

No. 861,887.

PATENTED JULY 30, 1907.

R. S. PEIRCE.
HANGER FOR ELECTRICAL CABLES.
APPLICATION FILED FEB. 27, 1905.

Fig. 1.

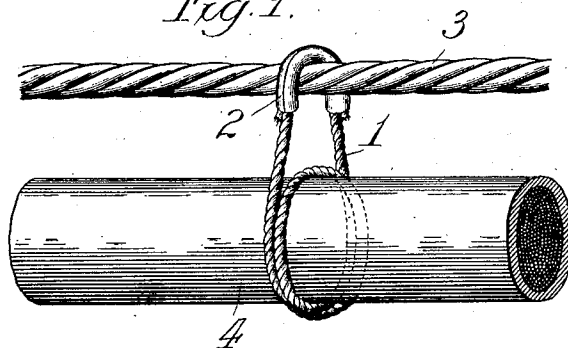


Fig. 2.

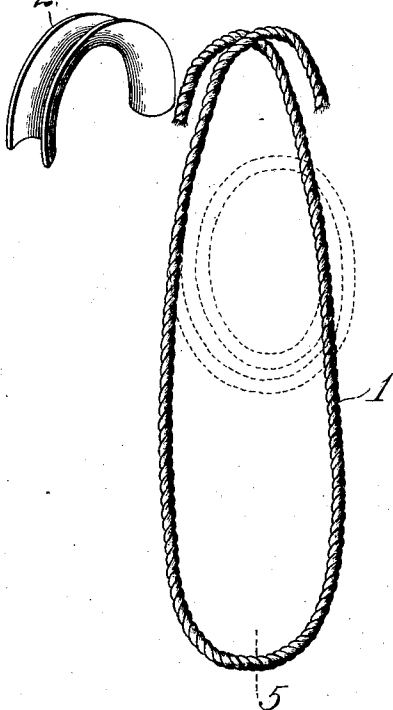


Fig. 3.

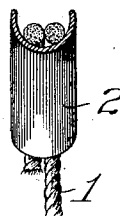


Fig. 4.

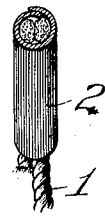
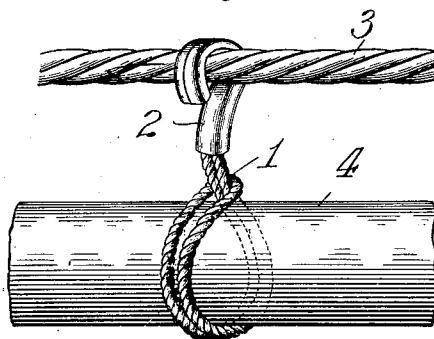


Fig. 5.



Fig. 6.



Witnesses:
Carl E. Gaylord,
John Enders.

Inventor:
Ralph S. Peirce,
By Sampson B. Miller,
Att'y.

UNITED STATES PATENT OFFICE.

RALPH S. PEIRCE, OF CHICAGO, ILLINOIS.

HANGER FOR ELECTRICAL CABLES.

No. 861,887.

Specification of Letters Patent.

Patented July 30, 1907.

Application filed February 27, 1905. Serial No. 247,489.

To all whom it may concern:

Be it known that I, RALPH S. PEIRCE, a citizen of the United States of America, and a resident of Chicago, county of Cook, and State of Illinois, have invented a new and useful Improvement in Hangers for Electrical Cables, of which the following is a specification.

My invention relates to cable hangers, by which cables, usually lead-covered, are hung from supporting strands usually steel cables, which in turn are suspended from poles or other suitable structures.

My invention relates particularly to a type of cable hanger which employs a section of marline cord or rope to engage the cable, this being provided with some form of metallic hook or clip for engaging the supporting strand or messenger wire, as the latter is termed in practice.

In the type of marline hanger widely used at the time of my invention, a metallic hook, of galvanized iron wire was provided, from an eye in the bottom of which was suspended a loop of marline. The method of applying the marline to the cable to be supported, and the hook to the supporting messenger wire, consisted in first looping the marline around the cable and afterwards as the cable was being slid into place, engaging the hook over the messenger wire. This type of hanger has universally involved a knot in the marline, since a closed loop was necessary and it was not practicable to manufacture marline cheaply in closed loops without the knot. This knot formed an item of expense in the manufacture of hangers of this type, since it has not been found generally practicable to employ machinery for making it. Again, the presence of a galvanized iron hook was objectionable on account of the comparatively short life of this material when suspended in aerial work. It is possible to so thoroughly galvanize iron that it will last for many years, but the difficulty has been present in hooks for cable hangers that if the hooks were bent about the supporting strand so as to prevent accidental slipping off, the galvanizing would be cracked, thus rendering the iron of the hook liable to serious deterioration. The sliding of the hook along the supporting strand during the erection of the cable, has been found often to so impair the coat of zinc on the hook as to greatly shorten the life of the hook. It may be stated that in general, the life of the galvanized iron hooks in the marline hangers is very much shorter than that of the marline itself.

My invention is particularly directed to overcoming the objectionable features in marline hangers, and is illustrated in the accompanying sheet of drawings in which,

Figure 1 shows a complete hanger of improved form, supporting a short section of cable from a steel cable or messenger wire directly above it; Fig. 2 shows the parts of my hanger before putting them together; Figs. 3, 4, and 5 show the steps in the assembling of my hanger,

and Fig. 6 shows a modified form of hanger coming within the general scope of my invention.

In the figures, 1 is a piece of marline. This consists of a piece of three-ply hemp rope or twine thoroughly impregnated with tar or other compound to make it practically weather-proof.

In putting my invention into practice, I prefer to use marline, since this is at present the best form of flexible supporting cord known, but it is obvious that any flexible cord of suitable strength and weather-resisting properties, might be used without departing from the spirit of my invention.

The two ends of the piece of marline are fastened together by being clamped within a tube 2 of metal, preferably of zinc, which tube serves the double purpose of binding the ends of the marline firmly together so as to form a closed loop, and also of providing a wearing surface to engage the supporting strand or messenger wire 3.

The general form of the zinc tube 2, after the hanger has been completed is shown in Fig. 1, and in the several stages of its manufacture in Figs. 2, 3, 4 and 5. The hanger in this form, being manufactured in the form of a closed loop, cannot be applied to the cable or to the messenger wire without first passing the end of the cable or the messenger wire through the loop. When in place, the U shaped tube of zinc 2 rides on the supporting strand 3, while the cable 4 hangs below, being supported by the marline. The piece of marline passes twice around the cable, as clearly shown. In another application filed by me, Serial No. 247,490 February 27, 1905, I am showing the method used and apparatus required in applying these hangers to the messenger wire and to the cable; the present application is devoted to the hanger itself.

The structure of my preferred form is advantageous over the old types of marline hangers in many respects: one of these is, that having no knot in the marline, the entire hanger may be assembled by automatic machinery, no manual labor being required. A still greater advantage is in the absence of iron or steel from the metal part of the hanger, with the consequent gain in life of this part. The absence of an open hook is also a material advantage, in that after the hanger is once applied, there is no possibility of the hook slipping off of the messenger wire and allowing the corresponding portion of the cable to remain unsupported.

In Fig. 6, I have shown a modified form of my invention which does not possess the advantage of a closed loop for embracing the messenger wire, since an open hook is used instead. In this modified form the marline 1 is embraced at its end by a tube 2, preferably of zinc, this being however, formed in the shape of a hook, as shown in Fig. 6. In this structure the two ends of the marline project from the same end of the tube 2, thereby leaving the other end free to slip over the messenger wire 3. This form of hanger is used

in substantially the same manner as the old marline hanger and has material advantages over it, due chiefly to the greater lasting qualities of the zinc hook and to the cheapness of manufacture.

5 The form of hanger shown in Fig. 1 can not be applied to a cable at intermediate points after the cable is suspended. To make possible the replacing of a hanger at an intermediate point on a cable, should one break or prove defective, I may use a similar
10 form to that shown in Fig. 1, but one in which the marline is in two pieces, rather than in a closed loop, as would be the case if the loop of marline 1 were cut on the line 5 in Fig. 2. In this case the two ends would be left long enough to tie by hand after the hanger had
15 been put in place over the messenger wire and the marline passed twice around the cable. Another way of applying hangers at intermediate points on the cable is of course, to use the modified type shown in Fig. 6.

20 I do not wish to limit myself in all respects to the exact construction here shown and described.

What I claim as new and desire to secure by United States Letters Patent, is:

1. In a hanger for electrical cables, a piece of weather-proof flexible cord for surrounding said cable and a non-corrosive metallic clip binding the ends of said cord together, said cord being thus held in a closed loop, said clip forming a part of said loop and holding the ends of said cord together, and said clip being curved to properly
25 embrace the supporting wire from which the cable is to be suspended, substantially as described.

2. In a hanger for electrical cables, a closed loop composed of two parts, the first of said parts being formed of flexible material suitable for contact with the surface

of the cable, the second of said parts being formed of a 35 non-abrasive material suitable for contact with the messenger wire supporting said cable, and both of said parts being of weather-resisting materials, substantially as described.

3. In a hanger for electrical cables, a closed loop formed 40 of two parts, one of said parts being suitable for contact with the cable and the other of said parts being suitable for contact with the supporting messenger wire, the entire closed loop being adapted to suspend a cable from a messenger wire by including both the cable and the messenger 45 wire within the closed loop, substantially as described.

4. In a hanger for electrical cables, a closed loop consisting throughout the greater portion of its length of a flexible cord adapted to pass around the cable to be supported, a tube of weather-resisting material binding the 50 ends of said flexible cord together to form a closed loop and forming in itself a portion of the length of said loop, said tube being curved to embrace the strand from which said cable is supported, substantially as described.

5. In a hanger for electrical cables, a closed loop of 55 flexible material adapted to pass around the cable and the messenger wire supporting the cable, and a metallic sheathing for that portion of said closed loop which contacts with the messenger wire and adapted to prevent contact of the messenger wire with the flexible material of 60 the closed loop, substantially as described.

6. In a hanger for electrical cables, a metal tube curved to embrace a supporting strand, and a flexible cord supporting a cable, the two ends of said cord lying side by side within said metal tube and being clamped together 65 by said tube to form a closed loop, substantially as described.

Signed by me at Chicago, county of Cook, State of Illinois, in the presence of two witnesses.

RALPH S. PEIRCE.

Witnesses:

CHARLES I. COBB,
J. M. HAMISTON.