Sept. 7, 1926. 1,599,040

R. E. CLISBY

ROPE TYING OR BINDING DEVICE

Filed June 3, 1925

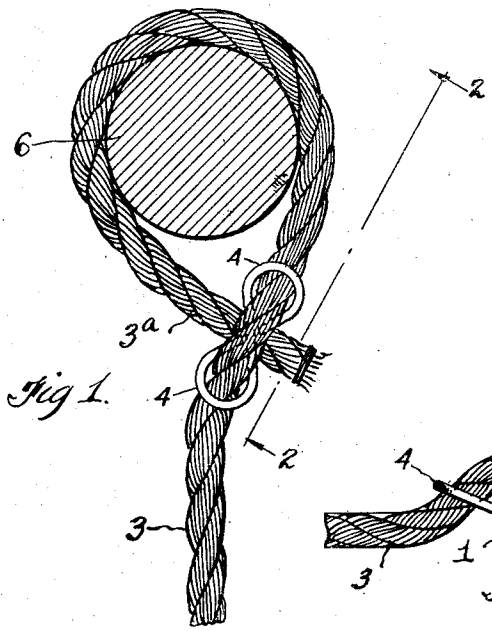


Fig 1.

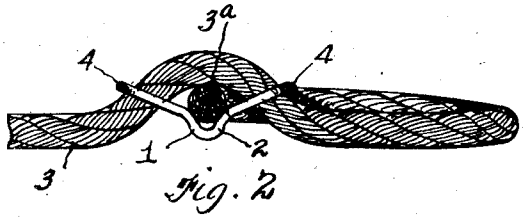


Fig. 2

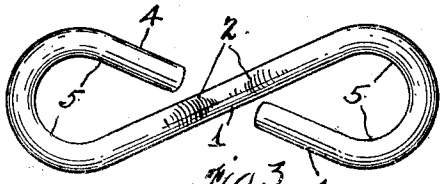


Fig. 3

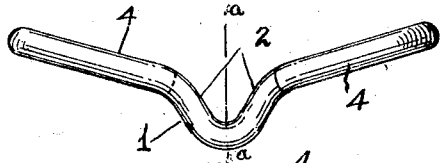


Fig. 4

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UNITED STATES PATENT OFFICE.

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ROPE TYING OR BINDING DEVICE.

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The present improved device is designed for use wherever a rope or equivalent flexible cable requires to be secured in the form of a loop, the object being to avoid the necessity of tying a knot in the rope. At the same time the portions of the rope secured together to form such loop may be readily adjusted whenever it is desired to vary the size of the loop or shift its location along the rope. It is deemed unnecessary to more than indicate the extent of the field in which such device may be used. Thus, while originally designed for the purpose of securing to a cross bar or branch of a tree a rope from which a swing may be suspended, the device is equally adaptable for use with so-called tow ropes whereby one automobile may be hitched to another.

To the accomplishment of the above indicated and other related objects, the invention then consists of the means hereinafter fully described and particularly pointed out in the claims, the annexed drawing and the following description setting forth in detail certain mechanism embodying the invention, such disclosed means constituting, however, but one of various mechanical forms in which the principle of the invention may be used.

In said annexed drawing:—

Fig. 1 is a side elevation showing the device in place on a rope formed into a loop as above described; Fig. 2 is a side elevation of the same as viewed from the right in Fig. 1; and Fig. 3 is a plan view and Fig. 4 a side elevation of the device by itself on a larger scale.

As best shown in the detached views (Figs. 3 and 4) of the device by itself, such device is preferably fashioned from stiff wire or round bar stock. A piece of such stock of proper strength and of necessary length (the strength being dependent upon the load which may have to be carried by the device and the length upon the diameter of the rope or cable with which it is to be used) is bent at approximately its mid point to form a kink 1, the inner sides 2 of which converge so as to provide an opening or recess of general V-shape. The width of this opening should be somewhat less than the diameter of the rope 3 to which the device is to be fitted (see Fig. 2). The respective ends 4, 4, of the device are rebent in opposite directions so as to form eyes 5, 5, that lie in planes disposed at right angles to the plane of kink 1, i. e. to the transverse plane of the recess, and slightly inclined with respect to the median axis a—a of such kink.

In use, one end 3^a of the rope is threaded successively through eyes 5, 5, and then after being looped about a bar 6 or other object to which the rope is to be attached, such end is passed through the opening 2 and the portion of the rope that lies opposite such opening. The relation of the parts of the device is such that such oppositely lying portion of the rope will likewise be kinked and accordingly upon a longitudinal pull being exerted on the main body of the rope, the effect is to press the portion of the end 3^a thus received in opening 2 forcibly against the kink 1. At the same time the reaction causes the rope to be bound in the eyes or openings 5 in the respective end portions of the device, with the result that neither portion of the rope thus engaged in the device can slip past the other and the stronger the pull, the more tightly such portions are pressed together.

By relieving the pull or tension on the rope, the pressure thus binding together the two portions of the rope that are held in the device is likewise instantly relieved and either such portion may be easily and freely slipped through the device in order to adjust either the size of the loop or the location thereof along the rope.

It has been found in actual test that the device will hold a loop thus formed out of a rope from slipping under a strain that approaches the breaking point of the rope. For example, an ordinary automobile can be stalled when tied to a post through a rope with a loop formed by the device before the loop will slip through the latter.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the mechanism herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:—

1. A device of the character described, comprising a body having a wedging recess, and an eye on each side of such recess inclined further from the plane of the respectively nearest wall of the recess.

2. A device of the character described, comprising a body having a recess of gen-

eral V-shape and an eye on each side of such recess inclined further from the plane of the respectively nearest wall of the recess.

3. A device of the character described, comprising a section of rod or wire bent to form a kink and on either side thereof an eye inclined further from the plane of the respectively nearest arm of the kink.

4. A device of the character described, comprising a section of rod or wire bent at approximately its mid-point to form a kink and having its ends rebent in the form of eyes, such eyes being further inclined from the plane of the respectively nearest arm of the kink.

Signed by me this first day of June, 1925.

ROY E. CLISBY.