Oct. 4, 1960 R. M. WILSON 2,955,150

SUPPORTING MEANS FOR ELECTRIC FENCE WIRE AND THE LIKE

Filed Sept. 16, 1957

Fig. 1.

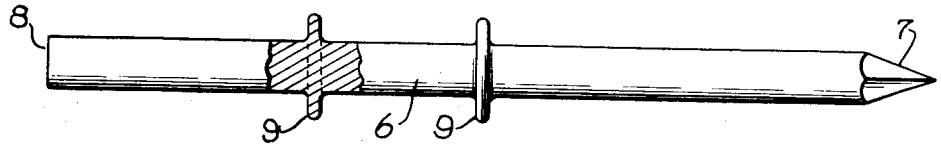


Fig. 2.

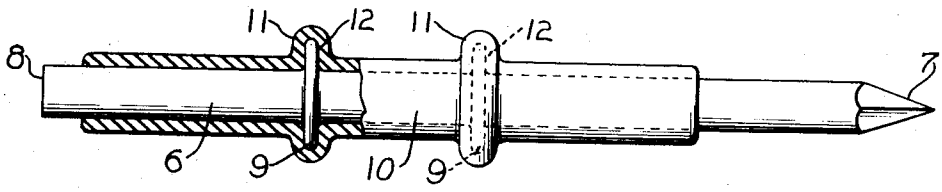


Fig. 3.

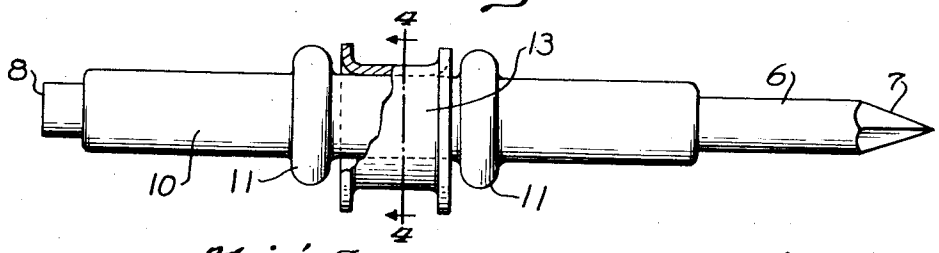


Fig. 4.

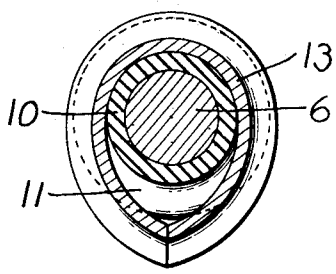
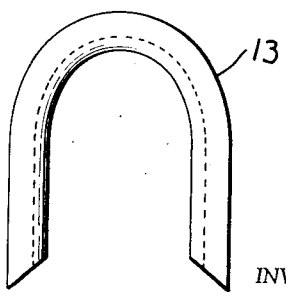


Fig. 5.



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SUPPORTING MEANS FOR ELECTRIC FENCE WIRE AND THE LIKE

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3 Claims. (Cl. 174—159)

The present invention deals broadly with electrical equipment, and in its specific phases with an armored and electrically insulated pin particularly adapted for electric fencing use.

Various forms of insulators and mountings have been proposed for use in connection with electric fencing and the like, and perhaps the commonest has been the porcelain insulator with a nail through its center, and with such nail having a compressible washer under its head and means for holding the nail against removal from the insulator. This combination is relatively bulky and easily broken. It was a recognition of this situation and the need of a more simplified and less bulky construction which led to the conception and development of the present invention.

Accordingly among the objects of the present invention is the provision of an exceptionally simple and inexpensive device for mounting an electric fence wire upon a wooden post or the like, and for preventing any grounding of the wire through the post.

A metal pin is provided for connection at one end with a wooden post or the like, said pin having an insulating sleeve surrounding it and, in turn, a metal wire-engaging grommet surrounds this sleeve: and a further object of this invention is to make novel provision for holding the sleeve in proper position on the pin and for holding the grommet against moving out of place on the sleeve.

A still further object is to provide a novel construction in which there is little likelihood of the wire touching the metal portion of the pin even if the wire should become accidentally disconnected from the grommet.

Yet another object is to provide the pin with a pointed end to be driven into the wooden post.

Still further objects and advantages of the invention will appear as the description proceeds.

To the accomplishment of the foregoing and related ends, the invention, then, consists of the means hereinafter fully described and particularly pointed out in the claims, the annexed drawing and the following description setting forth in detail certain means for carrying out the invention, such disclosed means illustrating, however, but one of various ways in which the principle of the invention may be used.

In the annexed drawing:

Figure 1 is a side elevation, partly in section, showing the pin of the present invention.

Figure 2 is a similar view, partially in section, showing the insulating sleeve applied to the pin.

Figure 3 is a similar view, partially in section, showing the grommet mounted on the insulating sleeve.

Figure 4 is an enlarged transverse sectional view on line 4—4 of Figure 3, looking in the direction of the arrows.

Figure 5 is a side view of a preferred form of the grommet before bending it around the insulating sleeve carried by the pin of Figure 1.

The construction shown in the drawing is a preferred

one and, for ready understanding of the invention, will be specifically described, but it is to be understood that variations may well be made within the spirit and obvious scope of the invention as shown in the drawing and herein described.

Referring more particularly to Figure 1 of the drawing, a metal pin **6** is provided and which has a pointed end **7** to be driven into a post, and a blunt end **8** upon which to deliver driving hammer blows. This pin is provided with two longitudinally spaced circumferential flanges **9** which are integral therewith. Both flanges are spaced from the ends of the pin: and the flange toward the pointed pin end **7** preferably has greater spacing from this end than the spacing of the other flange from the pin end **8**.

An insulating sleeve **10**, formed from a suitable dielectric insulating material such as the pliable plastic known as "Plasticol" is snugly applied to the pin **6** and its flanges **9**, preferably by a dipping operation. This sleeve **10** covers the pin **6** from a plane at or near the blunt end **8** to a plane suitably spaced from the pointed end **7** to facilitate driving of the pin into a post or the like and said sleeve has circumferential ribs **11** covering the flanges **9**. The sleeve **10** thus has two internal channels **12** extending into the ribs **11** and snugly receiving and holding the flanges **9**, respectively.

A wire-engaging grommet **13**, of metal or other suitable armoring material, surrounds the insulating sleeve **10** between the two ribs **11**, Figure 3. These ribs **11** hold the grommet **13** in place on the sleeve **10** and this sleeve is held against longitudinal shifting by the engagement of said ribs **11** with the flanges **9** of pin **6**.

The grommet **13** is preferably preformed in U-shape, as shown in Figure 5, from a suitable metal such as soft steel, aluminum, copper, or the like, and then bent into position around the sleeve **10** between ribs **11**. In so bending the grommet, it may be made to form a substantially concentric shape, but in actual practice it has been found to be generally easier to form if the extending ends of the grommet blank are a little long so that the finished grommet assumes an ovate form as shown in Figure 4. The ideal shape of the grommet would be circular, but as stated, this shape has been found somewhat impractical from the standpoint of ease of manufacture and mounting in place on pin **6**.

In using the invention, one pin **6** is driven into each wooden post or the like along the fence line. The electric fence wire is anchored by winding around one of the pin carried grommets **13** then stretched to the next post, wrapped around the pin carried grommet on this post, stretched to the next post, and so on. The grommets, which are of outwardly flanged edge form, as shown, protect and armor the insulating sleeves against injury from the wire, and since these insulating sleeves extend appreciably beyond the opposite sides of the grommets, they also give limited protection against the wire touching of any of the pins **6** even though it should accidentally become disconnected from one of the grommets.

It will be seen from the foregoing that a novel article of simplified form with great durability and high efficiency has been provided for use, such as in electric fencing, but attention is again invited to the possibility of making variations within the spirit and scope of the invention as above described and shown in the drawing.

Other modes of applying the principle of my invention may be employed instead of the one explained, change being made as regards the article and combinations herein disclosed, provided the means stated by any of the following claims or the equivalent of such stated means be employed.

I therefore particularly point out and distinctly claim as my invention:

1. A driven insulator member for an electric fence wire or the like, comprising an elongated metal pin one end of which is adapted to be inserted into and project from a post, said pin in its projecting portion having two outwardly projecting, longitudinally spaced, integral circumferential flanges, an insulating sleeve snugly surrounding and covering said pin in the portion of same including said flanges, said sleeve having two integral circumferential projecting ribs, said insulating sleeve also having two internal channels extending into said ribs and receiving said flanges of said metal pin respectively, and an armoring grommet having outturned side edges, said grommet loosely surrounding and protecting the outer face of said insulating sleeve between said ribs, said flanges being spaced from the ends of said pin respectively and the end portion of said insulating sleeve extending from said ribs a substantial distance toward said pin ends respectively, but short of reaching same so as to permit

driving said pin and entry into a post without injuring said insulating sleeve, said metal pin having a pointed end to be driven into a post.

2. A structure as specified in claim 1, in which said grommet is of ovate shape in cross section perpendicular to its longitudinal axis.

3. A structure as specified in claim 1, in which said insulating sleeve is of dielectric plastic, and said grommet is of metal.

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