M. P. MAXWELL.

HIGH VOLTAGE INSULATOR.

APPLICATION FILED JULY 12, 1911.

1,075,217.

Patented Oct. 7, 1913.

Fig. 1.

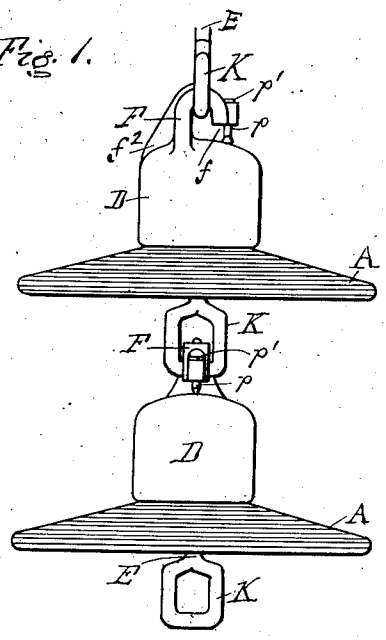


Fig. 2.

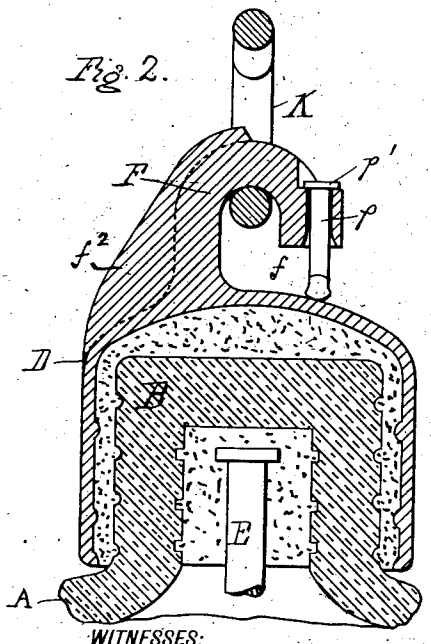
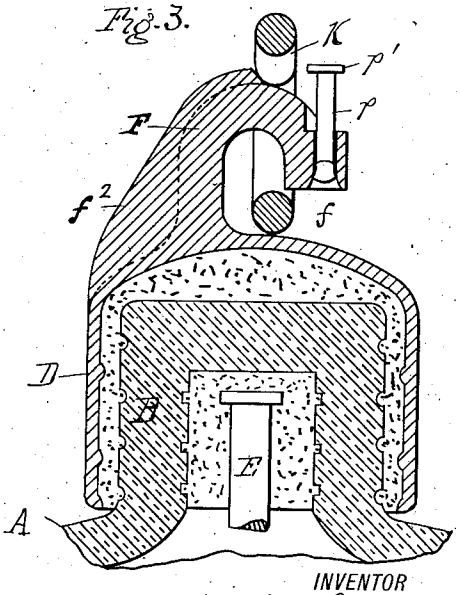


Fig. 3.



WITNESSES:

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UNITED STATES PATENT OFFICE.

MARSHALL P. MAXWELL, OF BROOKLYN, NEW YORK.

HIGH-VOLTAGE INSULATOR.

1,075,217. Specification of Letters Patent. Patented Oct. 7, 1913.

Application filed July 12, 1911. Serial No. 638,122.

To all whom it may concern:

Be it known that I, MARSHALL P. MAXWELL, a citizen of the United States of America, and residing in the borough of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in High-Voltage Insulators, of which the following is a specification.

My invention relates to the construction of insulators for high voltage transmission lines and more particularly insulators which are adapted for the connection or suspension of the electrical conductors to or from the supporting posts or towers. My improvements are also applicable to strain insulators.

The main object of my invention is to so construct a series of insulator units that they can be quickly and easily coupled or uncoupled for repair purposes, without danger of their becoming accidentally uncoupled, and yet allowing a sufficient freedom of motion between the units.

In the accompanying drawings, Figure 1 is a side elevation showing two united insulator units; Fig. 2 is a vertical section, drawn to a larger scale; Fig. 3 is a similar section showing the manner of uncoupling two such units.

Each insulator unit comprises an insulating body A of any desired shape, provided with a hollow cup-shaped central part B, into which is cemented the enlarged head and part of the shank of a coupling rod E, while onto the outside of this cup-shaped part of the insulator is cemented or otherwise secured a metal cap D. In the drawing I have shown the circular insulating body as with a single flange or petticoat, but the shape and the number of the petticoats may be varied as found desirable.

On the top of the metal cap D, I provide a substantial hook F, which is preferably cast in one with the cap, this hook being open at the side *f* for the introduction of the stirrup K on the outer end of the coupling rod E, of the next insulator unit. To prevent the stirrup K from escaping from the hook, I provide a latch pin *p* sliding in a vertical opening in the end of the hook F, and normally closing the side opening *f* by gravity. This pin has a head p^1, by which it may be grasped by the fingers to lift the latch pin, and after it has been put into the opening in the hook F, the nose of the pin is preferably expanded so that the pin cannot be wholly withdrawn from the hook. But whenever it is desired to uncouple a unit, the pin *p* can be raised as shown in Fig. 3, and the coupling rod E of one section is drawn toward the cap of the next section, and then the stirrup slipped out of the hook laterally as indicated in Fig. 3. The back of the hook F may be cast, with a strengthening pin f^2.

I claim as my invention:

An insulator unit, comprising a metal cap, an insulator secured therein, said cap having a vertically-disposed, inverted hook-member on its upper end open at one side, the inverted portion of said hook-member having an aperture substantially vertically disposed over the cap, and a gravity-operating pin mounted in the aperture of said vertical hook-member and slidable toward and from the exterior of the cap and adapted to close the open side of said hook-member.

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

MARSHALL P. MAXWELL.

Witnesses:

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