W. S. MORRIS.

POLE CLIMBING DEVICE.

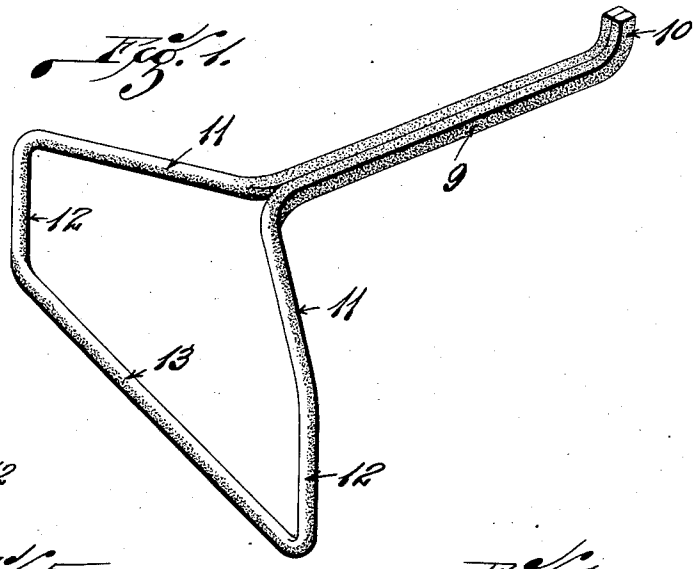
APPLICATION FILED JULY 29, 1912.

1,073,158.

Patented Sept. 16, 1913.



Fig. 1.



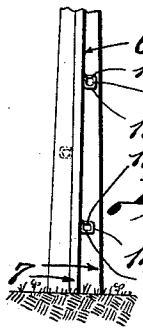
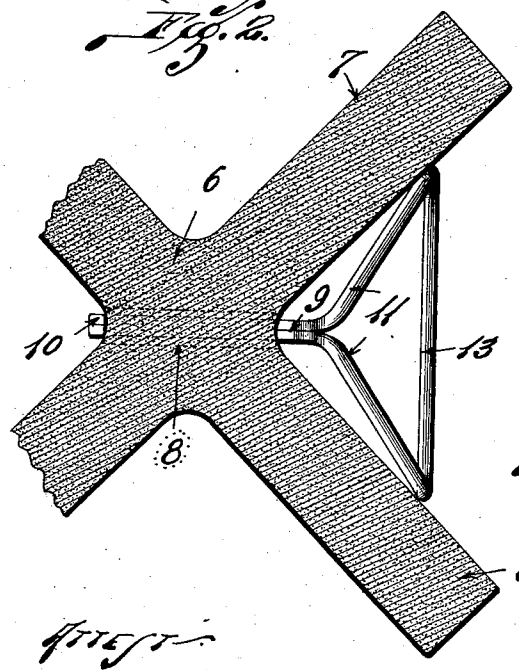


Fig. 5.

Fig. 3.

Fig. 12.



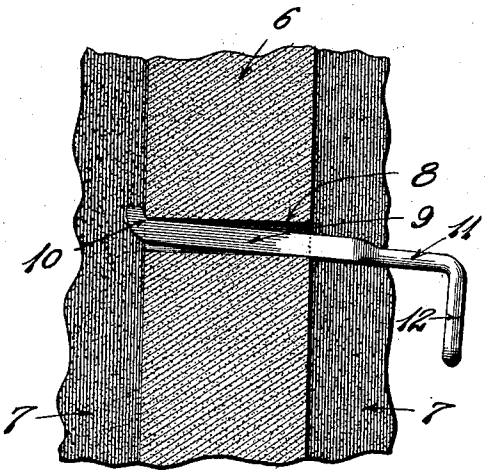
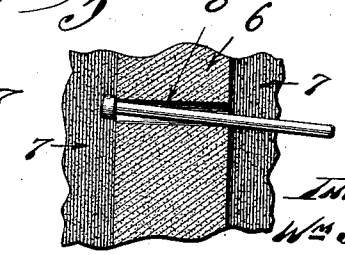


Fig. 7.



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UNITED STATES PATENT OFFICE.

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POLE-CLIMBING DEVICE.

1,073,158. Specification of Letters Patent. Patented Sept. 16, 1913.

Application filed July 29, 1912. Serial No. 712,173.

To all whom it may concern:

Be it known that I, WILLIAM S. MORRIS, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Pole-Climbing Devices, of which the following is a specification containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in pole climbing devices, and the object of my invention is to construct a removable and portable device arranged for detachable connection with a cement or metallic pole.

With the above purposes in view my invention consists in certain novel features of construction and arrangement of parts as will be hereinafter more fully described, pointed out in the claim and illustrated by the accompanying drawings, in which—

Figure 1 is a perspective view of one of my improved pole climbing devices; Fig. 2 is a sectional plan illustrating my improved device in position in a cementitious pole, cruciform in cross section; Fig. 3 shows in sectional elevation a fragment of a cementitious pole, cruciform in cross section, with one of my improved devices extended through the pole; Fig. 4 is a view similar to Fig. 3, on a reduced scale, showing a modified form of climbing device; and Fig. 5 shows in elevation a pole equipped with my improved climbing device.

Referring by numerals to the accompanying drawings: 6 designates the body portion of a cementitious pole, and 7 designates wings formed integral with the pole. The body portion, together with the wings, tapers from end to end, and in the formation of the pole I contemplate molding the body and the wings as a monolithic structure. This form of pole will be, in all probability, the style of pole that I will build and place upon the market, hence the climbing device will be designed with special reference to said pole.

Formed through the body of the pole, at an angle relative to the wings, there is a number of openings such as 8 which extend entirely through the body portion 6 of the pole.

The climbing device proper comprises a straight body portion 9 having at its one end a head 10. Extended from and formed integrally with the body portion at its end opposite the head 10 there is a pair of arms 11 which stand at an angle relative to the body portion 9. Formed integral at the outer ends of the arms 11 are the vertical arms 12, and connecting the arms 12 and extended integrally from their lower ends is a step or grip 13.

In view of the fact that the cementitious pole precludes the use of ordinary linemen's spurs, and in view of the fact that it is objectionable to equip the poles with fixed climbing devices it will be necessary for the linemen to carry a number of these removable devices. These devices are preferably made of a single piece of steel rod, hence it will be no inconvenience for the lineman to carry a number of the devices.

In practical use the body portion 9 of the climbing device is extended through one of the openings in the pole, with its head 10 projected entirely through and engaging the opposite face of the pole, so that the device may not be readily withdrawn and, as clearly shown in Fig. 2, when the device is in place in the pole the vertical arms 12 will engage the wings 7 of the pole and prevent the device from rocking laterally, or the body 9 from rotating in the opening in the pole. When such a climbing device is provided with an out-standing step or grip, such as 13, it will be necessary to provide some means for preventing the rotation of the body 9 in the opening in the pole.

If forms of poles other than the form shown are employed, some means equivalent to the vertical arms 12 must be resorted to, hence I do not wish to be understood as limiting myself to the specific construction of this feature of my climbing device.

In Fig. 4, I illustrate a modified form of climbing device which consists simply of a headed rod projected through an opening in the pole. Inasmuch as this device is a removable and portable climbing device for use in connection with cement or metallic poles, I consider it within the scope of my invention.

I claim:

A combination with a pole or column presenting a groove bounded by divergent walls

and having holes through the line of juncture of said wall, the step having a body portion insertible through the hole and an angular end to engage one end of the hole and a step portion widened to engage both of the divergent walls to prevent turning of the body portion in the hole.

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

WILLIAM S. MORRIS.

Witnesses:
E. L. WALLACE,
N. G. BUTLER.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."