Dec. 30, 1930.

W. R. EDSON

1,786,937

MOUNTING FOR ELECTRIC CONDUCTORS

Filed June 17, 1926

Fig. 1.

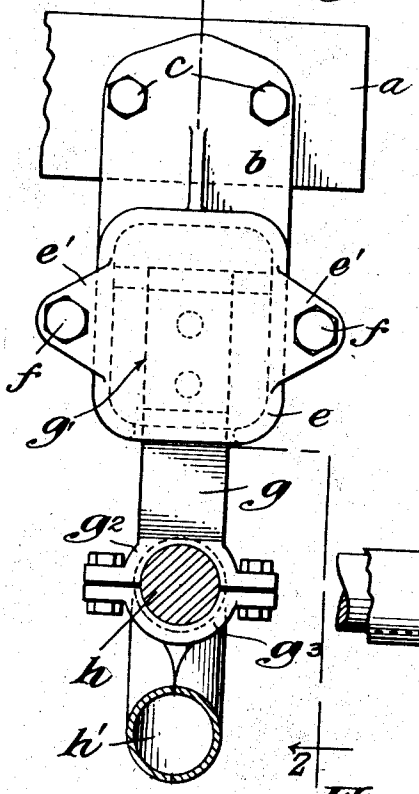


Fig. 2.

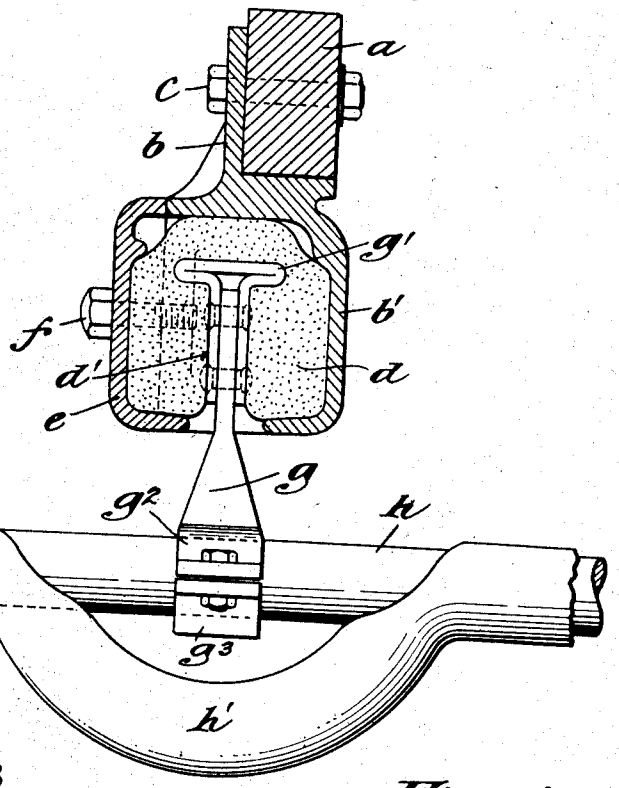


Fig. 3.

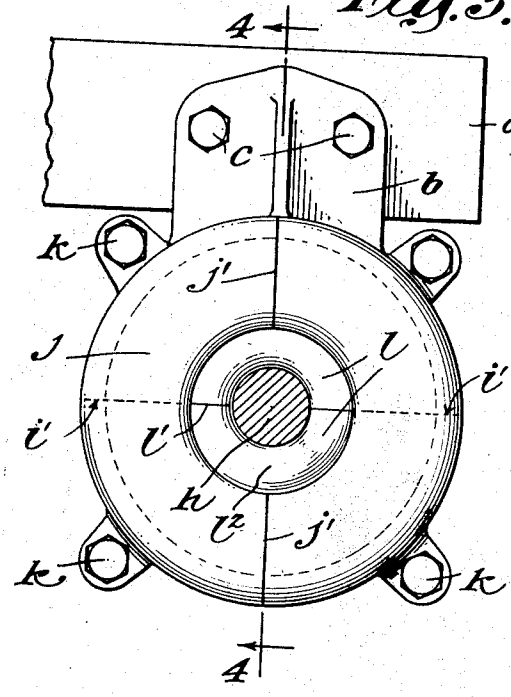
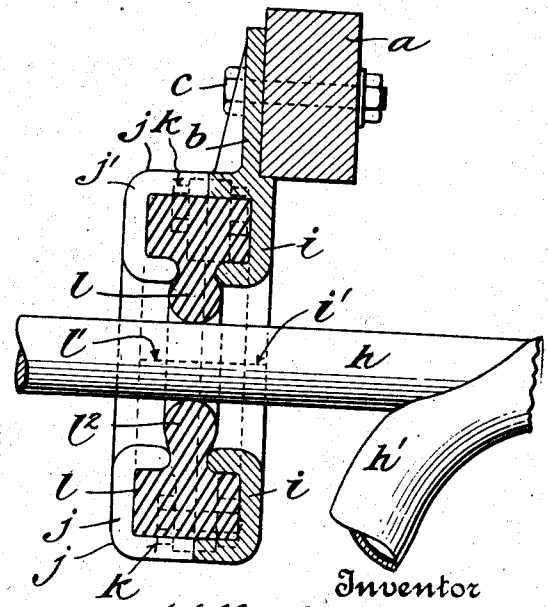


Fig. 4.



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UNITED STATES PATENT OFFICE

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MOUNTING FOR ELECTRIC CONDUCTORS

Application filed June 17, 1926. Serial No. 116,521.

This invention relates to mountings for electrical conductors and the like, wherein the same are suspended from a system of poles or other means which suitably resist the elements and carry the wires at a desired height.

Where wires, so mounted, are subjected to chafing and vibration caused by windage, temperature changes, pole vibration, change in temperature of the wire due to variations of current, etc., it is found that the jacket, or outer surface of the wire, becomes greatly injured, especially where the latter is of a softer metal, such as aluminum, and strengthened by a steel core.

An object of the present invention is to provide a mounting for conductors, particularly of the type above mentioned, which does not injure the wire in the manner described.

It is a further object of this invention to provide a means for supporting the wire from a cross arm in a manner to prevent breaking of the wire due to continual hoisting and bending thereof at the supporting bracket.

For a more detailed description of the invention reference will now be had to the accompanying drawings, wherein:

Figure 1 is a front elevation, partly in section, of a form of my device.

Figure 2 is a side elevation, partly in section of the device shown in Figure 1 and sectioned on the line 2—2.

Figure 3 is a front elevation of a modified form of the invention.

Figure 4 is a section on the line 4—4 of Figure 3 and looking in the direction of the arrows.

In the drawings *a* represents the cross arm of a pole, tower or other structure from which a transmission line is suspended. To the arm *a*, a bracket *b* is secured, as by bolts *c*. The lower extremity of the bracket is constructed as a housing *b'* which serves as a seat for a rubber, or other non-metallic cushioning element *d*. Cover *e* is bolted to the housing *b'* by means of bolts *f* passing through ears *e'* of the cover *e*. The rubber element *d* is formed larger than the housing with its cover *e* applied, so that when the latter is bolted on, the rubber is compressed. This not only insures a sturdy support, but also increases the wearing qualities and length of life of the connection.

Within the block *d* is an internal seat *d'* which receives the end of the downwardly extending arm *g*. Riveted to this arm is a bearing element *g'* which is seated upon the seat *d'*. The lower end of the arm *g* is formed as a co-operating portion g^2 of a clamp, the clamp portion of which is g^3. This clamp engages the core *h* of a cable, the jacket of which is shown as at *h'*, and which may be removed from the core at the point of support so that the cable may be supported from its core.

In practice, the jacket is of aluminum or other good conducting and light material, while the core is of steel to provide the necessary strength to the same. By supporting the cable through its core, the current carrying jacket is relieved of the strains set up at the point of connection and performs only the function of conducting the current.

In the modification shown in Figures 3 and 4 the bracket *b* has an annular, or ring-shaped housing *i* comprising two sections separated at *i'*. A cover *j* likewise of two sections but joined on a vertical axis *j'*, is connected to the housing by means of co-operating ears on the respective pieces and bolts, as indicated generally at *k*. By the above structure the device can be made to engage a wire without requiring slipping on at the end of the wire, as a solid annulus requires.

Within the housing, and compressed by the cover is a rubber ring *l* of a cross section shown particularly in Figure 4. It will be noted that the hole is off center, or eccentric, with respect to the housing so that below the wire as at l^2 a greater section of rubber is found than at l^3 above the wire. This added mass provides a greater cushioning force at the point where the weight of the wire is normally applied. The rubber block is composed of two sections divided along the line *l'* corresponding to the division of the housing *i*. If preferred the hole in the rubber element may be made concentric.

Obviously, the structure disclosed herein may be varied to suit the needs of different problems, and the particular structure shown does not limit the invention save as defined in the appended claim.

What I claim is:

Means for supporting a wire composed of a core and a jacket comprising supporting means, a housing carried thereby, a cover for the housing, yielding non-conducting cushioning means carried by the housing, means to secure the cover plate to the housing and to place the cushioning means under compression, and means carried by said cushioning means for engaging the core of the wire, the jacket thereof forming a by-pass around the engaging means.

This specification signed this 9th day of June, A. D. 1926.

WILLIAM R. EDSON.