S. E. GOODFELLOW.

ROPE CLAMP.

APPLICATION FILED NOV. 7, 1914.

1,166,673.

Patented Jan. 4, 1916.

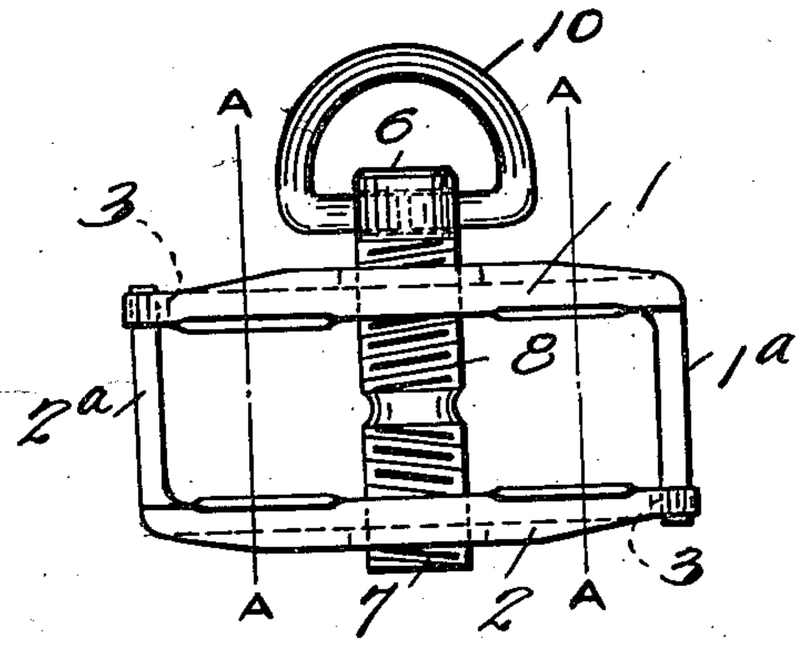


FIG. 1

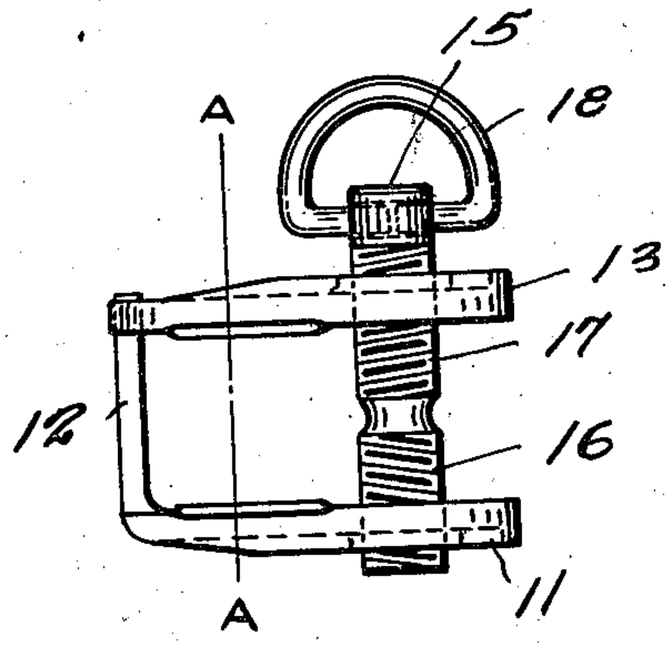


FIG. 4

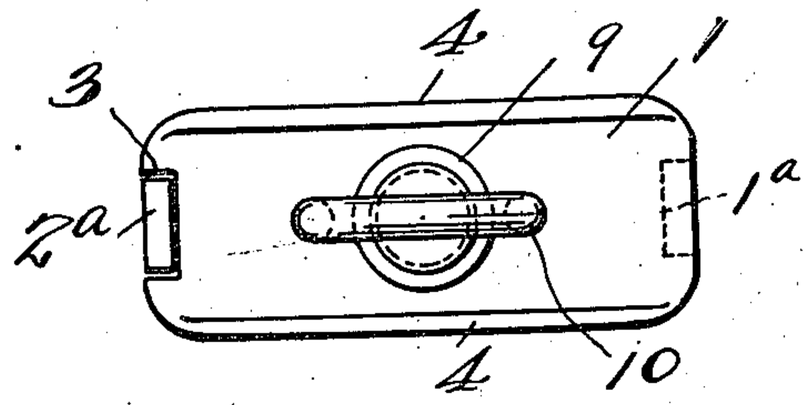


FIG. 2

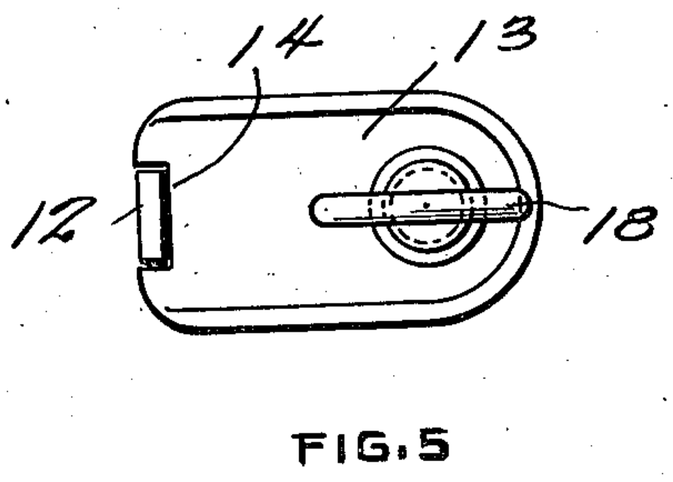


FIG. 5

FIG 3

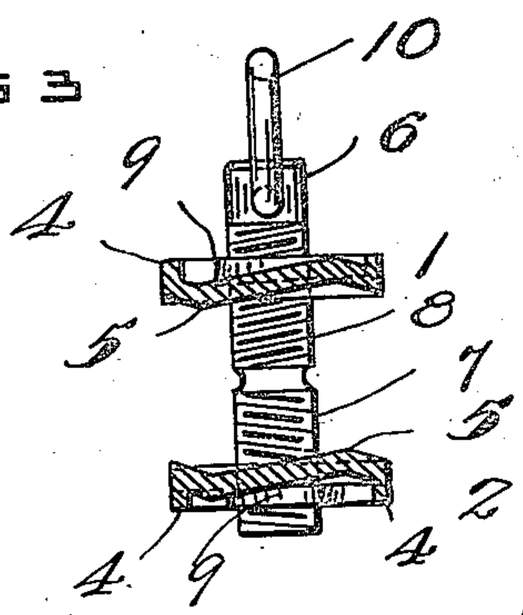
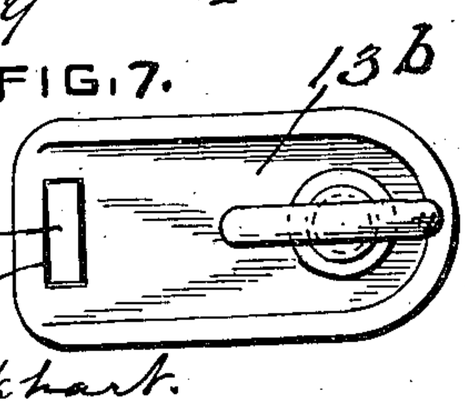


FIG. 7.



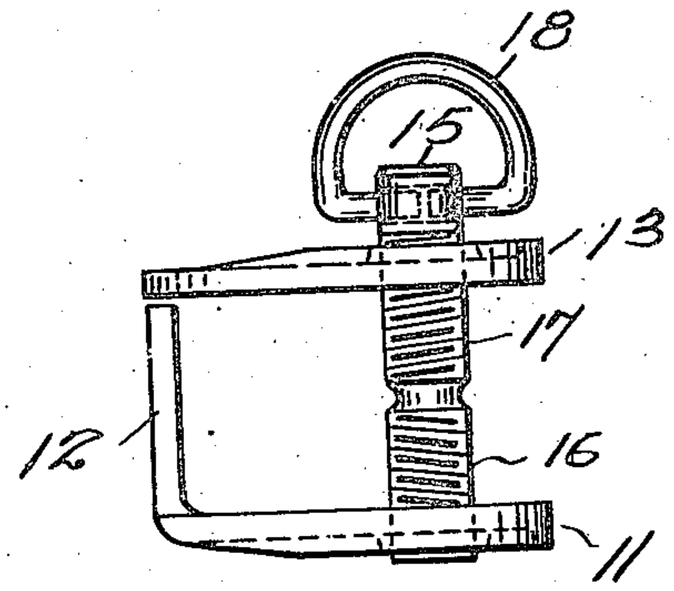


FIG. 6

Witnesses

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UNITED STATES PATENT OFFICE.

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ROPE-CLAMP.

1,166,673. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed November 7, 1914. Serial No. 870,805.

To all whom it may concern:

Be it known that I, SAMUEL ELNO GOODFELLOW, a citizen of the United States of America, residing at Columbus, in the county of Franklin and State of Ohio, have invented certain new and useful Improvements in Rope-Clamps, of which the following is a specification.

The present invention relates to improvements in rope clamps, and while it is designed especially for use in connection with clothes lines, it will of course be understood that the device is equally applicable for other purposes.

The primary object of the invention is the provision of a device that is facile in operation so that it may be quickly and easily applied to or detached from a rope, that is simple and compact in construction, and is comparatively inexpensive in production.

With these objects in view the invention consists in certain novel combinations and arrangements of parts, essentially three in number, whereby the clamp is produced as will hereinafter appear.

In the accompanying drawings I have illustrated two complete examples of the physical embodiment of my invention constructed according to the best modes I have so far devised for the practical application of the principles of my invention.

In the drawings: Figure 1 illustrates a duplex clamp made according to my invention. Fig. 2 is a top plan view of Fig. 1. Fig. 3 is a transverse vertical sectional view taken on either lines A—A in Fig. 1. Fig. 4 illustrates a single clamp, of which Fig. 5 is a top plan view and Fig. 6 a side elevation. Fig. 7 is a top plan view of a modified form of the single clamp.

As before stated the device which is the subject of the invention comprises essentially three elements or members, or at the most, four elements are essential to complete the clamp in either one or both of the forms illustrated.

Referring particularly to the duplex clamp of Figs. 1, 2 and 3, it will be seen that this device includes a pair of duplicate or complementary clamp plates 1 and 2 formed with guide posts 1^a and 2^a, and open end slots 3. The plates may be of cast or stamped metal as desired, and as will be apparent from the drawings the posts 1^a and 2^a are bent at right angles to the body of their respective plates at the ends, and these posts fit neatly in the slots 3 at the ends of the plates opposite to the integral posts. Strengthening or reinforcing ribs 4 4 extend along the longitudinal outer edges of the plates, and in cross section, the body of the plates, or rather the body of each plate is fashioned with an irregular surface as 5, for the purpose of providing a firmer grip on the rope than would otherwise be the case.

The two clamp plates are directly connected by means of a screw bar 6 which is provided with right hand threads 7 and left hand threads 8, and the plates are centrally perforated and threaded to receive these screw threads, an annular flange or boss 9 being employed to furnish additional engagement of the threaded parts. A ring or loop 10 is connected to the end of the screw bar, the latter being perforated for the purpose, and this ring serves not only as a handle or hand grasp to be used for turning the screw bar, but performs the additional function of a suspending ring for the rope to which the clamp is attached, as will be described.

In the form of the invention illustrated in the remaining figures of the drawing a single clamp is exemplified. Here the clamp plate 11 has an angular post or tongue 12, and the plate 13 has the open slot 14, the tongue and slot co-acting as in the other form. The screw bar 15 also performs the same function as the first bar and has the right hand and left hand threads 16 and 17 respectively and a suspending ring 18.

In the modified form of the single clamp illustrated in Fig. 7 the plate 13^b is formed with a slot 3^b located near the end of the plate but not open as in the other forms. The post or tongue 2^b fits neatly and is guided in this slot, and in some instances the modified construction is superior to the forms shown with open slots, as it absolutely eliminates the possibility of disengagement of parts while the post is in the slot.

The screw bar is purposely made longer than the posts or tongues 1^a, 2^b and 2^a or 12, so that by turning the screw bar the plates may be separated and the tongues disengaged from their slots, as in Fig. 6. When in this position the plates may be turned at an angle to each other and the clamp may be attached to a rope by locating the rope between a tongue and the screw bar. The plates are then turned to parallelism with

the tongues alining with their slots, and the bar may be turned clock-wise so that the threaded engagement causes the plates to clamp on the rope, and in this manner the device is fixed to the rope.

The duplex clamp is especially adapted for clamping two ends of rope or cable or the like together, for looping or shortening, or binding two parallel strands of rope together, and for many other purposes in connection with awnings, tackle, tents, etc., where ropes are to be attached.

The single clamp is well fitted for use, one for instance at the ends of a clothes line, and when so attached, the line is suspended by hanging the ring 18 over a nail or hook permanently fixed in place. Thus the line may be "put up" or "taken down" quickly and with little labor, knotting of the rope is eliminated, and the undesirable wrapping of the rope around sharp edges or corners or other projections is avoided, thus prolonging the utility and longevity of the rope. The clamp may be slid along the rope to proper or desired position (after first having been loosened) and fixed in adjusted position intermediate the ends of the rope, and the comparatively small size of the clamp makes it so that the clamp will remain on the clothes line and be "wound up" therewith without producing an unsightly or inconvenient protuberance.

It will be evident that a heavy duty clamp may be made involving these same principles to be used in hauling cables through conduits, and wires may be pulled through under ground ducts as in electric, telephone and telegraph wire and cable laying, and numerous other applications of the invention may be made without departing from my invention.

I claim:

1. The combination with a right and left hand screw bar of a pair of clamp plates one having an angular tongue and the other having an end opening for said tongue forming guiding means for holding the plates in parallelism.

2. The combination with a pair of co-acting clamp plates having threaded openings and each formed with an end slot and a tongue in engagement, of a screw bar having right and left hand threads engaged in said threaded openings.

In testimony whereof I affix my signature in presence of two witnesses.

SAMUEL ELNO GOODFELLOW.

Witnesses:

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MARY WILSON.