W. S. MOORE.

INSULATOR.

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996,782. **Patented July 4, 1911.**

Fig. 1.

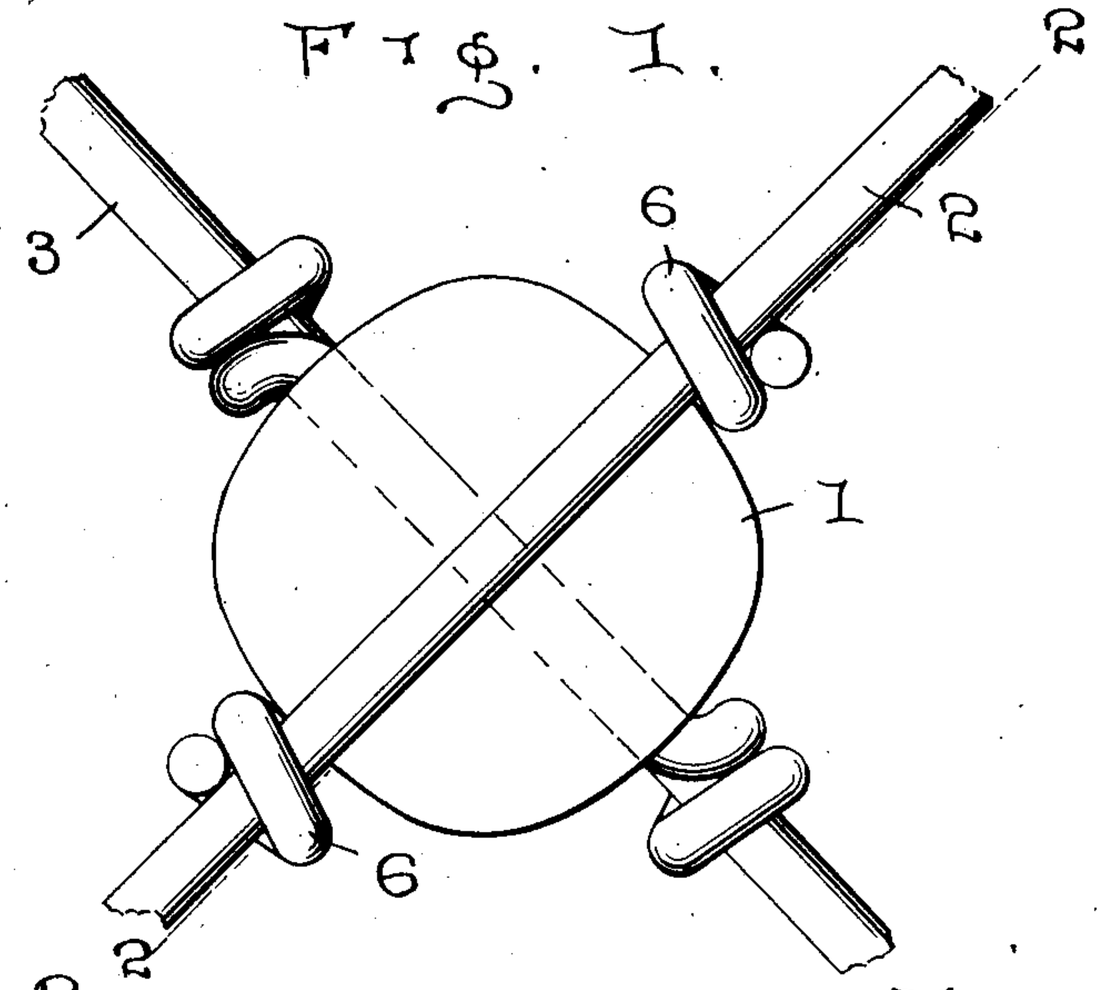

Fig. 3

Fig. 4.

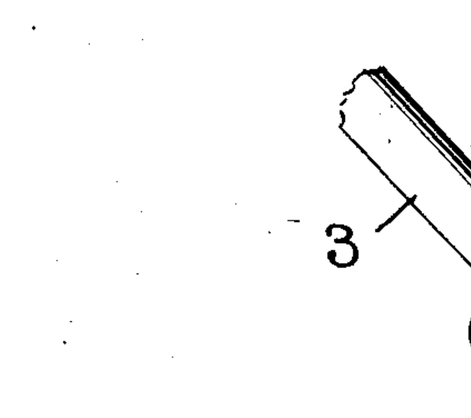

Fig. 2.

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INSULATOR.

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To all whom it may concern:

Be it known that I, WILLIAM S. MOORE, a citizen of the United States, residing at Princeton, in the county of Bureau and State of Illinois, have invented certain new and useful Improvements in Insulators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to new and useful improvements in insulators and more particularly to that class adapted to be used in connection with electric, telephone and similar wires and my object is to provide an insulator for separating two or more wires which cross each other.

A further object is to provide means for anchoring the wires to the insulator, and, a further object is to so arrange the insulator that the wires may cross each other at various angles.

Other objects and advantages will be hereinafter set forth and pointed out in the specification.

In the accompanying drawings which are made a part of this application, Figure 1 is a plan view of the insulator, showing a substantially circular block with the wires crossing at right angles. Fig. 2 is a sectional view thereof as seen on line 2—2, Fig. 1. Fig. 3 is a plan view of a substantially square block with the wires crossing at right angles, and, Fig. 4 is a similar view showing the wires crossing at a different angle.

Referring to the drawings, in which similar reference numerals designate corresponding parts throughout the several views, 1 indicates the insulator, which is preferably constructed from a block of porcelain and may be formed in any preferred shape and 2 and 3 indicate the wires engaging the insulator.

In the present instance I have shown the insulator as provided across its top with a groove 4 to receive the wire 2, the depth of the groove being preferably slightly less than the diameter of the wire and to prevent the block from slipping on the wire, the groove is preferably bowed from side to side of the insulator. The wire 3 also extends into a groove 5 at the bottom of the insulator and this groove may also be bowed to prevent the block from slipping on the wire.

The wires 2 and 3 are securely clamped in engagement with the insulator by tie wires 6 and 7, respectively, the tie wire 6 being introduced through an opening 8, which extends through the insulator 1 parallel with the wire 2 and adjacent the edge of the insulator engaged by the wire 3, while the tie wire 7 extends through a similar opening 9 through the insulator 1 and adjacent that edge of the insulator engaged by the wire 2, said tie wires extending at right angles to each other.

The ends of the tie wires are extended into engagement with their respective line wires and are twisted around the line wires, thereby securely locking the line wires to the insulator and in such position that it is impossible for said wires to come in contact with each other.

It will be readily understood that by providing additional grooves and openings in the insulator, any number of the line and tie wires may be secured to the block and, as shown in Fig. 4, the wires may cross each other at various angles.

The insulator is adapted for use both in buildings and on poles or other places and the grooves and holes may be varied in size to accommodate wires of different sizes.

This insulator will also take the place of brackets and bottle insulators and will eliminate the usual form of bushings and other devices for crossing wires, especially in house wiring, and, it will further be seen that by using this form of insulator the number of insulators required for separating the wires will be reduced to a minimum.

What I claim is:

1. In an insulating device the combination with a block having grooves on opposite sides of the block and at an angle to each other, openings extending through the block and corresponding in direction to the grooves in the edges of the block, the openings coöperating with one set of grooves being adjacent the opposite set of grooves, line wires in said grooves and tie wires extend-

ing through said openings and bent into engagement and interlocked with the line wires.

2. In an insulator the combination with a block having grooves on opposite edges, said grooves being bowed from end to end, and openings extending through the body of the block, said openings corresponding to the grooves in the edges of the block, line wires seated in said grooves and tie wires extending through the openings and engaging the line wires to lock the same in engagement with the block.

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

WILLIAM S. MOORE.

Witnesses:
W. C. SEIPLE,
ELI ALDRICH.