Sept. 9, 1941. R. R. PITTMAN ET AL 2,255,530

INSULATED BRACKET

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Fig. 1

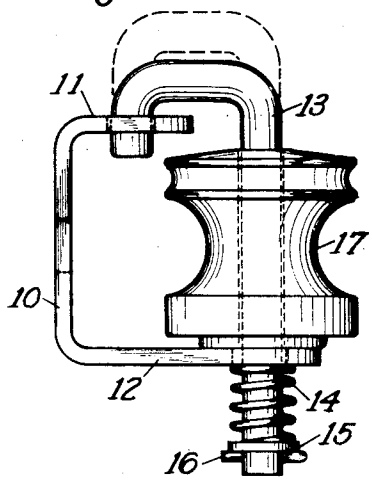


Fig. 2

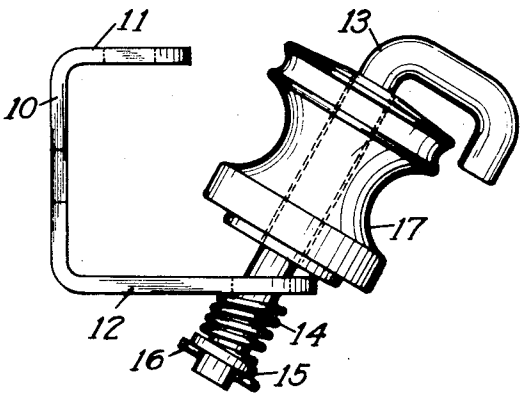
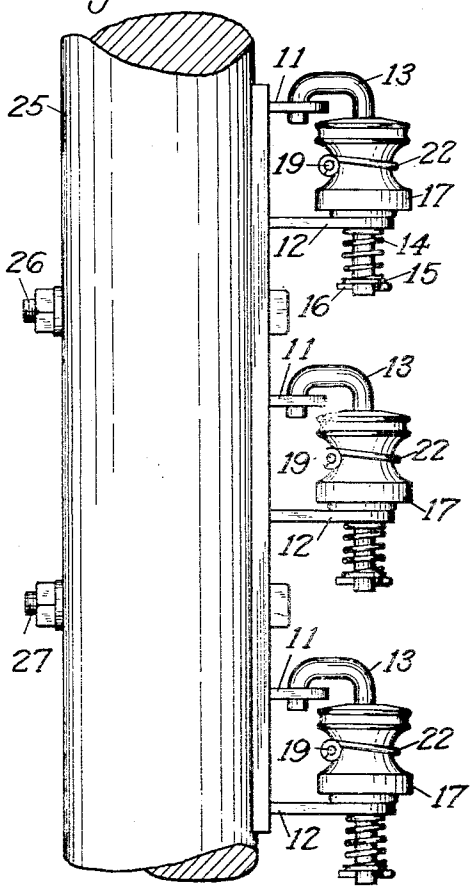


Fig. 3



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INSULATED BRACKET

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3 Claims. (Cl. 174—161)

The present invention relates to insulated brackets for use in supporting electrically energized conductors on poles or other structures.

It is desirable in brackets of this character to tie the conductor to the insulator in such a position that the conductor will be supported by a portion of the bracket in the event of loosening or failure of the tie wire used in fastening the conductor to the insulator, in order to prevent the conductors dropping to a position in which they may be a hazard to life or property. At the same time it is desirable to support the insulator-retaining member at its respective ends, to thereby provide the greatest strength in the direction of the conductor with a minimum of material, and therefore lowest cost.

Among the objects of the present invention may be noted (1) the provision of a bracket so arranged and constructed that a conductor may be positioned at the base side of the insulator without threading the end of the conductor through the bracket, this being accomplished through an organization in which the insulator-retaining member may be unlatched from engagement with a portion of the base, and subsequently tilted or swung away from the base to permit the desired positioning of the conductor, following which the insulator-retaining member may be restored to the latched position with respect to the base; (2) the embodying of a conducting resilient element for assuring electrical contact between the base and the insulator-retaining member, the resilient element acting to maintain the latter member in the latched position with respect to said base and (3) the provision of an economically constructed insulated bracket having relatively great strength for resisting the stresses imposed by tensioned conductors.

With these and other objects in view which appear as the description proceeds, our invention resides in the form, arrangement and organization of the parts, and the scope of the invention will be pointed out in the appended claims.

In the drawing: Fig. 1 is a side elevational view of the invention; Fig. 2 is a similar view showing the bracket in the unlatched and open position; and Fig. 3 is a side elevational view of one arrangement embodying the invention shown in the service position.

Referring in detail to Figs. 1 and 2, the metal base 10 includes a mounting surface and upper and lower outwardly extending portions 11 and 12 respectively, the latter preferably being longer than the former. The insulator-retaining member 13 extends upwardly from a point below the portion 12 through an opening therein, through the insulator 17 to a point above the portion 11, and thence laterally and downwardly through an opening in the latter.

For normally retaining the member 13 in the position just stated, a helical spring 14 is interposed between the lower surface of the base portion 12 and the washer 15, the latter being retained in position at the lower end of the insulator-retaining member 13 by means of the pin 16.

The spring 14 normally urges the insulator-retaining member 13 downwardly, and thereby normally maintains the upper end of the latter in latched engagement with the upper portion 11. The insulator 17 is preferably loosely fitted over the member 13, and is limited in its upward movement through engagement with the outer end of the member 11, thereby preventing the upstrain of a tensioned conductor unlatching the conductor-retaining member 13.

The latter member may be readily moved to the unlatched position shown by the broken lines of Fig. 1 by compressing the spring 14, the insulator 17 and the conductor-retaining member 13 then moved to the position shown by Fig. 2, and a conductor inserted laterally in the space between the insulator 17 and the vertically extending portion of the base 10. The elements may then be restored to the position shown by Fig. 1.

Fig. 3 illustrates a plurality of brackets of the present invention mounted on the common base, the latter being attached to the pole 25 by means of the bolts 26 and 27. The preferred manner of positioning the conductors 18 is here shown, the latter being respectively tied to the insulators 17 by the tie wires 22.

Other embodiments of the invention are possible, and it is therefore intended that the description and illustrations herein be interpreted as illustrative rather than limiting.

We claim as our invention:

1. An insulated bracket comprising a base, an insulator, an insulator-retaining member normally latched at one end to a first portion of said base and means including said insulator for fastening said member at the other end to a second portion of said base, and means responsive to only a single longitudinal movement of said insulator-retaining member in a direction normal with respect to that of said portions for unlatching said one end from said first portion

of said base while said other end remains fastened to said second portion of said base, the arrangement being such that said insulator-retaining member may be swung laterally away from said first portion when unlatched.

2. An insulated bracket comprising a base having upper and lower outwardly extending portions, an opening extending downwardly through each portion at the respective outer ends thereof, an insulator-retaining member extending upwardly through the opening in the lower portion to a point above the upper portion and thence inwardly and downwardly through the opening in said upper portion, an insulator positioned between said upper and lower portions through which said insulator-retaining member extends, resilient means arranged to urge said insulator-retaining member in a downwardly direction with respect to said base whereby said member is normally latched to said base, and means responsive to only a single endwise movement of said member for removing the latter from the opening in said upper portion, said insulator cooperating with said member following the removal to fasten both said insulator and said member to said lower portion.

3. An insulated bracket comprising a base having upper and lower outwardly extending portions, an opening extending downwardly through each portion at the respective outer ends thereof, an insulator-retaining member extending upwardly through the opening in the lower portion to a point above the upper portion and thence inwardly and downwardly through the opening in said upper portion, an insulator positioned between said upper and lower portions through which said insulator-retaining member extends, and means for removably latching the downwardly extending portion of said insulator-retaining member to the upper portion of said base.

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