June 15, 1954

O. H. LIND

2,681,196

CABLE HOLDING CLIP

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Fig. 1

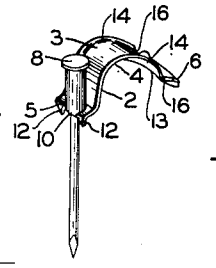


Fig. 2

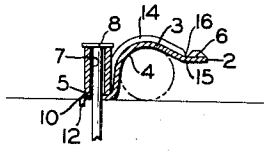


Fig. 3

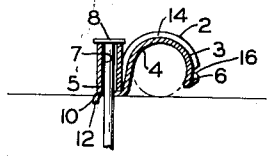


Fig. 4

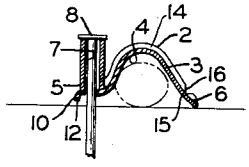


Fig. 5

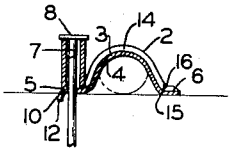
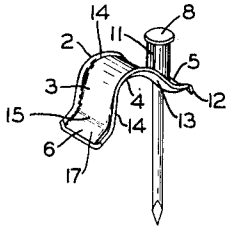


Fig. 6



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CABLE HOLDING CLIP

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9 Claims. (Cl. 248—71)

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This invention relates to a cable holding clip, and it particularly pertains to a die press metal clip for being nailed in situ for holding electric wiring cable to the building structure.

Cables to be held in place by the clips are of different size, and, heretofore, it has been necessary to have different size clips for the different size cables. Electric cables for wiring buildings, for example, are made in three standard diameters, and in order to have them snugly held in place by a holding clip, a different size clip has been used for each size cable. With my invention, a single size clip is readily adapted for use with any size cable, and accordingly, only one standard size of clip is required for cables of different sizes.

The invention comprises a clip which is die pressed or stamped from a metal blank to form a body portion with a recess conforming generally with the cross-sectional contour of the cable in which the electric wires are contained. Since the cables are cylindrical or oblate, the recess is arcuate but it could be of any other conformation.

One end of the clip is bent into the form of a tube and vertically disposed to an elevation which is about equal to the altitude of the arcuate recess in the body. An anchoring prong or prongs is also formed on one end of the body, preferably between the base of the vertically disposed tube and the adjacent portion of the body, the prong or prongs being bent downwardly so as to be driven and anchored in the frame structure to which the clip is nailed by a nail that is projected through the tube. The body portion is weakened transversely on a line which is substantially spaced from the free end so that the body portion can be readily bent along the weakened transverse line to bring the top of the arcuate wall of the recess closely about the cable if the cable is of a diameter smaller than the altitude of the recess. The cables are of three standard diameters, and a clip that is provided with the weakened end can be conformed in situ to fit any size cable. The weakened end of the clip can be struck by a hammer to deform and bend the weakened end at an angle to the main body, thereby reducing the size of the recess.

One other principal object of the invention is to provide a holding clip which is of a construction to be fitted in situ to fit different size cables.

Another object of the invention is to provide a holding clip which is of a construction for the nail to be driven home on a horizontal plane near the top or crown of the arcuate portion.

Another object of the invention is to provide

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a holding clip which, when driven home, will not rotate relatively to the nail.

Another object of the invention is to provide a holding clip which can be die pressed or stamped into final form.

Further objects and objects relating to the details of construction and economies of manufacture will definitely appear from the detailed description to follow.

In one instance I have accomplished the object of my invention by the device and means set forth in the following specification.

My invention is clearly defined and pointed out in the appended claims. A structure constituting a preferred embodiment of my invention is illustrated in the accompanying drawings forming a part of this specification in which:

Fig. 1 is a perspective view of a holding clip embodying my invention.

Fig. 2 is a cross sectional view of the holding clip used with a large cable, and before the weakened free end of the clip is bent inwardly about the cable.

Fig. 3 is a cross sectional view like Fig. 2 but showing the clip after its weakened free end has been bent down and inwardly against the cable.

Fig. 4 is a cross sectional view of the holding clip used with a smaller cable, and before one end of the clip has been bent along the transverse weakened line.

Fig. 5 is a cross sectional view like Fig. 3 but showing the clip after its weakened free end has been bent along the transverse weakened line by a hammer blow to bring the arcuate portion snugly about the cable and the bottom of the bent end against the support.

Fig. 6 is a perspective view of another embodiment.

Referring specifically to the drawings in which like numerals are used to designate like parts, numeral 2 refers generally to a holding clip which has been die stamped from a sheet metal blank. The main body 3 has an arcuate recess 4 formed between the end portions 5 and 6. The end 5 is rolled and bent into a vertically disposed tube having a bore or channel 7 through which a nail 8 is adapted to be driven. The metal is cut in from opposite side edges, leaving an uncut portion 10 between the cuts so that the opposite side edges of this end of the clip can be rolled in to be adjacent each other at 11 to form the tube. The tube is bent upwardly into vertical position along the uncut portion 10. The ends or corners of the blank, adjacent the cut portions, are bent downwardly to provide prongs 12 which will be driven and anchored into the frame structure to which the clip is nailed and, thereby,

prevent the clip from turning relatively to the nail.

The longitudinal edges of the clip are flared upwardly at 13 to prevent the corners from cutting the cable and also to provide reinforcing or stiffening flanges 14 lengthwise of the clip. The body of the clip is transversely weakened along the line 15 by any suitable means, such as cutting out a portion 16 in from one or both sides. This weakening of the body permits the clip being easily bent along the transverse line 15, and this can be effected by striking the free end of the clip a hammer blow before or after the clip is nailed in place to bend the free end inwardly about the cable as shown in Fig. 3. Or the clip can be struck to bend the weakened free end outwardly as shown in Fig. 5. The arcuate portion of the clip is thereby made smaller so that it can be brought in snug relation with a cable of smaller diameter. Since the cables are of different sizes, the clip can be made to fit snugly about any size cable. The clip will fit about the next smaller or intermediate size cable with only little, if any bending of the free end, and it can be made to fit the smallest size cable by being bent or deformed outwardly with the bottom side of the free end substantially parallel with the surface to which the clip is nailed as shown in Fig. 5. Since there are wide variations as to the degree of bending the free end of the clip and in positioning the weakened transverse line from its free end, the clip can be readily adapted to conform to cables of any size. For the larger size cables with a vertical diameter greater than the height of the recess, the free end can be bent inwardly, and for the smaller size cables, the free end can be bent outwardly. For the intermediate size cables, the free end of the clip may not need to be bent, but can be bent inwardly or outwardly if desired.

In the embodiment of Fig. 6, the free end 17 of the clip 2 is slightly deformed or bent along the transverse line 15 without providing any cut-outs or slits in from either of its opposite side edges. The slight deformation or bending of the clip will sufficiently weaken the body of the clip at this portion so that it may be readily further deformed or bent in situ by a slight hammer blow directed against the pre-bent end. The slight deformation or bending of the clip is sufficient to weaken the reinforcing or stiffening flanges 14 to facilitate further bending of the free end by a hammer blow directed against the free end.

I am aware that the structure shown herein is susceptible of considerable variation without departing from the spirit of my invention and, therefore, I have claimed my invention broadly as indicated by the appended claims.

Having thus described my invention, what I claim as new and useful and desire to secure by United States Letters Patent, is:

1. A metal cable holding clip having a body portion, including one free end, provided with a recess for receiving a member to be held in position, a vertically disposed tubular member on the opposite end of the clip for receiving a nailing means, and flared upwardly extending flanges formed along the opposite edges of the clip, said flanges being interrupted near the free end of the clip to facilitate bending the free end of said clip for fitting said clip to a cable of smaller diameter than one for which said clip is normally adapted without its free end being angularly bent.

2. A metal cable holding clip as set forth in claim 1 in which the flanges are weakened at a point in from the end of the clip to facilitate bending of the clip.

3. A metal cable holding clip as set forth in claim 1 in which the flanges are interrupted by cut-outs in from opposite edges of the clip for weakening said flanges to facilitate bending said clip.

4. A metal cable holding clip having a body portion bent to provide a recess opening out from one side for receiving a member to be held in position, a vertically disposed tubular member on one end of the clip substantially coextensive with the height of the bent receiving recess portion for receiving a nailing means, downwardly extending prongs formed on one end of the clip for being imbedded in the support to which the clip is nailed, and means provided on the end of the clip opposite the nailing end to facilitate bending said end for fitting the clip to different size cables.

5. A metal cable holding clip as set forth in claim 4 having flared upwardly extending flanges formed along the opposite edges of the clip, said flanges being interrupted near the free end of the clip to provide the means to facilitate bending the free end of said clip.

6. A die stamped metal clip having a body portion, including one free end, provided with a cable receiving recess, a vertically disposed tubular member formed from the body portion on the opposite end of the clip for receiving a nailing means, a downwardly extending prong, adjacent the bottom of the tubular member on the body of the clip, and flared upwardly extending flanges formed along the opposite edges of the clip, said flanges being interrupted near the free end of the clip to facilitate bending the free end of said clip at an angle to the body portion for reducing the recess of said clip to smaller than its normal size.

7. A die stamped metal clip having a body portion, including one free end, provided with a cable receiving recess, a vertically disposed tubular member formed from the body on the opposite end of the clip for receiving a nailing means, a prong extending downwardly from the body of the clip adjacent the bottom of said tubular member, and a weakened portion formed on the end of the recessed body portion opposite to the tubular member to facilitate bending the free end of said clip at an angle to the body portion for fitting said clip to a cable of smaller diameter than that for which the clip is normally adapted without its free end being angularly bent.

8. A die stamped metal clip having a body portion, including one free end, provided with a cable receiving recess, a vertically disposed tubular member formed by having the opposite end of said body bent upwardly and inwardly to bring its transverse edge to about the height of the crown of the recess and having the side edges of the bent end bent inwardly toward each other to register the bore of the tubular member with a perforation formed in the body portion of the clip beneath the tubular member, said perforated portion forming a seating face beneath said tubular member at one end of the clip, and a transverse free end of the clip being adapted to be bent transversely at a substantial distance in from its edge to reduce the recess of said clip to smaller than its normal size.

9. A die stamped clip as set forth in claim 8 in which the clip is weakened transversely near its free end to facilitate bending it.

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