Oct. 18, 1949. R. HOFFMAN 2,485,445

CABLE CLAMP

Filed Oct. 5, 1945

Fig. 1

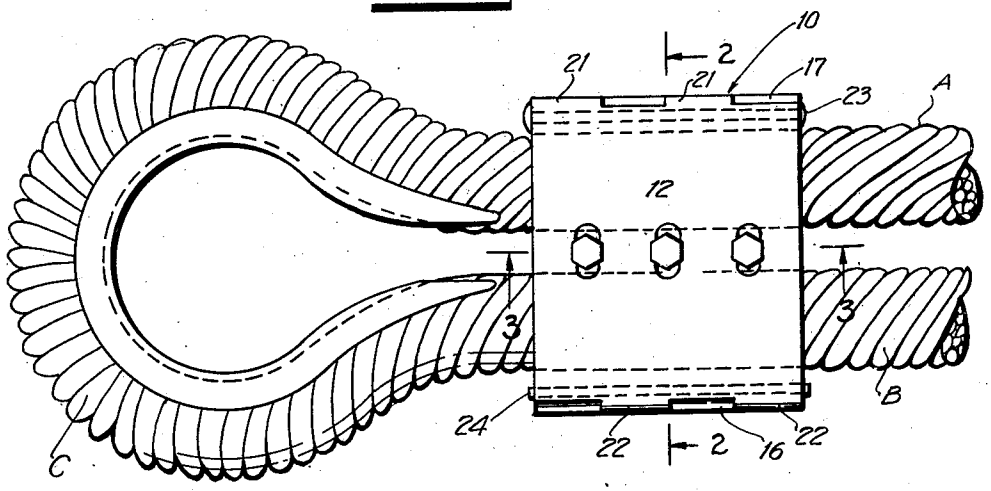


Fig. 2

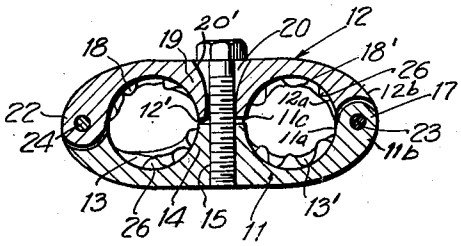


Fig. 3

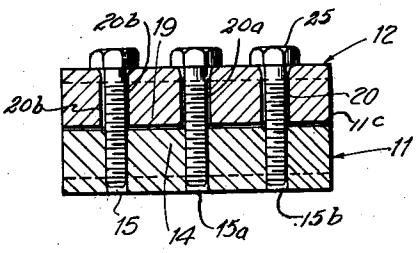
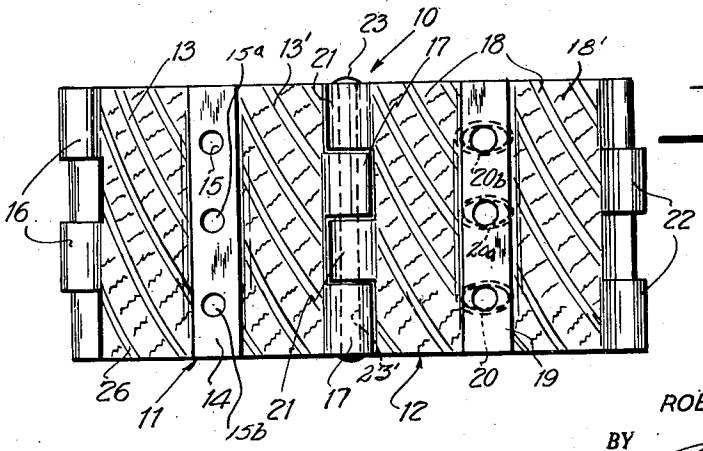


Fig. 4



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CABLE CLAMP

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1 Claim. (Cl. 24—135)

1

This invention relates to improvements in cable clamps.

The primary object of the invention resides in a cable clamp which effects a tight sure grip of the cable for the same operates on a clamping grip principle as distinguished from the conventional friction grip heretofore embodied in cable clamps.

Another feature of the invention is to provide a cable clamp in which the looped eye-forming end of a cable is securely held against accidental slipping, thus eliminating the danger of accidents caused by slipping when the cable is in use under the stress of a heavy load.

A further feature of the invention is the provision of a cable clamp which is simple and inexpensive of construction, easy to assemble and apply to a cable for use, and which is not injurious to the cable to which it is applied in use.

Other novel features of the invention will become apparent as the following specification is read in conjunction with the accompanying drawing, in which,

Figure 1 is a top plan view of the cable clamp in use upon a looped cable.

Figure 2 is a vertical transverse sectional view on the line 2—2 of Figure 1 with the cable omitted.

Figure 3 is a vertical longitudinal sectional view on the line 3—3 of Figure 1.

Figure 4 is a top plan view of the clamp with the clamping jaw section in swung open position.

Referring to the drawing by reference characters, the numeral 10 designates my improved cable clamp in its entirety which includes a pair of separable complementary jaw members 11 and 12 formed of metal forging.

The jaw member 11 is provided with spaced parallel gripping channels 13—13', on the inner side thereof, the inner face of the intermediate portion 14 being flat. Equidistantly spaced threaded holes 15, 15*a* and 15*b* are provided in the intermediate portion 14 and the same extend from the flat inner face 11*c* to the exterior of the member 11. The opposed sides 11*a* and 11*b* of the member 11 are provided with spaced hinge knuckles 16 and 17. The knuckles 16 and 17 are staggered relative to each other for reasons to be hereinafter explained.

The jaw member 12 is similar to the jaw member 11 with sides 12*a* and 12*b* and is provided with spaced parallel gripping channels 18—18' on the inner side thereof, the inner side of the intermediate portion 19 being flat. Spaced slots 20, 20*a* and 20*b* are provided in the intermediate portion 19 and extend from the flat inner face 12'

2

to the exterior of the member 12. The outer ends 20' of the slots 20 flare outwardly as best illustrated in Figure 2. When the members 11 and 12 are in assembled relation, the slots 20 respectively register with the threaded holes 15 while the gripping channels 13—13' and 18—18' are respectively opposed with the confronting flat surfaces of the intermediate portions 14 and 19 in spaced relation.

The opposed sides of the jaw member 12 are provided with spaced hinge knuckles 21 and 22, the same being staggered relative to each other for respective interfitting relation with the knuckles 17 and 16 of the jaw member 11. Except for the threaded holes 15 and slots 20, the jaw members 11 and 12 are identical and in manufacture they may be cast from the same mold, there being no necessity of rights and lefts. The holes and slots may be formed after the molding operation.

When assembled for use as shown in Figure 4, the knuckles 21 of member 12 are interfitted with the knuckles 17 of member 11 and a hinge pin 23 is inserted through the alined holes therein indicated at 23' in Figure 4, and the ends of the same headed or peened. The hingedly connected jaw members 11 and 12 may now be fitted about the cable A and its looped end portion B, with the same respectively seated in the gripping channels 13—13'. The jaw member 12 may now be swung to closed position over the member 11 whereupon the cable A and portion B thereof also seat in the gripping channels 18—18'. The knuckles 22 and 16 now interfit and a locking pin 24 is inserted through the alined holes therein. The clamp 10 is now in locked position about the cable A and its looped end portion B and in order to draw the jaw members 11 and 12 into tight clamping engagement with the cable portions, headed screws 25 are inserted through the slots 20 and have their threaded shanks screwed into the threaded holes 15. As the screws are turned by a wrench or pliers, the intermediate portions 14 and 19 are flexed inwardly causing the gripping channels 13—13' and 18—18' to tightly embrace the cable A and cable portion B in such manner as to prevent accidental slippage between the cable and the clamp 10. For increasing the gripping action the walls of the gripping channels 13—13' and 18—18' are provided with ribs 26 which are disposed at an angle relative to the length of the channels and which bite into the cable portions gripped thereby.

The pin 23 is closely fitted to the holes in the knuckles 16 and 22 so as not to accidentally slide

therefrom when the clamp 10 is in use. The tension between the jaw members also acts to prevent accidental shifting of the pin 24.

Whereas Figure 1 shows the use of the clamp 10 for gripping the looped end of a cable to form an eye C, the same may be used in other instances where two lengths of cable are to be tightly gripped for effecting a connection therebetween. The gripping action set up by the clamp 10 does not crimp the cable which is objectionable in the types of cable clamps now in use.

While I have shown and described what I consider to be the most practical embodiment of my invention, I wish it to be understood that such changes in construction, design, and materials as come within the scope of the appended claim may be resorted to if desired without departing from the spirit of my invention.

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

A cable clamp comprising a pair of complementary clamping jaw members, each of said jaw members having spaced apart hinge knuckles along their side edges, the knuckles on one side being staggered relative to the knuckles on the other side, said jaw members being arranged with the knuckles of one member interfitting with spaces adjacent those of the other member, so that the knuckles of the two members are alined along each edge, locking pins extending through the alined knuckles, each of the jaw members having a pair of spaced apart ribbed, inwardly facing cable gripping channels, the gripping channels of one member being opposed to those of the other member and registering therewith, the intermediate portions of the jaw members between each pair of gripping channels being spaced apart, one of said portions having threaded openings and the other having holes alined with said openings, said holes being enlarged at their outer ends to form transverse slots, and screw means in said holes and openings for connecting the intermediate portions of the jaw members together and for flexibly drawing the channels and intermediate portions of the members toward each other to effect a clamping action between the jaw members and portions of cable disposed in the gripping channels.

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