G. E. ROHMER.

CABLE AND WIRE CLAMP.

APPLICATION FILED JUNE 16, 1915.

1,308,869. Patented July 8, 1919.

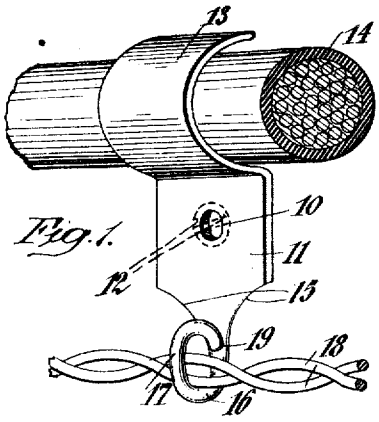


Fig. 1.

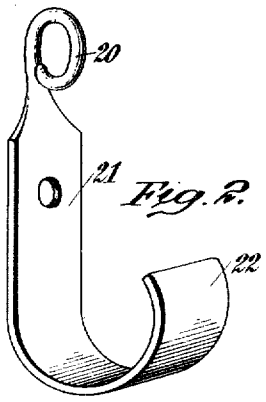


Fig. 2.

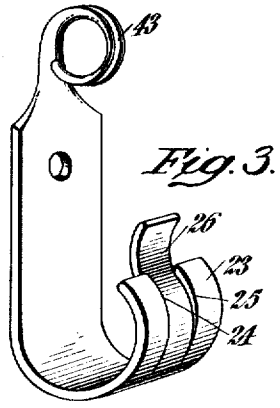


Fig. 3.

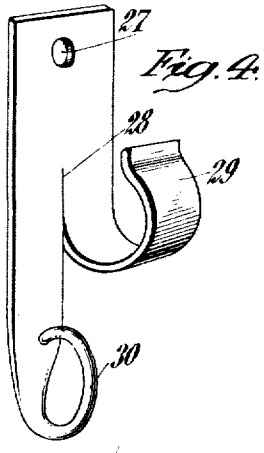


Fig. 4.

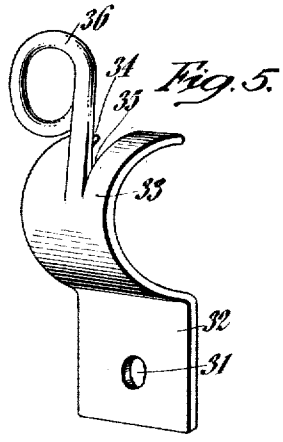


Fig. 5.

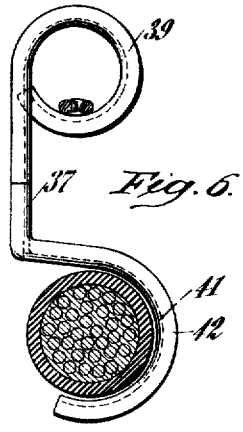


Fig. 6.

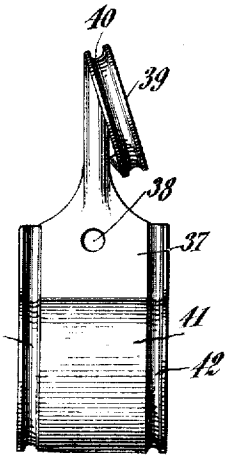


Fig. 7.

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CABLE AND WIRE CLAMP.

1,308,869. Specification of Letters Patent. Patented July 8, 1919.

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To all whom it may concern:

Be it known that I, GABRIEL E. ROHMER, a citizen of the United States of America, and a resident of Elmhurst, Long Island, New York, have invented certain new and useful Improvements in Cable and Wire Clamps, of which the following is a specification.

This invention relates to improvements in and relating to cable and wire clamps, and more particularly to that type which are used for the purpose of supporting and hanging cables, wires, pipes, etc., along the walls of buildings, and which are fastened to the walls by means of expansion bolts, screws, nails, or other suitable fastening means. An object of the invention is to provide an improved form of clamp or support of this character which may be readily manufactured at a comparatively small cost, which may be easily installed, and when installed be immediately in place for use, and so constructed that the cables or wires may be readily removed at any time when it is desired to renew the same, or for other purposes, and the clamp will remain anchored fast to the wall and in a position so as to be ready for further use. A further object is to provide in such a device supporting means which will be free of any sharp corners, so that there will be a minimum of wear upon the parts supported.

With these and other objects in view, my invention is shown in the accompanying drawings, and will be hereinafter more fully described with reference thereto and finally pointed out in the claims.

In the accompanying drawings,

Figure 1 is a perspective view showing one form of my invention in supporting position upon a wall, and showing a cable and wire supported thereby;

Fig. 2 is a perspective view of a modified form of construction;

Fig. 3 is a perspective view of a further modified form of construction;

Fig. 4 is a perspective view of another modified form of construction;

Fig. 5 is a perspective view of a modified form of construction somewhat similar to that shown in Fig. 1 but with the wire supporting means in a different position;

Fig. 6 is a side view of a still further modified form; and,

Fig. 7 is a front elevational view thereof.

Similar reference characters indicate corresponding parts throughout the several figures of the drawings.

Referring to the drawings, and more particularly to Fig. 1 thereof, my improved clamp or support is constructed of a blank of sheet metal, such as strap-iron or the like, which is provided with an aperture 10 in the intermediate portion 11 thereof, a screw 12 or other fastening means, such as an expansion bolt or the like, being secured through the said opening for holding the support in place upon the wall. The upper portion of the clamp is bent upwardly and outwardly from the said intermediate portion to form a curved hook-shaped portion 13, in which the cable 14 or the like is held in position. The sides of the clamp are cut inwardly below the said intermediate portion 11, as at 15, to form a relatively thin downwardly extending member 16, the contour of which is preferably beaten into rounded shape, and which is bent upwardly upon itself to form a ring-shaped wire-supporting portion 17, and in which are supported the wires 18 or the like. The end of the said member 16 is preferably turned to one side of the body portion of the clamp, as at 19, so that there will be no sharp corners to wear upon the insulation of the wires. The material used in constructing my improved clamp is of suitable flexibility to enable the same to be readily sprung open, so that the parts supported may be removed and replaced when desired.

In the embodiment shown in Fig. 2, the clamp is used in inverted position from that shown in Fig. 1, the wire-engaging portion 20 being at the upper end of the intermediate portion 21, and the cable-supporting member 22 being at the lower end thereof and bent outwardly and upwardly therefrom, the same being hook-shaped and bent slightly inwardly at the end, so that the cable is held securely therein.

In the form of construction shown in Fig. 3, the cable-supporting hooked portion 23 at the lower end of the intermediate portion is split, as at 24 and 25, to form a central ten-

sion member 26, which extends upwardly from the end of the hooked portion 23, and is bent inwardly and upwardly therefrom, and normally the inner surface of the said central portion is slightly within the inner surface of the hooked portion. In other respects the parts of this embodiment of my improved clamp are substantially the same as the construction shown in Fig. 2, with the exception that the hooked portion 43 instead of being of rounded contour is channel-shaped, the rounded portion thereof being on the inner or wire-engaging side. The advantage of this construction is that the tension member 26 securely holds the cable within the hooked portion and serves as a guiding means for inserting the said cable therein, and also permits ready removal of the same by springing the said central portion outwardly by exerting pressure on the upper end thereof.

In Fig. 4, I have shown a still further modified form of construction, in which an aperture 27 is provided at the upper end of the clamp for securing the same to the wall, and the lower end thereof is bifurcated centrally, as at 28, one side thereof being bent upwardly to form a hooked portion 29 for supporting the cable, and the other side thereof rounded and bent upwardly upon itself to form a wire-supporting member 30, said wire-supporting member being beneath the said cable-supporting hooked portion 29.

In the form shown in Fig. 5, an aperture 31 is provided in the lower portion 32 thereof for securing the same to the wall, and the upper portion is bent outwardly and upwardly therefrom to form a hooked portion 33 for supporting the cable. This hooked portion is split, as at 34 and 35, and the intermediate portion is carried straight upwardly therefrom and rounded and bent downwardly upon itself to form a wire-supporting member 36. This form of construction is somewhat similar to that shown in Fig. 1, with the exception that the wire-supporting member is arranged above the cable-supporting member instead of below the same, as in the construction shown in Fig. 1.

In Figs. 6 and 7, I have shown a still further modified form of construction, in which the intermediate portion 37 is provided with an aperture 38, as in the form of construction shown in Fig. 2, and a wire-supporting member 39 is provided above the same, this member instead of being rounded as in Fig. 2 being in the form of a semi-circular channel 40, the convex portion thereof being on the inner side, so that there is no sharp surface for wearing upon the insulation of the wires. The lower portion of the clamp is bent outwardly and downwardly from the said intermediate portion 37 to form a hooked supporting member 41, and semi-circular channels 42 are provided along the edges thereof, the rounded surface being on the inner side thereof, so that there are no sharp surfaces for wearing upon the insulation of the cable.

In Fig. 7, is clearly shown the manner in which the wire-engaging portion is bent obliquely upon itself, so that its end is disposed at one side of the central portion thereof. This construction permits of the ready insertion and removal of the wires into and out of the same.

It will be seen that with the use of my improved clamp, a very inexpensive and at the same time effective means for supporting cables and wires in position is provided and by which there will be practically no wear upon the parts supported, and the same may be readily removed and replaced when desired without in any way changing the position of the supporting members or defacing the building.

I have shown preferred and satisfactory forms of my invention, but it is obvious that changes may be made therein within the spirit and scope thereof, so that I do not desire to be limited to the form shown, except as may be required by the claims.

I claim:—

1. The combination with a supporting surface of a cable and wire-supporting clamps, formed from a single piece of sheet material, and comprising a wall engaging portion of a single thickness exposed at its front face, and provided with a screw hole, and adapted to be held with the entire surface immediately and contactingly in engagement with said supporting surface, a flexible and resilient hook-shaped portion formed integral therewith, and adapted to resiliently support therein a cable or the like of relatively large proportions, and a secondary supporting member, also formed integral therewith, and substantially narrower than said back engaging portion and said hook-shaped portion, said secondary supporting member being of substantially the same width adjacent said back engaging portion as at its end portion, and bent diagonally upon itself to form a supporting ring for supporting wires or the like of relatively small proportions independently of the said cable supporting portion, said cable supporting portion and said wire supporting portion leaving said back engaging portion and said screw hole unobstructed.

2. The combination with a supporting surface of a cable and wire-supporting clamp, and comprising a wall engaging portion, a hook shaped portion formed integral therewith adapted to support therein a cable or the like of relatively large proportions, and provided with a resilient tension member provided with a guiding sur-

face adapted to guide said cable into said hook shaped portion and adapted to resiliently engage said cable, and a ring shaped portion adapted to support wires or the like of relatively small proportions, independently of said cable supporting portion.

In testimony that I claim the foregoing as my invention, I have signed my name in the presence of two subscribing witnesses.

GABRIEL E. ROHMER.

Witnesses:
Jos. BISBANO,
F. HOGG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."