Jan. 27, 1942. H. M. McLEARN 2,271,270

ROPE CLAMP

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Fig. 1.

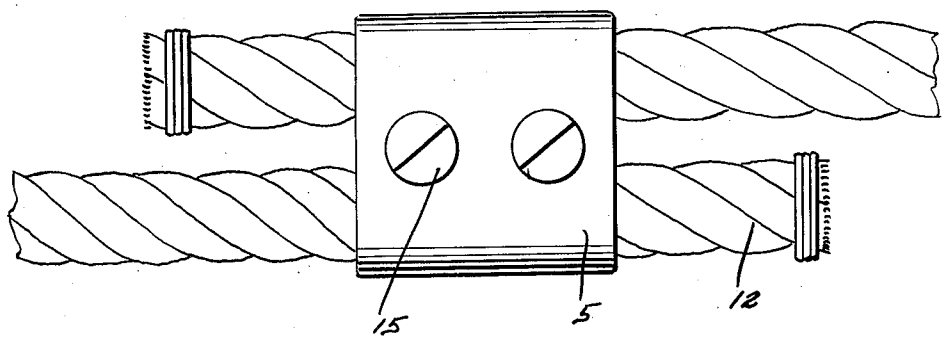


Fig. 4.

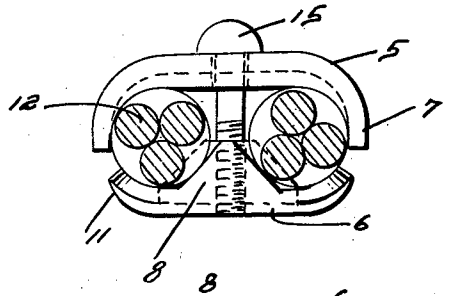
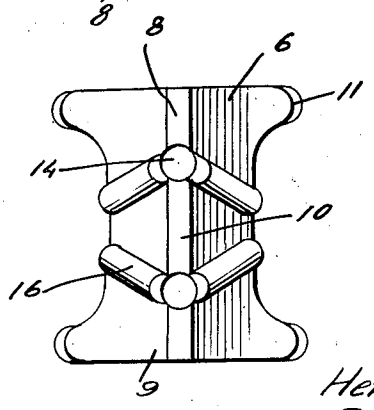


Fig. 6.



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Fig. 2.

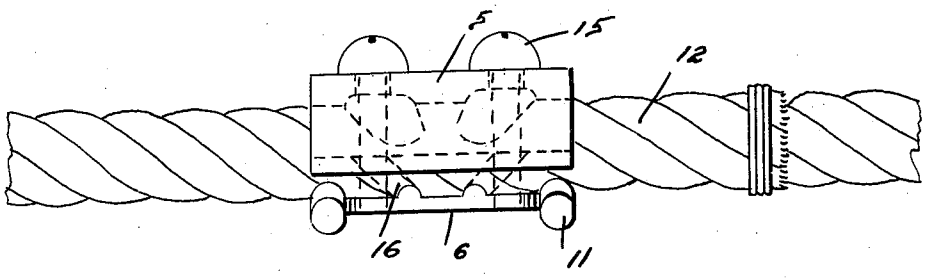


Fig. 3.

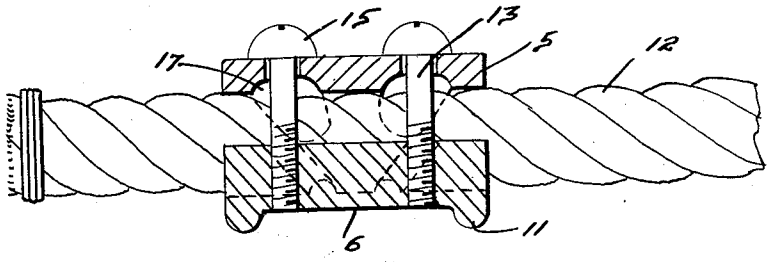
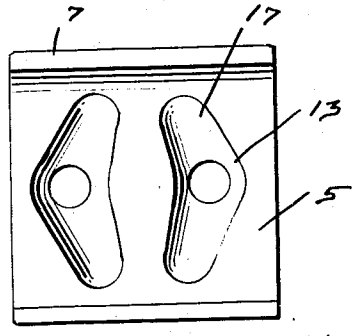


Fig. 5.



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UNITED STATES PATENT OFFICE

2,271,270

ROPE CLAMP

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Application December 10, 1940, Serial No. 369,499

2 Claims. (Cl. 24—125)

The present invention relates to new and useful improvements in clamps for use in connecting the ends of rope and the like and has for its primary object to provide a pair of clamping members connected together in clamping engagement by clamping screws and providing cooperating ribs and grooves on the opposed faces of the clamping members within which the rope is adapted to be seated to secure the ends of the rope against slipping in the clamp.

A further object is to provide a device of this character of simple and practical construction, which is efficient and reliable in performance, which is strong and durable, relatively inexpensive to manufacture and otherwise well adapted for the purposes for which the same is intended.

Other objects and advantages reside in the details of construction as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming part hereof, wherein like numerals refer to like parts throughout and in which:

Figure 1 is a top plan view.

Figure 2 is a side elevational view.

Figure 3 is a longitudinal sectional view.

Figure 4 is an end elevational view.

Figure 5 is a plan view of the inside of one clamping plate and

Figure 6 is a similar view of the other clamping plate.

Referring now to the drawings in detail wherein for the purpose of illustration I have disclosed a preferred embodiment of the invention the numerals 5 and 6 designate a pair of cooperating clamping plates, the plate 5 being of substantially U-form in transverse section and embodying inwardly extending longitudinal side edges 7.

The plate 6 is provided with a longitudinally extending rib 8 at its central portion, the walls of the rib being inclined as shown at 9 in substantially wedge formation and terminating in a flat ridge 10. Each corner of the plate 6 is provided with extensions 11 which are bent inwardly in a direction toward the inwardly extending edges 7 of the clamping plate 5 and cooperate to secure the pair of ropes 12 therebetween.

The plate 5 is formed with a pair of openings 13 and the plate 6 there is likewise formed with a pair of openings 14 adapted to register with the opening 13 for receiving screws 15 for securing the plates 5 and 6 in clamping engagement against opposite sides of the rope 12. The openings 13 of the plate 5 are of a diameter slightly greater than the diameter of the screws 15 to permit limited movement of the plate 5 relative to the plate 6 in order that the plates may properly seat themselves with respect to the twisted strands of the rope.

The inclined walls 9 of the rib 8 of the plate 6 are each provided with a pair of ribs 16, the ribs on each of the inclined surfaces 9 diverging toward the flat central portion or ridge 10 of the rib as shown to advantage in Figure 6 of the drawings. The inner surface of the plate 5 is formed with a pair of grooves 17, the grooves extending in a direction corresponding to the respective ribs 16 when the plates are arranged in their opposed clamping relation. The grooves 17 are of a width substantially in excess of the width of the ribs 16.

Accordingly when the clamping plate 5 and 6 are secured in clamping engagement on the rope 12 a portion of the rope will be forced into the grooves 17 by pressure of the ribs 16 subjected to a relative opposite side of the rope. Likewise the inclination of the ribs 16 and grooves 17 will cause portions of the rope to be twisted oppositely in order that the same may properly seat in the respective grooves and thus produce a slight kink in the rope to further restrain accidental slipping of the rope from the clamp.

It is believed the details of construction, advantages and manner of use of the device will be readily understood from the foregoing without further detailed explanation.

Having thus described the invention what I claim is:

1. A rope clamp comprising a pair of clamping plates, means for securing the plates in clamping engagement with a pair of ropes, one of said plates being of substantially U-form adapted to receive the ropes in parallel relation, inwardly curved corners projecting laterally outwardly on the other plate cooperating with the first named plate to retain the ropes against lateral movement, a longitudinal rib on one of the plates separating the ropes, laterally extending ribs on the sides of the first named rib the outer ends of the ribs on the respective sides of the longitudinal rib converging and laterally extending grooves in the inner surface of the other plate adapted to register with the lateral ribs, at least one pair of cooperating ribs and grooves being disposed in substantial longitudinal alignment with the strands of the cable to receive one of the strands longitudinally in the groove.

2. A rope clamp comprising a pair of clamping plates, one of said plates being of substantially U-form adapted to receive the ropes in parallel relation, inwardly curved corners projecting later-

ally outwardly on the other plate cooperating with the first named plate to retain the ropes against lateral movement, a longitudinal rib on one of the plates separating the ropes, laterally extending ribs on the sides of the first named rib, the outer ends of the ribs on the respective sides of the longitudinal rib and converging laterally extending grooves in the inner surface of the other plate adapted to register with the lateral ribs, at least one pair of cooperating ribs and grooves being disposed in substantial longitudinal alignment with the strands of the cable to receive one of the strands longitudinally in the groove, said plates having longitudinally spaced aligned openings, bolts inserted in said openings to receive the plates in clamping relation, the openings of one plate being of greater diameter than the diameter of the bolts to provide limited transverse and longitudinal movement of said one plate relative to the other plate to compensate for irregularities in the surface of the ropes during clamping thereof.

HERBERT M. McLEARN.