J. A. MEURLING.

INSULATOR.

APPLICATION FILED MAR. 19, 1910.

970,078. Patented Sept. 13, 1910.

Fig. 1

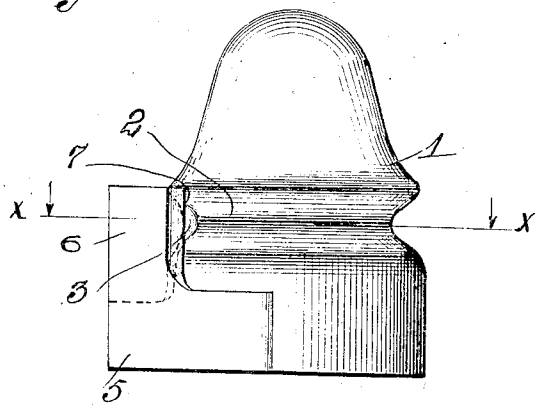


Fig. 2

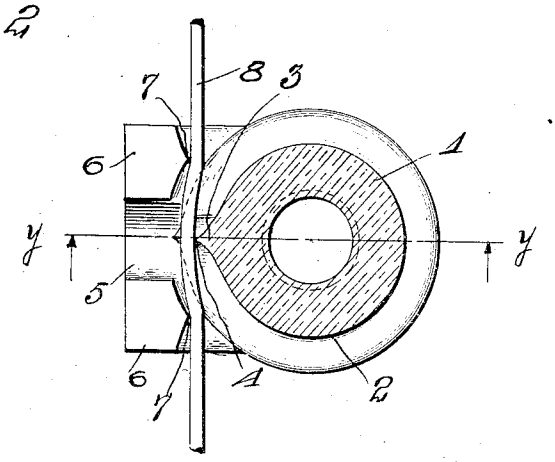
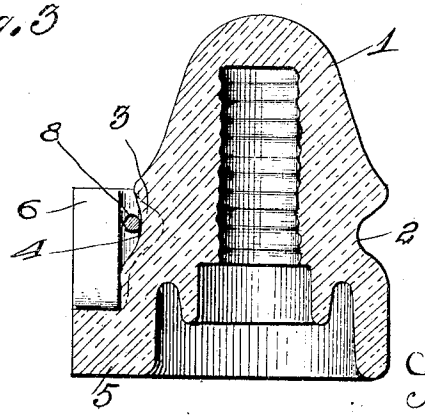


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN A. MEURLING, OF CHICAGO, ILLINOIS.

INSULATOR.

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Application filed March 19, 1910. Serial No. 550,314.

To all whom it may concern:

Be it known that I, JOHN A. MEURLING, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to insulators for electric wires, telegraph or telephone, and has for its object the provision of a device of this character to which a wire may be readily and quickly attached without the use of additional binding wires as are ordinarily used.

A further object is the provision of an insulator as mentioned which will be adapted to so hold a wire as to prevent longitudinal movement thereof therethrough.

Other objects will appear hereinafter.

With these objects in view my invention consists in an insulator characterized as above mentioned and in certain details of construction which will be hereinafter described and particularly pointed out in the appended claims.

My invention will be more readily understood by reference to the accompanying drawing forming a part of this specification, and in which—

Figure 1 is a side elevation of an insulator embodying the preferred form of my invention, Fig. 2 is a horizontal section taken on line *x*—*x* of Fig. 1, and Fig. 3 is a central vertical section taken on line *y*—*y* of Fig. 2.

Referring now to the drawings 1 indicates the body of the insulator which is formed of any suitable material of low conductivity, such as porcelain, glass, or the like. Formed in said body intermediate its extremities is a circumferentially extending groove 2. Formed in said groove is a transversely extending integral projection 3 terminating at its outer end in a comparatively sharp edge 4. Formed in and laterally projecting from the same side of the body 1 at the base thereof is an enlargement 5. Formed upon and upwardly projecting from the enlargement 5 are two posts 6 positioned one at either side of the projection 3 and substantially equidistant therefrom. Said posts are of a length such that the upper extremities thereof extend above or terminate in a plane including the upper edge of the groove 2. The inner sides of the posts 6 are formed with comparatively sharp vertically extending preferably straight edges 7, said edges being so positioned relative to the edge 4 of the projection 3 that a wire 8 passed through or introduced in the insulator will be kinked or buckled as clearly shown in Fig. 2. With this construction therefore upon pressure being applied to the wire, as when pulling the same taut, the same will be forced against the edges 4 and 7 and which, evidently, will serve to hold the wire against any possible longitudinal movement. With this construction, the greater the force applied to the wire, the more secure will the same be held in the insulator. Vertical displacement of this wire is prevented by reason of the groove 2 and the corresponding concave form of the contacting edge 4 of the projection 3. The edges 7 are preferably formed straight, as before stated, in order to facilitate the arrangement of a wire in the insulator or the detachment thereof therefrom.

The interior of the body 1 is formed for the reception of the standard insulator-supporting pin, the same being screw-threaded for threading thereon. In attaching the insulator, the same will not be threaded down tightly upon the supporting pin but will be so mounted as to be free for rotary movement thereon. This precaution is taken so that in the event of a break in the wire, in which occurrence the force or pull by the severed wire parts upon each of the insulators adjacent the break is directed all in one direction, each of the latter will be free to turn through a partial rotation, as caused by this intense strain, to a position in which the same will be disposed at an angle to the direction of the wire; since in such position, the insulator will more effectually clench the wire passing therethrough.

While I have shown what I deem to be the preferable form for my device I do not wish to be limited thereto as there might be various changes made in the details of construction without departing from the spirit of the invention comprehended within the scope of the appended claims.

Having described my invention what I claim as new and desire to secure by Letters Patent is:

1. An insulator comprising a substantially cylindrical body having an interior opening for the reception of a supporting pin, said body being formed of a single piece of insulating material, a transversely extending

wire-receiving groove in the outer surface of said body, a projection formed in said groove, an enlargement formed at one side of the bottom of said body, extending upwardly, posts formed upon said enlargement in a plane with said groove at either side of said projection, said posts being so positioned that a wire introduced into said groove will be kinked or buckled by contact therewith and with said projection, substantially as described.

2. An insulator comprising a substantially cylindrical body formed of a single piece of insulating material, a circumferential groove in the lateral surface of said body, a projection formed in said groove, an enlargement formed at one side of the bottom of said body, extending upwardly, posts formed upon said enlargement extending co-planar with said groove at either side of said projection, said posts being so positioned that a wire introduced into said groove contacting said projection will be kinked or buckled by contact with said posts, the contacting portions of said posts being straight and sharp edged and of said projection being concave and sharp edged, the contacting edges of said posts extending parallelly with the axis of said body, substantially as described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHN A. MEURLING.

Witnesses:
JOSHUA R. H. POTTS,
W. C. SMITH.