

No. 821,401.

PATENTED MAY 22, 1906.

T. CARTER.
INSULATOR.

APPLICATION FILED MAY 23, 1905.

Fig. 1.

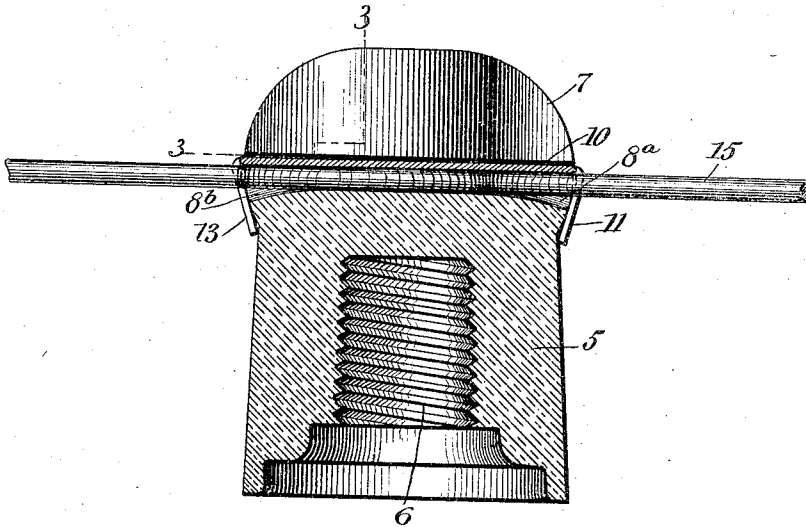


Fig. 2.

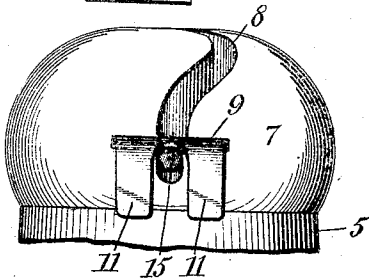


Fig. 4.

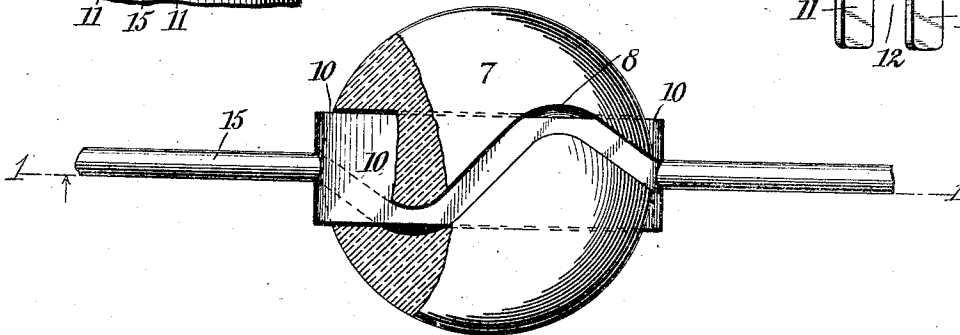
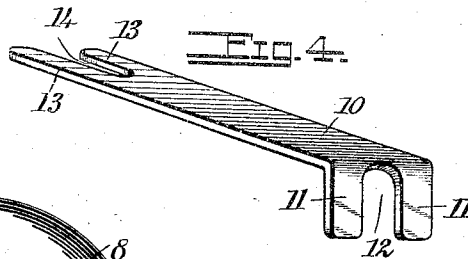


Fig. 3.

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UNITED STATES PATENT OFFICE.

TAYLOR CARTER, OF FRANKFORT, KENTUCKY.

INSULATOR.

No. 821,401.

Specification of Letters Patent.

Patented May 22, 1906.

Application filed May 23, 1905. Serial No. 281,735.

To all whom it may concern:

Be it known that I, TAYLOR CARTER, a citizen of the United States, and a resident of Frankfort, in the county of Franklin and State of Kentucky, have invented a new and Improved Insulator, of which the following is a full, clear, and exact description.

My invention relates to insulators admitting of general use, but more particularly to insulators intended to hold wires used in telegraphy, telephony, and the like.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical cross-section through one of my improved insulators. Fig. 2 is a fragmentary elevation showing the top of the insulator viewed as from the right of Fig. 1. Fig. 3 is a fragmentary plan view of the insulator and wire supported thereby, a portion of the insulator being broken away; and Fig. 4 is a perspective view of the key used for retaining the wire in place relatively to the insulator.

The body of the insulator is shown at 5 and is threaded internally at 6 in the usual or any desired manner, so as to be mounted upon a supporting-pin. Integral with the body 5 is a head 7, provided with a substantially S-shaped slot 8, sunken directly into the head 7 from the top thereof, as indicated. A horizontal slot 9 passes centrally through the head 7 and is neatly fitted by a metallic key 10, provided at one of its ends with tongues 11, separated by a slot 12, and at the other of its ends with tongues 13, similarly separated by a slot 14. The wire is shown at 15. The ends of the slot 8 are slightly deeper than other parts thereof at the points designated 8^a 8^b in Fig. 1.

The operation of my device is as follows: In order to mount the wire 15 in position, it is raised to the top of the insulator, then bent slightly and forced into the slot 8 until it reaches the bottom thereof. The curvature of the slot is the same from top to bottom, and consequently the wire retains the shape which it assumes when first forced into the top of the slot. The wire being now against the bottom of the slot, the key 10 is forced into the slot 9 immediately over the wire, so as to bind the wire against the bottom of the

slot. The tongues 11 and 13 are now bent downward, as indicated in Fig. 1, and effectively prevent upward movement of the wire. If desired, the tongues 11 may be bent downward before the key 10 is inserted, as indicated in Fig. 4. With an insulator equipped as above described it is impossible to dislodge the wire 15, except by straightening the tongues in the key and then withdrawing the key from the slot 9. The ends 8^a 8^b of the slot 8 are slightly lower than the center, as I find that this conformity facilitates passing the wire 15 through the said slot and also prevents collection of water in the slot.

It will be noted that when the wire is in position it has the same conformity as the substantially S-shaped slot and is therefore not readily pushed endwise from the insulator. The key 10 being comparatively wide, no part of the wire can pass the key.

The device is of peculiar service to linemen, as it admits of quick and permanent repairs at a small expense.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An insulator comprising a member provided with a sinuous slot for receiving a line-wire, the walls of the slot being parallel and formed upon a series of regular alternately-reversed curves merging into each other, whereby abrupt curves in the line-wire are avoided, and provided with a horizontally-disposed slot substantially parallel to the sinuous slot, and at right angles to the walls thereof, and a key having means for engaging the line-wire and detachably mounted within such second slot.

2. An insulator comprising a member provided with a sinuous slot for receiving a line-wire, the walls of the slot being parallel and formed upon a series of regular alternately-reversed curves merging into each other, whereby abrupt curves in the line-wire are avoided, and provided with a horizontally-disposed slot substantially parallel to the sinuous slot, and at right angles to the walls thereof, and a key detachably mounted within such second slot, the ends of the key being recessed to form tongues adapted to be bent in order to retain the key in position.

3. In an insulator, the combination of a body member provided with a slot for engag-

ing the wire, and another slot for engaging the key, and a key removably engaging said last-named slot, the ends of the key being recessed to form tongues adapted to be bent on
5 each side of the line-wire in order to hold said key in position.

In testimony whereof I have signed my

name to this specification in the presence of two subscribing witnesses.

TAYLOR CARTER.

Witnesses:

R. K. McCLURE, Jr.,

F. C. CANNON.