(No Model.)

F. HOOVER.

INSULATOR.

No. 575,952. Patented Jan. 26, 1897.

Fig. 1.

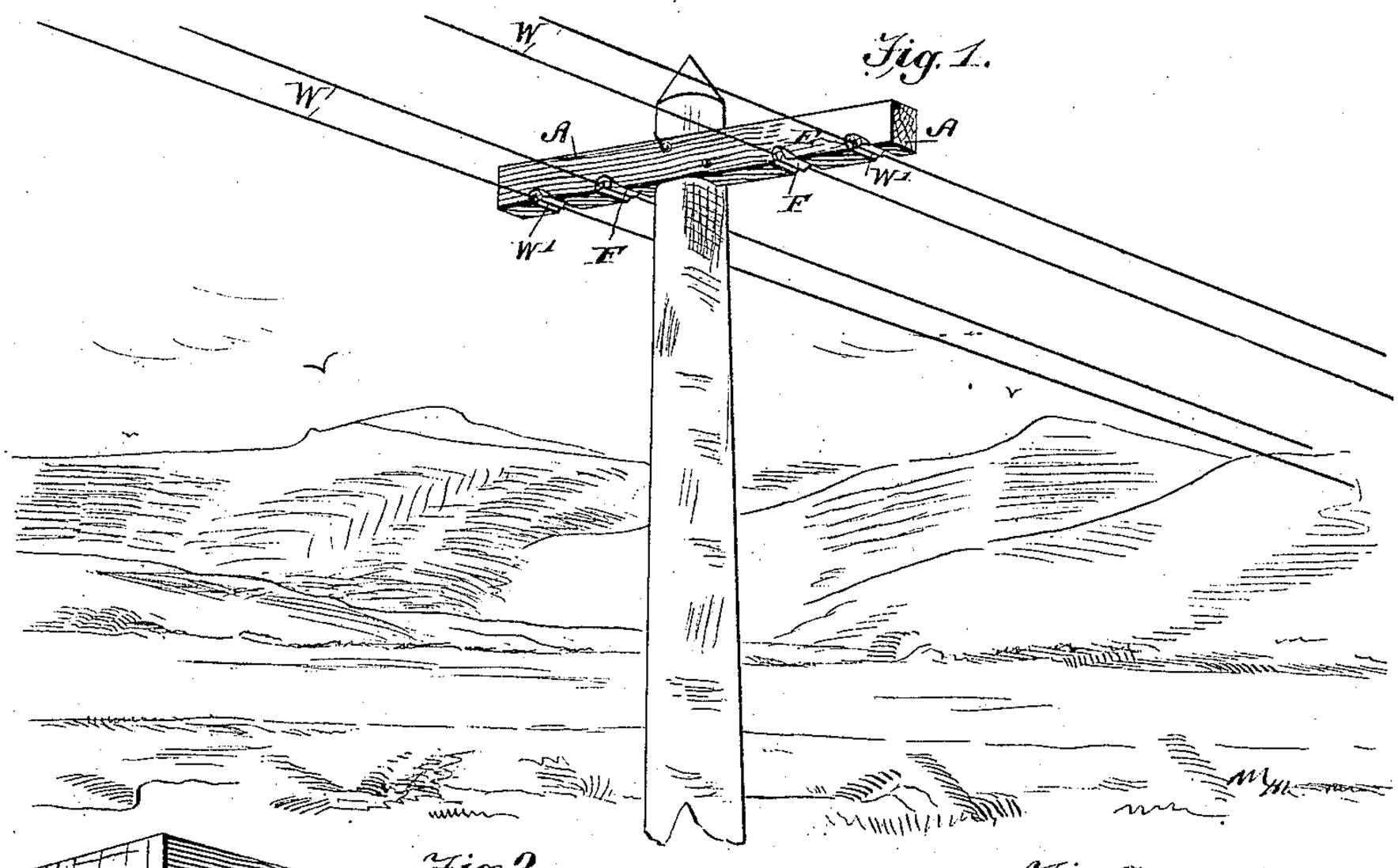


Fig. 2.

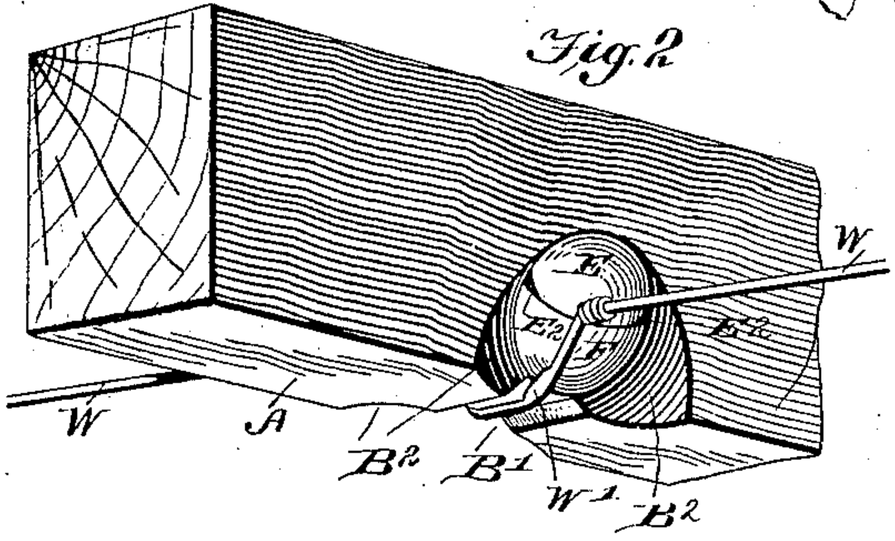


Fig. 3.

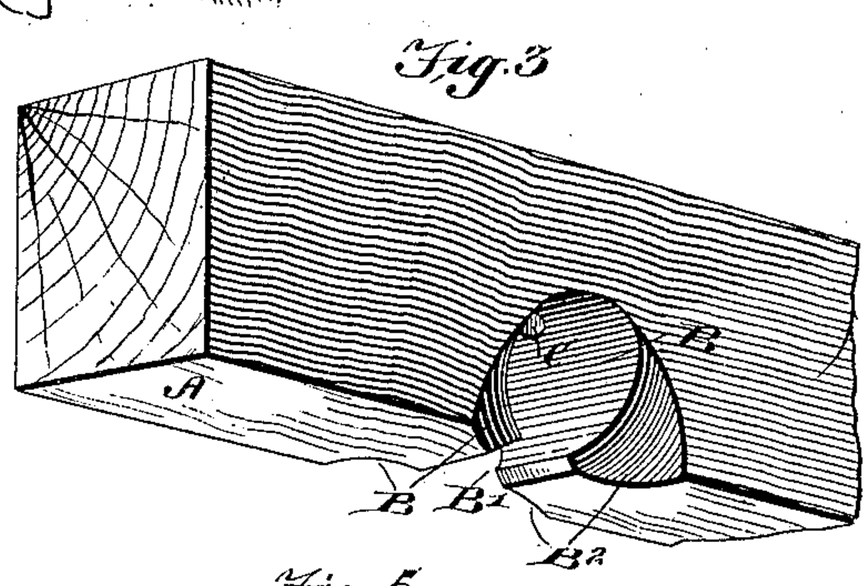


Fig. 4.

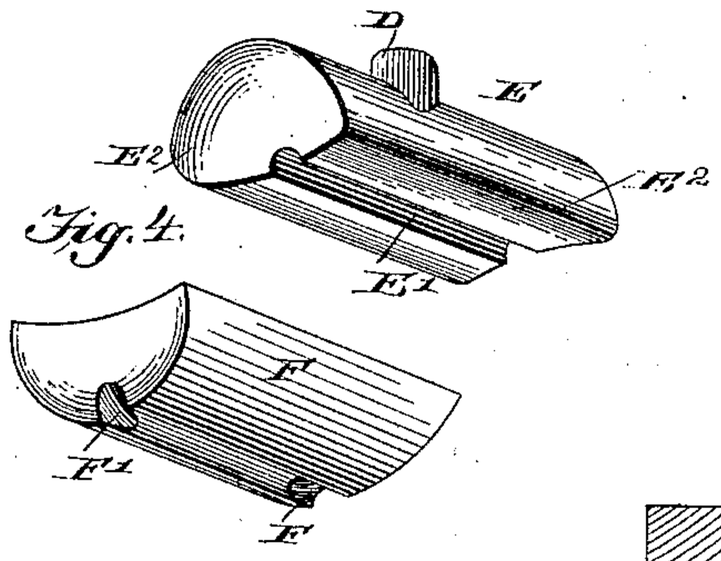


Fig. 5.

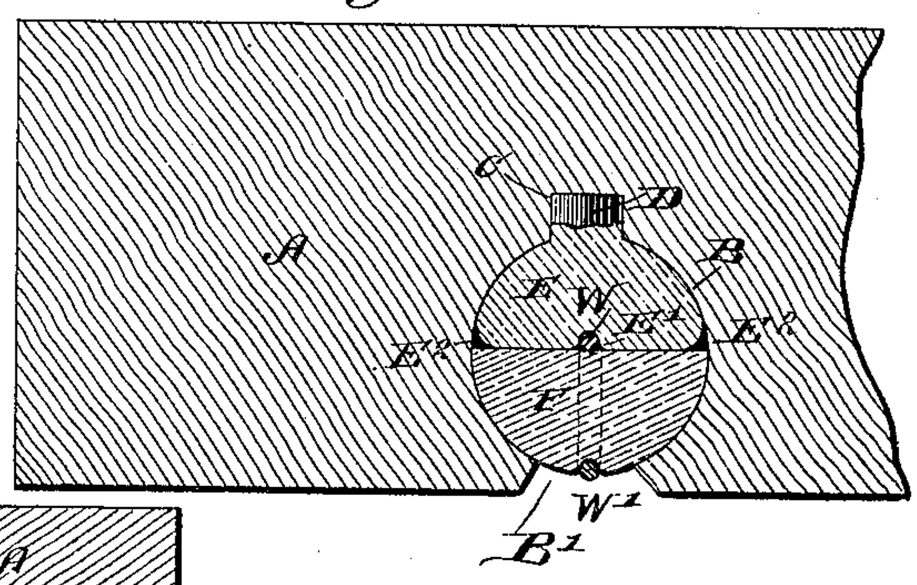
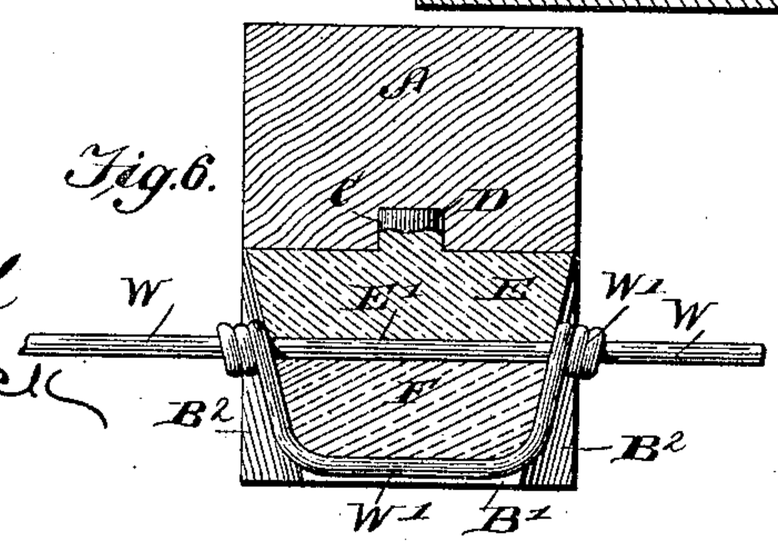


Fig. 6.



WITNESSES:

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INSULATOR.

SPECIFICATION forming part of Letters Patent No. 575,952, dated January 26, 1897.

Application filed May 19, 1896. Serial No. 592,237. (No model.)

To all whom it may concern:

Be it known that I, FRANK HOOVER, residing at Paducah, in the county of McCracken and State of Kentucky, have invented a new and Improved Insulator, of which the following is a specification.

This invention relates generally to insulators, and more particularly to an improved insulator adapted for use upon the cross-arm of an ordinary telegraph-pole or other electric-wire supports requiring the use of an insulator.

The most common method of securing the line-wires of a telegraph or telephone system consists in the employment of a cross-arm having a series of upright pins, to which are attached glass insulating-knobs, around which the fastening-wire is passed or looped in order to secure the line-wire to said glass or insulating knob. Several other modes of accomplishing this purpose have also been devised, but they have been more or less complicated and require considerable time and labor in their attachment and manipulation. Furthermore, the knobs now employed are liable to be broken and very often the upright points are broken off.

The object of my invention therefore is to provide an exceedingly cheap and simple construction of insulator, made of any insulating material, but preferably of glass, one which can be quickly and easily applied to the cross-arm and one which is not liable to become broken or get out of order.

Another object is to provide an insulator which is applicable to other devices besides the cross-arm of a telegraph-pole.

With these various objects in view my invention consists in the peculiar construction of the various parts and in their novel combination or arrangement, all of which will be fully described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a view showing the invention in use. Fig. 2 is a detail view of a portion of the cross-arm, showing the insulator secured therein. Fig. 3 is a detail view of the same portion with the insulator removed. Fig. 4 shows the insulator detached from the cross-arm. Fig. 5 is a longitudinal section of the cross-arm and insulator, and Fig. 6 is a transverse section of the same parts.

In carrying out my invention I employ a cross-arm A, which is attached to the ordinary telegraph-pole in the usual manner. This cross-arm, however, has a transverse recess or opening B, essentially circular in form and having a narrow opening B′ at the bottom. The lower edges of the cross-arm are cut out, as shown at B^2, adjacent to the circular opening or recess B. A socket C is produced centrally in the top of the recess B, the purpose of said socket being to receive the projecting lug or knob D upon the insulating-block E, said block being essentially semicircular in cross-section and adapted to fit in the top of the recess or opening. The lower face of this insulating-block E has a longitudinal groove E′, in which the line-wire W is adapted to seat. The side edges of the block E are cut away slightly at E^2 in order that the block can be lowered sufficiently below the top of the recess in order to have the lug D clear the top until it reaches the point where it is to ascend into the socket C.

The line-wire W, resting in the longitudinal groove E′, is secured therein by means of a lower securing insulating-block F, also semicircular in cross-section and adapted to be slid into the opening under the upper block and wire, the extreme lower portion of said block resting in the opening B′, said block being longitudinally grooved, as shown at F′, the purpose of which is to form a guide for the securing-wire W′, which is passed under the bottom of the block F and wrapped around the line-wire W at its ends. By this arrangement it will be impossible for the lower block to be dislocated, and as long as the lower block remains in place it will be impossible for the line-wire to become displaced.

If desired, the blocks E and F may be slightly tapering in order to bind more closely in the circular recess or opening, but this is not absolutely essential, as the adhesion between the wood and the glass will be sufficient to prevent any transverse movement of the insulating-blocks.

It will thus be seen that I provide an exceedingly cheap, simple, and durable form

of insulator, one which can be quickly and easily applied and one which is not likely to get out of order.

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

1. In an insulator, a cross arm or timber having a circular recess or opening formed with a socket in the center, of the top, a top insulating-block having a central lug adapted to fit the socket, and the bottom insulating-block adapted to fit under the upper block within the circular recess or opening, substantially as shown and described.

2. In an insulator, a cross arm or timber having a transverse circular recess or opening provided with a central socket in the top, the upper insulating-block having a projecting lug adapted to fit the socket, the lower face of said block having a longitudinal groove to receive the line-wire, and the lower insulating-block for securing the line-wire, substantially as shown and described.

3. In an insulator, the cross arm or timber having a transverse recess essentially circular in shape and open at the bottom, said recess having a central socket in the top, the upper insulating-block having a lug adapted to fit the socket, and the longitudinal groove to receive the line-wire, and the lower insulating-block adapted to bind the wire upon the upper block, substantially as shown and described.

4. The combination with the cross-arm having a transverse circular recess open at the bottom, and provided with a socket in the top, of the upper insulating-block having a projecting lug adapted to fit the socket, and the longitudinal groove adapted to receive the line-wire, the lower insulating-block adapted to fit in the recess under the bottom of the upper block, and line-wire, said block having a longitudinal groove on the bottom, and the fastening-wire, all arranged and adapted to operate, substantially as shown and described.

FRANK HOOVER.

Witnesses:
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