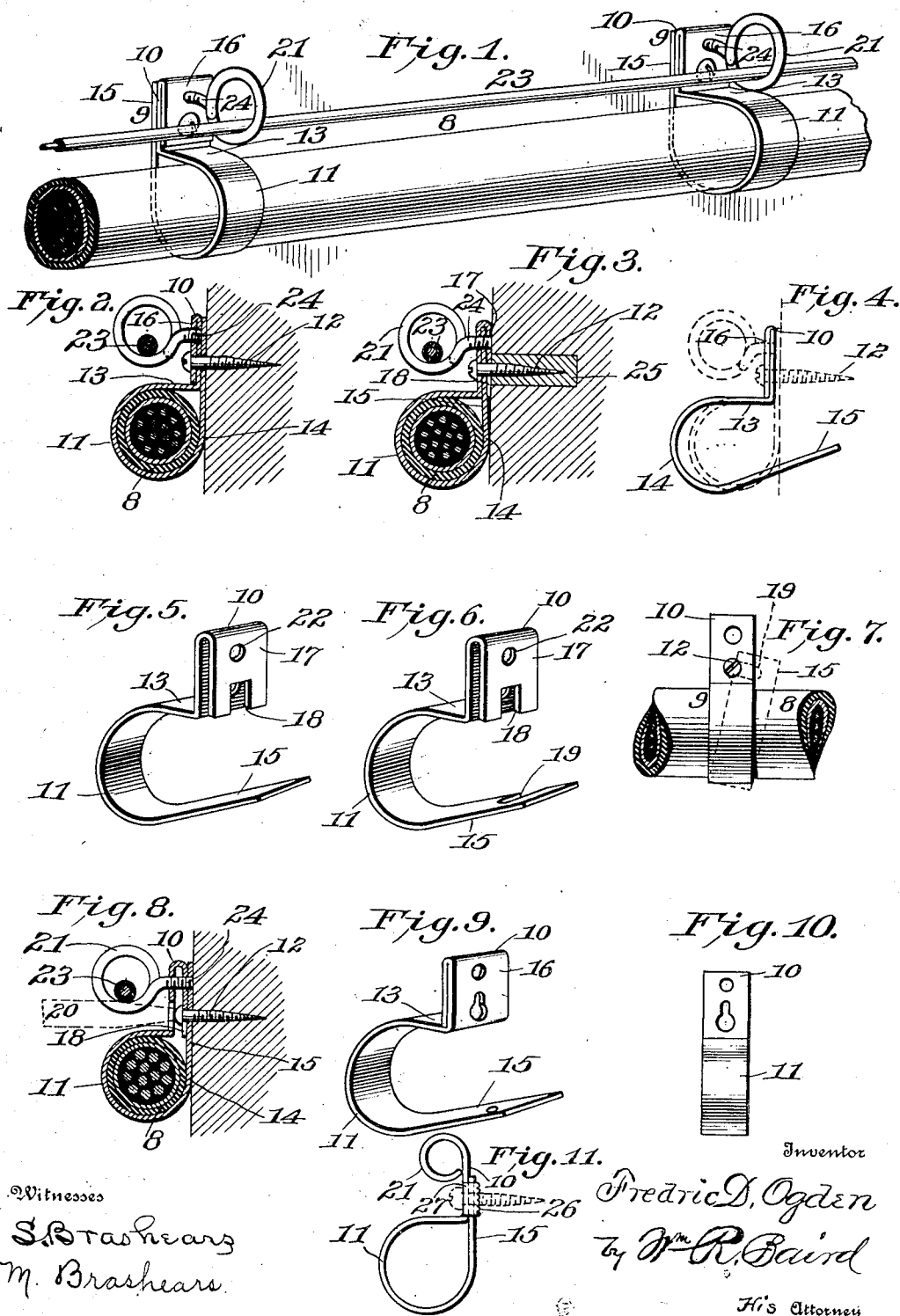


No. 888,349.

PATENTED MAY 19, 1908.

F. D. OGDEN.
COMBINED CABLE SUPPORT AND WIRE CLIP.
APPLICATION FILED SEPT. 14, 1907.



UNITED STATES PATENT OFFICE.

FREDRIC D. OGDEN, OF BAYONNE, NEW JERSEY.

COMBINED CABLE-SUPPORT AND WIRE-CLIP.

No. 888,349.

Specification of Letters Patent.

Patented May 19, 1908.

Application filed September 14, 1907. Serial No. 392,841.

To all whom it may concern:

Be it known that I, FREDRIC D. OGDEN, a citizen of the United States, residing at Bayonne, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Combined Cable-Supports and Wire-Clips, of which the following is a specification.

My invention relates to means for hanging or supporting electric cables and wires along the faces of walls, ceilings, fences or other structures.

The object of the invention is to provide supporting hooks or hangers to receive and securely hold cables and wires in such situations with the least possible liability of injury thereto or to the wall or fence to which they are attached, and with the least liability of the cable or wire breaking down or loosening the hanger.

With these objects in view, the invention consists in the improved cable and wire hanger hereinafter fully described and afterwards specifically claimed.

I will now proceed to specifically describe my invention having reference to the accompanying drawing in which—

Figure 1 is a perspective view of two of my improved hangers with a section of cable and line of wire supported thereby. Fig. 2 is a cross section through one of the hangers and the cable and wire and a portion of a wall to which it is secured. Fig. 3 is a similar view, illustrating a slightly modified form of hanger. Fig. 4 is a side elevation of the hanger shown in Fig. 2, before the cable is secured in place, the dotted lines showing it in secured position around a cable. Fig. 5 is a perspective view of the modified form of Fig. 3, before being secured in position. Fig. 6 is a perspective view of another modification in the form of the hanger. Fig. 7 is a front elevation showing a section of cable supported in a hanger of the form shown in Fig. 6, the dotted lines indicating a position assumed by the hanger, just before it is secured in position. Fig. 8 is a vertical section showing a still further modification. Fig. 9 and Fig. 10 are respectively a perspective view and a front elevation of another form of hanger. Fig. 11 is a view of a further modification.

Like reference characters mark the same parts wherever they appear in any of the figures.

I will first describe my cable hanger and the various modifications thereof and afterwards describe the application thereto of the wire supporting clip.

Referring specifically to the drawings, 8 indicates a length of lead or otherwise covered cable, and 9 a cable supporting hanger comprising, generally, an upright portion, 10, by which to secure it against the wall or other support, and a body portion, 11, to surround transversely the cable 8. The hanger is formed by bending a strip of sheet steel or other metal into substantially the form shown in Fig. 4, the upright portion 10 being preferably of double thickness and perforated to receive a screw, 12, to secure it in place. The strip is bent outward from the bottom of the upright portion 10 at substantially a right angle forming a horizontal portion, 13, of about a length substantially of one-half the diameter of the cable. From thence the metal is bent into substantially three-fourths of a circle to the point, 14, and from this point to the end of it is left straight, as at 15, such straight portion being of a length to reach to about the top of the upright portion 10 when the hanger is in use as in Figs. 1 and 2.

Instead of bending the top of the upright portion outward as at 16 in Figs. 1, 2 and 4, it may be turned inward as at 17, in Figs. 3 and 5, and instead of perforating both thicknesses, as heretofore mentioned, part 17 may be notched as at 18 in Fig. 5.

In the construction of Figs. 1 to 5, the straight back portion 15 is perforated near its end to register with the perforations of the upright portion 10, to receive the securing screw, and to secure this form of hanger in position.

To hang the cable in a hanger of the form of Figs. 1, 2 and 4, it is placed in the curved body and the back portion bent up to lie behind the upright portion 10 with the body closely encircling the cable, and the securing screw passed through the perforations and into the wall, fence or the like.

With a hanger of the form of Figs. 3 and 5, the end of the back portion 15 is slipped between the two parts of the upright portion instead of behind both parts as in Figs. 1, 2 and 4. The straight back portion 15, instead of being perforated to receive the securing screw, may be provided with a transverse notch, 19, as shown in Figs. 6 and 7, and thus

formed, the hanger with the cable therein may be secured in position as before described, or the back portion may be slipped sidewise upon the securing screw from the position shown in dotted lines in Fig. 7. In this form the cable may be adjusted or removed from the hanger by simply loosening the screw without wholly withdrawing it, the back portion 15 being then moved aside to the dotted line position of Fig. 6, from which it can be readily sprung open sufficient to loosen the cable in the hanger.

In the form shown in Fig. 8, the support may be hung up by partially entering the screw through its end, leaving it projecting slightly. The cable may then be placed in the body, and the body bent inward, passing the notch 18 over the head of the screw. A screw-driver, 20, may now be passed through an opening 18 in the outer fold of the upright portion 10, and the screw driven home, rigidly securing the support in place.

In the construction shown in Figs. 9 and 10, the perforation to receive the securing screw is in the form known as a key-hole slot whereby the screw 12 may be permanently placed in position and the cable support slipped on and off the same when desired.

In Fig. 3, at 25 I have shown how the securing screw may be threaded into a plug in the wall or other surface if so desired. With my improved hanger, the cable hangs as it were from the securing screw, and the tendency due to the weight of the cable is to press the hanger against the wall, fence, or the like, whereby there is less liability of loosening the hanger than there is with devices of this character in which the securing screw is below the cable. There is no tendency to bend or break off the hanger and thus drop or sag the cable.

Heretofore it has been customary to support cables and the branch wires which are run from them, by independent means, the wire being usually supported by a separate drive-ring spike into the wall. The result has been that both cable supports and wire hangers have exerted a destructive action upon the cables and wires themselves as well as upon the surfaces to which they were secured, sometimes compressing, opening or breaking the insulating coverings of costly cables and rendering them worthless when taken down. The injury to the surface by the hammering, drilling, and spike-driving, has always been objectionable to the occupants of buildings and injurious to the walls to which the attachments are made. To obviate all of these troubles I have combined in one structure with my improved cable hereinbefore described, a clip for supporting separate wires.

In the drawing I have shown the wire supporting clip at 21, such clip being preferably threaded into the upper portion of the cable

support in threaded holes 22, in any of the forms illustrated in the various figures of the drawing and hereinbefore described, the supported wire being shown in Figs. 1, 2, 3 and 8 at 23.

The threaded stem 24 of the clip after passing through the folded portion of the cable support may bear against straight back portion 15 as shown in Figs. 1 and 2, or it may bear against the wall or other surface as shown in Figs. 3 and 8. In Fig. 3 this stem 24 while bearing against the wall, does not pass through the straight back portion 14 but in Fig. 8 said stem passes through the folded portion of the clip and the straight back portion 14, the latter being extended higher in this figure.

In the modification shown in Fig. 11 the whole structure including the wire supporting clip is made in one piece and the edges of the upright portion 10, which in this instance is of a single thickness, are formed with inwardly bent flanges 27 provided with teeth 26 to give a secure hold upon the surface to which the device is to be attached.

What I claim is:

1. A hanger for supporting a cable against a vertical surface, comprising a curved body portion to encircle the cable, and an upright end above the body doubled inward upon itself, the opposite end portion shaped to have its end enter between the two parts of the first upright end, the two ends shaped to lie against the surface and to receive through them the securing screw.

2. A hanger for supporting a cable against a surface, comprising a curved body portion to encircle the cable, and an upright end above the body doubled inward upon itself, the opposite end portion also lying against the surface and its end entered between the two parts of the first upright end, the two ends receiving through them the securing screw, the inner fold of the first named upright end having a notch in its lower edge for that purpose.

3. A hanger for supporting a cable against a vertical surface, comprising a curved body portion to encircle the cable, and two parallel superposed ends above the body shaped to rest against said surface and receive the securing screw, the inner parallel end having an open notch in its edge, and the other parallel end having a hole, for the passage of the screw.

4. A hanger for supporting a cable against a surface comprising a curved body portion to encircle the cable, and an upright end above the body doubled inward upon itself, the opposite end portion also lying against said surface and its end entered between the two parts of the first upright end, the two ends receiving through them the securing screw, the inner fold of the first named portion being notched in its lower edge to pass

over the body of the screw under its head and the outer fold having an opening to admit the screw driver.

5 5. A hanger for supporting a cable against a surface comprising an upper upright portion to rest against said surface, a horizontal portion in length substantially equal to one-half the diameter of the cable, a main body portion of substantially the form of three-fourths of a circle, and a straight back portion, the parallel portions receiving a securing screw to enter the vertical surface.

15 6. A hanger for supporting a cable against a surface, comprising a curved body portion to encircle the cable, and an upright end above the body doubled inward upon itself, the opposite end portion also lying against the surface and its end entered between the two parts of the first upright end, the two ends receiving through them the securing screw, in combination with a wire supporting clip threaded into said upright ends and bearing against the wall or surface upon which the cable is supported.

25 7. A hanger for supporting a cable against a surface, comprising a curved body portion

to encircle the cable, and an upright end above the body doubled inward upon itself, the opposite end portion also lying against the surface and its end entered between the two parts of the first upright end, the two ends receiving through them the securing screw, the inner fold of the first named upright end having a notch in its lower edge for that purpose, in combination with a wire supporting clip threaded through said upright end.

8. A hanger for supporting a cable against a surface, comprising a curved body portion to encircle the cable, and two parallel superposed ends above the body to rest against said surface and receive the securing screw, the inner parallel end having a notch in one side for that purpose, in combination with a wire supporting clip having a stem threaded through said parallel superposed ends.

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

FREDRIC D. OGDEN.

Witnesses:

EDW. A. STULZ,
WM. R. BAIRD.