Nov. 10, 1936. J. McCORMICK 2,060,628

CLOTHESLINE CLAMP LOCK

Filed April 2, 1936

Fig. 1

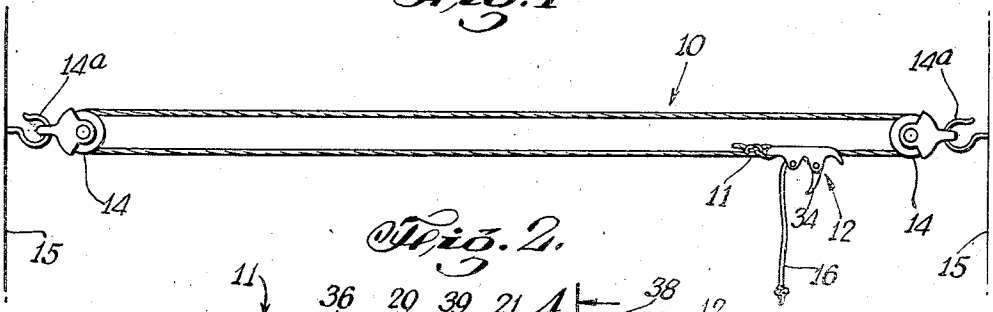


Fig. 2.

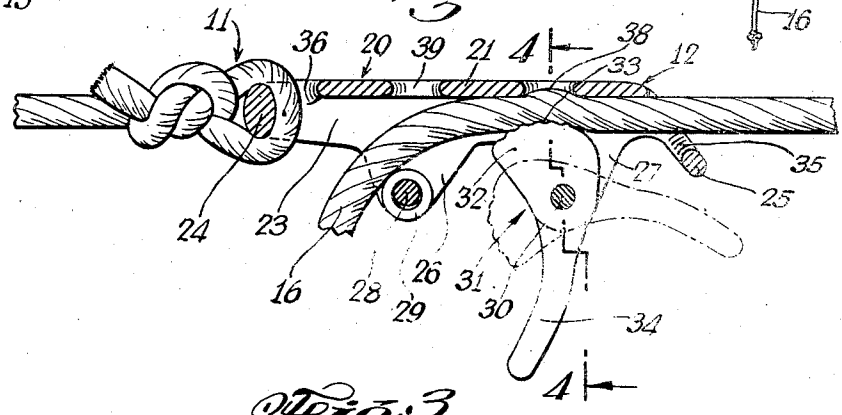


Fig. 3.

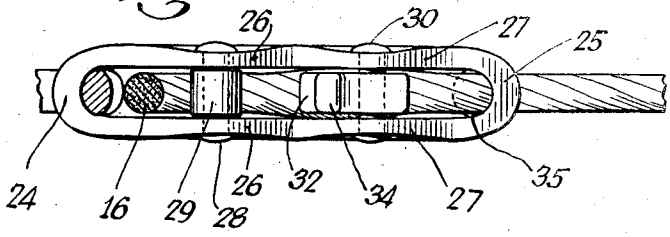
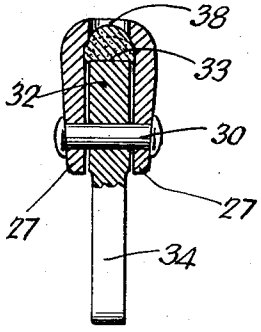


Fig. 4.



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CLOTHESLINE CLAMP LOCK

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8 Claims. (Cl. 24—134)

This invention relates to rope locks and the like articles.

An object of this invention is to provide a rope lock for adjustably connecting the ends of a clothes line, having means to minimize wear on the rope during adjustment or tightening thereof as the same is pulled through the lock previous to locking the rope.

A further object of this invention is to provide in a rope lock of the character described, highly improved means for gripping the rope to prevent slipping when the lock is in locked condition.

Another object of this invention is to provide a rope lock or grip having a large variety of uses and provided with an eccentric rope gripping member having a handle at a convenient angle to facilitate both gripping or releasing movement of said member.

Still another object of this invention is to provide a compact and durable rope lock of the character described which shall be relatively inexpensive to manufacture, easy to operate, positive in action, and withal, practical and efficient to a high degree in use.

Other objects of this invention will in part be obvious and in part hereinafter pointed out.

The invention accordingly consists in the features of construction, combinations of elements, and arrangement of parts which will be exemplified in the construction hereinafter described, and of which the scope of application will be indicated in the following claims.

Fig. 1 is a side elevational view of a clothes line provided with a rope lock embodying the invention;

Fig. 2 is an enlarged longitudinal cross-sectional view of the improved rope lock;

Fig. 3 is a bottom plan view of the rope lock; and

Fig. 4 is a cross-sectional view taken on line 4—4 of Fig. 2.

Referring now in detail to the drawing, 10 designates a clothes line or rope having one end 11 tied to a rope lock 12 embodying the invention, in the manner hereinafter appearing. The rope or line passes around a pair of pulleys 14 engaging hooks 14a attached to the wall 15, and the free end 16 of the rope is clamped or gripped to the lock 12.

The rope lock 12 comprises a member 20 made of cast aluminum, sheet metal or of any other suitable material. Said member 20 has a top wall 21 and depending parallel side walls 23. Said side walls are interconnected at one end by a substantially semi-cylindrical portion 24. At the other ends thereof, said side walls are interconnected by a semi-circular portion 25 disposed in a downwardly and outwardly inclined plane. Said side walls 23 furthermore have two pair of depending ears 26, 27. Interconnecting the ears 26 is a pin or rivet 28 on which is mounted a loose roller or ring 29.

Interconnecting the other pair of ears 27 is a pin or rivet 30 parallel to the first pin and on which is pivoted a rope gripping lever or member 31 having a head 32 provided with an eccentric ribbed or ridged edge 33 and a handle 34 extending substantially diametrically oppositely to said head. As shown in Fig. 2 of the drawing, the cammed or eccentric edge 33 increases in radius from the axis of pin 30 in a counter-clockwise direction so that as the member 31 is rotated in a clockwise direction, said edge moves closer to the undersurface of top wall 21.

As shown in the drawing, furthermore, the semi-circular portion 25 forms an opening 35 at one end of the rope lock, below the top wall 21. Said top wall has an opening 36 adjacent the semi-circular portion 24, an opening 38 above the pin 30, and may also be formed with an opening 39 above pin 28.

One end of the rope or clothes line 10 may be passed through the opening 36 and tied to the portion 24. The other end 16 of the rope is then threaded through opening 35 between the side walls 23, between the gripping head 32 and top wall 21 and over the roller 29.

With the gripping member in the releasing position shown in dot-dash lines in Fig. 2 of the drawing, the end 16 of the rope may be pulled or tightened, the rope end being grasped as by a person projecting a hand through a window in the wall 15 adjacent the rope lock. It will be noted that the rope can be pulled toward said wall, the rope passing around the roller 29, frictional wear being substantially eliminated by reason of said roller.

When the rope has been sufficiently tightened, the gripping member is rotated in a clockwise direction, looking at Fig. 2, to bring the eccentric edge 33 into engagement with rope and to press said rope partially into the opening 38 and against the top wall 21. The natural pull on the clothes line will tend to rotate the gripping member 31 into increasingly gripping or clamping position. The provision of the opening 38 provides an additional gripping action on the rope as does also the provision of ridges or ribs on edge 33.

Although the rope lock is shown in the drawing for the purpose of illustration as applied to a

clothes line, it will be understood that the same may be used as a rope clamp or connecting member for rope ends whenever such a clamp or connector is desired for ropes or cables.

Since the handle 34 extends substantially diametrically opposite to the head, the same may be conveniently grasped by the user for rotating the lever in either direction.

It will thus be seen that there is provided a device in which the several objects of this invention are achieved, and which is well adapted to meet the conditions of practical use.

As various possible embodiments might be made of the above invention, and as various changes might be made in the embodiments above set forth, it is to be understood that all matter herein set forth or shown in the accompanying drawing is to be interpreted as illustrative and not in a limiting sense.

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

1. A rope lock comprising a member having a top wall and depending portions interconnected by a pin, a lever pivoted on said pin, having an eccentric edge, said top wall having an opening above said pin, the depending portions of said member being further interconnected by a second pin parallel to said first pin, and a roller on said second pin.

2. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge.

3. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said handle projecting substantially diametrically oppositely to said head.

4. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said handle projecting substantially diametrically oppositely to said head, said eccentric edge having ribs thereon.

5. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said top wall having an opening above the pin on which the lever is mounted.

6. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said top wall having an opening above the pin on which the lever is mounted, said top wall also having an opening adjacent said semi-cylindrical portion.

7. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said handle projecting substantially diametrically oppositely to said head, said eccentric edge having ribs thereon, said top wall having an opening above the pin on which the lever is mounted.

8. A rope lock comprising a member having a top wall and depending parallel walls, said parallel walls being interconnected by a semi-cylindrical portion at one end, and by a semi-circular downwardly and outwardly inclined portion at the other end, said side walls having two pair of depending ears each interconnected by a pin, a roller on one pin, and a lever pivoted on the other pin and having a head and a handle, said head having an eccentric edge, said handle projecting substantially diametrically oppositely to said head, said eccentric edge having ribs thereon, said top wall having an opening above the pin on which the lever is mounted, said top wall also having an opening adjacent said semi-cylindrical portion.

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