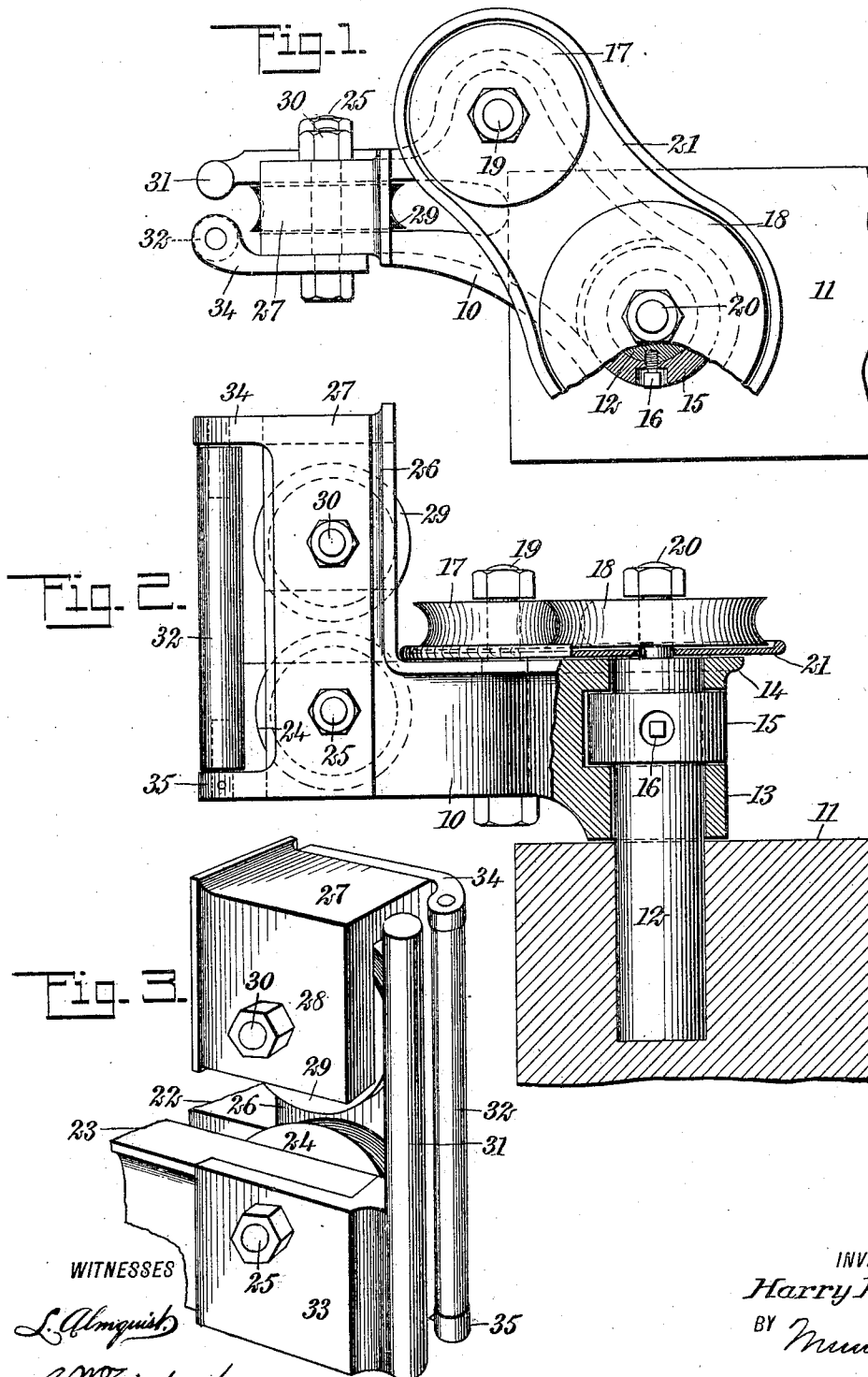


H. HOLMES.  
GUIDE ATTACHMENT.  
APPLICATION FILED JAN. 8, 1909.

934,809.

Patented Sept. 21, 1909.



# UNITED STATES PATENT OFFICE.

HARRY HOLMES, OF DUFFEY, CALIFORNIA.

## GUIDE ATTACHMENT.

Specification of Letters Patent. Patented Sept. 21, 1909.

934,809.

Application filed January 8, 1909. Serial No. 471,272.

*To all whom it may concern:*

Be it known that I, HARRY HOLMES, a citizen of the United States, and a resident of Duffey, in the county of Mendocino and State of California, have invented a new and Improved Guide Attachment, of which the following is a full, clear, and exact description.

This invention relates to certain improvements in guiding means for ropes, cables, wires, or the like, and more particularly to certain improvements in the guide shown in my prior patent, Number 852,062, granted April 30, 1907.

The specific device illustrated in my prior patent, as well as that illustrated in the accompanying drawings, is especially designed for use in connection with donkey engines for directing the cable to the spool or drum of the engine. The guide serves to support the cable with the minimum amount of friction and at a particular point in respect to the drum, irrespective of the position of the load, but it is evident that the device may be used for various other purposes than in connection with the drums of donkey engines.

The main object of my present invention is to so construct the guide that the cable may be readily removed therefrom without disassembling the device; and a further important object is to so connect the body of the device to the stationary support that it may freely rotate in respect thereto but cannot become detached therefrom.

Further objects and advantages of the device will be set forth more fully in the detail description of the specific form illustrated.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures, and in which—

Figure 1 is a top plan view of a device constructed in accordance with my invention, a portion thereof being broken away; Fig. 2 is a side elevation of the device shown in Fig. 1, a portion thereof being broken away; and Fig. 3 is a perspective view of a portion of the device.

The main body 10 of my improved device is connected to a stationary base 11 of any suitable character, and is so mounted that it may freely rotate about a vertical pivot. This pivot comprises a post 12 rigidly secured to the base 11 and extending through

a cylindrical passage in the body 10. This passage extends through two separate branches 13 and 14 of the body, and intermediate these two branches I provide a collar 15 encircling the post 12. This collar is placed in position between the two branches before the post is extended through the passage and is then rigidly secured to the post by means of a set screw 16. The head of said screw is countersunk below the surface of the collar. The collar is of a length substantially equal to the distance between the branches, so that the body 10 may freely rotate about the post 12, but cannot become detached therefrom. Upon the upper surface of the body 10, I provide two sheaves 17 and 18, having vertical axes and having their peripheries grooved and spaced apart to permit the passage of the cable therebetween. One of the sheaves 17 is preferably mounted upon a bolt 19, extending through the body, while the other sheave 18 is mounted on a spindle 20 constituting an extension of the post 12. The two sheaves are held against displacement by suitable nuts, and friction is reduced by a plate 21 having apertures therethrough for the spindles of the sheaves. The plate is curved at its ends to conform to the curvature of the two sheaves, and constitutes a support for both of them.

The body of the device has two outwardly-extending branches or arms 22 and 23 spaced apart, and between the two branches is journaled a sheave 24 rotating in a vertical plane and about a pivot bolt 25 extending transversely through the branches. One of the branches 22 is provided with an upwardly-extending portion 26, carrying at its upper end a horizontally-extending portion 27, and the latter terminates in a downwardly-extending portion 28. Between the portions 26 and 28 is mounted a sheave 29, rotatable in a vertical plane and about a horizontally-extending pivot bolt 30. The two sheaves 24 and 29 lie in the same vertical plane and closely adjacent each other, and both sheaves have their peripheries grooved to receive the cable therebetween. It will be noted that the pivot bolt of the lower sheave 24 is supported at its opposite ends by separate portions of the body 10, but that the upper sheave 29 is supported at both ends from a single one of the branches extending out from the body; thus the support 23 for one end of the pivot bolt of the lower sheave is spaced from and

independent of the support 28 for the corresponding end of the upper sheave, so that the cable may be inserted laterally between the two supports and into position between the two sheaves.

For directing the cable to the two sheaves 28 and 29, I provide two guides 31 and 32, extending vertically adjacent the periphery of the last-mentioned sheaves and opposite to the sheaves 17 and 18. One of these guides 31, is in the form of a cylindrical rod having its lower end constituting a bracket 33 bolted or otherwise rigidly secured to the branch 23 of the body. The upper end of the guide rod 31 is spaced from the adjacent supporting portion 28 of the upper sheave and at a distance therefrom sufficient to permit of the passage of a cable therebetween. The other guide 32 is in the form of a roller and is mounted at its upper and lower ends in brackets 34 and 35 rigidly secured to the branch 22 and the upward extension thereof.

The cable may be readily placed between the two sheaves 17 and 18, as the pivot bolts of the latter are unsupported at their upper ends. It may then be freely inserted between the sheaves 24 and 29, as the supports for the pivot bolts are spaced apart at one end. The cable may then be looped over the top of the guide rod 31 and between the latter and the portions 27 and 28, so that it may slip between the two guides.

It is not necessary to disassemble the device or remove any of the parts while placing the cable in position or removing the same, yet the cable in the normal operation of the device cannot accidentally escape from between the guides.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A device of the class described having two sheaves spaced apart and rotatable in the same plane, supports for said sheaves, the support for one end of the pivot of one sheave being spaced from the support of the corresponding end of the pivot of the other sheave, and a rotatable guide rod having its free end extending adjacent one of said supports.

2. A device of the class described, comprising two sheaves rotatable in the same plane, a support for each of said sheaves, said supports being spaced apart at one end of the sheaves, and a guide rod adjacent the peripheries of said sheaves and connected to one of said supports and having a free end extending adjacent to but spaced from the other support.

3. A device of the class described, comprising two sheaves rotatable in the same plane, connected supports for said sheaves and two substantially parallel guide rods

disposed upon opposite sides of the plane of said sheaves, one of said guide rods being supported at each end and the other of said guide rods being supported at one end and having the opposite end free and extending beyond the diameters of both sheaves.

4. A device of the class described, comprising a body having two laterally-extending branches, a sheave journaled between said branches, one of said branches having an upwardly-extending portion, a sheave carried by said portion and disposed in the same plane with the first-mentioned sheave, said last-mentioned sheave and its support being independent of the other branch of said body, and two substantially parallel guides adjacent said sheaves upon opposite sides of the plane thereof, one of said guides being supported by one of said branches and the other of said guides being supported by the other branch.

5. A device of the class described, comprising a body having two laterally-extending branches, a sheave journaled between said branches, one of said branches having an upwardly-extending portion, a sheave carried by said portion and disposed in the same plane with the first-mentioned sheave, said last-mentioned sheave and its support being independent of the other branch of said body, and two substantially parallel guides adjacent said sheaves upon opposite sides of the plane thereof, one of said guides being supported at both ends from the branch having said upwardly-extending portion and the other of said guides being supported only at the lower end and by the other branch.

6. A device of the class described, comprising a body, a plurality of sheaves carried thereby and serving as guides for a cable or the like, a support, and an upwardly-extending post carried thereby, said body having two branches spaced apart and each provided with an aperture therethrough for receiving said post, and said post being provided with a collar rigidly secured thereto and disposed intermediate said branches.

7. A device of the class described, comprising a body, a pivotal support therefor, two sheaves adjacent each other and rotatable in the same horizontal plane, two sheaves carried by said body adjacent each other and rotatable in a vertical plane, and a plate carried by said body and serving to support both of said first-mentioned sheaves.

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

HARRY HOLMES.

Witnesses:

LESTER C. GREGORY,  
LOUIS A. HANSON.