June 11, 1940. O. K. COLEMAN 2,204,121

CABLE HANGER

Filed Dec. 27, 1939

Fig. 1.

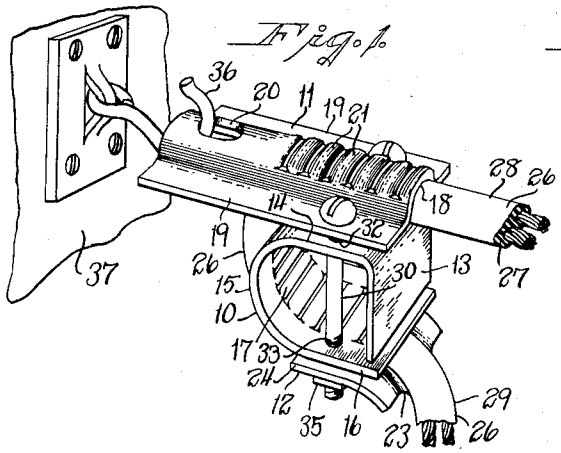


Fig. 2.

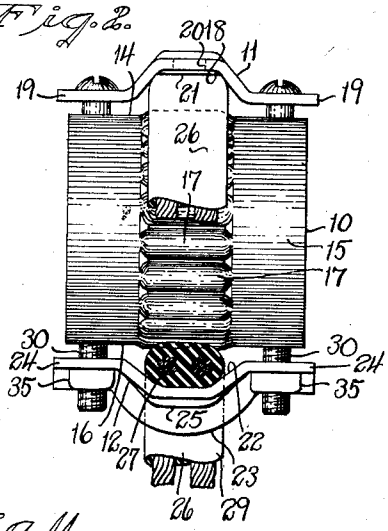


Fig. 3.

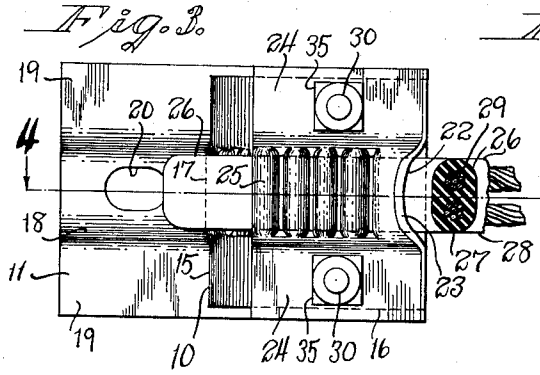


Fig. 4.

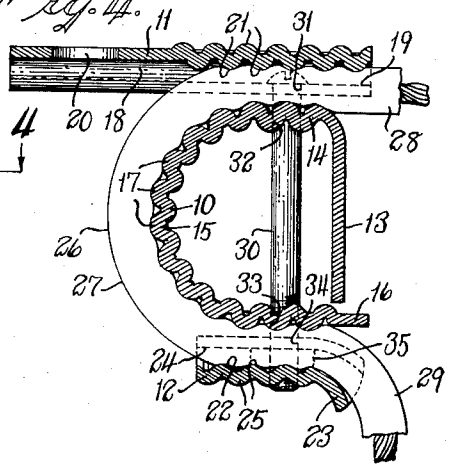


Fig. 5.

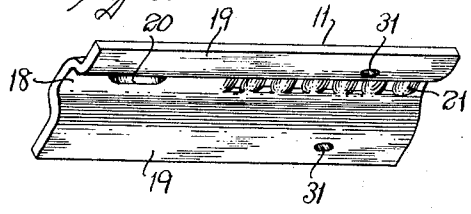


Fig. 6.

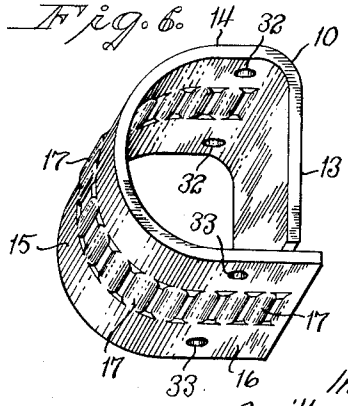
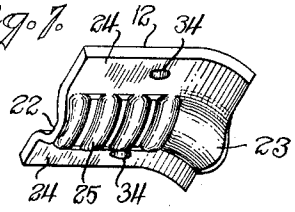


Fig. 7.



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CABLE HANGER

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Application December 27, 1939, Serial No. 311,105

15 Claims. (Cl. 24—125)

This invention relates to improvements in cable hangers and more particularly to cable hangers of the type adapted to be mounted on the side wall of a building and serving to support a cable leading from an exterior electric power-line or the like.

One of the objects of the present invention is to provide a superior cable hanger so constructed and arranged as to be conveniently attached to the side of a building or the like and which will support a cable intermediate its ends.

Another object of the present invention is to provide a superior cable hanger of such construction as will firmly support an electric cable and which will securely grip and hold the said cable against slippage relative thereto without damaging the insulation or outer wrapping of the said cable.

Still another object of the present invention is to provide a superior cable hanger of rugged and simple construction which may be readily and efficiently assembled and installed with a minimum of effort.

A further object of the present invention is to provide a superior cable hanger for supporting a cable intermediate its ends and which is formed of simple elements readily manufactured and constructed with a minimum of parts resulting in an article economical for manufacture.

With the above and other objects in view, as will appear to those skilled in the art from the present disclosure, this invention includes all features in the said disclosure which are novel over the prior art and which are not claimed in any separate application.

In the accompanying drawing, in which certain modes of carrying out the present invention are shown for illustratiive purposes:

Fig. 1 is a perspective view of a cable hanger constructed in accordance with the present invention and shown secured to the side wall of a building and supporting an electric cable;

Fig. 2 is an inner end view of the cable hanger detached and showing a portion of a cable which is partly broken away;

Fig. 3 is an underside view thereof;

Fig. 4 is a vertical central sectional view taken on the line 4—4 of Fig. 3;

Fig. 5 is a perspective view of the suspension-member;

Fig. 6 is a similar view of the body-member; and

Fig. 7 is a perspective view of the clamping-member.

In the embodiment of the present invention herein chosen for illustration, the cable hanger includes a body-member 10 (which also functions as a clamping-member), a suspension-member 11 and a clamping-member 12. The body-member 10 is formed of relatively-heavy sheet metal and has an outer end-wall 13 which is bent to form an upper side-wall 14 merging into a bowed or arched inner end-wall 15. The bowed end-wall 15 of the body-member 10 merges downwardly into a lower side-wall 16 which terminates adjacent the free end of the outer end-wall 13 of the body-member as is particularly well shown in Figs. 1, 4 and 6.

Along its side-walls 14 and 16 and along its end-wall 15, the body-member 10 is provided with a series of transversely-extending corrugations or cable-gripping ribs 17 projecting outwardly beyond the outer face of the adjacent marginal portions of the said body-member. The corrugations 17 just referred to, are spaced from each other in such manner as to provide a continuous band of parallel transversely-extending corrugations upon the respective outer faces of the side-walls 14 and 16 and the end-wall 15 of the body-member 10. The said band of corrugations 17 extends from adjacent the free end of the lower side-wall 16 of the body-member 10 continuously to a point adjacent the junction of the upper side-wall 14 and the outer end-wall 13 thereof, as shown particularly well in Figs. 4 and 6. The corrugations 17 may be readily formed by subjecting the body-member 10 to a suitable stamping or rolling operation before the said body-member is folded into the shape illustrated in the drawing.

Returning to the suspension-member 11 it will be seen by reference to the drawing that the said suspension-member 11 is also formed of relatively-heavy sheet metal which is stamped or rolled to form a central-longitudinal cable-positioning and cable-clamping groove 18. The groove 18 as thus produced, is flanked on its opposite sides by side-flanges 19—19 respectively forming the respective opposite side-edges of the suspension-member 11. The suspension-member 11 is relatively long as compared to its width and is adapted, when assembled to the body-member 10, to have its inner portion extending inwardly beyond the inner end-wall 15 of the said body-member for the purpose hereinafter to appear.

Adjacent its inner end the suspension-member 11 is provided with a slot 20 formed on the longitudinal center of the cable-positioning and cable-clamping groove 18 of the said suspension-mem-

ber 11. For substantially half the distance inwardly from its outer end the groove 18 of the suspension-member 11 is formed with a series of parallel transversely-extending corrugations or cable-gripping ribs 21 complemental to the corrugations 17 of the body-member 10.

By reference to the drawing it will be seen that the relatively-short clamping-member 12 substantially corresponds in cross section to the cross-sectional form of the suspension-member 11 and is provided with a central-longitudinal cable-positioning and cable-clamping groove 22 which at its outer end is downwardly and outwardly flared as at 23. The clamping-member 12 is formed similar to the suspension-member 11 with two side-flanges 24—24 at its respective opposite edges, each of which is downwardly and outwardly curved at its outer end. The clamping-member 12, thus constructed, has the outer portion of the cable-positioning and cable-clamping groove 22 downwardly and outwardly curved to guard against the too-sharp bending of a cable to be supported by the cable hanger in a manner hereinafter to appear. The major portion of the cable-positioning and cable-clamping groove 22 of the clamping-member 12 is formed in a manner similar to the suspension-member 11 with transversely-extending corrugations 25.

As shown in Figs. 1 to 4 inclusive, a cable 26 having an insulating covering 27 is folded around the side-walls 14 and 16 and around the curved end-wall 15 of the body-member 10. The upper reach 28 of the cable 26 may lead from a pole or the like while the lower reach 29 of the said cable may be led to a metering device or the like mounted either exterior of the building or therein.

To retain the upper reach 28 of the cable 26 in position against the corrugations 17 in the upper side-wall 14 of the body-member 10, the suspension-member 11 is adapted to be positioned with the outer portion of its cable-positioning and cable-clamping groove 18 placed over the said upper reach 28 of the cable 26. With the clamping-member 11 placed over the upper reach 28 of the cable 26 as just described, the corrugations 21 thereof will be in engagement with the upper surface of the said cable.

Similarly, the clamping-member 12 is placed with its cable-positioning and cable-clamping groove 22 beneath the lower reach 29 of the cable 26 to retain the said reach in position for engagement with the corrugations 17 of the lower side-wall 16 of the body-member 10. With the clamping-member 12 in the position described, the corrugations 25 thereof are in engagement with the cable 26, and the flared portion 23 of the said clamping-member serves to permit the exit of the lower reach 29 of the said cable on a gradual curve between the lower side-wall 16 of the body-member 10 and the upper face of the clamping-member 12, as shown particularly well in Figs. 2 and 4. By providing for the gradual curving of the cable 26 as described, any sharp bending or kinking of the cable 26 is avoided.

For the purpose of clamping the lower reach 29 of the cable 26 between the lower side-wall 16 of the body-member 10 and the clamping-member 12, as well as for clamping the upper reach 28 of the said cable between the upper side-wall 14 of the said body-member and the suspension-member 11, a pair of clamping-bolts 30—30 are employed. The said bolts 30—30 respectively extend downwardly through one of two perforations 31—31 in the side flanges 19—19 of the suspension-member 11, thence downwardly through perforations 32—32 in the upper side-wall 14 of the body-member 10. The said clamping-bolts 30—30 pass downwardly through the hollow interior of the said body-member and extend through perforations 33—33 in the lower side-wall 16 of the said body-member and thence downwardly through perforations 34—34 in the side flanges 24—24 of the clamping-member 12. Each of the said clamping-bolts 30—30 has threaded onto its threaded lower end a nut 35 which, when seated, bears against the under face of the adjacent one of the side flanges 24—24 of the clamping-member 12.

When the cable 26 is installed as shown in the drawing, and the nut 35 of each of the clamping-bolts 30—30 is tightened, the said cable will be firmly gripped between the complemental corrugations 17 of the body-member 10 and the corrugations 21 and 25 respectively of the suspension-member 11 and the clamping-member 12. The pressure or clamping action exerted by the clamping-bolts 30—30 and their respective nuts 35 will upwardly flex the lower side-wall 16 of the body-member 10, and in the event that it becomes necessary to apply excessive clamping pressure, the outer end-wall 13 will serve as a stop against which the outer portion of the said lower side-wall 16 may come to rest.

The groove 18 in the suspension-member 11 and the groove 22 in the clamping-member 12 serve to hold the upper and lower reaches 28 and 29 of the cable 26 against displacement laterally of the body-member 10.

By reference to Fig. 1 it will be seen that the cable hanger may be securely mounted on the side wall of a building or the like by hooking the elongated slot 20 formed in the suspension-member 11 over a hook 36 or other similar device which latter may be secured in any suitable manner to the side-wall 37 of the building or other support. In this manner the upper reach 28 of the cable 26 is in position to extend to a pole or the like of a power-line while the lower reach 29 of the said cable is also properly positioned to be led downwardly to a meter or other similar device. It will be understood, of course, that other suitable mounting-means other than the hook 36 may be employed for supporting the cable hanger.

By means of the cable hanger herein shown and described, it will be seen that a cable such as the cable 26 may be securely supported and that the said cable is held against relative slipping movement with respect to the said cable hanger. It will also be noted that due to the construction herein shown and described that the cable 26 is folded around a corrugated portion of the cable hanger and is securely clamped in place in such manner as to subject the major portion of the said cable folded around the cable hanger to the anchoring effect of the corrugations respectively formed in the parts 10, 11 and 12.

It will thus be apparent that the cable hanger serves to securely support a cable and that the same may be coupled to the cable in an efficient manner requiring a minimum of operations. Furthermore, the cable hanger is constructed of a minimum number of parts of relatively-heavy construction and which is economical for manufacture.

The invention may be carried out in other specific ways than those herein set forth without departing from the spirit and essential characteristics of the invention, and the present em-

bodiments are, therefore, to be considered in all respects as illustrative and not restrictive, and all changes coming within the meaning and equivalency range of the appended claims are intended to be embraced therein.

I claim:

1. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member having opposite faces spaced apart by an intermediate portion thereof and interposed between the said suspension-member and the said clamping-member with one of the said spaced-apart faces thereof directed toward and spaced from the said suspension-member to provide a cable-receiving passage and having its opposite spaced-apart face directed toward and spaced from the the said clamping-member to provide a second cable-receiving passage; and means for holding the three said members in assembled relationship with a cable secured therebetween and extended through the two cable-receiving passages with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

2. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member having two opposite spaced-apart faces joined by an intermediate arched portion and interposed between the said suspension-member and the said clamping-member, one of the spaced-apart faces of the said body-member being directed toward and spaced from the said suspension-member to provide a cable-receiving passage, and the opposite spaced-apart face of the said body-member being directed toward and spaced from the said clamping-member to provide a second cable-receiving passage; and means for holding the three said members in assembled relationship with a cable secured therebetween and extending over the arched portion of the said body-member and through the two cable-receiving passages with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

3. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member having opposite faces spaced apart by an intermediate portion thereof and interposed between the said suspension-member and the said clamping-member with one of said spaced-apart faces thereof directed toward and spaced from the said suspension-member to provide a cable-receiving passage and having its opposite spaced-apart face directed toward and spaced from the said clamping-member to provide a second cable-receiving passage; and clamping-means constructed and arranged to force the said clamping-member toward the adjacent face of the said body-member and to simultaneously force the opposite face of the said body-member toward the said suspension-member while a cable extends through the two cable-receiving passages to secure the said cable between the said members with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

4. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member having two opposite spaced-apart faces joined by an intermediate arched portion and interposed between the said suspension-member and the said clamping-member, one of the spaced-apart faces of the said body-member being directed toward and spaced from the said suspension-member to provide a cable-receiving passage, and the opposite spaced-apart face of the said body-member being directed toward and spaced from the said clamping-member to provide a second cable-receiving passage; and means for forcing the said clamping-member toward the adjacent face of the said body-member and simultaneously forcing the opposite face of the said body-member toward the said suspension-member while a cable lies extended over the arched portion of the said body-member and through the two cable-receiving passages provided between the said members with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

5. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a hollow body-member having opposite faces spaced apart by an intermediate portion thereof and interposed between the said suspension-member and the said clamping-member with one of the said spaced-apart faces thereof directed toward and spaced from the said suspension-member to provide a cable-receiving passage and having its opposite spaced-apart face directed toward and spaced from the said clamping-member to provide a second cable-receiving passage; and means for holding the three said members in assembled relationship with a cable secured therebetween and extended through the two cable-receiving passages with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

6. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a hollow body-member having two opposite spaced-apart faces joined by an intermediate arched portion and interposed between the said suspension-member and the said clamping-member, one of the spaced-apart faces of the said hollow body-member being directed toward and spaced from the said suspension-member to provide a cable-receiving passage, and the opposite spaced-apart face of the said hollow body-member being directed toward and spaced from the said clamping-member to provide a second cable-receiving passage; and means for holding the three said members in assembled relationship with a cable secured therebetween and extending over the arched portion of the said hollow body-member and through the two cable-receiving passages with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

7. A cable hanger including in combination: a suspension-member having means for attachment to a support and provided with a longitudinal cable-positioning groove; a clamping-member also provided with a cable-positioning groove; a body-member having opposite faces spaced apart by an intermediate portion thereof and interposed between the said suspension-member and the said clamping-member with one of the said spaced-apart faces thereof directed toward the said suspension-member and extending across the cable-positioning groove therein and having

its opposite spaced-apart face directed toward the said clamping-member and extending across the cable-positioning groove therein; and means for holding the three said members in assembled relationship with a cable secured therebetween and extending through the cable-positioning grooves respectively formed in the said suspension-member and in the said clamping-member with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

8. A cable hanger including in combination: a suspension-member having means for attachment to a support and provided with a longitudinal cable-positioning groove; a clamping-member also provided with a cable-positioning groove; a body-member having opposite spaced-apart faces interconnected by an arched intermediate portion and having one of the said spaced-apart faces thereof directed toward the said suspension-member and extending across the cable-positioning groove therein and having its opposite spaced-apart face directed toward the said clamping-member and extending across the cable-positioning groove therein; and means for holding the three said members in assembled relationship with a cable secured therebetween and extending over the arched portion of the said body-member and through the cable-positioning grooves respectively formed in the said suspension-member and in the said clamping-member with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

9. A cable hanger including in combination: a suspension-member having means for attachment to a support and provided with a longitudinal cable-positioning groove; a clamping-member also provided with a cable-positioning groove; a body-member having opposite faces spaced apart by an intermediate portion thereof and interposed between the said suspension-member and the said clamping-member with one of the said spaced-apart faces thereof directed toward the said suspension-member and extending across the cable-positioning groove therein and having its opposite face directed toward the said clamping-member and extending across the cable-positioning groove therein; and means for forcing the said clamping-member and its cable-positioning groove toward the adjacent face of the said body-member and simultaneously forcing the opposite face of the said body-member toward the said suspension-member and the cable-positioning groove therein to secure a cable in place with one portion thereof reversed with respect to another portion of the cable and spaced therefrom by the said interposed body-member.

10. A cable hanger including in combination: a suspension-member having means for attachment to a support and provided with a longitudinal cable-positioning groove; a clamping-member also provided with a cable-positioning groove; a body-member having opposite spaced-apart faces interconnected by an arched intermediate portion and having one of the said spaced-apart faces thereof directed toward and extending across the cable-positioning groove in the said suspension-member and having its opposite spaced-apart face directed toward and extending across the cable-positioning groove in the said clamping-member; and clamping-means for simultaneously forcing the said clamping-member and its cable-positioning groove toward the adjacent face of the said body-member and forcing the opposite face of the said body-member toward the said suspension-member and the cable-positioning groove therein while a cable is extended over the arched portion of the said body-member and through the cable-positioning grooves respectively formed in the said suspension-member and in the said clamping-member to secure a cable in place with one portion thereof reversed with respect to another portion of the cable and spaced therefrom by the said interposed body-member.

11. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member interposed between the said suspension-member and the said clamping-member and folded up from sheet metal to provide two side-walls integrally united in spaced-apart relation by an intermediate portion of the said body-member, one of which spaced-apart side-walls faces toward the said suspension-member to provide a cable-receiving passage therebetween and the other of which spaced-apart side-walls faces toward the said clamping-member to provide a cable-receiving passage therebetween; and means for holding the three said members in assembled relationship with a cable secured therebetween and extending through the two cable-receiving passages with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

12. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member interposed between the said suspension-member and the said clamping-member and folded from sheet metal to provide two laterally-spaced-apart side-walls integrally united by an arched top-wall, one of the said spaced-apart side-walls facing toward the said suspension-member to receive a portion of a cable therebetween and the other of said spaced apart side-walls facing toward the said clamping-member to receive a portion of a cable therebetween; and means for holding the three said members in assembled relationship with a cable extended over the arched end-wall of the said body-member and between the said suspension-member and one side-wall of the said body-member as well as between the opposite side-wall of the said body-member and the said clamping-member to secure a cable in place with one portion thereof reversed with respect to another portion of the cable and spaced therefrom by the said interposed body-member.

13. A cable hanger including in combination: a suspension-member having means for attachment to a support; a clamping-member; a body-member interposed between the said suspension-member and the said clamping-member and folded from sheet metal to provide two opposite spaced-apart side-walls and a top-wall and bottom-wall intermediate the spaced-apart side-walls, one of the said spaced-apart side-walls extending adjacent to and in substantial parallelism with the said suspension-member to receive a portion of a cable therebetween, and the other of said spaced-apart side-walls extending adjacent the said clamping-member to receive a portion of a cable therebetween; and means for holding the three said members in assembled relationship with a cable extended between the said suspension-member and one side-wall of the

said body-member and between the opposite side-wall of the said body-member and the said clamping-member to secure a cable in place with one portion thereof reversed with respect to another portion of the cable and spaced therefrom by the said interposed body-member.

14. A cable hanger including in combination: a body-member formed of sheet metal shaped to form an arched top-wall integrally uniting two spaced-apart side-walls, and a bottom-wall intermediate the spaced-apart side-walls and integrally united to one thereof; a suspension-member having means for attachment to a support and extending in substantial parallelism with one of the spaced-apart side-walls of the said body-member; a clamping-member located adjacent the spaced-apart side-wall of the said body-member which is opposite the said suspension-member; and means for forcing the said suspension-member and the said clamping-member in opposite directions toward the adjacent side-walls of the said body-member to clamp a cable therebetween to secure a cable in place with one portion thereof reversed with respect to another portion of the cable and spaced therefrom by the said interposed body-member.

15. A cable hanger including in combination: a body-member formed of sheet metal shaped to form an arched top-wall disposed intermediate of and integrally uniting two spaced-apart side-walls, and a bottom-wall integrally united to one of the said side-walls; a suspension-member having means for attachment to a support and provided with a corrugated cable-positioning groove facing toward one of the spaced-apart side-walls of the said body-member; a clamping-member also formed with a cable-positioning groove and facing toward the spaced-apart side-wall of the said body-member opposite the said suspension-member; and means for simultaneously forcing the said suspension-member and the said clamping-member in opposite directions toward the adjacent side-walls of the said body-member to clamp a cable therebetween with a portion of the said cable reversed with respect to another portion thereof and spaced therefrom by the said interposed body-member.

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