

June 1, 1937.

V. I. CRUSER

2,082,099

CONDUCTOR SUPPORT

Filed June 7, 1935

FIG. 1

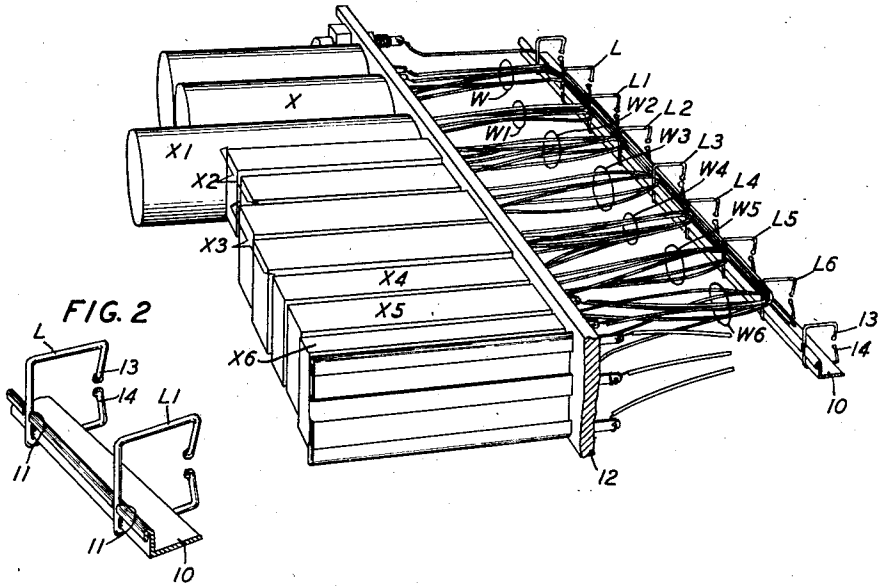


FIG. 2

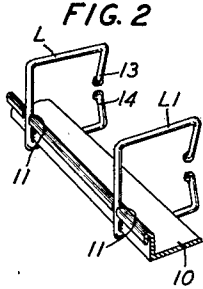


FIG. 3

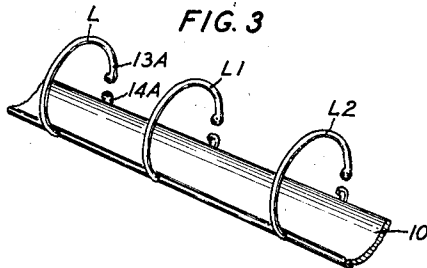


FIG. 4

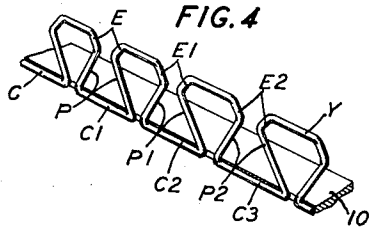
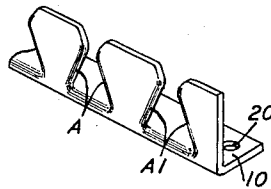


FIG. 5



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CONDUCTOR SUPPORT

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1 Claim. (Cl. 248—49)

This invention relates to conductor supports or grids of the type used in connection with wired equipments where a series of electrical connections are to be taken from a cable at a plurality of points.

The object of this invention is to provide a conductor support of this type which will be simple, cheap to manufacture and wherein the conductors are held in proper grouped relation in a positive and effective manner without sewing. The elimination of sewing allows easy tracing of the leads in the grid.

According to the invention a plurality of wire members are bent to form open loops which may be of any desired geometrical figure and secured as by welding them in spaced relation and perpendicularly to the longitudinal axis of a supporting bar, the supporting bar having a cross-section registering with similar portions of the wire loops at their welded points and the ends of the wires are bent inwardly to provide guiding passageways for facilitating the entrance of the conductors in the loops of the support thus formed.

This support avoids the usual sewing of the conductors before or after their connections to the terminals of the different electrical apparatus and is more economical.

Other novel features and advantages of the invention will appear from the following description and by the claim appended thereto, reference being had to the accompanying drawing in which,

Fig. 1 is a perspective view of the support bar showing the manner of distributing the conductors for connection to the electrical apparatus secured to a mounting plate;

Fig. 2 is a perspective enlarged view of a portion of the conductor support shown in Fig. 1;

Fig. 3 is a perspective view of a modification of the conductor support shown in Fig. 1;

Fig. 4 is a modified form of support in which a piece of wire is bent to form a series of triangular loops welded at the edge of a flat supporting bar; and

Fig. 5 is a perspective view of a modification of the supporting bar shown in Fig. 4.

As shown in Fig. 1 of the drawing the sets of conductors W, W₁, W₂, W₃, W₄, W₅, and W₆, for example, which connect with the electrical apparatus X, X₁, X₂, X₃, X₄, X₅, and X₆ extend in axial relation with respect to the supporting bar 10 thus forming a shelf on which these conductors rest and are deviated from such direction around the substantially rectangularly shaped loops of wires as L, L₁, L₂, L₃, L₄, L₅, and L₆ which afford rounded surfaces for preventing the tearing or cutting of the insulating covering of the conductors W, W₁, W₂, etc.

Portions of the wire loops L, L₁, L₂, etc. register with the geometrical cross-section of the bar 10,

the vertically disposed edge of which is rolled outwardly to provide a rounded surface on which the sets of conductors W, W₁, W₂, etc. rest. In the rounded edge portion of this bar is formed a plurality of notches 11 best seen in Fig. 2 provided for readily locating the wire loops L, L₁, L₂, etc. in predetermined space relation with respect to the electrical apparatus X, X₁, X₂, etc. on the supporting bar 12, these wire loops being secured to the bar 10 as by welding and the ends 13 and 14 of these loops are bent inwardly to provide guiding passageways for facilitating the entrance of the conductors in the loops.

In the modification shown in Fig. 3 the bar 10 has an arcuated cross-section and one of its longitudinal edges is outwardly rolled to provide a rounded surface to prevent the damaging of the insulating covering of the conductors, and this edge like the bar shown in Fig. 1 is provided with a plurality of notches for readily determining the space relation of the wire loops or rings L, L₁, L₂, etc. around which the conductors W, W₁, etc. are bent in a direction leading toward the terminals of the electrical apparatus X, X₁, X₂, etc. for connection therewith as shown in Fig. 1 and the ends 13A and 14A of the wire loops are rounded and bent inwardly as shown in Figs. 1, 2, and 3 in order to facilitate the entrance of the conductors in the loops.

In the modified form shown in Fig. 4 a piece of wire is bent as to form a series of triangularly shaped openings P, P₁, and P₂ having outwardly flaring passageways, such as E, E₁, and E₂ provided to facilitate the entrance of the conductors in the triangular openings P, P₁, and P₂ and the coaxial portions C, C₁, and C₂ of the wire Y are secured as by welding to one edge of the bar 10 which in this modified form is of rectangular cross-section.

In the modification shown in Fig. 5 the bar 10 is preferably of right angle cross-section and openings, such as A and A₁ similar to the openings P, P₁, and P₂ shown in Fig. 4 are punched from the bar 10 and holes such as 20 are provided at each end of the bar for securing it to a bracket not shown extending from the support 12 to which the electrical apparatus are securely mounted.

It is understood that minor changes may be made as to form and size of the parts without departing from the spirit and scope of the appended claim.

What is claimed is:

A supporting device for wire conductors comprising a bar made of a flat strip serving as a shelf for the conductors, a plurality of loop members open at one side and secured to one edge of said bar, said loop members having similar portions forming guideways for facilitating the entrance of the wire in said loop members.

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