May 12, 1936. W. C. HOLTZMANN 2,040,555

ROPE ADJUSTER AND HOLDER

Filed Jan. 24, 1935

Fig. 1.

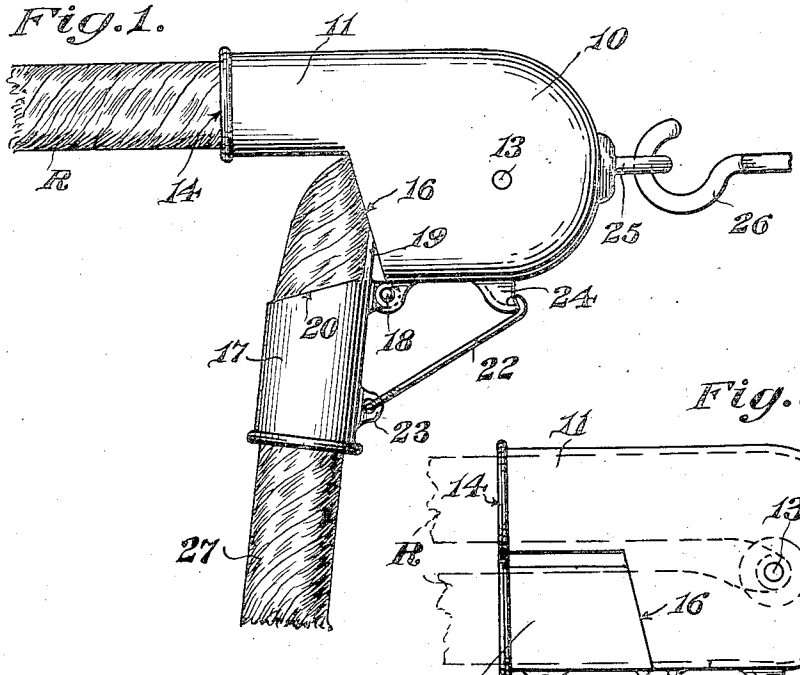


Fig. 3.

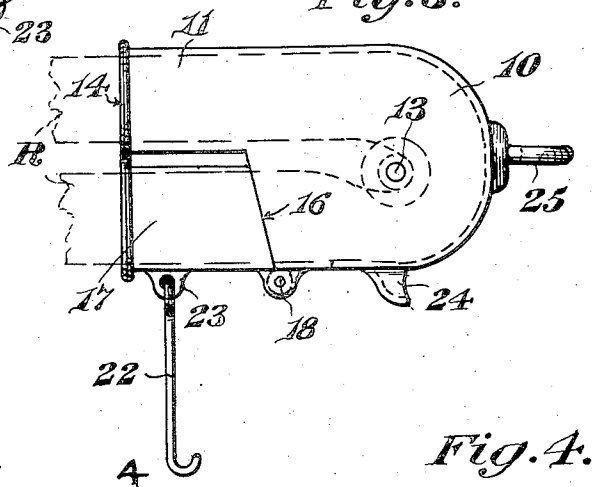


Fig. 2.

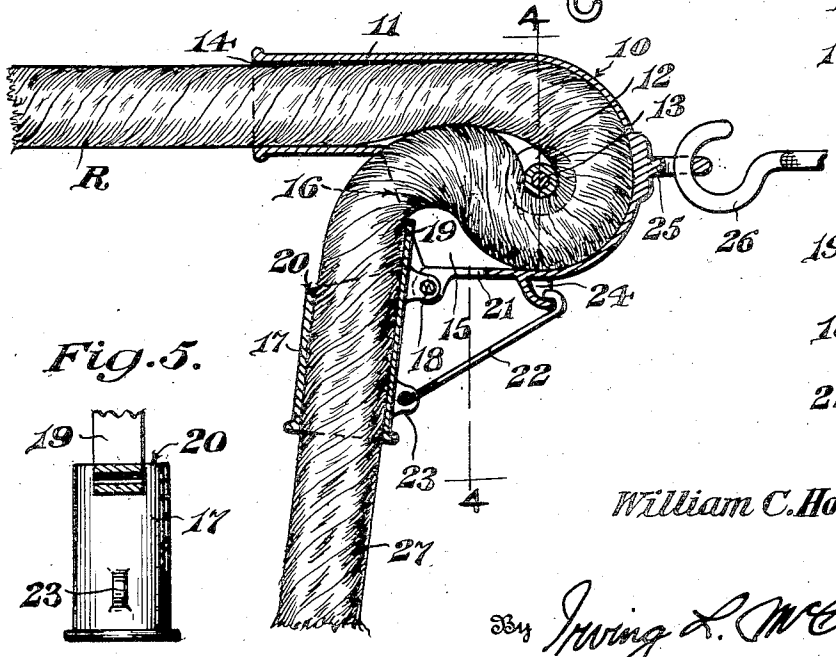


Fig. 4.

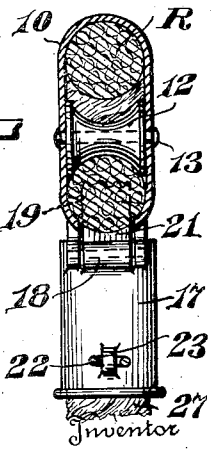


Fig. 5.

Inventor

William C. Holtzmann,

By Irving L. McCathran

Attorney

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ROPE ADJUSTER AND HOLDER

William C. Holtzmann, New York, N. Y.

Application January 24, 1935, Serial No. 3,326

5 Claims. (Cl. 24—132)

This invention relates to rope adjusters and holders, and has for its principal object the production of a simple and efficient rope adjuster and holder which is so constructed as to facilitate the tightening of a rope, the taking up of the slack, and also the holding of the rope at a desired tension.

A further object of this invention is the production of a simple and efficient clamping means forming a part of the rope holder, the clamping means being capable of being swung to a position so as to firmly hold the rope in a clamped position and also being swung to permit the rope to easily slide through the holder for the purpose of loosening the rope.

A still further object of this invention is the production of a simple and efficient rope holder having a hinged sleeve which may be swung in one position to clamp the rope against sliding movement, and the sleeve may be swung to another position for permitting the rope to freely slide through the holder.

With these and other objects in view my invention consists in certain novel constructions, combinations and arrangements of parts as will be hereinafter more fully described and claimed.

In the drawing:—

Figure 1 is a side elevation of the holder in a clamping position;

Figure 2 is a longitudinal sectional view through the holder in the position shown in Figure 1;

Figure 3 is a side elevation of the holder in a closed position whereby the rope may freely slide therethrough;

Figure 4 is a vertical sectional view taken on line 4—4 of Figure 2;

Figure 5 is a rear elevation of the locking sleeve showing the hinge journal in transverse section.

By referring to the drawing, it will be seen that the rope holder comprises a body 10 having a forwardly projecting tubular sleeve 11, and within the body 10 is journaled a pulley or roller 12, the pulley or roller 12 being journaled upon the journal pin 13. The forward end 14 of the forwardly projecting sleeve 11 is open, as clearly illustrated in Figure 2, and the pulley 12 is mounted within the body 10 in a plane below the bottom of the sleeve 11, as shown in Figure 2. The body 10 is provided with a lower compartment 15 located below the sleeve 11, which compartment 15 is provided with an open forward end 16.

A locking sleeve 17 is hingedly secured, as at 18, to the body 10 adjacent the open end 16, and this locking sleeve is adapted to be swung from a locking position at substantially right angles to the body 10, to an unlocking position substantially parallel with the sleeve 11, as shown in Figure 3, when it is desired to loosen the rope R which is adapted to pass through the body 10 and the sleeves 11 and 17. This locking sleeve 17 is provided with a projecting locking tongue 19 which extends beyond the inner edge 20 of the sleeve 17 and normally lies within the notch 21 formed in the bottom of the body 10 when the sleeve 17 is in an unlocking position or extends parallel to the sleeve 11. When the locking sleeve 17, however, is swung to a locking position, the locking tongue 19 will be swung upwardly, as shown in Figure 2, thereby forcing the rope R upwardly, as shown in Figure 2, and firmly clamping the rope in a locked position tightly around the pulley 12 and cause the adjoining strands of the rope R to be firmly clamped in frictional engagement. In order that the locking sleeve 17 may be held in this locked position, a hook 22 is pivotally connected to an eye 23 and engages the catch 24 which is secured to the bottom face of the body 10, as will be noted by carefully considering Figure 2. The locking tongue 19 is provided with a series of blunt teeth at its outer end to facilitate the gripping of the rope R.

The body 10 may be provided with an eye 25 at its rear end whereby a supporting hook 26 may engage the eye 25 and support the body 10 in an operative position.

It should be understood that when the locking sleeve 17 is in the position shown in Figure 3, the rope R may be easily moved over the pulley 12 and loosened within the holder or body 10. After the rope has been tightened to the desired tension and the slack taken up, the end 27 of the rope R may be pulled downwardly thereby swinging the locking sleeve 17 to a position at substantially right angles to the sleeve 11, as shown in Figures 1 and 2, and this will cause the locking tongue 19 to force the rope R upwardly, as shown in Figure 2, and thereby cause the adjoining strands of the rope to be forced in clamping relation about the pulley 12, thus holding the rope R in a taut position. The sleeve 17 will be locked in this locking position through the medium of the hook 22 which engages the catch 24.

It will be noted that the crowding of the rope R in the position shown in Figure 2 through the medium of the tongue 19 will provide an efficient locking means for holding the rope R in a properly adjusted position.

Certain detail changes may be made without departing from the spirit of the invention so

long as such changes fall within the scope of the appended claims.

Having described the invention, what I claim as new is:—

1. A rope holder of the class described comprising a body adapted to receive a rope, a hinged sleeve carried by the body through which a strand of rope is adapted to be trained, clamping means carried by the hinged sleeve and adapted to engage the rope trained through the sleeve for clamping the rope against movement through the body when said sleeve is swung at an angle to the body, and means engaging said hinged sleeve for locking the sleeve in a position substantially at right angles to said body.

2. A rope holder and tightener comprising a body having a guiding sleeve through which a rope is adapted to extend, a guiding means within the body around which a rope is adapted to be trained, said body having an opening below said sleeve, a locking sleeve hinged to said body and normally closing said opening, the locking sleeve being adapted to receive the rope passing through the body, and said locking sleeve having a projecting tongue adapted to be swung within the body as the sleeve is swung at right angles to the body for firmly clamping a rope passing through said body and said sleeves in a locked position when said last mentioned sleeve is swung at an angle to said body.

3. A rope holder and tightener comprising a body having a forwardly projecting sleeve, and said body having an opening formed below said sleeve, a locking sleeve hingedly secured to said body adjacent its lower edge, said locking sleeve adapted to normally close said opening, said sleeves and body adapted to receive a rope, a guiding means within the body around which a rope is adapted to be trained when extending through said sleeves, a locking tongue projecting from said locking sleeve and adapted to normally lie along the bottom of said body when said locking sleeve is extended substantially parallel to said first-mentioned sleeve, and said tongue being adapted to project within the body at an angle to the bottom of the body for firmly clamping a rope extending through the body when said locking sleeve is swung at an angle to the body.

4. A rope holder and tightener comprising a body having a forwardly projecting sleeve, and said body having an opening formed below said sleeve, a locking sleeve hingedly secured to said body adjacent its lower edge, said locking sleeve adapted to normally close said opening, said sleeves and body adapted to receive a rope, a guiding means within the body around which a rope is adapted to be trained when extending through said sleeves, a locking tongue projecting from said locking sleeve and adapted to normally lie along the bottom of said body when said locking sleeve is extended substantially parallel to said first-mentioned sleeve, said tongue being adapted to project within the body at an angle to the bottom of the body for firmly clamping a rope extending through the body when said locking sleeve is swung at an angle to the body, and said body having a notch for normally receiving said tongue when said locking sleeve is extended in substantially parallel relation with said first mentioned sleeve.

5. A rope holder and tightener comprising a body having a forwardly projecting sleeve, and said body having an opening formed below said sleeve, a locking sleeve hingedly secured to said body adjacent its lower edge, said locking sleeve adapted to normally close said opening, said sleeves and body adapted to receive a rope, a guiding means within the body around which a rope is adapted to be trained when extending through said sleeves, a locking tongue projecting from said locking sleeve and adapted to normally lie along the bottom of said body when said locking sleeve is extended substantially parallel to said first-mentioned sleeve, said tongue being adapted to project within the body at an angle to the bottom of the body for firmly clamping a rope extending through the body when said locking sleeve is swung at an angle to the body, a hook carried by said locking sleeve, and a catch secured to said body for engagement with said hook for holding said locking sleeve in a locking position.

WILLIAM C. HOLTZMANN.