

J. OPPMAN.
ROPE CLAMP.
APPLICATION FILED FEB. 25, 1921.

1,399,647.

Patented Dec. 6, 1921.

Fig. 1.

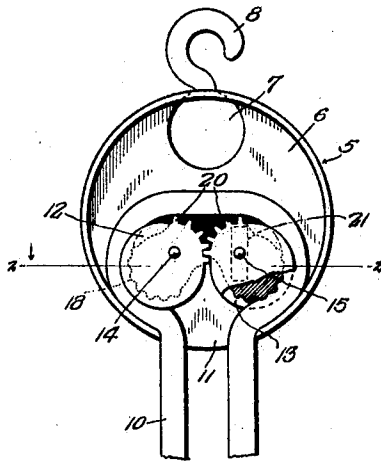


Fig. 3.

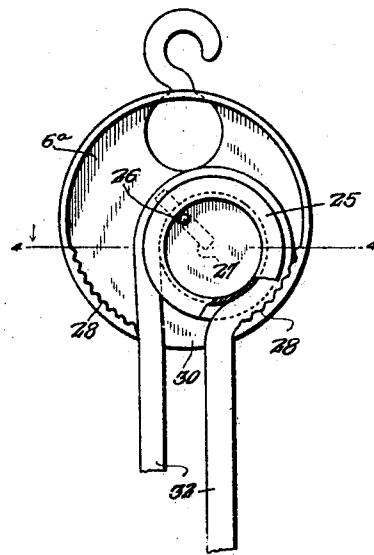
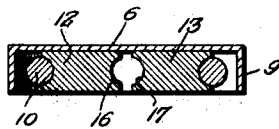
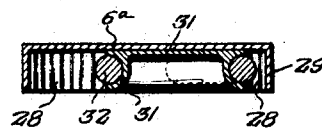


Fig. 2.

Fig. 4.

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ROPE-CLAMP.

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To all whom it may concern:

Be it known that I, JOSEPH OPPMAN, a citizen of the United States, residing in Conneltsville, in the county of Fayette and State of Pennsylvania, have invented certain new and useful Improvements in Rope-Clamps, of which the following is a specification.

This invention relates to rope clamps, and the primary object of the invention is directed to a novel and improved casing for receiving a portion of a rope or cable whereby the same may be securely held in clamping position and readily released therefrom when desired.

Another object of the invention is directed to a rope clamp wherein the inner portion of the rope is clamped between the casing and a rotatable member carried thereby, including provision for releasing the rope without removing the same from the rotating element or casing.

Another object of the invention is directed to a novel and improved rope or cable clamp having doubled, manually actuated rotatable members carried and supported within a casing for coöperative engagement with each other and with a portion of a rope whereby the same may be clamped between the said casing and the rotatable members.

A still further object of the invention relates to a rope clamp of the type above set forth including an open casing having corrugations on its inner periphery for engaging a portion of a rope between the said corrugations and a manually, grooved rotatable element eccentrically mounted within the said casing whereby the rope may be clamped and released without removing the same.

With these objects in view and others which will be suggested and manifest as the purpose and nature of my invention are revealed in the following specification and drawings,

Figure 1 is a view showing the interior of the clamp and the rope or cable in clamping position.

Fig. 2 is a sectional view taken on the line 2—2 of Fig. 1 looking in the direction of the arrows.

Fig. 3 is a modified form of the invention, and

Fig. 4 is a sectional view taken on the line 4—4 of Fig. 3.

Referring now to the specification where like numerals designate corresponding parts throughout the drawings, 5 designates in its

entirety a circular casing having an open front face 6, the wall of said casing being provided with an enlarged recess 7 stamped out from said wall and terminating in an upwardly extending curved hook 8 from which the clamp and its rope or cable may be suspended. The inner flange 9 of the casing is preferably of a width slightly larger than the diameter of the rope 10 to be clamped, said rope extending through a recess 11 in the flange portion of the casing and trained about a pair of manually actuated rotatable elements 12, 13 as clearly shown in Fig. 1.

The respective rotatable elements 12, 13 are eccentrically mounted as at 14, 15 to the casing and just above the opening 11, above referred to, whereby the cable or rope 10 may be clamped or locked between the flange portion 9 and the said rotatable elements. For this purpose each of the rotatable elements are preferably grooved as shown at 16, 17 to receive the bight portion of the rope or cable and are also provided with blunted teeth 18 for clamping the said rope.

Referring to Fig. 1 it will be seen that the rotatable elements are also formed with segmental teeth 20 which are adapted to mesh with each other when the rotatable element 13 is turned by the thumb nut 21 on the outer face of the wall 6 as shown in dotted lines in the said figure.

From the above construction, it will be readily seen that as the rope or cable is first loosely trained about the rotatable element, the said rope may be clamped by simply turning the thumb nut 21 whereby the segmental teeth 20 will bring the blunted teeth 18 into clamping engagement with the rope lying flush with the flange portion of the casing. It will be obvious that by reversing the thumb nut 21 that the rope may be released from clamping engagement and moved as desired.

Referring now to the form of the invention shown in Fig. 3, it will be seen that I have shown but one rotatable element 25 which is eccentrically pivoted as at 26 and also provided with a thumb nut 27 for rotating the same. It will be noted in this instance that the casing is substantially similar to the form shown in Fig. 1 except that I have shown grooved corrugations 28 extending for a short distance on the flange 29 above and upwardly from the recess 30 of said casing. The rotatable element in this

case is somewhat larger than the rotatable element shown in the form of Fig. 1, but is also grooved on its outer periphery 31 to receive the cable 32 in the same manner as above described. It will be further noted that the rotatable element 25 is preferably hollow and substantially the same with as the flange 29 of the casing whereby the inner face 31 will at all times lie flush with the inner face 6^a as clearly shown in Fig. 4 of the drawings. It will be furthermore obvious that since the rotatable element 25 is eccentrically pivoted that it may be rotated either to the left or right for bringing the rope into clamping position with respect to the casing. A further and more extended description of the clamping device above described is not thought to be necessary in view of the clear drawing forming a part of this invention, as described above in detail.

In the accompanying drawings, I have shown and described my improved clamping means which in practice has been found to be highly satisfactory in obtaining the desired results. It will be obvious however that other embodiments may be adopted and that various changes in the details of construction may be resorted to by those skilled in the art without departing from the spirit and scope of the invention. It is furthermore understood that the invention is not necessarily limited or restricted to the precise elements shown and the modifications described except in so far as such limitations are specified in the subject matter being claimed.

Having shown and described my invention what I now claim as new and desire to secure by Letters Patent of the United States is:

1. A rope clamp comprising an annular casing, rotatable means pivoted within the casing eccentrically with respect to the peripheral wall thereof, said wall being cut away to permit a rope or cable to be trained about said rotatable means, and engaged thereby in different clamping positions with the peripheral wall of the casing adjacent the cutaway portion thereof.

2. A rope clamp comprising a supportable plate having an annular flange at one side thereof, a rotatable element eccentrically pivoted to the inner side of said plate, said flange being cut away to permit a rope or cable to be trained about said rotatable element and engaged thereby between said element and the annular flange in different

clamping positions adjacent the cutaway portion.

3. In a rope clamp comprising a plate having an annular flange at one side thereof, a pair of eccentrically pivoted elements having cooperating teeth thereon rotatably carried by the inner side of the plate, said elements being grooved and provided with blunted teeth on their periphery for receiving and engaging a rope in different clamping position with said flange, and a supporting hook stamped from the body of the plate.

4. A rope clamp comprising a plate having an annular flange integral therewith, a pair of eccentrically pivoted elements having cooperating teeth thereon rotatably mounted to the inner side of said plate, said flange being cut away to permit a rope to be trained about and engaged between said rotatable elements and the flange in different clamping positions, segmental blunted teeth also formed on said elements and means exterior of the plate for actuating said elements to clamp and release the said rope from clamping position with said blunted teeth.

5. A rope clamp comprising a supportable plate having an annular flange, a rotatable element, eccentrically pivoted on the inner face of said plate, said flange being cut away to permit a rope to be trained about and engaged by said rotatable element in different clamping positions with the flange adjacent the cutaway portion, corrugations formed on said flange in proximity to the cut away portion and external means for actuating said element to clamp and release the rope from engagement with the corrugations.

6. In a rope clamp comprising a supportable plate having an annular flange, a rotatable grooved element, eccentrically pivoted on the inner face of said plate, said flange being cut away to permit a rope to be trained about and engaged by said rotatable element in different clamping positions with the flange adjacent the cutaway portion, corrugations formed on said flange in proximity to the cut away portion, external means on the outer face of the plate for actuating the rotatable element to the left or right to clamp and release the rope from engagement with the corrugations.

In testimony whereof I affix my signature hereto.

JOSEPH OPPMAN.