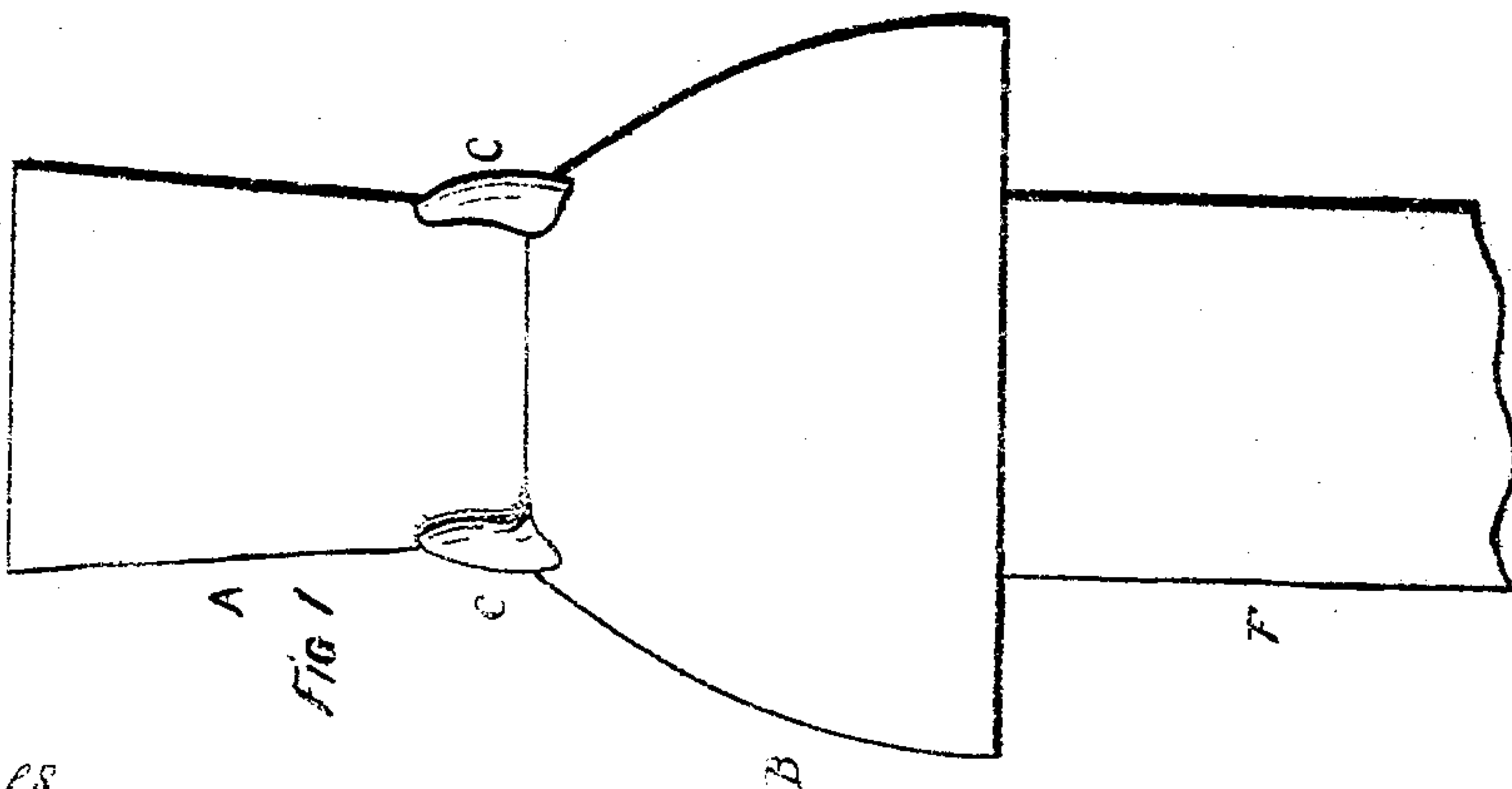
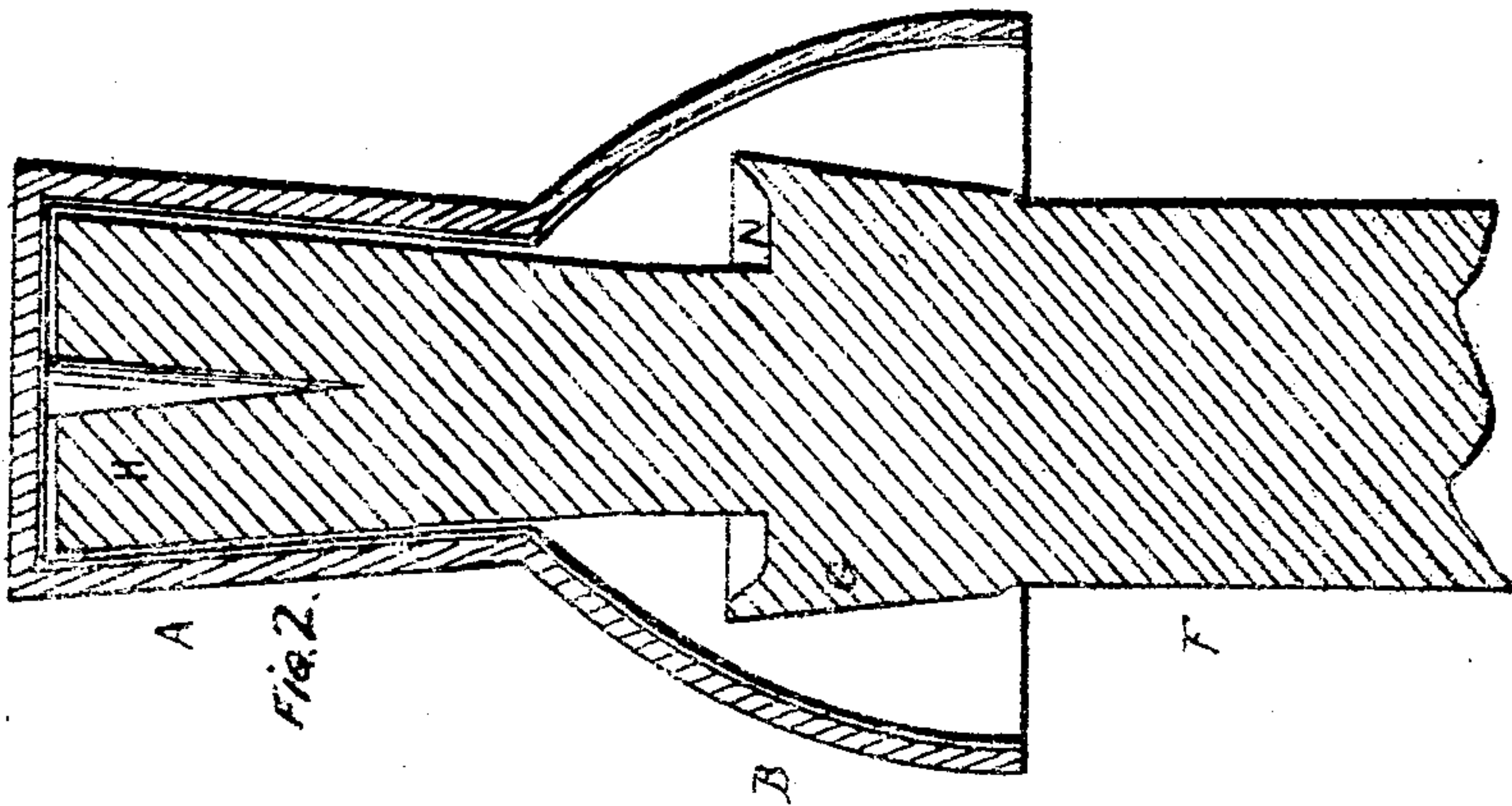


M. L. Wood.

Telegraph Insulator.

N^o 71564

Patented Nov. 26, 1867.



Witnesses

Inventor

J. E. Dennis
Walter Hinckman

Merritt L. Wood
By his Atty. J. Dennis jr

United States Patent Office.

MERRITT L. WOOD, OF ITHACA, NEW YORK, ASSIGNOR TO HIMSELF,
SAMUEL PORTER, AND L. M. MONROE.

Letters Patent No. 71,564, dated November 26, 1867.

IMPROVEMENT IN TELEGRAPH-INSULATORS.

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

TO ALL WHOM IT MAY CONCERN:

Be it known that I, MERRITT L. WOOD, of Ithaca, Tompkins county, State of New York, have invented certain new and useful Improvements in Telegraphic Insulators; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvements without further invention or experiment.

The nature of my invention consists in a conical-shaped iron case, made largest at the upper end, to be applied to a wooden standard, provided with a wedge, which is forced in by the case when it is forced on to the standard to spread the end of the standard into the upper end of the case, and hold it firmly on the standard, and in making a groove around the standard that supports the case or insulator, which may be filled with paraffine or other suitable material; and in preparing the standard with paraffine or other insulating substance before the insulator is applied; and in rib or collar on the wooden standard under the base of the insulator. In the accompanying drawings—

Figure 1 is an elevation of my improved insulator on a standard.

Figure 2 is a section of the insulator with a standard in it.

In these drawings, A is the top of the insulator, to which the standard or support is fitted, and B the enlarged base, both of which may be made of cast iron or other metal, in the form shown, or in such other form as will answer the purpose. The top, A, is about one and one-half inch in diameter at the top, and one-fourth of an inch smaller where it joins the base B, which swells out somewhat in a hemispherical form to two and one-half inches in diameter. The heights of the top and base are about two inches each, making the insulator about four inches long. The metal may be about one-eighth of an inch, or a little less, in thickness. I make two hooks or horns, C C, on the base, just below where it joins the top, and curve the horns in towards the top, as shown in the drawing, and arrange them in such a position that they will press the wire D against the insulator, at or near where the top joins the base, so that the wire cannot be raised above the points of the horns without being bent considerably, so that when the wire is put in, and drawn as straight as the horns will permit, it will be held firmly by the insulator. This insulator is coated or lined with porcelain, flint, felspar, glass, or other insulating substance, on the inside, in the mode well known and practised by furnace-men, to insulate it from the standard F, which is made of wood, in the form shown in the drawing, with the upper end fitted to the top A, and an enlargement, G, under the base B, covered and protected by it. The top of this enlargement is hollowed out to form a circular trough around the standard F, which I fill with paraffine, rosin, or some other suitable material impervious to water, and which will prevent the rain which gets on the standard from ascending the wood and soaking up into the standard F so freely as it might do, without the paraffine. The whole of the upper end of the standard may be soaked in paraffine before the insulator is applied, down a little below the trough, if preferred that way. Before the insulator is put on the standard, it is sawed or split, and the wedge H entered, so that as the insulator is driven down or forced on, the wedge is forced in, which spreads the end of the standard in the insulator, which is made largest on the inside at the upper end, so as to be held firmly on the standard by the wedge. My improved insulator will be stronger if made of cast iron, rendered malleable in the manner well known and practised.

I claim, in combination with the conical-shaped iron insulator A, the wedge H, inserted in the top of the standard or support, in the manner and for the purpose as set forth.

I also claim the groove N around the standard F, for holding paraffine or other suitable material, for the purpose set forth.

Witnesses:

FRANCIS M. FINCH,
WALTER C. CURRAN.

MERRITT L. WOOD.