No. 852,623. PATENTED MAY 7, 1907.

J. A. ROTH.

POLE CLIMBING APPARATUS.

APPLICATION FILED MAY 10, 1906.

Fig. 1.

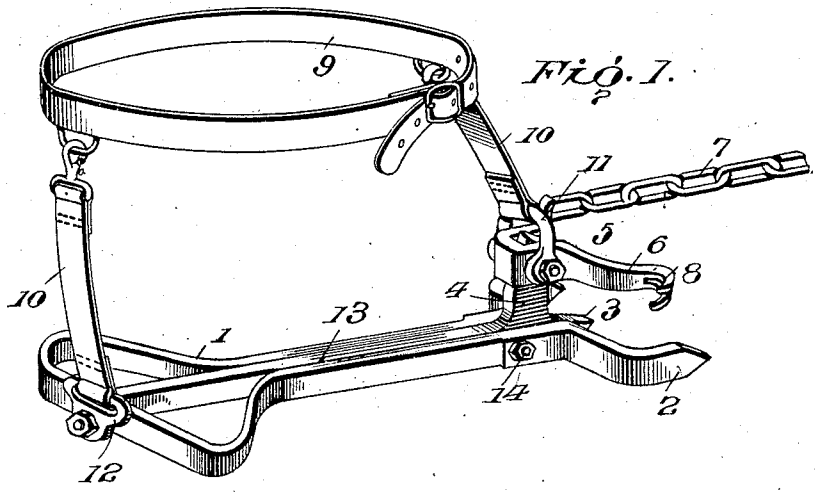


Fig. 2.

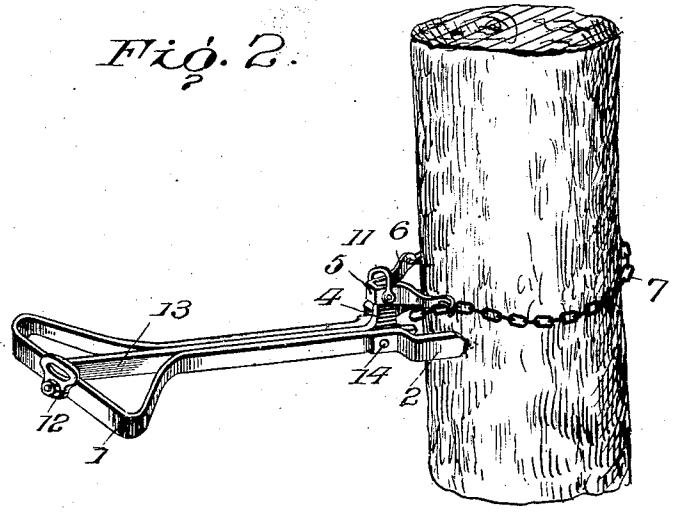
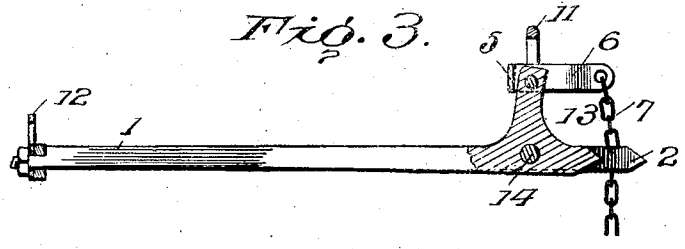


Fig. 3.



Inventor

J. H. Roth.

Witnesses

By R. A. B. Racey Attorneys

THE NORR. PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN A. ROTH, OF HANNIBAL, OHIO.

POLE-CLIMBING APPARATUS.

No. 852,623. Specification of Letters Patent. Patented May 7, 1907.

Application filed May 10, 1906. Serial No. 316,199.

To all whom it may concern:

Be it known that I, JOHN A. ROTH, a citizen of the United States, residing at Hannibal, in the county of Monroe and State of Ohio, have invented certain new and useful Improvements in Pole-Climbing Apparatus, of which the following is a specification.

This invention consists of novel apparatus for facilitating climbing of telegraph poles and trees or the like, and is particularly designed for use by linemen or persons engaged in similar occupation.

Carrying out the invention, it is contemplated to provide a seat or supporting frame adapted to be straddled by the operator, means for attaching the seat or supporting frame to the body of the operator, and means for connecting the apparatus with the pole or tree to be climbed.

For a full understanding of the invention and the merits thereof and also to acquire a knowledge of the details of construction of the means for effecting the result, reference is to be had to the following description and accompanying drawings, in which:

Figure 1 is a perspective view of an apparatus embodying the invention. Fig. 2 is a view showing the seat frame and adjacent parts secured to a pole or tree, the body attaching means being omitted. Fig. 3 is a vertical longitudinal sectional view.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

Specifically describing the invention, the numeral 1 designates a seat frame which is adapted to have a seat suitably attached thereto so that when the device is in use the lineman or operator, after he has climbed the pole, can readily position the seat frame and rest himself by sitting thereon, at the same time being free to use his arms in performing any operation which it is necessary to accomplish. The seat frame 1 is provided at its inner end with spaced spurs or pole engaging members 2, and an intermediate spur 3 between the spurs 2. Projecting upwardly from the inner end portion of the frame 1, is an arm 4, and laterally extending from said arm 4, is a fork 5 comprising spaced outwardly converging and curving members 6. A chain 7 or similar flexible connecting means is connected at one end to the outer extremity of one of the members 6, the other of said members 6 being formed with a hook 8 to engage the opposite end portion of the chain after the latter has been passed about the pole or tree to secure the device thereto. The form of the fork 5 is such that it conforms to the contour of the pole or tree. The body attaching means for the apparatus consists of a belt 9, rings at opposite points in its circumferential extent, and short straps 10 pendent from the rings of the belt 9, are connected with loops 11 and 12, the loop 11 being connected with the upper end of the arm 4, while the loop 12 is attached to the outer end of the seat frame 1. The straps 10 may have snap hooks at the upper extremities to engage the rings of the belt 9. It will be observed that the construction of the seat frame is such that same may be readily straddled by the operator and when connected with the belt 9, the device will be securely attached to the body of the user and will not encumber him in any way in walking, or in ascending or descending the pole or tree.

The seat frame 1 is preferably made from a bar which is bent between its ends to form the outer enlarged portion of the seat frame, opposite end portions of the bar being extended in parallel relation toward the front extremity of the frame at which point they are projected outwardly and forwardly to form the spurs 2. The arm 4 is a vertical extension of a longitudinal bar 13, the rear end of which is connected with the outer end of the frame 1 and which is received in the space between the sides of the frame. A fastening bolt 14 is used to secure the front end of the bar 13 to the side portions of the frame 1, the outer end of the bar 13, however, passing through the outer end of the frame being suitably connected therewith in any substantial way. The fork 5 likewise is preferably made of a bar of metal, bent upon itself to receive at its outer portion the upper end of the arm 4, the sides of said bar being curved outwardly in a manner hereinbefore described to form the members 6.

It will be obvious that in the use of the invention, as the operator climbs a pole, should he desire to rest or perform any work, he merely engages the spurs 2 with the pole, the rest 7 having previously been passed thereabout and engaged with hook 8, and as soon as his weight is received on the seat frame, the spurs 2 firmly embed themselves in the pole and support the operator in an obvious way. The intermediate spur 3 is useful for climbing trees of a diameter less than the

distance between the spurs 2 and under these conditions the spurs 2 act as stops to prevent lateral movement of the seat frame when spur 3 is engaged with an object.

Having thus described the invention, what is claimed as new is:

1. A tree climbing apparatus comprising a seat frame provided near one end with an upwardly extending arm and with laterally extending diverging pole engaging members in advance of said arm, a fork secured to the upper end of said arm and provided with laterally diverging members, one of which is formed with a hook, and a chain connected to the other member of said fork and arranged for detachable engagement with the said hook.

2. In tree climbing apparatus, a seat frame consisting of a bar bent upon itself and having its end portions spaced apart and formed into spurs to engage a support, a longitudinal bar between the opposite end portions of the frame bar aforesaid and secured thereto, an arm projecting upwardly from the longitudinal bar, a fork attached to the upper end of said arm to engage a pole or support, a chain adapted to embrace a support and connected with the fork aforesaid, and a spur formed at the front extremity of the longitudinal bar and arranged intermediate of the spaced spurs of the seat frame.

3. In tree climbing apparatus, a seat frame consisting of a bar bent upon itself and having its end portions spaced apart and formed into spurs to engage a support, a longitudinal bar between the opposite end portions of the frame bar aforesaid and secured thereto, an arm projecting upwardly from the longitudinal bar, a fork attached to the upper end of said arm to engage a pole or support, a chain adapted to embrace a support and connected with the fork aforesaid, a spur formed at the front extremity of the longitudinal bar and arranged intermediate of the spaced spurs of the seat frame, a loop connected with the upper end of the arm of the longitudinal bar, a second loop projecting upwardly from the outer end of the frame, a belt, and suspending straps detachably connecting the belt with the loops aforesaid.

4. A tree climbing apparatus comprising a seat frame embodying a bar bent upon itself at an intermediate portion and forming spaced apart members that are diverged at their ends and formed with spurs, and a longitudinal bar secured between the spaced apart members of the first named bar and provided with an upwardly extending arm and a spur in advance of said arm and intermediate of the first named spurs, a fork secured to said arm and provided with diverging members, and means for securing a chain to the member of said fork, as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN A. ROTH. [L. S.]

Witnesses:

CHARLES L. RUBY,

D. N. MANGOLD.