Nov. 29, 1932. J. W. SHOPE 1,889,113

DROP WIRE HANGER

Filed Dec. 16, 1931

Fig. 1.

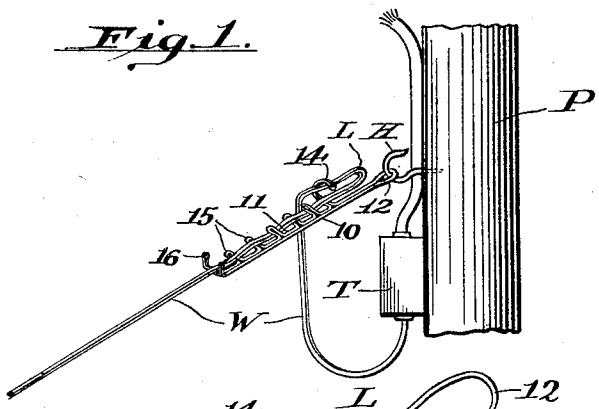


Fig. 2.

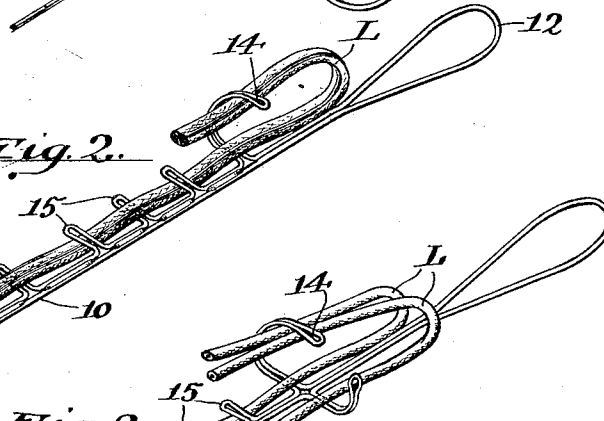


Fig. 3.

Fig. 4.

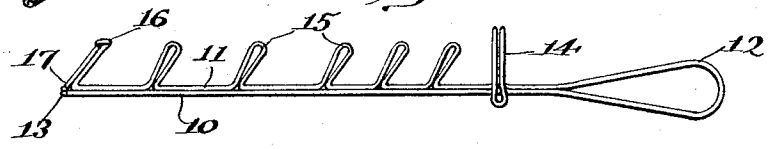


Fig. 5.

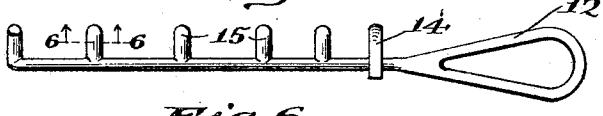
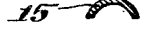


Fig. 6.



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UNITED STATES PATENT OFFICE

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DROP WIRE HANGER

Application filed December 16, 1931. Serial No. 581,358.

My invention relates to a drop wire hanger and has for its principal object, the provision of a relatively simple, practical and inexpensive hanger that may be conveniently employed for engaging and supporting in proper position wires that serve as electric current conductors and which wires extend from a pole or other support to a building, for instance, telephone wires or the wires that carry electric current to a housing or building for lighting and heating purposes.

Further objects of my invention are, to provide a device of the character referred to which in addition to serving as a hanger also functions as a clamp to automatically grip the engaged wire and prevent the same from pulling through the hanger, further, to provide a drop wire hanger that is constructed so as to receive and firmly hold the drop wire without the necessity for extraneous fastening means such as tie wires and further, to provide a hanger that will be effective in materially reducing the time, labor and consequent expense that is ordinarily involved in the connection and supporting of drop wires, dead ends and the like.

With the foregoing and other objects in view, my invention consists in certain novel features of construction and arrangement of parts that will hereinafter be more fully described and claimed and illustrated in the accompanying drawing in which:

Fig. 1 is an elevational view of a portion of a pole and showing a hanger of my improved construction suspended therefrom and with a drop wire connected to said hanger.

Fig. 2 is a perspective view of a hanger constructed in accordance with my invention.

Fig. 3 is a perspective view similar to Fig. 2 and showing a form of hanger utilized for supporting two drop wires of dead ends.

Fig. 4 is a plan view of the hanger.

Fig. 5 is a plan view of a hanger that is stamped from a single piece of sheet metal.

Fig. 6 is an enlarged cross section taken on the line 6—6 of Fig. 5.

By reference to the accompanying drawing and particularly to the construction illustrated in Figs. 1 and 2, it will be noted that the hanger is formed from a single length of wire which is bent double to form a pair of straight legs 10 and 11 which lie immediately adjacent to each other and said legs are rigidly secured to each other in any suitable manner, preferably by solder or by the molten metal into which the hangers are dipped to provide the same with a protective coating.

At one end of the hanger the wire is bent to form an elongated loop 12 which when the hanger is applied for use engages over a suitable support, for instance, a hook H, that is seated in a pole P or other similar support and at the opposite or lower end of the hanger the end of the leg 10 is bent upwardly at right angles to form a finger 13.

A portion of the wire that forms leg 11 a short distance below hook 12 is bent outwardly, thence upwardly and inwardly to form a laterally disposed hook 14, the free end of which overlies the body of the hanger formed by the legs 10 and 11 and this hook is adapted to receive a loop L that is formed in the wire W that is engaged and supported by the hanger, such loop providing a certain amount of slack in the drop wire between the terminal box and the support for the lower end of said drop wire.

Portions of leg 11 below the hook 14 are bent at right angles outwardly and thence inwardly to form laterally projecting fingers 15, all of which occupy the same plane and to increase the drop wire engaging end holding qualities of the hanger, I prefer to space the first two or three fingers that are nearest the hook 14, closer together than those fingers that project from the lower portion of the hanger, although such spacing is not absolutely necessary.

That portion of the wire in the end of leg 11 that forms the lowermost finger 15 has a portion at the outer end of said finger bent at right angles to form a retaining finger 16 that occupies a position parallel with finger 13 and the extreme end portion of the wire that is bent to form the end finger 15 and the finger 16 is bent at right angles to form a

finger 17 that lies immediately adjacent to the finger 13.

Fingers 13 and 17 are secured to each other in any suitable manner, preferably by solder or by the molten metal into which the hanger is dipped.

When my improved hanger is in use loop 12 is suspended from hook H and the drop wire W that leads from terminal box T on the post or other support, extends from said box upwardly and the loop L is formed in said drop wire and said loop is positioned beneath hook 14. From said loop the drop wiring extends alternately beneath and over the laterally projecting fingers 15 and at the end of the hanger said wire projects between finger 16 and the connected fingers 13 and 17 and said wire extends downwardly to the supporting insulator on the housing or other building that is serviced by said drop wire.

That portion of the drop wire that engages over and beneath the fingers 15 assumes a zigzag position and such arrangement automatically produces sufficient friction between the wire and the fingers to withstand all pull or strains that are ordinarily impressed on the wire below the hanger and thus the wire is very firmly secured to the hanger without the use of extraneous fastening means such as tie wires, clamps or the like.

Inasmuch as the entire hanger is formed of wire which is round in cross section, there are no sharp edges on any portion of the hanger and thus there is practically no tendency to abrade or cut the insulation that covers the drop wire.

If desired the loop 12 may be easily bent or spread apart so as to be readily engaged over a knob or insulator.

In Fig. 3 I have shown a form of hanger that is designed to receive and support two drop wires and where such construction is employed both legs of the section of wire from which the hanger is formed, are provided with the laterally arranged hooks 14, fingers 15 and fingers 16.

In Fig. 4 I have shown a modified construction wherein the laterally disposed fingers 15 are slightly inclined with respect to the legs 10 and 11 and the inclination being such that the tendency of the engaged drop wire is to move inwardly towards the legs 10 and 11.

In the modified construction illustrated in Figs. 5 and 6, the hanger and all parts thereof are stamped from a single piece of suitable sheet metal and where the device is so constructed the laterally projecting drop wire engaging fingers are curved in cross section as illustrated in Fig. 6 to prevent the edges of said fingers from making direct contact with the insulation covering of the drop wire.

Thus it will be seen that I have provided a drop wire hanger that is relatively simple in construction, inexpensive of manufacture and very effective in performing the functions for which it is intended.

An especially desirable feature of my invention is the construction whereby the drop wire is applied to the hanger by merely engaging said wire alternately above and below the laterally projecting fingers, thus effecting a material saving of time, labor and consequent expense in the hanging or stringing of drop wires in overhead electric service equipment.

It will be understood that minor changes in the size, form and construction of the various parts of my improved drop wire hanger may be made and substituted for those herein shown and described without departing from the spirit of my invention, the scope of which is set forth in the appended claims.

I claim as my invention:

1. A drop wire hanger, comprising a substantially straight body portion, a loop at one end thereof, a series of fingers projecting laterally from said straight body portion and a pair of fingers projecting from the end of the body of the hanger opposite from the end on which said loop is formed and which pair of fingers are arranged substantially at right angles to the plane occupied by the series of fingers.

2. A drop wire hanger, comprising a substantially straight body portion, a loop at one end thereof, a series of fingers projecting laterally from said straight body portion, a hook projecting laterally from said body portion between said loop and said series of fingers and a pair of fingers projecting from the end of the body of the hanger opposite from the end on which said loop is formed and which pair of fingers are arranged substantially at right angles to the plane occupied by the series of fingers.

In testimony whereof, I affix my signature.

JAMES W. SHOPE.