

G. B. MARSHALL.
INSULATOR.
APPLICATION FILED OCT. 9, 1908.

907,834.

Patented Dec. 29, 1908.

Fig. 1.

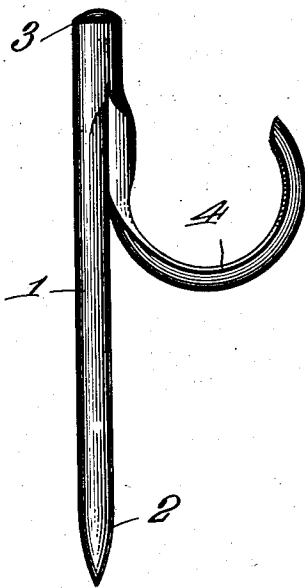


Fig. 2.

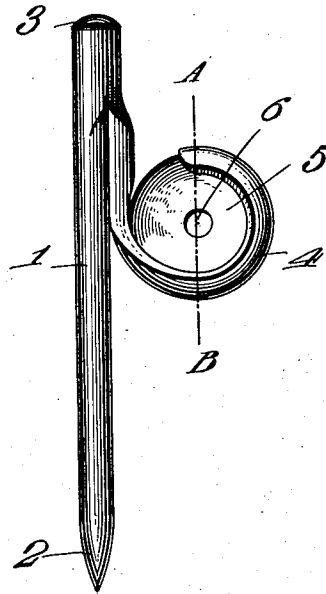


Fig. 6.

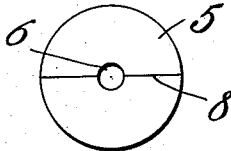


Fig. 4.

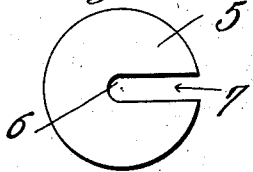


Fig. 5.

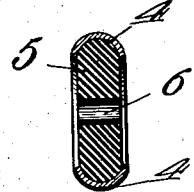
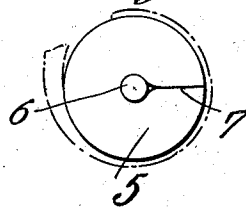


Fig. 3.

Witnesses

E. J. [Signature]
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UNITED STATES PATENT OFFICE.

GEORGE B. MARSHALL, OF SHANNON, TEXAS.

INSULATOR.

No. 907,834.

Specification of Letters Patent.

Patented Dec. 29, 1908.

Application filed October 9, 1908. Serial No. 456,967.

To all whom it may concern:

Be it known that I, GEORGE B. MARSHALL, a citizen of the United States, residing at Shannon, in the county of Clay and State of Texas, have invented a new and useful Insulator, of which the following is a specification.

This invention has reference to improvements in insulators and it is designed to provide a simple and cheap insulator adapted more particularly for attaching electric conductors such as telephone wires or telegraph wires to walls or other such structures and more particularly to brick walls and posts or trees or even wooden structures.

The improved insulator comprises a spike adapted to be driven by a hammer into the mortar between bricks in a brick wall or into trees or into frame structures, and on one side of this spike there is formed a clip adapted to embrace and hold an insulating button or washer.

The invention will be best understood from a consideration of the following detail description taken in connection with the accompanying drawings, forming a part of this specification, in which drawings,

Figure 1 is an elevation of the device before the insulating button is applied. Fig. 2 is a similar view of the device with the insulating button in place. Fig. 3 is a section on the line A—B of Fig. 2. Figs. 4, 5 and 6 are views of modified forms of insulating buttons.

Referring to the drawings there is shown a spike 1 having a pointed end 2 and a hammering end 3. The spike is designed to be driven into the mortar between bricks or into a tree or into a wooden structure by applying the point 2 to the place where the spike is to be driven and then striking the end 3 with a hammer or other proper implement.

On one side of the spike near the end 3 there is formed a finger or clip 4, bent toward the pointed end of the spike and then returned on itself toward the end 3 thereof until the clip is in the form of an open loop of substantially circular contour. This clip is furthermore curved in a direction at right angles to its superior curve so as to form a channel as best shown in Fig. 3.

As manufactured the clip 4 is sufficiently spread at its open end to receive an insulating button 5 preferably of circular outline and with its periphery rounded in the direction of its longitudinal axis and the button

has a central perforation 6 of a size to readily permit the passage of a telephone wire or conductor of the insulated type.

In the drawings the button 5 is shown as of circular outline but it is to be understood that it is not necessarily of this shape although it is generally preferable to so construct the button 5.

In putting up the conductors it is customary to string the insulating buttons 5 upon the conductors and then after the spikes have been driven in the support to introduce the buttons in the clips 4 and with a hammer or other suitable tool to close up the clip until the buttons are firmly clamped in the clip against the possibility of accidental displacement. By closing the open end of the clip so that the free end approaches the spike 1 the button 5 is prevented from escaping through such open end and the laterally curved or channel form of the clip holds the button against accidental displacement in the direction of the length of the conductor.

Instead of making the button 5 with a central perforation 6 so that it becomes necessary to string the buttons upon the electric conductor the buttons may be made with a radial slot 7 leading from the central perforation 6 to the edge of the button and wide enough to permit the button to be simply slipped onto the conductor in a direction radial to said button. Now when the insulating button is placed within the clip 4 and the latter is closed up toward the spike 1 the button is forced together at the slot until the latter is partially or wholly closed up. Of course in this construction the insulating button must be made of some material which will yield to pressure circumferentially applied without causing the button to become broken at the point opposite the slot 7.

When insulating buttons of material which is not adapted to stand bending are used then they may be made of two parts as indicated in Fig. 6, the division line being shown at 8.

All the forms of insulating buttons are well adapted for use in connection with the particular form of clip of the device forming the subject matter of the present invention.

It will be understood of course that the clip 4 is made of malleable material, preferably malleable iron and the clip may be made of such size as to accommodate insulating buttons of a sufficiently great diameter to prevent the passage of current from the conductor to the spike.

It is to be noted that the clip 4 is especially adapted for clamping insulating buttons such as shown in Figs. 4 and 6 or any other type of button where the insulating button may be applied to the conductor without the necessity of stringing it thereon.

What is claimed is:—

1. An insulator comprising a spike with a clip formed on one side thereof and having one face concave, said clip being adapted to be bent on itself with the concave face inward to grasp an insulator structure.
2. An insulator comprising a spike with a clip formed on one side thereof, said clip being of channel form in cross section and also adapted to be bent on itself to grasp an insulator structure.
3. An insulator comprising a spike with a clip formed on one side thereof, said clip being adapted to be bent on itself and an insulating button adapted to be confined in said clip and provided with a passage for an electric conductor.
4. An insulator comprising a spike with a clip formed on one side thereof said clip being of channel form and also adapted to be bent on itself, and an insulating button hav-

ing its periphery shaped to seat in the channel clip, said button being provided with a passage for an electric conductor and adapted to be encircled by the clip and locked to the spike thereby.

5. An insulator comprising a spike with a clip formed on one side thereof, said clip being adapted to be bent on itself, and an insulator button provided with means for the reception of an electric conductor lateral to the length of the conductor and to be locked about the conductor by the grasp of the clip.

6. An insulator comprising a spike with a clip formed on one side thereof, said clip being of channel form and also adapted to be bent on itself, and an insulator provided with means for the reception of an electric conductor lateral to the length of the conductor and to be locked about the conductor by the grasp of the clip.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

GEORGE B. MARSHALL.

Witnesses:

G. W. McDANIAL,
M. H. MARSHALL.