No. 733,064. PATENTED JULY 7, 1903.

E. S. MARSH.

CABLE HANGER.

APPLICATION FILED OCT. 20, 1902.

NO MODEL.

Fig. 1.

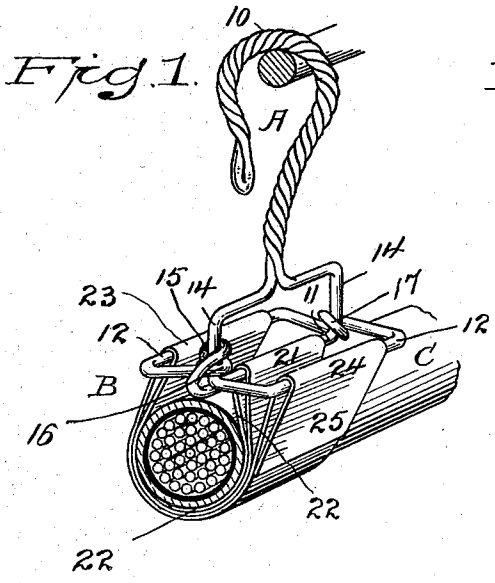


Fig. 2.

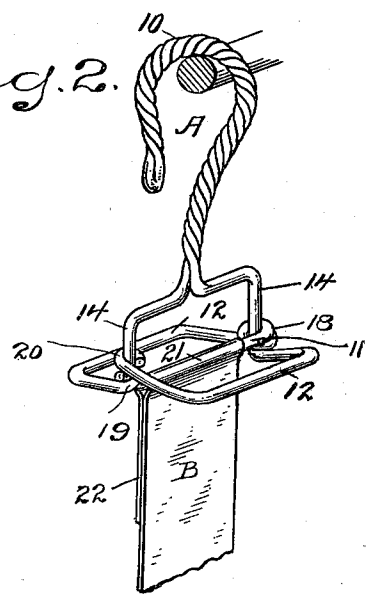


Fig. 3.

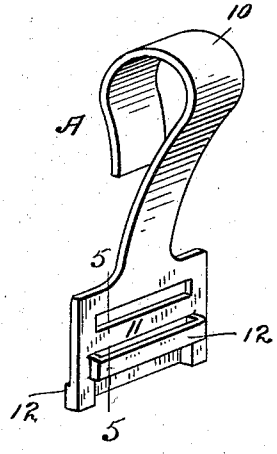


Fig. 4.

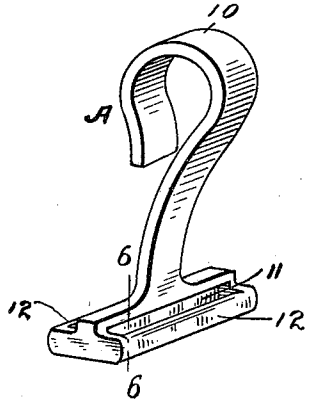


Fig. 5.

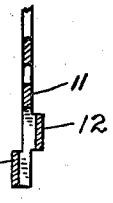
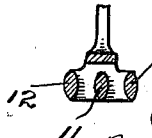


Fig. 6.



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No. 733,064. Patented July 7, 1903.

UNITED STATES PATENT OFFICE.

EUGENE S. MARSH, OF BRIDGEPORT, CONNECTICUT, ASSIGNOR OF ONE-HALF TO GEORGE E. BETTS, OF BRIDGEPORT, CONNECTICUT.

CABLE-HANGER.

SPECIFICATION forming part of Letters Patent No. 733,064, dated July 7, 1903.

Application filed October 20, 1902. Serial No. 127,926. (No model.)

To all whom it may concern:

Be it known that I, EUGENE S. MARSH, a citizen of the United States, residing at Bridgeport, county of Fairfield, State of Connecticut, have invented a new and useful Cable-Hanger, of which the following is a specification.

My invention relates more especially to devices for hanging electric cables, an important use thereof being the hanging of telephone-cables to supporting-wires; and my invention has for its object to provide a simple and inexpensive device of this character to consist simply of a hook which may be made of wire struck up from a sheet of metal or cast and a perfectly plain strip of metal, preferably zinc, on account of the non-oxidizing and non-resilient qualities of that metal, which shall be attached thereto.

Important features of the invention are that it enables me to provide integral hooks—that is, each hook is complete in itself—and that the hooks are so constructed as to permit the use in connection therewith of plain strips of metal that require no preparation whatever, thus effecting an important saving in the cost of production. The saving from the use of my invention is, in fact, threefold: First, the hook is made in a single piece, all auxiliary and supplemental pieces being dispensed with; second, the metal strip is perfectly plain and is attached to the hook by passing one end over the central cross-piece and then bending it upon itself, and, third, the fact that beyond the ordinary tools of the trade the linemen are required to carry nothing but the hangers complete—that is, the hooks with the metal strips attached thereto enable them to effect a constant saving of time in putting up a line, the application of my novel hanger in suspending a cable from a supporting-wire being simplicity itself and requiring but an instant's time.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective illustrating the use of my novel hanger in suspending a cable from a supporting-wire, the hook being made of wire; Fig. 2, a perspective of the hanger detached; Fig. 3, a perspective of a hook blanked out and formed from sheet metal; Fig. 4, a perspective of a form of hook that may be cast in a single piece; Fig. 5, a detail sectional view on the line 5 5 in Fig 3, and Fig. 6 is a detail sectional view on the line 6 6 in Fig. 4.

A denotes my novel hook, and B a strip of band-metal connected thereto and used to support an electric cable C. The essential features of the hook are a bow 10, adapted to engage a supporting-wire, as D, a central cross-piece 11, to which the metal strip is attached, and lateral cross-pieces 12, over which the metal strip is successively passed after being passed about the cable, as will presently be fully explained. In the form illustrated in Figs. 1 and 2 the hook is made from a single piece of wire doubled upon itself at approximately its mid-length and twisted for a sufficient distance to form the bow 10. The ends are then bent outward diametrically away from each other and then downward to form the three cross-pieces. It is of course wholly unimportant so far as the principle of the invention is concerned in just what manner the wire is bent to form the cross-pieces. In Figs. 1 and 2 I have illustrated different modes of forming them. In the form illustrated in Fig. 1 the two strands of wire are bent downward to form side pieces 14. One of the strands is then bent at right angles to the side pieces to form the central cross-piece, the end of that strand being coiled about the opposite side piece, as at 15. The other strand passes through coil 15 and is bent outward in substantially the plane of the central cross-piece, then parallel with the central cross-piece to form one of the lateral cross-pieces, then inward and is coiled about one of the side pieces, as at 16, then outward again and parallel with the central cross-piece to form the other lateral cross-piece, then inward again, and the end is coiled about the other side piece, as at 17. In the form illustrated in Fig. 2 one of the strands after forming the central cross-piece is coiled about one of the side pieces, as at 18, then outward in the plane of the central cross-piece, then parallel with the central cross-piece to form one of the lateral cross-pieces, then inward, and its end is coiled about the other side piece, as at 19. The other strand passes through coil 18, then outward in substantially the plane

of the central cross-piece, then parallel with the central cross-piece to form the other lateral cross-piece, and then inward and is coiled about the other cross-piece, as at 20. In the form illustrated in Figs. 3 and 5 the cross-pieces 11 and 12 are shown as lying in different horizontal planes. This form may be blanked out and formed in a single operation from sheet metal, the lateral cross-pieces being easily given the required lateral offset, but necessarily in different horizontal planes. In the form illustrated in Figs. 4 and 6 the cross-pieces are shown as lying in the same horizontal plane, although this is wholly immaterial, as this form is cast, and the cross-pieces may easily be placed in any desired arrangement relatively to each other. As furnished for use the metal strip is attached to the central cross-piece by folding one end over it, as at 21 in Fig. 1, the short end 22 of the strip lying in close contact with the strip itself. In use the strip is first passed downward about the cable, the short end of the strip lying upon the inner side and in close contact with the cable, and is then passed over one of the lateral cross-pieces, as at 23, then downward, closely inclosing the other ply of the strip, which itself incloses the cable, and finally over the other lateral cross-piece, as at 24, the outer short end 25 being pressed down closely upon the outer ply of the strip, as clearly shown in Fig. 1.

It will readily be seen from the above that the operation of suspending a cable from a supporting-wire by the use of my novel hanger is reduced to the extreme of simplicity, much time being saved in applying each hanger and loss of parts being avoided.

Having thus described my invention, I claim—

1. A cable-hanger consisting of a hook comprising a bow, a central cross-piece and two lateral cross-pieces, all of said parts being rigidly connected at each end, and a metal strip suspended from the central cross-piece, said cross-pieces and bow being immovable relatively to each other, whereby the said strip may be carried around a cable and over one of the two lateral cross-pieces, and then returned around the cable and over the other lateral cross-piece.

2. As an article of manufacture, the hook comprising a bow, a central cross-piece and two lateral cross-pieces, all being made of a single piece of wire, all of the parts being rigidly connected at each end of the cross-pieces, substantially as shown for the purpose specified.

3. A cable-hanger comprising a hook having three cross-pieces rigidly connected at each end with the hook, and all being formed from a single piece of metal, and a metal strip connected to the intermediate cross-piece and adapted to extend therefrom around a cable and around one of the other cross-pieces and returned around the cable and over the third cross-piece, whereby the cable may be supported by two thicknesses of the strip.

In testimony whereof I affix my signature in presence of two witnesses.

EUGENE S. MARSH.

Witnesses:
A. M. WOOSTER,
S. W. ATHERTON.