoting them in end bearings a broad bearing, extending the entire length of each roller is provided and the employment of a roller of required diameter is rendered practicable. The wing that is secured to the shank and carries the roller 3 has a distinct office to perform.

The traction cable, in practice, is made of steel wire which, in use, becomes more or less frayed and presents along its length projecting, broken ends of wire strands. The office of the wing is to receive the impact from such projections and to turn the implement in the slot, thereby allowing the cable to pass

without dragging the lifter and without the consequent danger to an operator. For this reason the roller 3 is preferably at right angles to the shank, so that the lifter is free to turn under any blow delivered against the side of the wing.

It is perhaps sufficient, for practical purposes, to use the lifter in its simplest form, as above described. Where it is thought to be desirable, however, lifter actuating mechanism may be employed, as for example, that illustrated, in which: 7 indicates a brace support pivoted at one end, as indicated at 8 to the shank near its upper extremity and carrying, in like manner, a lever 9 at its other extremity. This lever carries on one end a handle and on the other end a shoe 11. By drawing the handle toward the upper end of the shank, the shoe is forced against the slot rail and an upward tendency is imparted to the lifter. The handle end of the lever 9 is preferably bent, as indicated, and serves as a guard to prevent the fingers of the operator from being caught between the handle 10 and the shank 1.

In practice, the parts are made of metal, the rollers being preferably of hardened tool steel to prevent undue wear.

What I claim is—

1. In a device for lifting traction cables, the combination with a shank, of a wing, and a cable supporting roller carried upon the wing, substantially as set forth.

2. In a device for lifting traction cables, the combination with a shank, of a wing, a groove in the upper edge thereof, and a loosely pivoted roller embedded in the same, substantially as set forth.

3. The combination with a traction cable lifter, of a brace rod pivoted thereto, and a lever pivoted to the extremity thereof for raising and lowering the lifter, substantially as specified.

In testimony of all which I have hereunto subscribed my name.

JAMES B. BROWN.

Witnesses:

G. T. MYERS,

J. M. WITHEROW.