C. WINTER.

CLIMBING HARNESS.

APPLICATION FILED APR. 11, 1916.

1,229,003.

Patented June 5, 1917.

Fig. 1,

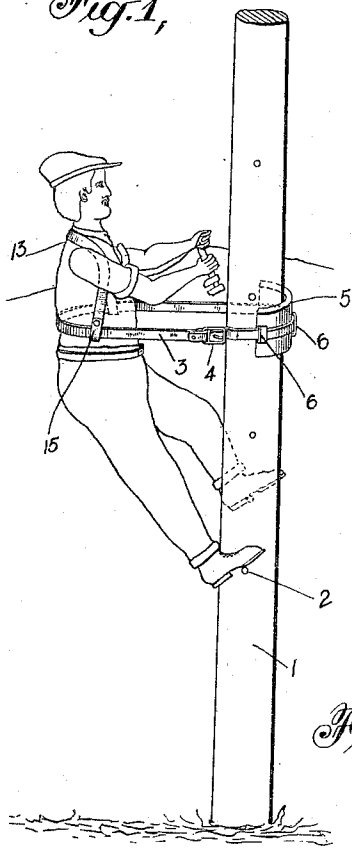


Fig. 2,

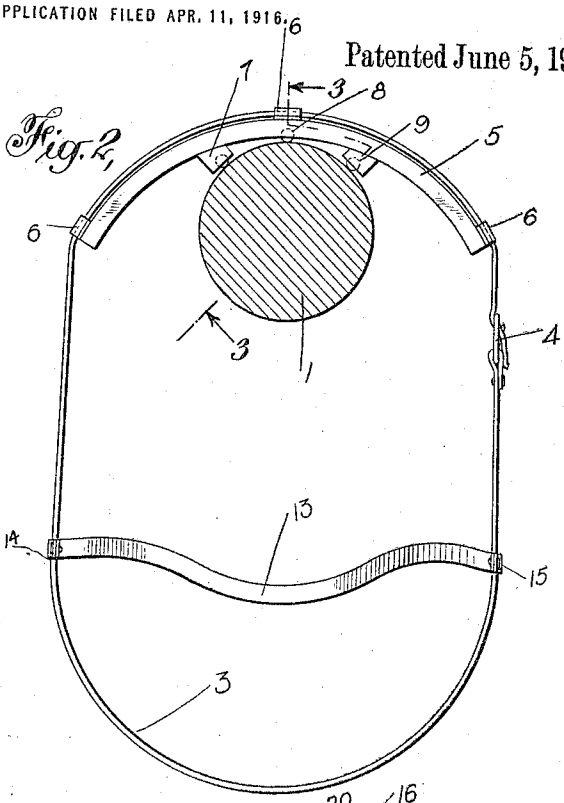


Fig. 3,

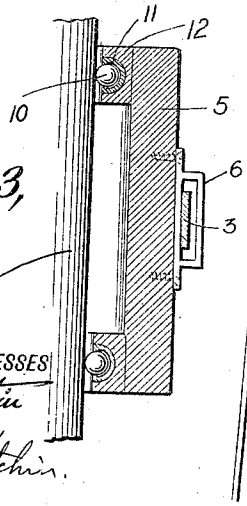


Fig. 4,

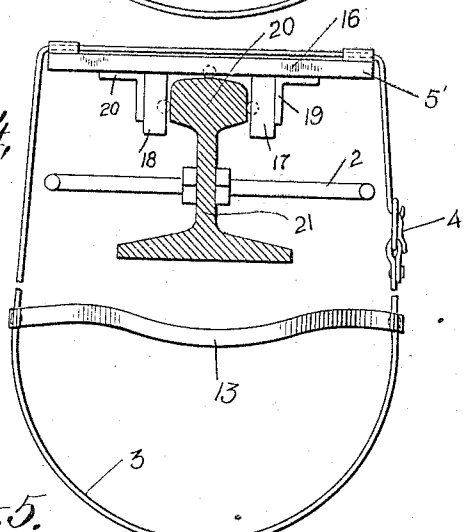
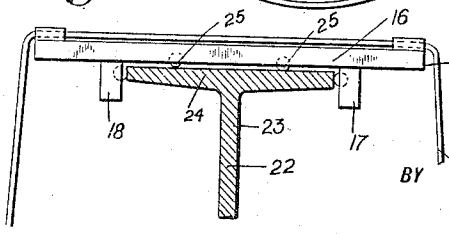


Fig. 5.



WITNESSES

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CLIMBING-HARNESS.

1,229,003. Specification of Letters Patent. Patented June 5, 1917.

Application filed April 11, 1916. Serial No. 90,351.

To all whom it may concern:

Be it known that I, CHRISTIAN WINTER, a citizen of the United States, and a resident of Oskaloosa, in the county of Mahaska, and State of Iowa, have invented a new and Improved Climbing-Harness, of which the following is a full, clear, and exact description.

This invention relates to climbing harness and has for an object the provision of an improved arrangement whereby a workman may quickly climb or descend a pole.

Another object in view is the provision of an arrangement of harness whereby a workman may move up or down a pole without using his hands.

A still further object in view is to provide a harness for climbing poles arranged with an anti-friction guiding and bracing member which coacts with the straps of the harness for allowing a proper movement of the workman.

In the accompanying drawing:—

Figure 1 is a perspective view showing an embodiment of the invention, the same being shown in operative position;

Fig. 2 is a top plan view of the harness shown in Fig. 1, the pole being shown in section;

Fig. 3 is a section through Fig. 2 on line 3—3, the same being on an enlarged scale;

Fig. 4 is a top plan view of a slightly modified form of the invention to that shown in Fig. 2;

Fig. 5 is a top plan view of a further modified form of the invention to that shown in Fig. 2.

Referring to the accompanying drawings by numerals, 1 indicates a wooden pole provided with pins 2 acting as steps. Ordinarily in climbing a pole similar to pole 1 the workman would grasp the pole with his hands and place his feet on the respective pins 2 as he moved upwardly. According to the present invention the workman may brace himself against the outer end of strap 3 and place his feet on the respective pins 2 as he moves upwardly without moving his hands in any way, whereby his hands will be free to carry tools or supplies of any kind. The strap 3 is preferably connected together at the ends by a buckle 4 of any suitable kind.

A shoe 5 is provided which has guiding loops 6 arranged thereon for guiding and holding the strap 3 upon the shoe. It will be observed that the shoe is arc-shaped as shown in Fig. 2, whereby the same may readily fit poles of different sizes. In order that the shoe may freely slide up and down, antifriction members 7, 8 and 9 are provided. These antifriction members are each provided with a ball 10, a socket member 11 and a supporting base 12 formed of any material, as for instance, wood. The entire shoe 5 may be made from wood, if desired, or from metal without departing from the spirit of the invention. The strap 3 may be made from leather, fabric or other suitable material and may be made of any length and adjusted as desired by properly adjusting the buckle 4. In order that the strap 3 may be held at a proper height around the waist a shoulder strap 13 is provided which has loops 14 and 15 at the ends slidingly fitting over the strap 3. The shoulder strap 13 is sufficiently long to allow the same to be looped over, or, rather, back of the neck and under the forward part of the arms, as shown in Fig. 1.

In Fig. 4 will be seen a slightly modified form of the invention in which the device is especially adapted for posts made from T-rails. In forming a harness of this kind the shoe 5′ is formed with a straight bar 16 having upright members 17 and 18 arranged thereon braced by angle irons 19 and 20. Members 17 and 18 and the center of bar 16 carry antifriction rollers or balls so as to engage the top and sides of the head 20 of the post or pole 21.

Fig. 5 discloses a further modified form of the invention wherein the pole 22 is provided with a web 23 and a wide base 24. The shoe 5″ for accommodating this pole is constructed similar to that shown in Fig. 4 except that a plurality of antifriction members 25 are provided in the bar 16. The uprights 17 and 18 carry antifriction rollers or balls similar to those shown in Figs. 2 and 4 but are not provided with the bracing angle bars 19 and 20, as the side pressure on this form of the invention is but slight. It is evident that the members 17 and 18 may be moved farther apart or closer together as desired to accommodate different sized poles, while the arc-shaped form shown in Fig. 2 will automatically accommodate different sized poles within certain limits without any adjustment whatever. If desired, the members 7 and 9 may be moved outwardly in case the device is to be used

on a very large pole. It is also evident that other slight changes and rearrangements of the parts may be made without departing from the spirit of the invention.

What I claim is:

In a climbing harness of the character described, a supporting strap, a shoe over which said strap is fitted, said shoe extending substantially transversely of the pole, a plurality of lugs or projections extending from said shoe at different points, said lugs being arranged to engage the pole at a plurality of angles whereby the shoe may more freely slide along the pole and antifriction balls arranged in said lugs, said balls being constantly in position to engage a pole with which the harness is used.

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

CHRISTIAN WINTER.

Witnesses:

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BERT G. PORTER.

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