Sept. 4, 1928.

1,682,737

J. BLACKBURN

CABLE HANGER

Filed Oct. 17, 1925

Fig. 1.

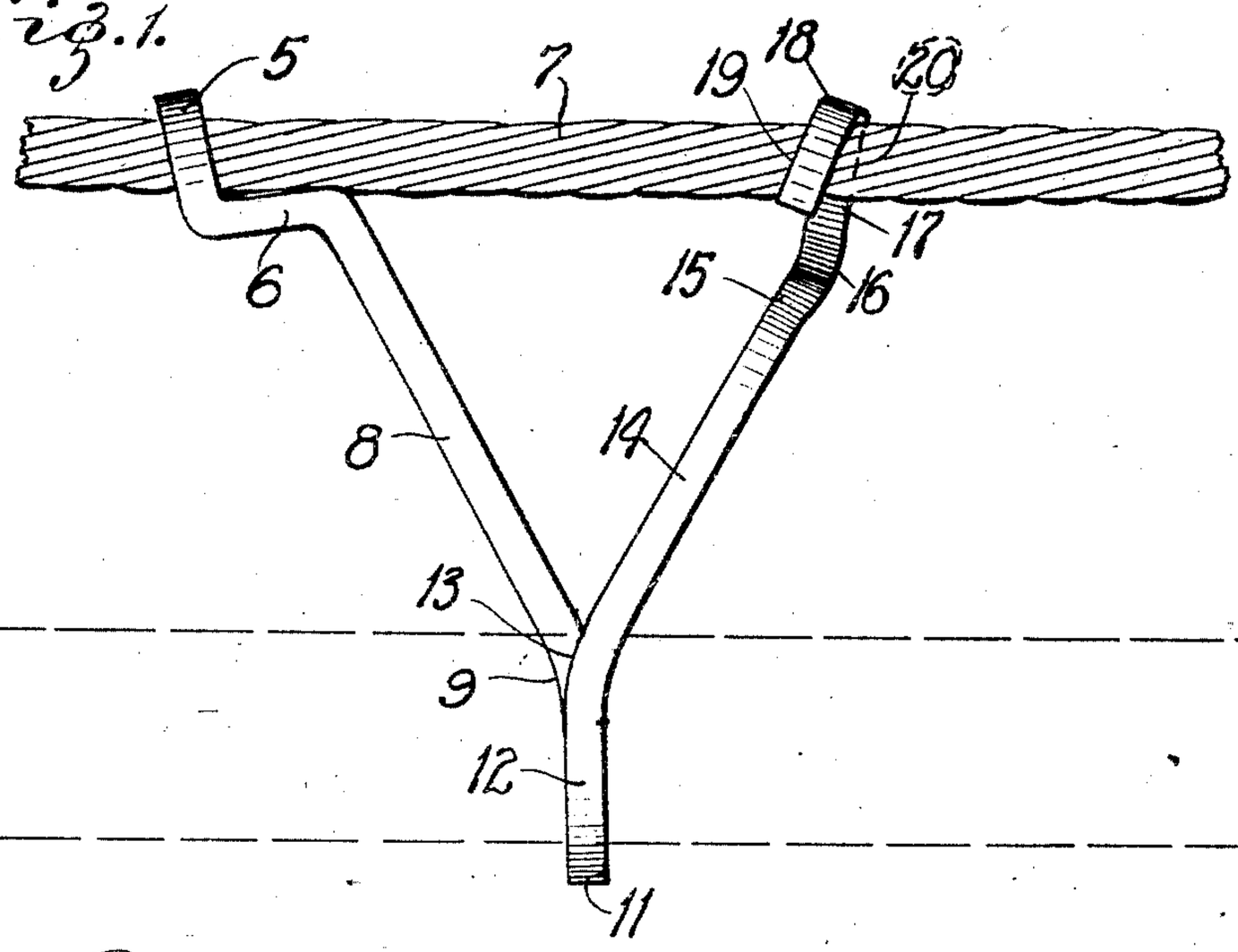


Fig. 2.

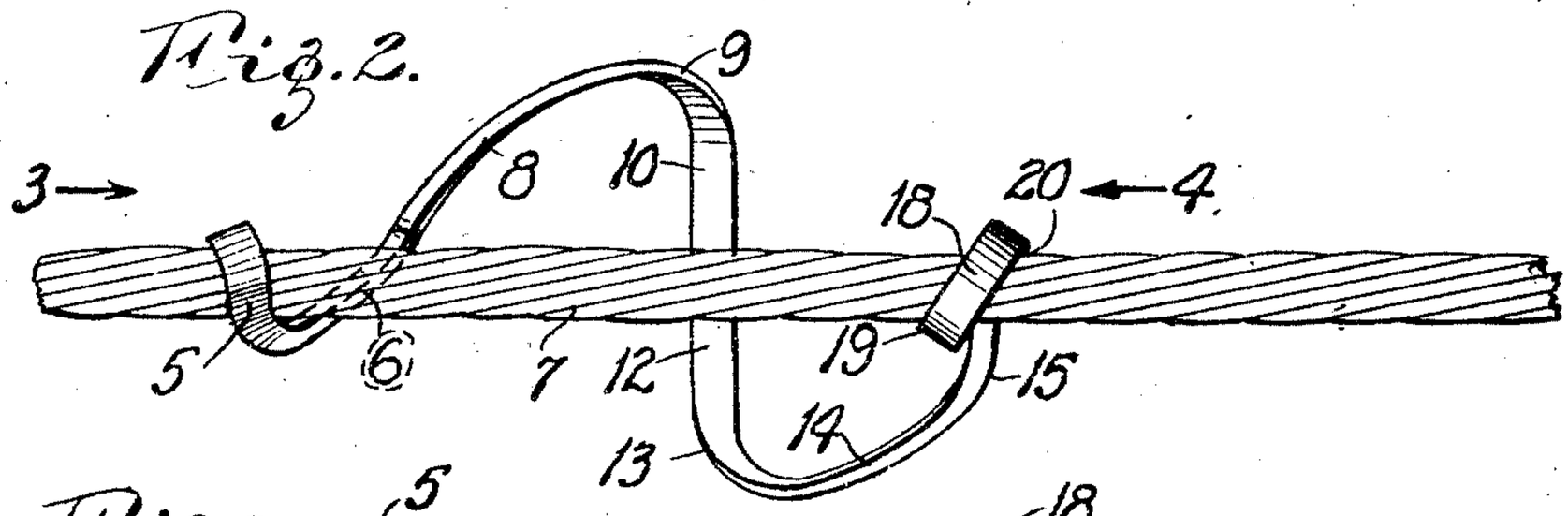


Fig. 3.

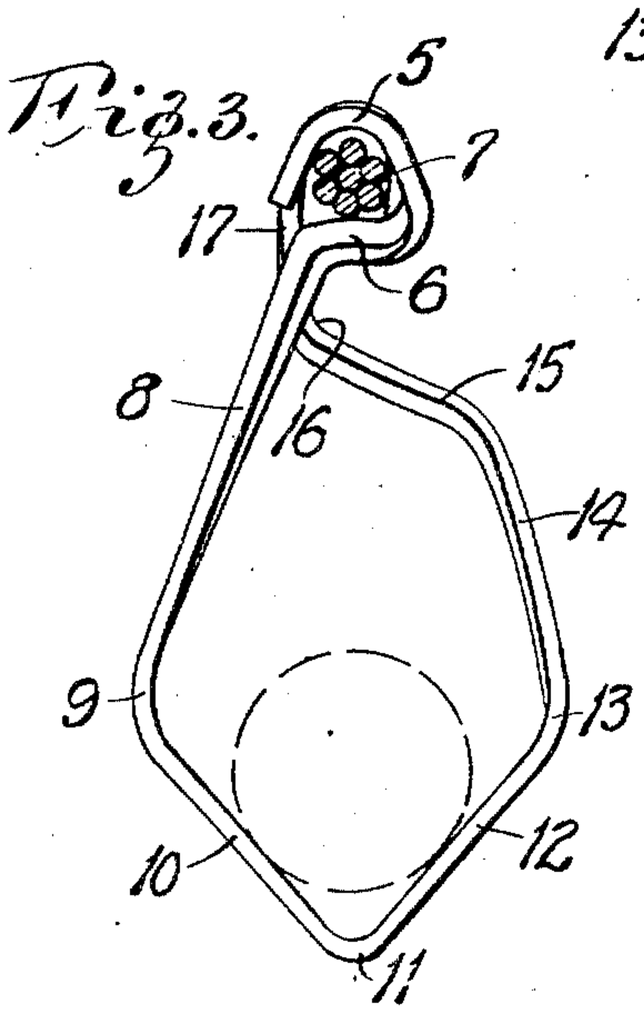
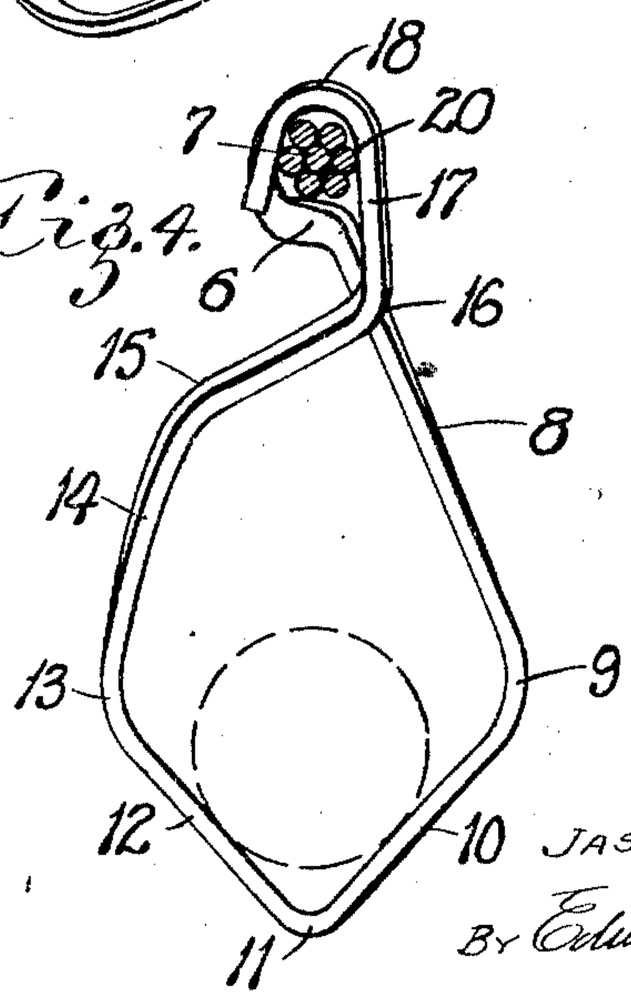


Fig. 4.



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UNITED STATES PATENT OFFICE.

JASPER BLACKBURN, OF WEBSTER GROVES, MISSOURI.

CABLE HANGER.

Application filed October 17, 1925. Serial No. 62,980.

My invention relates to improvements in cable hangers, and has for its primary object a cable hanger of the single ring type, which is provided with a V-shaped cable seat so as to support the cable on two sides and prevent its rolling in the seat. I have discovered that where the circular type of cable seat is used, there is a tendency for the cable to roll backward and forward in the seat and thus in a short time wear off both the fabric covering and the lead covering with which the cable is surrounded thereby shorting some of the electric conductors in the cable.

By the peculiar construction of my cable support, all rolling tendency of the cable is prevented and consequently the wearing through of the outer coverings of the cable is prevented.

A further object is to construct a cable hanger in which both hooks, by means of which it is attached to the cable, will have a tendency to grip the wire and prevent longitudinal movement of the hanger in either direction.

A still further object is to construct a cable hanger embodying the aforesaid features, which can be readily attached to a messenger wire by hand and without the use of any tools whatsoever.

In the drawings:—

Fig. 1 is a side elevation of my improved hanger showing the same applied to a messenger wire;

Fig. 2 is a top plan view of Fig. 1;

Fig. 3 is an end view looking in the direction of the arrow 3 in Fig. 2; and

Fig. 4 is an end view looking in the direction of the arrow 4 in Fig. 2.

In the construction of my device, I employ a strand of wire, which is preferably flat although this feature is not essential. On one end of this wire is formed a hook 5. The wire adjacent the hook 5 is provided with a portion 6, which is designed to extend underneath the messenger wire 7 diagonally to the longitudinal axis of the messenger. The portion 6 has extending therefrom an arm 8, which is provided with a bend as at 9. From the bend 9 is the straight portion 10, which is inclined downwardly and toward the vertical plane of the messenger. At the lower portion of the arm or inclined part 10 is a relatively sharp bend 11 from which extends upwardly and outwardly an inclined straight portion 12; the portions 10, 11 and 12 forming substantially a V. This is clearly illustrated in Figs. 3 and 4. At the end of the inclined portion 12 is a curved portion 13, which is provided with an upwardly and inwardly extending arm 14. The upper part of this arm is bent as at 15 so that it will pass underneath the messenger wire but at some distance below the same. This portion 15 is again bent as at 16 so that a vertical portion 17 will be formed. The vertical portion 17 terminates in a hook 18, which hook is at an angle to the longitudinal axis of the messenger wire and is preferably inclined toward the hook 5 as illustrated in Fig. 2. The hook is so arranged that when it is in position on the messenger wire, the edges 19 and 20 will have a tendency to fit in between the strands of the messenger wire and thus prevent creeping. The hook 5 and the diagonal portion also have the same tendency, and by reason of this the hanger firmly grips the messenger wire and due to the tension and torsion set up in the various portions of the hanger during its application, all creeping tendency is eliminated. It is to be understood, of course, that my device is made of wire which has resiliency so that when the various parts are sprung out of their normal position, as will be described herein, the inherent resiliency of the material will tend to cause it to assume its original shape and thus enhance the gripping action.

My device is applied as follows:

The hook 5 is first placed over the messenger with the hook 18 free. The hook 18 is then brought beneath the messenger wire, thus bringing the portion 6 underneath the messenger wire. In this position the hook 18 will be quite a distance below the messenger. The ring is then lifted in such a manner as to bring the hook 18 above the messenger wire after which the ring is so swung that the hook 18 will pass over the messenger. In doing this the arm 6 will be placed under tension. In other words, there will be a tendency to bend the arm downward. There will also be a certain amount of tension set up in the balance of the ring and, upon removing the hand from the ring, this will have a tendency to draw the hook 18 down tight over the wire, while at the same time the tension set up in the arm or portion 6 will have a tendency to force the hook 5 down tightly on the wire. The tension thus exerted on the two hooks effectually prevents any creeping on the messenger, the hook 5 pre-

venting creeping in one direction, while by reason of the hook 18 being canted relative to the longitudinal axis of the messenger wire 7 will prevent creeping in the opposite direction as there will be a tendency of these hooks to twist and bite into the messenger wire tighter when any longitudinal movement is attempted, especially when this longitudinal movement is applied to the cable seat as would be the tendency when a cable is pulled through the hanger.

It will also be noted from my construction that the hooks 5 and 18 are widely separated. This not only gives stability to the hanger and obviates tipping tendency but also permits the hanger to be applied over an existing cable.

It will be further noted that in applying my device, no scissor-action is present but that a leverage principle is employed in applying the hanger in which the messenger wire plays an important part as practically all the leverage exerted in applying the hanger is exerted upon the messenger, and is not dependent at all upon the grip of the lineman applying the hanger.

It will also be observed from Figs. 3 and 4 in which the cable is shown in dotted lines that my cable hanger provides a two-point support for the cable. This is an important feature and prevents the rolling of the cable or sliding laterally as aforesaid, whereas with the circular cable seat only a one-point support was provided. This support was only on the lowermost point of the cable and, therefore, the same could slide laterally whereas the two-point support provided by my improved hanger is on each side of the cable and at some distance above its lowermost point and, therefore, all possibility of the cable rolling or side sliding is absolutely prevented, because in order to slide, however slightly, it will be necessary for the cable to elevate itself considerably. This, however, is not possible on account of the great weight of the cable, and also the tendency of the cable to wedge itself in the V support on account of its weight.

Having fully described my invention, what I claim is:—

A cable hanger formed of a single strand of spring wire having a hook on one end, a portion integrally formed with said hook and extending under and contacting with the underneath surface of a messenger wire, an arm integral with said portion, a V shaped cable seat formed integral with said arm and adapted to contact with and support a cable at one point of each of two opposite sides of its vertical axis and below its horizontal axis, so as to prevent any lateral movement therein in said seat, a second arm integral with said seat, said arm diverging from the first mentioned arm and extending in an opposite direction thereto, and a hook integral with said last mentioned arm, said hook arranged to extend diagonally across the top of the messenger wire when the hanger is in position, whereby creeping of said hanger in either direction is eliminated.

In testimony whereof I have affixed my signature.

JASPER BLACKBURN.