

T. H. WATKINS.
INSULATOR.
APPLICATION FILED JUNE 21, 1911.

1,009,810.

Patented Nov. 28, 1911.

2 SHEETS—SHEET 1.

Fig. 1.

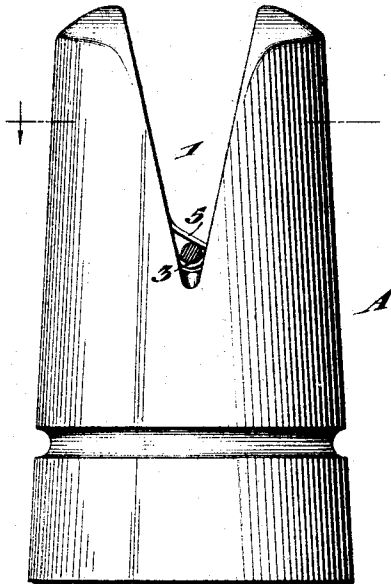


Fig. 2.

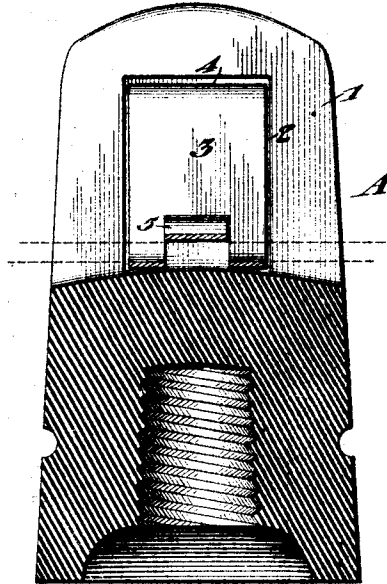
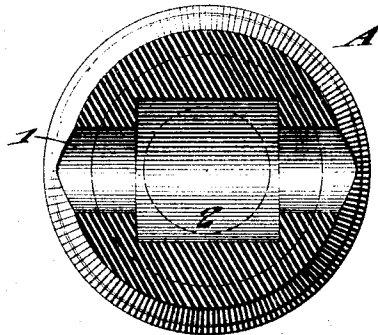


Fig. 3.



Witnesses
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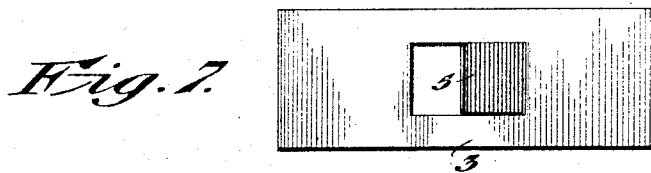
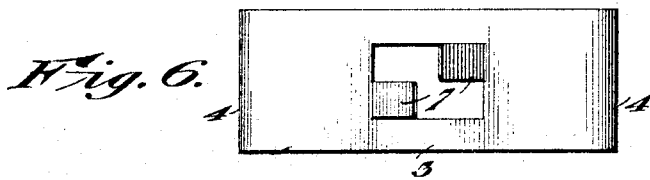
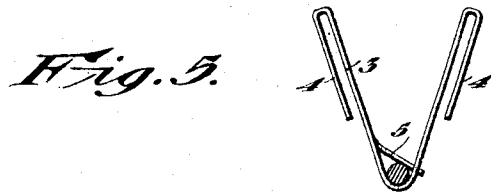
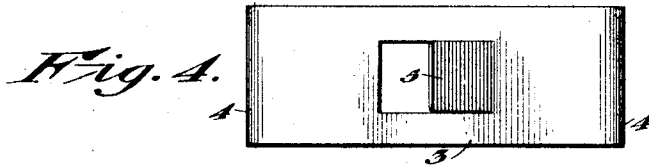
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Witnesses

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UNITED STATES PATENT OFFICE.

THOMAS H. WATKINS, OF WAKPALA, SOUTH DAKOTA.

INSULATOR.

1,009,810.

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Application filed June 21, 1911. Serial No. 634,459.

To all whom it may concern:

Be it known that I, THOMAS H. WATKINS, a citizen of the United States, residing at Wakpala, in the county of Corson and State of South Dakota, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to an improvement in Insulators, and the object is to provide means for fastening the wire to the insulator.

The fastening means consists of resilient plates which are connected to the wire and which are sprung into a socket formed in the insulator for fastening the wire to the insulators which are mounted upon the cross bars of a telephone or telegraph pole.

The invention consists in certain novel features of construction and combinations of parts which will be hereinafter fully described and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view in side elevation looking through the groove; Fig. 2 is a vertical sectional view; Fig. 3 is a horizontal sectional view; Fig. 4 is a top plan view of the preferred form of fastening means ready to be applied to a wire; Fig. 5 is a view in elevation showing the position taken by the fastening means for gripping the wire and just prior to being forced or sprung into the socket of the insulator; Fig. 6 is a plan view of a slightly modified form; and Fig. 7 is a top plan view of another modified form similar to the structure shown in Figs. 1 to 5, with the wings or lips removed.

A, represents the insulator, which is made of any suitable insulating material, and is provided with a notch or socket 1. The walls of the socket are provided with recesses 2. The base of the socket or notch has a general curvature or slope from the apex at the center to the ends, to drain off moisture and prevent its accumulation therein. A plate 3 of flexible material is provided with lips or wings 4, which are formed by the ends of the plate being bent along the rear side and parallel with the main portion. A tongue 5 is struck or cut from the central portion of the plate, and is adapted to project in an upward direction. The wire to be fastened and held to an insulator is received beneath the lip, then the sides

of the plate are bent toward each other practically V-shaped for causing the tongue to be compressed upon the wire for fastening the clip or plate securely thereto. The plate is then sprung or drawn into the socket or notch formed in the insulator, causing the wings and plate to enter the recesses in the notch or socket, thereby securely fastening the wire to the insulator. By this means the wire is always held within the insulator and is held sufficiently tight to hold the line secure in case of break. The tension of the line is not dependent on the security of two fastenings to hold it taut. The tension is equalized by the many insulators to which it is secured from mile to mile or from end to end. In case the wire should break, it will instantly kink, and this would prevent the wire from slipping through the fastening. As the wire must be straight and free from kinks in order to pass or be pulled over the insulator, a great deal of pressure will be necessary to disconnect the wire from the fastening means after it has once been fastened to the insulator. The fastening means is preferably made of material which will not rust, the body being of sufficient flexibility and resiliency to be fastened to the line wire and to fit into the recesses in the insulator.

In Fig. 6 I have shown a slightly modified form in which two tongues 7 are struck from the central portion of the plate 3, and each is intended to grip the wire, one tongue extending in one direction across the wire, and the other tongue extending in the opposite direction, so that the two tongues engage the two sides of the wire when the sides of the plate are drawn together or moved toward each other prior to being inserted in the socket of the insulator.

The modification shown in Fig. 7 is similar to the structure shown in Figs. 1 to 5, but in this form I have omitted the wings or lips 4. The lips 4 insure that the plate or fastening means is securely locked within the recesses of the socket, whereas with the structure shown in Fig. 7, if, for instance, the sockets should be of a greater size than the fastening plate, the plate would not fit the recesses and be held as securely therein as when the wings are provided which insure the plate being securely

fastened upon the wire and at the same time insuring the fit in the socket of the insulator.

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

10 1. An insulator having a socket formed therein, a flexible plate sprung into the socket and held therein, and means on the plate for fastening a wire.

2. An insulator having a socket formed therein, the walls of the socket having recesses therein, a flexible plate having lips thereon adapted to be sprung into the socket
15 causing the lips to enter the recesses for fastening the plate to the insulator, and means on the plate for fastening a wire thereto.

20 3. An insulator having a socket formed therein, the walls of the socket having re-

cesses therein, a flexible plate having lips thereon adapted to be sprung into the socket causing the lips to enter the recesses for fastening the plate to the insulator, and a tongue formed on the plate for fastening a
25 wire thereto.

4. An insulator comprising a socket, a plate having a tongue struck therefrom, between which tongue and the plate a wire is held, the ends of the plate being bent toward
30 each other for clamping the tongue upon the wire and then springing the plate in the socket of the insulator for connecting the plate and wire to the insulator.

In testimony whereof I affix my signature
35 in the presence of two witnesses.

THOMAS H. WATKINS.

Witnesses:

W. J. CRAIN,

W. M. CHAMBERS.