

Nov. 21, 1939.

E. T. SAYERS

2,181,072

CABLE CLAMP

Filed May 3, 1939

2 Sheets-Sheet 1

Fig. 1.

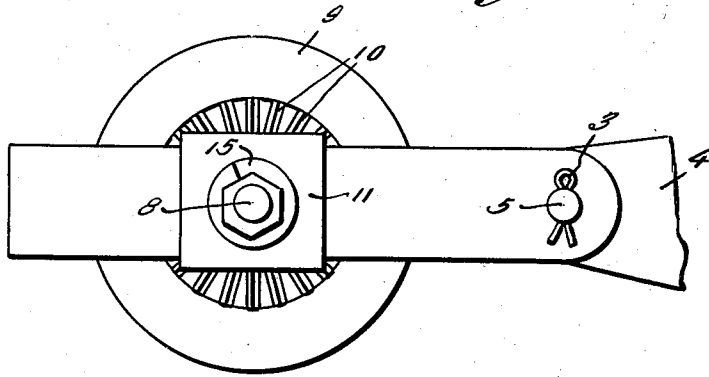


Fig. 2.

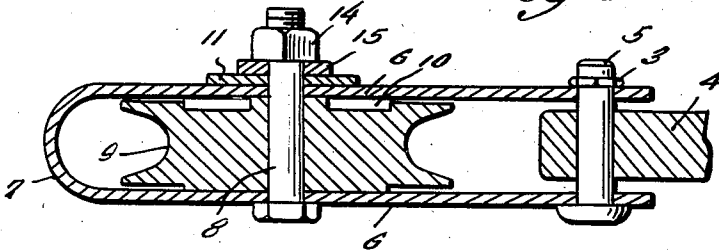
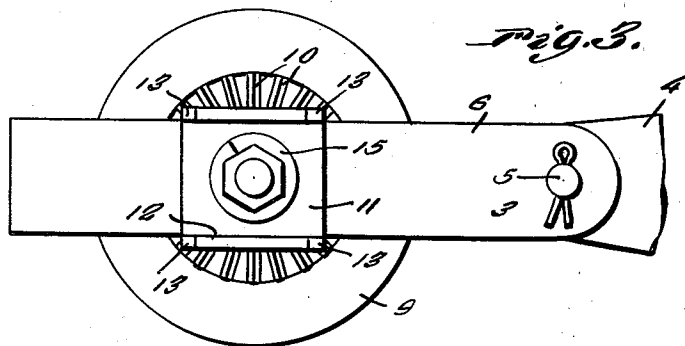


Fig. 3.



Inventor

E. T. Sayers

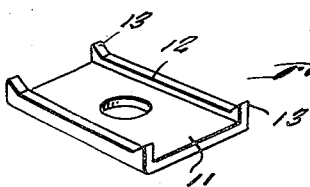


Fig. 4.

By

Clarence A. O'Brien
and Hyman Berman
Attorneys

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Fig. 5.

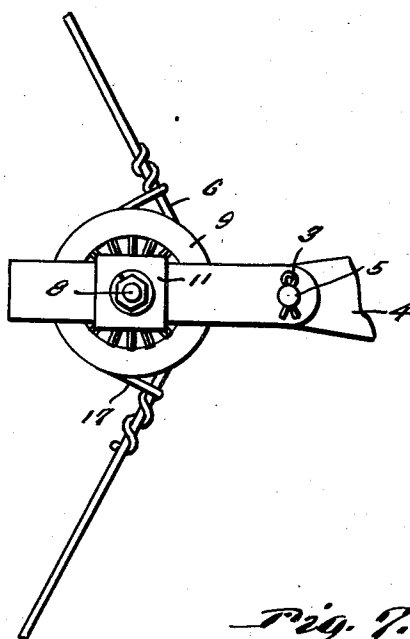


Fig. 6.

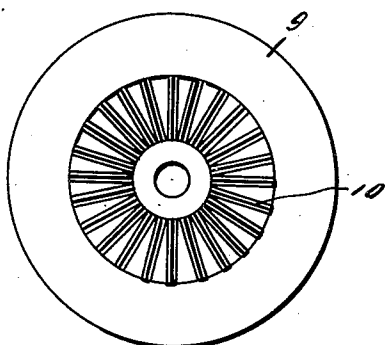


Fig. 7.

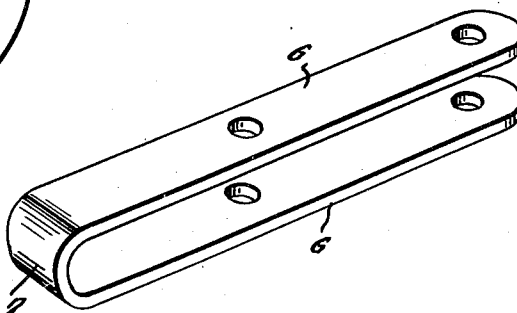
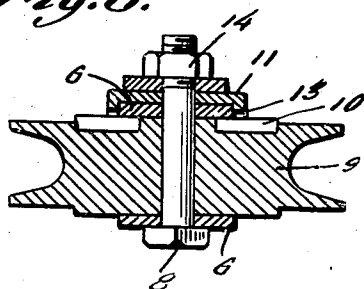


Fig. 8.



Inventor

E. T. Sayers

By

Oliver A. O'Brien
and Hyman Berman
Attorneys

UNITED STATES PATENT OFFICE

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CABLE CLAMP

Eugene Thomas Sayers, Falmouth, Ky.

Application May 3, 1939, Serial No. 271,615

2 Claims. (Cl. 175—376)

This invention relates to clamps for electrical conductors or other cables, and an object of the invention is to provide a clamp of this character designed particularly for use on any angle poles with suspension type construction such as used by the Rural Electrification Administration, and which is so constructed as to overcome the present tendency of the cable to bind, often resulting in pulling the pole over and in many cases causing a break in the cable.

A further object of the invention is to provide a clamp of this character which will render less difficult the now laborious manner of stringing a conductor cable and which generally requires first the stringing of the cable through a temporary snatch block and then, after the cable has been stretched to the proper tension, removing the cable from the temporary snatch block or roller and placing it in the clamp provided for that purpose.

The present invention together with its objects and advantages will be best understood from a study of the following description taken in connection with the accompanying drawings wherein—

Figure 1 is an elevational view of the clamp.

Figure 2 is a sectional view therethrough.

Figure 3 is a view similar to Figure 1 but with the toothed washer in a position reverse to that shown in Figure 1.

Figure 4 is a perspective view of the toothed washer.

Figure 5 is a view similar to Figure 1 and illustrating the application of the invention, the structure in Figure 5 being shown on a reduced scale.

Figure 6 is an elevational view of the grooved roller forming part of the invention.

Figure 7 is a perspective view of the U-shaped strap forming part of the invention.

Figure 8 is a sectional view through the roller and associated parts, and

Figure 9 is a fragmentary detail sectional view through the roller showing the teeth provided thereon.

Referring more in detail to the drawings it will be seen that in the preferred embodiment thereof the clamp comprises a substantially U-shaped metallic strap 7 the legs 6—6 of which at their free extremities are apertured to receive a bolt 5 through the medium of which the strap is secured to the suspension element 4 of an angle pole (not shown). For obvious reasons the bolt 5 is equipped with a cotter pin 3 as shown.

Intermediate the ends thereof the legs 6 of

the strap 7 are apertured to receive an axle bolt 8 for a grooved pulley wheel 9.

The wheel 9 on one side thereof is provided with a circular series of teeth 10.

Cooperable with the teeth 10 for securing the wheel 9 against rotative movement and in a fixed position of rotative adjustment there is provided a toothed, substantially rectangular washer or plate 11.

The plate 11 as shown in Figure 4 is provided along two sides thereof with flanges 12, and each flange 12 at its opposite end terminates in teeth 13 for cooperation with the teeth 10 of the wheel 9.

For the bolt 8 there is provided a nut 14 and for the nut 14 there is provided a conventional lock washer 15.

When it is desired to have the wheel 9 freely rotate the plate 11 is positioned on the device with the flanged and tooth-equipped side thereof facing away from the wheel 9 as shown in Figure 3.

When it is desired to secure the wheel 9 in the desired position of rotative adjustment the plate 11 is positioned on one leg 6 of the strap 7 with the flanges 12 disposed at opposite sides of said leg 6 of the strap so that the teeth 13 engage the teeth 10 of the wheel 9 as shown in Figures 1, 5 and 8. Obviously with the plate 11 so positioned and nut 14 threaded home on the bolt 8 teeth 13 will engage with the teeth 10 to secure the wheel 9 against rotative movement in either direction.

In actual practice the conductor cable 16 is trained over the wheel 9 between the legs 6 of the strap 7 and when pulled to the desired tension nut 14 is threaded home to cause the teeth 13 of the plate 11 to engage the teeth 10 of the wheel 9 to secure the latter against rotative movement. When the conductor 16 is thus placed under tension resort is then had to a tie wire 17 which, as shown, is trained over the wheel 9 and its ends then wrapped around the cable 16 as shown in Figure 5 to secure the cable 16 at the desired tension.

Thus it will be seen that with a cable clamp embodying the features of the present invention the electrically charged conductor or cable is permanently held under tension; the need of temporary equipment is dispensed with, and the possibility of an electrically charged cable becoming loosened and falling to the ground practically entirely eliminated.

It is thought that a clear understanding of the construction, utility and advantages of an in-

vention of this character will be had without a more detailed description.

Having thus described the invention what is claimed as new is:

- 5 1. A cable clamping device comprising a substantially U-shaped strap the legs of which at the open end of the U are equipped for attachment to a pole-mounted suspension element, a bolt extending through the legs of said U-shaped member, a grooved cable-accommodating wheel 10 rotatably supported by said bolt between the legs of said member, said wheel being provided on one side thereof with a circular series of teeth, an apertured plate engaging said bolt at one side of said U-shaped member, said plate being provided at the corners thereof with teeth engage- 15 able with the teeth on said wheel for securing the latter against rotative movement.

2. A cable clamping device comprising a sub-

stantially U-shaped strap the legs of which at the open end of the U are equipped for attachment to a pole-mounted suspension element, a bolt extending through the legs of said U-shaped member, a grooved cable-accommodating wheel 5 rotatably supported by said bolt between the legs of said member, said wheel being provided on one side thereof with a circular series of teeth, an apertured plate engaging said bolt at one side of said U-shaped member, said plate being provided at the corners thereof with teeth engage- 10 able with the teeth on said wheel for securing the latter against rotative movement, said bolt being provided with threads at one end thereof, a nut threadedly engaged with said threaded end of said bolt, and a lock washer on the bolt inter- 15 posed between said nut and the aforementioned toothed plate.

EUGENE T. SAYERS.