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INSULATOR FOR ELECTRIC WIRES.

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Witnesses

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INSULATOR FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 787,442, dated April 18, 1905.

Samuel B. Flynt and Leaman A. Maiden, of Meridian, Mississippi.

To all whom it may concern:

Be it known that we, Samuel B. Flynt and Leaman A. Maiden, citizens of the United States, residing at Meridian, in the county of Lauderdale and State of Mississippi, have invented certain new and useful Improvements in Insulators for Electric Wires, of which the following is a specification.

This invention appertains to supports for telegraph, telephone, and other electric wires, the purpose being to prevent the breakage incident to insulators of glass, porcelain, or other vitreous material such as commonly employed for attaching electric conductors to supporting arms or pins.

Glass or vitreous material is commonly utilized in the manufacture of insulators because of its cheapness, non-conducting qualities, and resistance to the elements. This class of insulators suffers most from thoughtless or mischievous parties using the same as targets. The purpose of this invention is to enable the use of insulators of glass or vitreous material and to protect the same against injury. In accordance with this invention the insulator of glass or vitreous material is incased by a protector, preferably of metal, and the invention relates more particularly to the adjunctive means combined with the protective casing, as will appear more fully hereinafter, and outlined in the subjoined claim.

In the accompanying drawings, forming a part of the specification, Figure 1 is a side elevation of an insulator embodying the invention. Fig. 2 is a vertical section of the insulator on the line x x of Fig. 1. Fig. 3 is a detail view of a portion of the protective casing, showing the securing means between the sections. Fig. 4 is a detail perspective view of the insulator, the parts being separated and arranged in a group.

Corresponding and like parts are referred to in the following description and indicated in all the views of the drawings by the same reference characters.

The insulator proper is indicated at 1 and may be of usual construction and formation and is composed of glass, porcelain, or other vitreous material.

The protective casing, which incloses the insulator 1, is composed of similar sections 2 and 3, preferably of metal, although within the purview of the invention any material that will resist hard usage and the elements may be successfully employed. A groove 4 is provided near the upper end of the protective casing and results in the formation of an inner rib which corresponds to the accustomed groove 5 in the outer side of the insulator 1. This rib and groove form interlocking means between the insulator and its protective casing and prevent displacement thereof after the casing has been properly placed in position and fastened. A slight space exists between the insulator and casing to prevent undue pressure coming upon the insulator at any one point. Gaskets 6, of rubber or other packing material, are interposed between the insulator and its casing and serve as noise-deadeners by absorbing vibration and to prevent breakage of the insulator in the event of the casing being struck a smart blow by means of a missile or other object.

Any suitable means may be employed for securing the sections 2 and 3 after being placed about the insulator 1. The means illustrated are preferred, and consist of a flexible strip 7 at each side of a section and a pair of lugs 8 at the sides of the other section to receive the strips 7 between them, the projecting ends of said strips being bent either up or down against one or the other of the lugs, as illustrated, to prevent separation of the sections. The flexible strips 7 are attached to the section provided with them in any suitable manner, and, as shown, lugs 9 are formed on the section, and the strips are molded in or otherwise attached to said lugs. When placing the sections 2 and 3 about an insulator, the outer ends of the flexible strips 7 pass between lugs 8, and after the sections have been pressed together the ends of the strips 7 are bent, so as to retain the sections in place.

An insulator constructed substantially as herein set forth may be used in the accustomed manner and is attached to the pin of a cross-arm or other support in the usual way.
the line-wire 10 being secured thereto by means of the binder 11. The binder, in conjunction with the line-wire, acts in the further capacity of securing the sections 2 and 3, so as to prevent their separation. The protector being wholly exterior to the insulator of flexible material receives any shock or blow delivered thereon, thereby preventing injury to the insulator, and the packing 8, intervening between the insulator and protector, compensates for shock and vibration and materially decreases the chance of injury to the insulator 1 in the event of the protector sustaining a smart blow from any source or object.

Having thus described the invention, what is claimed as new is—

As a new article of manufacture, a protective casing for insulators comprising similar sections grooved externally to receive a binder, oppositely arranged pairs of lugs upon one section, a single lug at opposite sides of the other section, the several lugs above mentioned being arranged adjacent to the joint of contiguous sections, and a flexible strip extending from the single lugs of the last-mentioned section and adapted to pass between the pairs of lugs of the first-mentioned section to be bent about one of each of said pairs of lugs.

In testimony whereof we affix our signatures in presence of two witnesses.

SAMUEL B. FLYNT. [s.]
LEAMAN A. MAIDEN. [s.]

Witnesses:

H. E. MONTGOMERY,
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