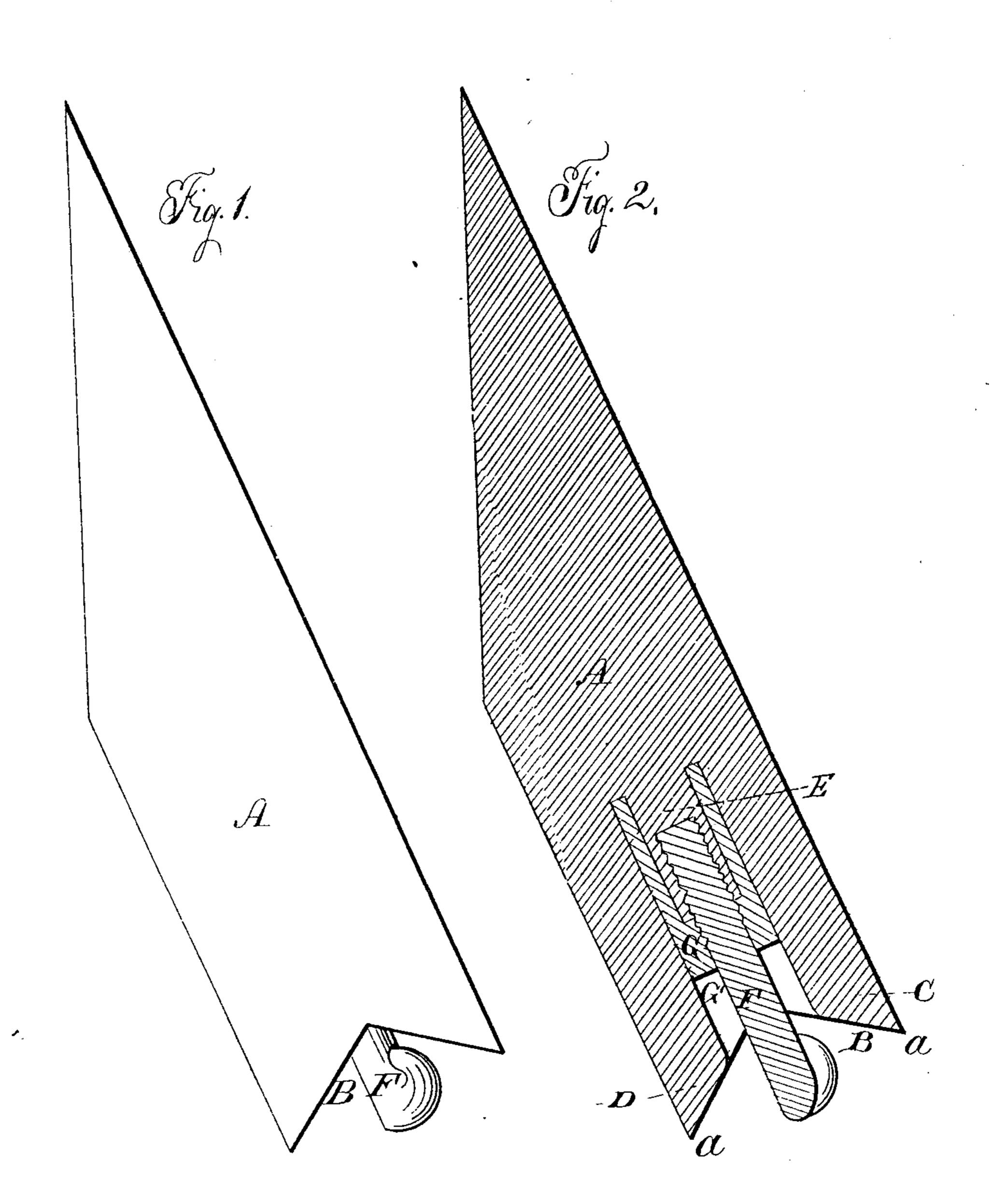
## A. H. CASTLE.

Telegraph Insulator.

No. 79,951.

Patented July 14, 1868.



Witnesses:

Jeff Buradge

Inventor.

A Castle

N. PETERS PHOTO-LITHOGRAPH WASHINGTON D. C.

## United States Patent Office.

A. H. CASTLE, OF ANN ARBOR, MICHIGAN.

## IMPROVEMENT IN INSULATORS.

Specification forming part of Letters Patent No. 79,951, dated July 14, 1868.

To all whom it may concern:

Be it known that I, A. H. CASTLE, of Ann Arbor, in the county of Washtenaw and State of Michigan, have invented certain new and useful Improvements in Insulators; and I do hereby declare that the following is a full and complete description of the same, reference being made to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a side view of the insulator. Fig. 2 is a vertical section.

Like letters refer to like parts.

In Fig.1 A represents a bracket, in the lower end of which is cut a deep angular notch, B, thereby producing an overhanging projection,

C, and an under projecting lip, D.

E, Fig. 2, is a central core, in which is secured the hooks F for supporting the wire. The core referred to and the bracket are of one entire piece, the wood, by means of an appropriate implement, being cut out from around the center, leaving it as a core-connection to the body of the bracket, as seen at E, and into which the hook is inserted, as before said. The space or chamber between the core and the walls of the bracket is then filled with any insulating material, G, to within a short distance of the end, which is left unfilled, thereby leaving a free space between the stem of the hook and walls, as shown at G'.

This insulator is complete in its purpose. The overhanging projection C, the depth and an-

gular character of the notch, and the free space G', effectually prevent the rain from running down onto the hook, so that no escapes can take place in consequence of the presence of water, as the rain runs down and off from the salient point a remote from the hook and beyond the wire. Also, the core forming a part of the bracket, making of the two one entire piece, is much stronger, and not liable to be set to one side of the chamber, as are the cores when made separately and inserted into the hole, thereby bringing the core and hook in contact with the walls of the chamber. It is also much easier made, as the operation of boring the hole or chamber at the same time forms the core.

I am aware that insulators have been made with central cores, into which the hook is screwed, but these cores are made separately from the bracket, a hole being bored in the end of the same and the core introduced and therein insulated. This I do not claim.

What I claim as my improvement, and de-

sire to secure by Letters Patent, is—

The insulating-bracket A, with a core, E, formed solidly with said bracket, and the angular transverse notch B, by which the hook is covered by the projections CD, in the manner as and for the purpose specified.

A. H. CASTLE.

Witnesses:

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E. D. KINNE, Wm. F. Roth.