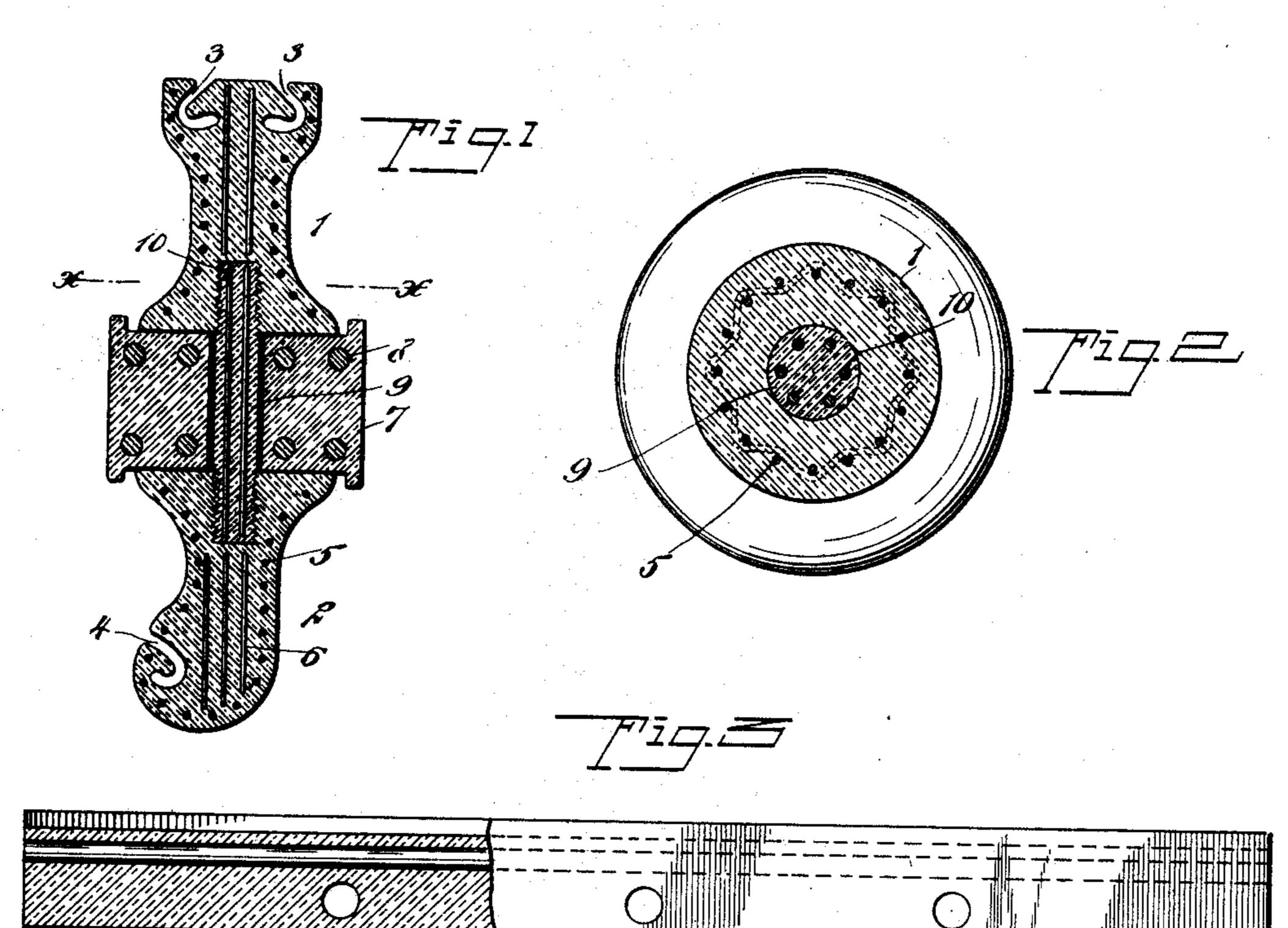
## H. W. WOOLBERT. INSULATOR.

(Application filed Aug. 27, 1900.)

(No Model.)



WITNESSES:

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INVENTOR
Honry W. Woolbert

BY
MUNICIPALITY
ATTORNEYS

## United States Patent Office.

HENRY W. WOOLBERT, OF SMETHPORT, PENNSYLVANIA.

## INSULATOR.

SPECIFICATION forming part of Letters Patent No. 666,586, dated January 22, 1901.

Application filed August 27, 1900. Serial No. 28,148. (No model.)

To all whom it may concern:

Be it known that I, HENRY W. WOOLBERT, a citizen of the United States, and a resident of Smethport, in the county of McKean and State of Pennsylvania, have invented a new and Improved Insulator, of which the following is a full, clear, and exact description.

This invention relates to improvements in insulators for carrying or supporting electric

to wires.

Insulators made of glass or similar fragile material become useless or fall apart when

broken and drop the wire.

It is the object of my invention to obviate this difficulty by embodying in the insulator metal or similar supports which will hold the parts of the insulator together should it be broken by a stone or otherwise.

I will describe an insulator embodying my 20 invention and then point out the novel fea-

tures in the appended claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate cate corresponding parts in all the figures.

Figure 1 is a longitudinal section of an insulator embodying my invention. Fig. 2 is a section on the line x x of Fig. 1. Fig. 3 is a partial section and partial side view of a

30 supporting-arm employed.

The insulator shown in Figs. 1 and 2 of the drawings comprises the blocks or heads 1 2, consisting of glass or similar material. One of these heads is provided with two incut openings 3 for receiving two wires, while the other head is provided with a single incut opening 4 for receiving a single wire. Embedded in each block or head is a woven-wire frame 5. It is to be understood, however, that instead of the woven wire perforated metal may be employed. Also in each block or head are longitudinally-disposed wires or

metal strips 6. The blocks or heads are connected to an arm 7, of glass or similar material, and in this arm 7 sustaining-wires or 45 metal strips 8 are placed. The blocks or heads are shown as connected to the arm by means of a glass bolt 9, having screw-thread engagement with the blocks or heads, and through this glass bolt metal strips or wires 50 10 are passed. By this construction the metal supporting devices are fully insulated from the supported electric wire, and obviously should any of the glass portions be broken or cracked by the contact of a stone or other 55 device the parts will be held firmly together by said supporting devices.

Having thus described my invention, I claim as new and desire to secure by Letters

Patent—

1. An insulator, consisting of fragile material, having two incut openings at one end to receive wires, and a metal support embedded in the insulator, substantially as specified.

2. An insulator, consisting of fragile material, having two incut openings at one end to receive wires, and an incut opening at its opposite end for receiving a wire, and a metal support embedded in the insulator, substan-70

tially as specified.

3. An insulator, consisting of glass or the like, a wire support embedded in said glass or the like, an arm of glass or the like for supporting the insulator, and metal wires or 75 rods embedded in said arm, substantially as specified.

In testimony whereof I have signed my name to this specification in the presence of

HENRY W. WOOLBERT.

two subscribing witnesses.

Witnesses:

JOHN G. TODD, JOSEPH W. HENRY.