## W. D. GUSEMAN & E. C. BRIGHT. INSULATOR FOR TELEGRAPH WIRES.

No. 97,392.

Patented Nov. 30, 1869.

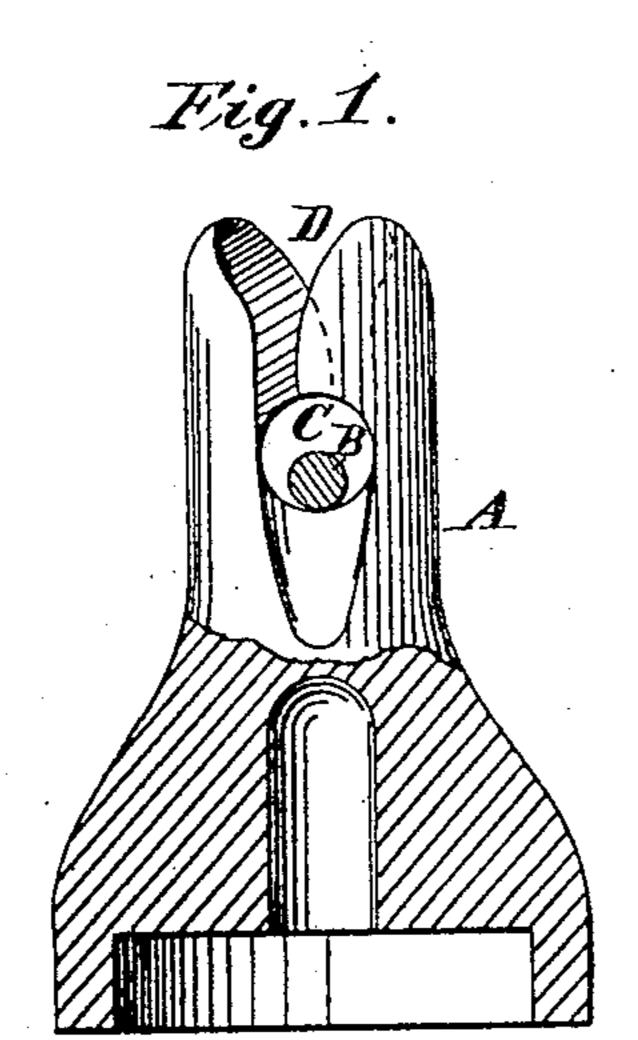
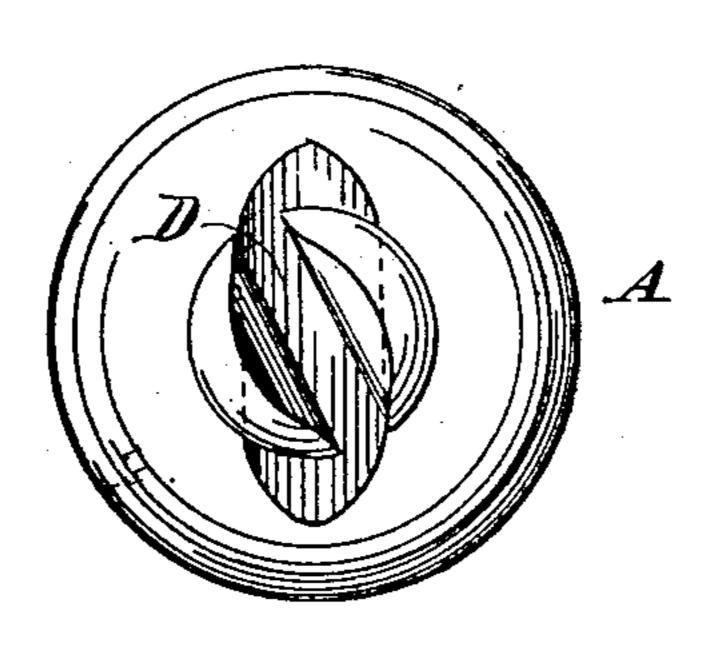


Fig. 2.



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## Anited States Patent Office.

## W. D. GUSEMAN AND E. C. BRIGHT, OF MORGANTOWN, WEST VIRGINIA

Letters Patent No. 97,392, dated November 30, 1869.

## IMPROVED INSULATOR FOR TELEGRAPH-WIRES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, W. D. GUSEMAN and E. C. BRIGHT, of Morgantown, in the county of Monongalia, and State of West Virginia, have in dan a new and useful Improvement in Telegraph- re Insulators; and we do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to a new and useful improvement in insulators for telegraph-wires, and consists in the form of the wire-aperture through the insulator, and the portion of the slot in the insulator, as hereinafter described.

In the accompanying drawing—

Figure 1 represents a side view of the insulator, partly in section.

Figure 2 is a top view.

Similar letters of reference indicate corresponding parts.

A is the insulator, which, in its outline, does not

differ materially from other insulators.

The aperture in which the wire B rests, passes directly through the insulator. The bottom of this hole. or wire-aperture, is grooved or sloped downward from the middle, or from any other point, so that water will run off from the hele, and a ridge be left for the wire to rest on.

These grooves or slopes from the hole are tapering, as indicated in the drawing, while the wire rests on a narrow ridge in the hole.

The telegraph-wire B is introduced into the aper-

ture C through a slot, D, which slot is placed at an angle with the direction of the wire-aperture, as seen

in fig. 2.

This slot D may be in the side of the insulator, instead of the apex. In either case it is placed at a sufficient angle to secure and fasten the wire in the aperture.

It will be seen that the insulator is a self-fastener for the wire, by this angularity of the slot D.

The insulator may be made of glass, or any other suitable material.

Having thus described our invention,

We claim as new, and desire to secure by Letters Patent—

1. The narrow ridge or point in the insulator, formed by the grooves, or a groove extending downward from the wire-aperture, on which ridge the wire rests, substantially as described.

2. The sloping grooves, (one or more in number.) extending from the wire-aperture, for discharging the water and forming a ridge for the wire to rest on, sub-

stantially as described.

3. The insulator A, constructed with the aperture C and slot D, arranged at an angle with each other, as shown, either with or without a cap to protect it from the weather.

The above specification of my invention, dated this , 1869. day of

W. D. GUSEMAN. E. C. BRIGHT.

Witnesses:

ALPHEUS JENKINS, JAMES M. KERN.