Oct. 28, 1930. A. W. GRONQUIST 1,779,430

ROPE LOCK

Filed Nov. 22, 1929

Fig. 1.

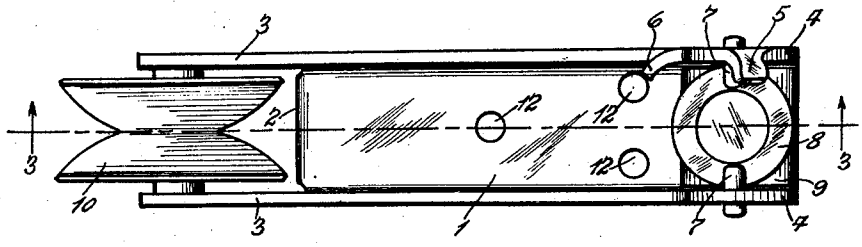


Fig. 2.

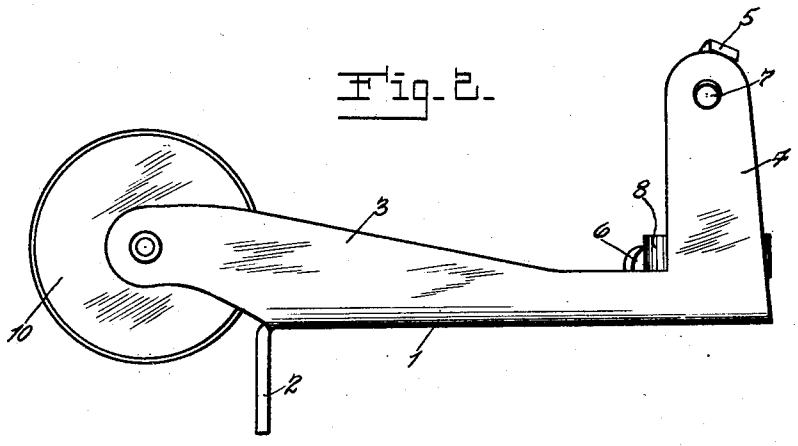
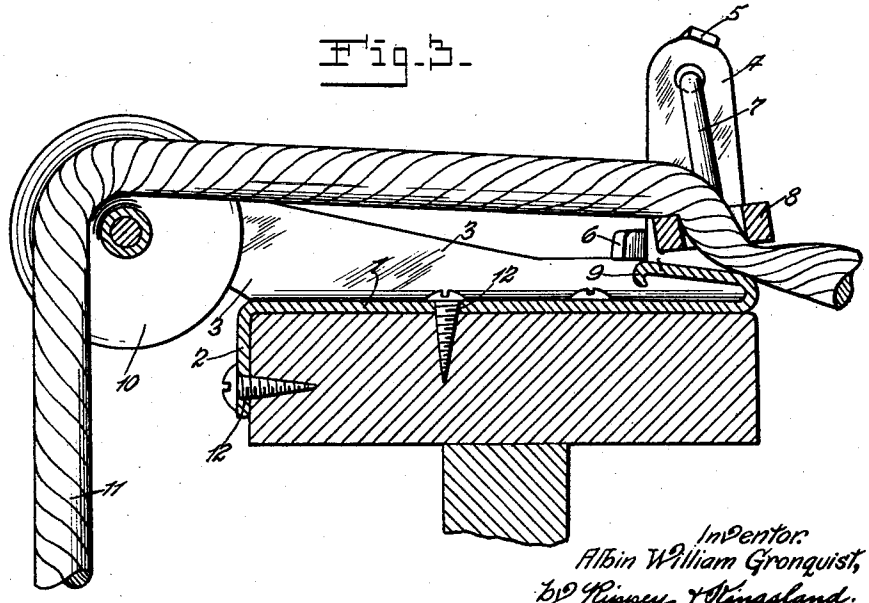


Fig. 3.



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UNITED STATES PATENT OFFICE

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ROPE LOCK

Application filed November 22, 1929. Serial No. 408,998.

This invention relates to a rope lock and of a type which may be employed with a rope used in handling a boat anchor.

One of the objects of this invention is to provide such a lock as will be economical to manufacture, durable in use and efficient in operation.

Other objects will appear from the detailed description to follow taken in connection with the accompanying drawing, in which

Fig. 1 is a plan view of the lock.

Fig. 2 is a side elevation.

Fig. 3 is a cross-section on line 3—3 of Fig. 1.

The frame for the lock is such that it may be cut and formed integrally from flat metal stock. It comprises the base 1, attaching flange 2, a pair of brackets 3 and vertical supports 4 formed integrally with the base. One of the supports 4 may have inwardly extending lugs 5 and 6 which act as stops limiting the movement of the pendulum about to be described.

A pendulum is pivotally mounted on the supports 4 by the pair of arms 7 to which is attached at their lower end the ring 8.

Formed integrally with the base 1 is the heel 9 with a slight clearance with the ring 8. A pulley 10 is mounted between the brackets 3 forward of the pendulum. The rope 11 is passed over the pulley 10 downwardly through the ring 8 and outwardly between the bottom of the ring and the heel 9. The extreme outward free end of the rope may be knotted (not shown in the drawing) to prevent its passing through the ring.

The device may be attached to a support by screws through the holes 12 in the base 1 and the flange 2.

When the free end of the rope is loosened and allowed to assume a position in a horizontal plane touching the heel, friction between the rope and the ring will cause the pendulum to swing inwardly and engage the rope between the edge of the ring 8 and the heel 9, as shown in the drawing. By tightening the free end of the rope and bringing it upwardly so that it lies in a plane above that assumed when it is in a locked position, for instance in a horizontal plane, the lock will be released and the rope will follow freely through the ring so long as the rope remains taut and in a proper plane, as described.

It is obvious that while there has been illustrated and described a specific construction adapted to be used as a lock for rope holding a boat anchor, this invention may be applied to devices for holding ropes used for other purposes, as ropes for awnings and the like.

It will be seen that a lock is provided which is simple in construction, economical to manufacture, durable in service and efficient in operation.

It is obvious that changes may be made in the details of construction within the appended claims without departing from the spirit of this invention.

I claim:

1. A rope lock comprising a frame, a pendulum mounted in said frame, a transverse ring at the lower end of the pendulum, and a heel positioned to engage the rope passing through said ring.

2. A rope lock comprising a frame, a pendulum mounted in said frame, a transverse ring at the lower end of the pendulum, a heel positioned to engage the rope passing through said ring, and means for alining one end of the rope.

3. A rope lock comprising a frame, a pendulum mounted in said frame, a transverse ring at the lower end of the pendulum, a heel positioned to engage the rope passing through said ring, and a pulley for positioning one end of the rope.

4. A rope lock comprising a frame, a pendulum mounted in said frame, a transverse ring at the lower end of the pendulum, a heel positioned to engage the rope passing through said ring, and stops to limit the movement of the pendulum.

5. A rope lock comprising a frame, a pendulum mounted in said frame, a transverse ring at the lower end of the pendulum, a heel positioned to engage the rope passing through said ring, and a pulley in substantial alinement with a point between the pendulum pivot and the heel.

6. A rope lock including an integral frame having a base, brackets and supports,

a pendulum pivoted on said supports, a transverse ring at the lower end of said pendulum, a pulley mounted on said brackets, and a heel integral with said frame positioned and adapted to engage a rope between the heel and the ring.

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