L. F. COOPER.

ROPE CLIMBING DEVICE.

APPLICATION FILED OCT. 8, 1913.

1,115,401. Patented Oct. 27, 1914.

Fig. 1.

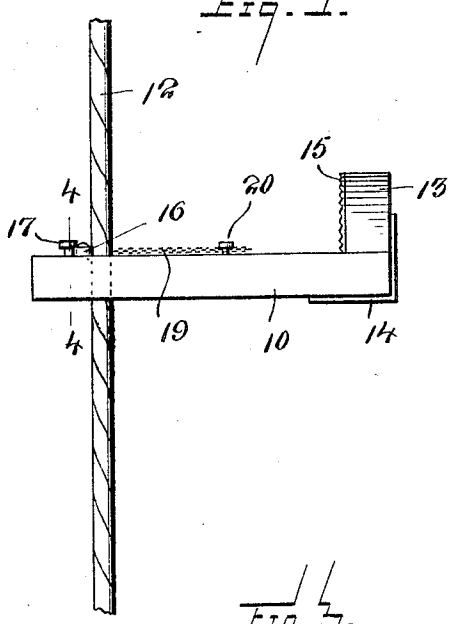


Fig. 2.

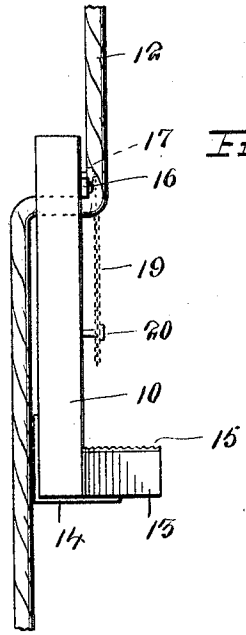


Fig. 3.

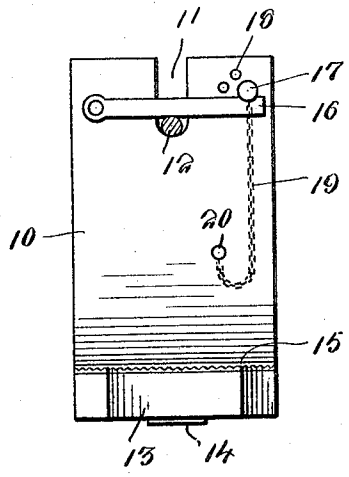
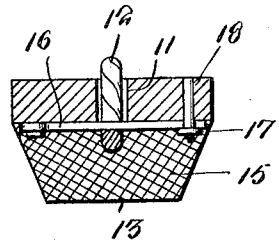


Fig. 4.



Witnesses

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ROPE-CLIMBING DEVICE.

1,115,401. Specification of Letters Patent. Patented Oct. 27, 1914.

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To all whom it may concern:

Be it known that I, LINN FENIMORE COOPER, a citizen of the United States, residing at Albany, in the county of Albany and State of New York, have invented new and useful Improvements in Rope-Climbing Devices, of which the following is a specification.

An object of the invention is to provide a simple and effective device for use in aiding persons to climb ropes and other cables.

The invention comprehends, among other features, the provision of a device which is adapted for sliding engagement with the rope or cable and which, by the weight of the person, can be so arranged relatively to the rope or cable as to be frictionally held in a locked position thereon and whereby, when the weight of the person on the device is removed therefrom, the device can be raised or lowered on the rope.

In the further disclosure of the invention reference is to be had to the accompanying drawings, constituting a part of this specification, in which similar characters of reference denote corresponding parts in all the views, and in which:

Figure 1 is a side elevation of the device, showing the same loosely arranged on the rope; Fig. 2 is a similar view showing the position of the device when the same is locked on the rope; Fig. 3 is a plan view of the device as shown in Fig. 1, the rope being shown in cross section; and Fig. 4 is a vertical transverse sectional view taken on the line 4—4 in Fig. 1.

Referring more particularly to the views, I provide a body 10 terminating at one end in a centrally arranged slot 11 through which is adapted to loosely pass a rope 12, the other end of the body 10 having a lateral foot rest 13 rigidly secured thereto by a suitable angle brace 14, with the inner face of the foot rest preferably covered by a non-slipping member 15 such as a sheet of serrated rubber or the like. Mounted to swing on the body 10 to extend across the slot 11 is a locking member 16 in the nature of a bar which has its free ends adapted to abut against a locking pin 17 which can be received in one of a series of holes 18 formed in the body 10, the said locking pin 17 being preferably carried on a chain 19 secured to the body 10 by a bolt or screw 20, in order to prevent accidental loss of the locking pin 17.

Now referring to Fig. 1 it will be apparent that in the use of the device the same is first arranged with respect to the rope 12 so that the rope 12 will lie in the slot 11 of the body, after which the locking member 16 is swung to extend transversely to the slot, with its inner edge loosely engaging the rope 12, the locking member being held in this position by the locking pin 17, arranged in one of the holes 18 as mentioned, it being understood that a number of holes are provided on the body to receive the locking pin in order that the device can accommodate ropes of different diameters and thicknesses. The person who is to climb the rope now grasps the rope above the body 10 and by placing his foot beneath the body can readily raise the same on the rope, after which the said person places his other foot upon the non-slipping member 15 of the foot rest 13 and pressing downwardly thereon swings the body 10 downwardly into a position substantially parallel to the rope, thus causing the locking member 16 to securely grip the rope at the point where the rope passes through the slot and thus offset a portion of the rope at this point to rigidly hold the body 10 upon the rope at the place to which it has been raised by the operator. The operator now reaches farther up the rope and again pulls himself upwardly by his own strength, while, at the same time, with one of his feet arranged upon the body, he also advances the same upwardly, first, however, swinging the body back to a horizontal position relatively to the rope and as shown in Fig. 1. It will thus be seen that in this manner the operator can advance the body 10 on the rope to the position desired and at any time he should become tired can readily lock the body on the rope and place his entire weight thereon in order to insure the rigid holding of the body on the rope so that he can rest before climbing farther up the rope.

My device is very adaptable for use as a means for climbing up a rope and also as a supporting means for comfortably supporting a person on the rope a distance from the ground without danger of slipping.

It will be understood that the device can be moved downwardly on the rope in sub-

stantially the same manner as the same is advanced up the rope except that in this instance the operator slides down the rope to the desired distance and then raising the body to a horizontal position, permits it to also slide down a certain distance, after which the operator rests himself upon the body in order that he may lower his hands on the rope and then proceed to descend in the manner mentioned heretofore, carrying the body 10 with him.

Having thus described my invention, I claim:

1. In a rope climbing device, the combination with a body terminating at one end in a central longitudinally arranged slot adapted to have the rope pass therethrough, of a locking member mounted to swing on the body and adapted to bridge the slot to hold the rope therein, means for securing the locking member in bridging position, and a lateral foot rest projecting from one end of the body.

2. In a rope climbing device, the combination with a body provided with a longitudinal slot formed at one end thereof, said slot being adapted to receive the rope therethrough, of a locking member on the body and adapted to bridge the slot to hold the rope therein, a pin for securing the locking member in bridging position, and a foot rest projecting from the other end of the said body.

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

LINN FENIMORE COOPER.

Witnesses:
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