

(No Model.)

L. B. GRAY.  
INSULATOR.

No. 514,221.

Patented Feb. 6, 1894.

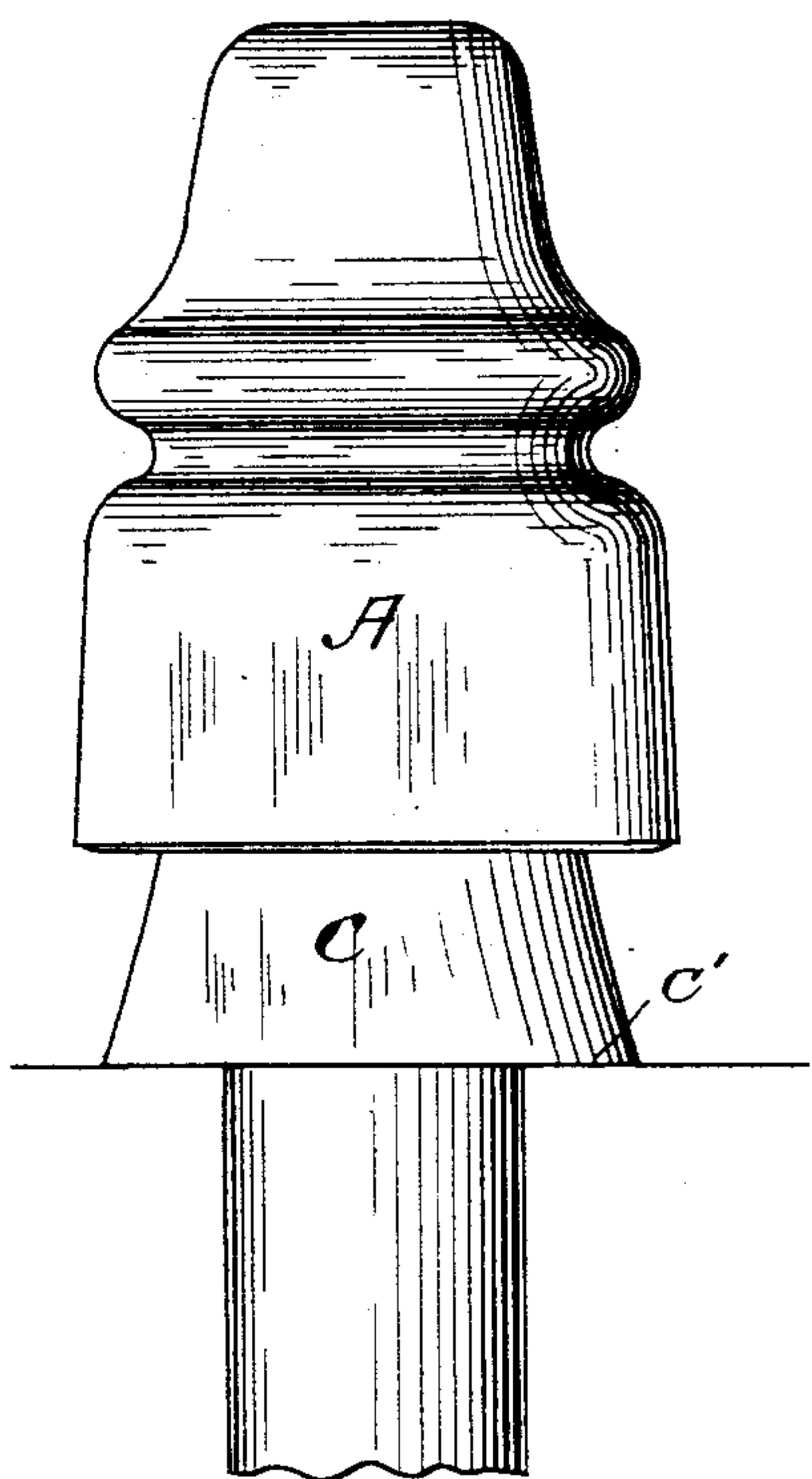


Fig. 1.

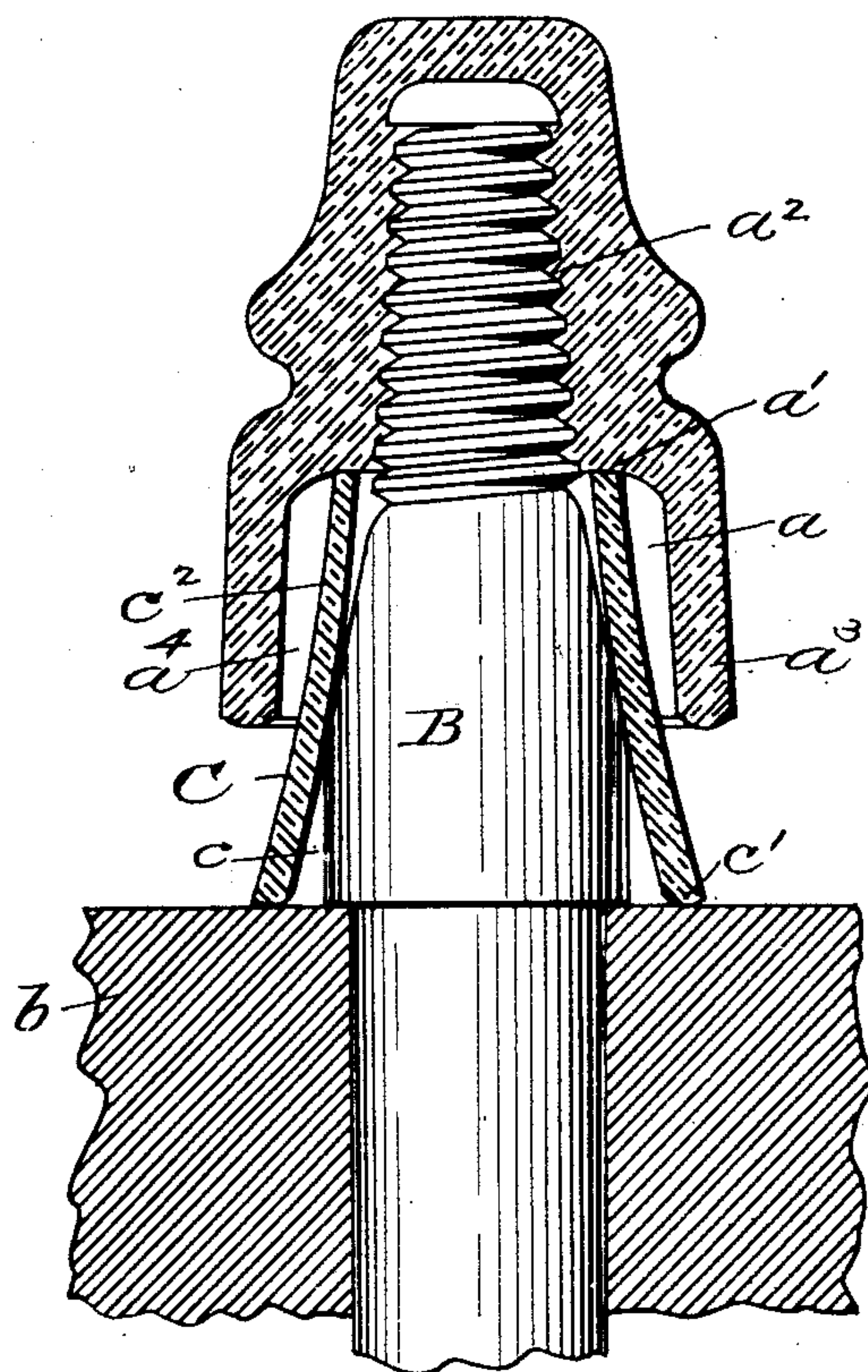


Fig. 2.

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# UNITED STATES PATENT OFFICE.

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## INSULATOR.

SPECIFICATION forming part of Letters Patent No. 514,221, dated February 6, 1894.

Application filed June 22, 1893. Serial No. 478,448. (No model.)

*To all whom it may concern:*

Be it known that I, LAWRENCE B. GRAY, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Insulators, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to an insulator especially designed for supporting wires carrying current of high tension, and which comprises the insulator proper adapted to be secured to a supporting peg by being screwed upon it, and a supplemental or auxiliary insulator which surrounds the peg and bears upon the cross-bar or other support to which the peg is attached and which is held against said bar or support, by the insulator proper or the wire support, the said main insulator and auxiliary insulator being so constructed that the main one fits over in part the supplemental one, and when screwed upon the peg to bear upon its upper surface and clamp it against the pin, bar or support. Such an insulator is cheaply made, and very much increases the efficiency of the insulation.

In the drawings,—Figure 1 is a view in plan of my improved type of insulator, and Fig. 2 is a view in vertical section of the same.

A is the main insulator. It is of ordinary construction, excepting as hereinafter specified, and has the interior threaded hole by which it is adapted to be screwed to the threaded end of the holding peg B. The peg is carried by a cross-bar *b* or any other suitable support. The main insulator has the relatively large cavity *a*, extending inward from its under surface, and from the inner end *a'* of which the threaded hole *a<sup>2</sup>* extends.

C is a supplemental or auxiliary insulating sleeve or device. It preferably is made flaring or bell-shaped and of glass or other suitable insulating material. It has the central hole *c* to freely receive the pin B. Its lower edge *c'* rests upon the pin support *b'* and its upper part *c<sup>2</sup>* is of a size to enter the recess *a'* of the main insulator and permit the shoul-

der *a'* thereof to come in contact with its upper end *c<sup>3</sup>* and bear upon the same, to firmly clamp it against the pin support.

In use, the inner section C is slipped upon the pin B and the main section screwed down upon the pin until it has partially covered the inner section and its shoulder *a'* brought into contact with the upper surface of the inner section with sufficient stress to rigidly clamp it against the pin support. This construction practically covers the pin with insulation and increases the efficiency of the insulator in that it reduces the extent of loss from moisture. It will be observed that when the two parts are together, the section *a<sup>3</sup>* of the main insulator forms a petticoat about the upper portion of the lower section C, there preferably being a cavity or space *a<sup>4</sup>* between the petticoat and the inner section.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In an insulator, the combination of the peg B having the threaded end and its support, the main section A of an insulator having the thread to engage the threaded end of the peg, and a supplemental insulating section C clamped or held by the main section when screwed upon the peg between it and the peg support, as and for the purposes described.

2. In an insulator, the main section A, having the petticoat *a<sup>3</sup>*, and a shoulder *a'* with the supplemental section C, a section of which enters the recess formed by the petticoat and abuts against the shoulder *a'* and the cavity *a<sup>4</sup>*, as and for the purposes described.

3. The insulator, having the main section A, provided with a petticoat *a<sup>3</sup>*, and the supplemental section C, a portion of which enters the cavity of the main section formed by the petticoat *a<sup>3</sup>* and the sides of which flare outward below the cavity, substantially as described.

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Witnesses:

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