No. 678,866. Patented July 23, 1901.

J. P. DUVALL.

ROPE CLAMP.

(Application filed Dec. 24, 1900.)

(No Model.)

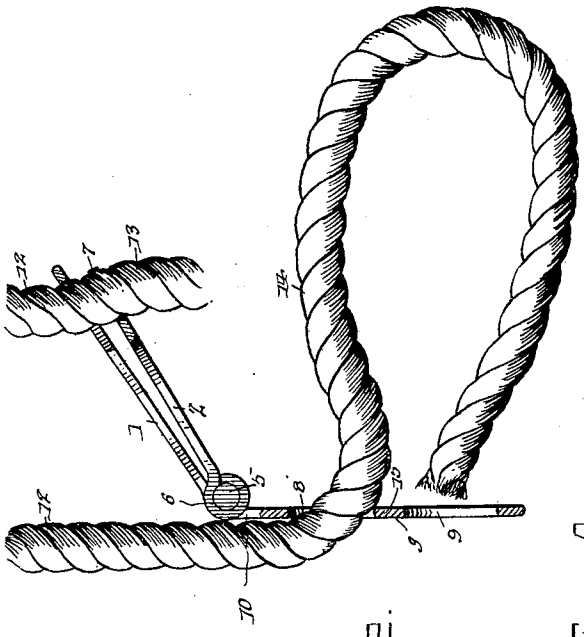


Fig. 2.

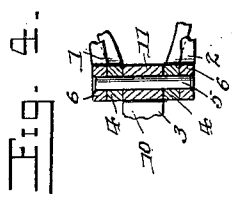


Fig. 4.

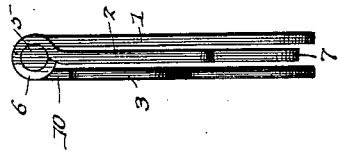


Fig. 3.

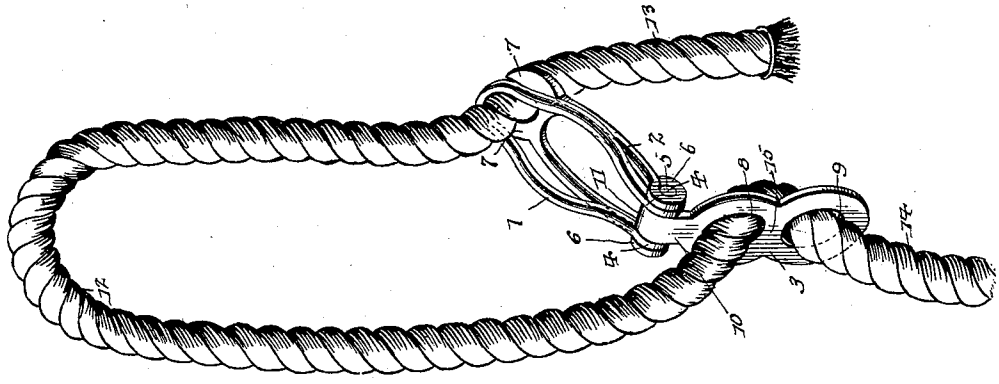


Fig. 1.

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UNITED STATES PATENT OFFICE.

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ROPE-CLAMP.

SPECIFICATION forming part of Letters Patent No. 678,866, dated July 23, 1901.

Application filed December 24, 1900. Serial No. 40,958. (No model.)

To all whom it may concern:

Be it known that I, JEPHTHAH P. DUVALL, a citizen of the United States, residing at Waverly, in the county of Bremer and State of Iowa, have invented a new and useful Rope-Clamp, of which the following is a specification.

This invention relates to rope-clamps, and has for its objects to provide an improved device of this character which is especially designed for adjustably holding the opposite portions of a rope, so as to form a loop or halter, and to provide for conveniently adjusting the size of the loop without removing the clamp from the rope. It is furthermore designed to preclude the possibility of the rope slipping upon the clamp and also to have the latter foldable, so that it may be conveniently carried in a pocket of the clothing and readily arranged in condition for use.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a perspective view of the clamp applied to a rope, so as to form a loop or halter thereof. Fig. 2 is a side elevation thereof. Fig. 3 is an edge elevation of the clamp when folded. Fig. 4 is a detail sectional view taken longitudinally through the common hinged or pivotal connection of the members of the clamp.

Like characters of reference designate corresponding parts in all of the figures of the drawings.

Referring to the accompanying drawings, it will be seen that the present form of rope-clamp comprises three parts or members 1, 2, and 3, which have a common pivotal or hinged connection whereby the members accommodate themselves to the pull on the rope and may also be folded into compact form when not in use. The member 1 is in the form of a substantially U-shaped loop, having its opposite sides bulged or bowed outwardly at corresponding intermediate points, so as to enlarge the intermediate portion of the loop for the introduction of the end of a rope. The opposite ends of this loop are formed into eyes 4 for the reception of a pivot-pin 5, which forms a common connection for the three members. The member 2 is also of substantially U shape, having its terminals formed into eyes 6, which receive the respective terminals of the pivot-pin and lie at the outer sides of the adjacent eyes of the member 1, whereby the inner portion of the member 2 straddles the inner portion of the member 1. At the outer free end of the member 2 there are provided a pair of opposite outwardly-directed jaws 7, which produce an outer terminal bifurcation or seat for the reception of a rope. Normally the members 1 and 2 lie at the same side of the pivot-pin and adjacent to each other, while the member 3 is disposed at the opposite side of the pivot-pin and angularly related with respect to said members 1 and 2. This member 3 is in the form of a flat plate having a pair of openings 8 and 9 respectively located adjacent to the inner and outer ends of the member. These openings are commonly circular and are designed for the reception of a rope. The inner end of the member is provided with a short neck portion 10, which is laterally reduced and formed into an eye 11, which lies between the opposite eyes of the member 1 and also receives the pivot-pin. It will be understood that the eyes are all in close proximity, so as to form a compact and neat pivotal connection for the members.

In applying the clamp to a rope 12, so as to form a loop or halter thereof, one end of the rope, as indicated at 13, is passed inwardly through the outer opening 9 in the plate member 3 and then outwardly through the inner opening 8 in said member, whereby the clamp is applied to the rope and may be slid along the same until the end 13 is far enough away from the clamp to form the desired size of loop. When the clamp has thus been applied to the rope, the end portion 13 is then passed around the neck of an animal or whatever is to be embraced by the loop, and then the end of the rope is passed inwardly through the

member 1 and seated in the notch or bifurcation in the outer free end of the member 2, which is then forced inwardly toward the member 1 for the purpose of binding the rope between the outer end of the member 1 and the inner end wall of the notch or bifurcation in the member 2, whereby the free end of the rope is fixedly connected to the clamp and the latter is fixedly connected at opposite ends to different portions of the rope, thereby forming a loop. It will be here observed that any pull upon the loop portion of the rope will draw the member 2 more firmly against the member 1, thereby precluding the possibility of the clamp accidentally slipping upon the rope. However, a pull in the opposite direction upon the free end portion 13 of the rope will swing the clamp member 2 away from the member 1, thereby freeing the rope and permitting of the same being removed from the clamp or the latter moved to a new position upon the rope. It will also be observed that by reason of the common pivotal connection the members may be conveniently swung back and forth to facilitate the application and removal of the clamp, and the pivotal or flexible connection permits of the clamp accommodating itself to the relative positions of the looped portion of the rope and the long free end portion thereof. When not in use, the clamp may be folded into compact form, as indicated in Fig. 3 of the drawings, and conveniently carried in a pocket of the clothing.

What is claimed is—

1. A rope-clamp comprising a pair of swinging mutually-coöperating members, having corresponding openings for the reception of a rope, the outer end wall of one member and the inner end wall of the other member forming rope-gripping elements, and a rope-holding device also connected to the coöperating members and mounted independently thereof.

2. A rope-clamp, comprising three mutually pivotally connected members, of which two of the members are constructed to coöperate and form a rope-grip, and the other member formed into a rope-holder.

3. A rope-clamp, comprising a bifurcated clamp member, a guard-loop member coöperating with and pivoted to the clamp member, and a rope-holder connected to and mounted independently of the former members.

4. A rope-clamp, comprising a clamp member, a guard member coöperating therewith, and a rope-holder, there being a mutual pivotal or hinged connection between all of the members, and each of the latter being independently movable upon the mutual pivotal connection.

5. A rope-clamp, comprising a clamp member, a guard member coöperating therewith, a rope-holder, all of these members having their inner ends provided with bearing-eyes, and a common pivot-pin inserted through the bearing-eyes and forming a mutual pivotal connection for the members, and each of the latter being independently movable upon the pivot-pin.

6. A rope-clamp, comprising a bifurcated clamp member, a loop-shaped guard member pivoted to and coöperating with the clamp member and having its intermediate portion laterally enlarged, whereby the outer free terminal portion of the loop is reduced, and a rope-holder connected to and mounted independently of the former two members.

7. A rope-clamp, comprising a substantially U-shaped clamp member, having its opposite sides provided with corresponding bearing-eyes, and its outer free terminal provided with opposite jaws forming a rope-seat, a substantially U-shaped guard, having its opposite sides provided with corresponding bearing-eyes, a common pivot-pin for all of the bearing-eyes, and a rope-holder mounted upon the pivot-pin.

8. A rope-clamp comprising clamp and holder members, which have a common pivotal or hinged connection, the holder member having a rope-receiving opening, and an intermediate cross-bar intersecting the opening and forming a cleat for binding against a rope.

9. A rope-clamp, comprising pivotal coöperating clamp members, a rope-holder having a rope-receiving opening, and an intermediate cross-bar intersecting the opening, and a common pivot-pin forming a mutual pivotal or hinged connection for all of the members.

10. A rope-clamp, comprising a clamp member, which is of substantially U shape, having the terminals of its opposite sides provided with corresponding bearing-eyes, and opposite outwardly-directed jaws at the outer end of the member and forming a rope-seat, a substantially U-shaped guard member having corresponding eyes at the terminals of its opposite sides, a rope-holder in the form of a plate having opposite openings, and a bearing-eye at its inner end, and a transverse pivot-pin passing through all of the eyes and forming a mutual pivotal or hinged connection for the members.

11. The combination with a looped rope, of a clamp therefor, comprising three mutually pivotally connected members, of which the intermediate member has an outer bifurcation forming a rope-seat, one of the other members having an opening for the reception of the rope and coöperating with the intermediate member, the adjacent end of the rope being passed inwardly through the said other member and thence received in the seat of the intermediate member, and the third outer member having inner and outer openings, the adjacent end portion of the rope being passed inwardly through the inner opening and thence outwardly through the outer opening.

12. A rope-clamp comprising three members having a mutual pivotal or hinged con-

nection, the intermediate member having an outer bifurcation forming a rope-seat, one of the outer members having a rope-receiving opening coöperating with the rope-seat of the intermediate member, and the other outer member forming a rope-holder and having inner and outer rope-receiving openings.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

JEPHTHAH P. DUVALL.

Witnesses:

E. J. KAUFMAN,

G. O. VAN DERVING.