Jan. 30, 1934. F. H. SHARAR 1,945,000

CLAMP

Filed March 9, 1933

Fig. 1.

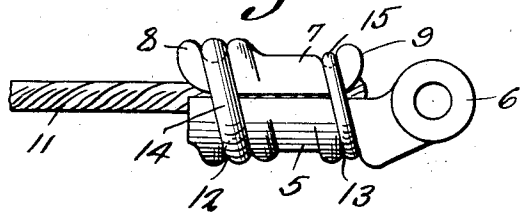


Fig. 2.

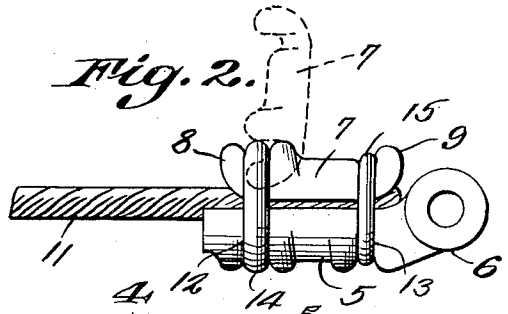
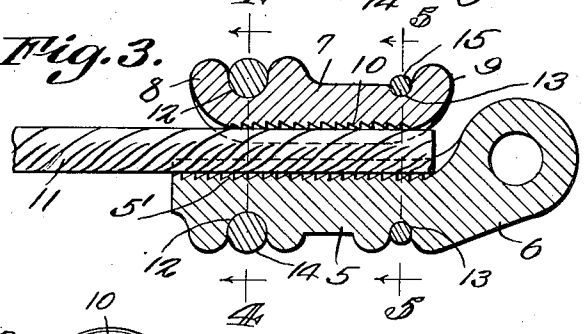


Fig. 3.



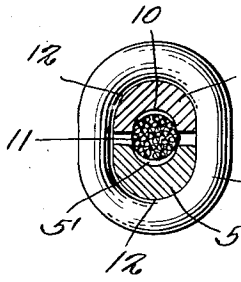


Fig. 4.

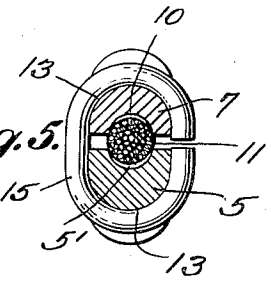


Fig. 5.

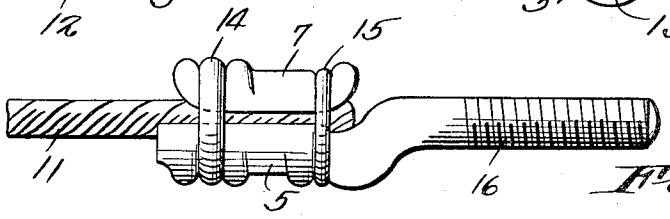
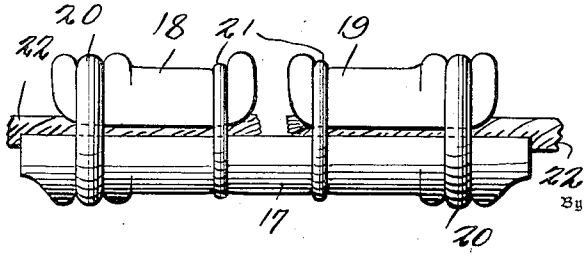


Fig. 7.

Fig. 6.



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Patented Jan. 30, 1934 1,945,000

UNITED STATES PATENT OFFICE

1,945,000

CLAMP

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Application March 9, 1933. Serial No. 660,174

6 Claims. (Cl. 24—132)

This invention has reference to clamps designed for use in connecting the ends of wire ropes, cables or the like, the primary object of the invention being to provide means which will automatically grip the wire rope or cable, and one wherein the gripping action of the clamp will be increased under abnormal strain directed to the rope or cable, with which the clamp is used.

Another object of the invention is to provide a device of this character which may be employed as a means for securing the end of a wire rope or cable, eliminating the necessity of using U bolts, or similar securing devices.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed, may be made within the scope of what is claimed, without departing from the spirit of the invention.

Referring to the drawing:

Figure 1 is a side elevational view of a clamp constructed in accordance with the invention, and illustrating the position of the movable jaw, when strain is directed to the cable held within the clamp.

Figure 2 is a side elevational view of the clamp, the movable jaw being shown in dotted lines, in a position to be swung into clamping relation with the body portion of the clamp.

Figure 3 is a longitudinal sectional view through the clamp.

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

Figure 5 is a sectional view taken on line 5—5 of Figure 3.

Figure 6 is a side elevational view of a clamp wherein a threaded shank forms a part of the body portion of the clamp.

Figure 7 is a side elevational view of a modified form of clamp, designed for supplying the ends of cables.

Referring to the drawing in detail, the reference character 5 designates the body portion of the clamp, which is elongated, and provided with a groove formed longitudinally in the inner surface thereof, which groove is formed with teeth 5'.

As shown, one end of the body portion 5 extends upwardly as at 6, where it is formed with an opening, through which a suitable securing bolt not shown, may be passed, to secure the body portion to an angle or suitable support.

Cooperating with the body portion 5, is a removable jaw 7, which is formed with curved ends 8 and 9 respectively.

The groove 10 is formed longitudinally of the jaw 7, the surface of the groove being provided with teeth, which are inclined towards the free end of the body portion, the teeth being designed to bite into the cable secured by the clamp, and indicated by the reference character 11, securely holding the jack in position.

The jaw 7, and body portion, are provided with grooves 12 and 13 respectively, the grooves 12 being disposed opposite to each other, to accommodate the securing ring 14, which is substantially oval in formation, and of a size to permit of slight movement of the jack with respect to the body portion, as shown by Figure 2 of the drawing.

This ring 14, secures the jaw at one end, while the opposite end of the jaw is held in position by means of the wire 15, which is bent around the jack and body portion, and held in the grooves 13 thereof.

From the foregoing it will be seen that to position the jaw 7, one end of the jaw is positioned under the ring 14, whereupon the jaw is swung downwardly into engagement with the wire rope or cable 11. With the jaw in this position, the wire 15 is bent around the jaw and body portion, securing the jaw.

It is obvious that if excessive strain is directed to the wire rope or cable 11, the jaw will be moved into close engagement with the body portion, to clamp the wire rope or cable 11, to prevent movement of the wire rope or cable with respect to the body portion.

As shown by Figure 6 of the drawing, a threaded extension 16 is provided on the body portion, which threaded extension may be passed through an opening of a supporting surface, and a nut positioned thereon, to secure the clamp in position.

As shown by Figure 7 of the drawing, the clamp has been designed for connecting the adjacent ends of a cable, and in this form of the invention, an elongated body portion 17 is provided, which body portion is formed with a groove formed longitudinally thereof.

Cooperating with the body portion 17, are jaws 18 and 19 respectively, which jaws are also provided with grooves of a construction to accommodate the wire rope or cable used with the clamp.

These jaws 18 and 19 are held in position by means of the rings 20 and wires 21, the rings

20 and wires 21 being so constructed that the jaws may move slightly, as strain is directed to the wire ropes or cables 22.

As the jaws 18 and 19 are moved away from each other, a binding action will be set up between the jaws and wire ropes or cables secured thereby, securely holding the wire ropes or cables against movement.

Having thus described the invention what is claimed is:

1. A clamp for clamping cables, comprising a body portion formed with a groove, a movable jaw having a groove cooperating with the body portion in gripping a cable therebetween, and means embracing portions of both jaws for removably mounting the movable jaw on the body portion.

2. A clamp for clamping cables, comprising a body portion having a groove to accommodate a cable, a removable jaw having a groove to accommodate the cable, means for securing the jaw to the body portion, and said securing means permitting of movement of the jaw longitudinally of the body portion to grip the cable, when the strain is directed to the cable.

3. A clamp for clamping cables, comprising a body portion having a groove formed longitudinally thereof and adapted to receive a cable, a movable jaw having a groove to accommodate the cable, said jaw cooperating in gripping a cable, a securing ring positioned over the body portion and jaw for holding the jaw in position on the cable, said ring being disposed at one end of the body portion and jaw, a wire member bent around the opposite end of the jaw and body portion, and said ring and wire member permitting of slight movement of the jaw longitudinally of the body portion.

4. A clamp for clamping cables, comprising a body portion having a groove formed therein to receive a cable, said body portion having external grooves, a removable jaw having a groove and fitted over the cable held in the body portion, said jaw having external grooves, a securing ring fitted in the external grooves of the body portion and jaw at one end of the body portion and jaw, and a wire fitted in the groove at the opposite end of the body portion and jaw securing the jaw in position, and said jaw being mounted for movement longitudinally of the body portion.

5. A clamp for clamping cables, comprising a body portion having a groove to receive a cable, a jaw cooperating with the body portion in gripping a cable, said jaw having a curved end, a ring positioned over one end of the body portion, one end of the jaw adapted to be fitted under the ring member, the curved portion of the jaw being movable over the cable fitted on the body portion securing one end of the jaw in position, and a securing member for securing the opposite end of the jaw to the body portion.

6. A clamp for clamping cables, comprising a body portion having teeth at one edge thereof, said teeth adapted to bite into a cable positioned on the body portion, a removable jaw having teeth to bite into the cable, said jaw being positioned over the cable, a ring member embracing a portion of the jaw and body portion, securing the jaw to the body portion, a wire member embracing a portion of the jaw and body portion securing the opposite end of the jaw to the body portion, and said jaw adapted to move longitudinally of the body portion to set up a gripping action with the body portion to grip the cable held between the body portion and jaw.

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