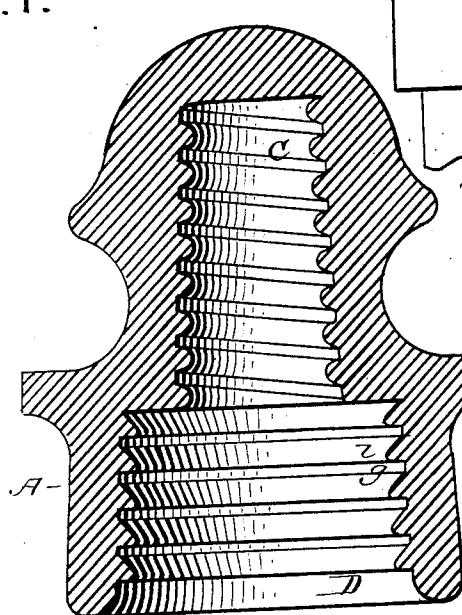
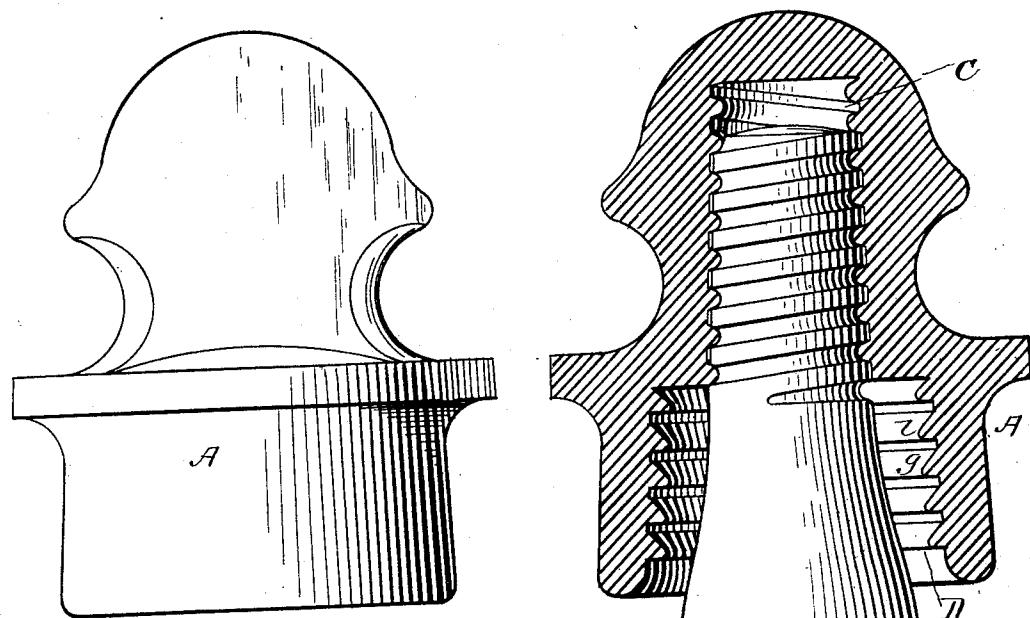


(No Model.)

S. OAKMAN.  
ELECTRIC INSULATOR.

No. 434,879.

Patented Aug. 19, 1890.



WITNESSES.

Frank G. Parker  
William Edison

INVENTOR.

Fig. 3. *Samuel Oakman*

# UNITED STATES PATENT OFFICE.

SAMUEL OAKMAN, OF MELROSE, MASSACHUSETTS.

## ELECTRIC INSULATOR.

SPECIFICATION forming part of Letters Patent No. 434,879, dated August 19, 1890.

Application filed September 13, 1889. Serial No. 323,862. (No model.)

*To all whom it may concern:*

Be it known that I, SAMUEL OAKMAN, of Melrose, in the county of Middlesex and State of Massachusetts, have invented a new and 5 useful Improvement in Telegraph-Insulators, of which the following, taken in connection with the accompanying drawings, is a specification.

The object of my invention is to so improve 10 the interior surface of an insulator that the insulating qualities may be increased, the increase of insulation being attained by corrugation of the interior surface, thereby not only increasing the surface distance from the 15 pin to the conducting-wire, but rendering the interior much better protected from becoming wet, as the ridges or lands of the corrugations protect the grooves, and thus keep at least a part of the surface dry, a consideration 20 of great importance in insulation.

The object is attained by molding the interior surface of the insulator in the manner shown in the accompanying drawings, in which—

25 Figure 1 is a perspective view of an insulator of a form adapted to receive my improvement. Fig. 2 is a view showing an insulator in vertical section and a "standard-pin" in elevation. Fig. 3 is a vertical section of my 30 insulator.

In the drawings, A represents the body of an insulator of a form adapted to receive an interior surface of my design, it being understood that I am not obliged to confine myself 35 to any particular form of insulator, the chief feature of my device being to increase insulation by adding to the surface distance that intervenes between the supporting-pin of the insulator and the conducting-wire.

B, Fig. 2, represents a pin of the "standard" 40 type, which fits the interior screw-thread C of the insulator, made in the usual manner.

The novelty of my device consists in the shape and arrangement of the annular projections formed on the interior surface of the 45 "petticoat" of the insulator. The interior surface D has formed upon it annular projections I, forming grooves g between them, as shown in Figs. 1 and 2. The upper sides of these grooves are inclined; but their under 50 sides are nearly or quite horizontal, so as to offer a complete barrier against water, it being well known that in rain-storms water is driven up under the petticoat of the insulator, thus making an electric connection between 55 the wire on the outside and the wet pin that the insulator is attached to. By forming the internal projection with flat faces at right angles to the general surface of the interior of the petticoats I offer a much better water 60 stop or barrier to the driving rain and sleet than has heretofore been made. This form of projection also provides good drip edges for water if any should get inside, so that it may drop from the edge of one projection to 65 that of the next, and thus not wet the whole interior surface.

I claim—

In an insulator, the combination of the petticoat and a series of internal annular projections having inclined tops and flat bases adapted to act as water-stops, substantially 70 as and for the purpose set forth.

SAMUEL OAKMAN.

Witnesses:

FRANK G. PARKER,  
WILLIAM EDSON.