

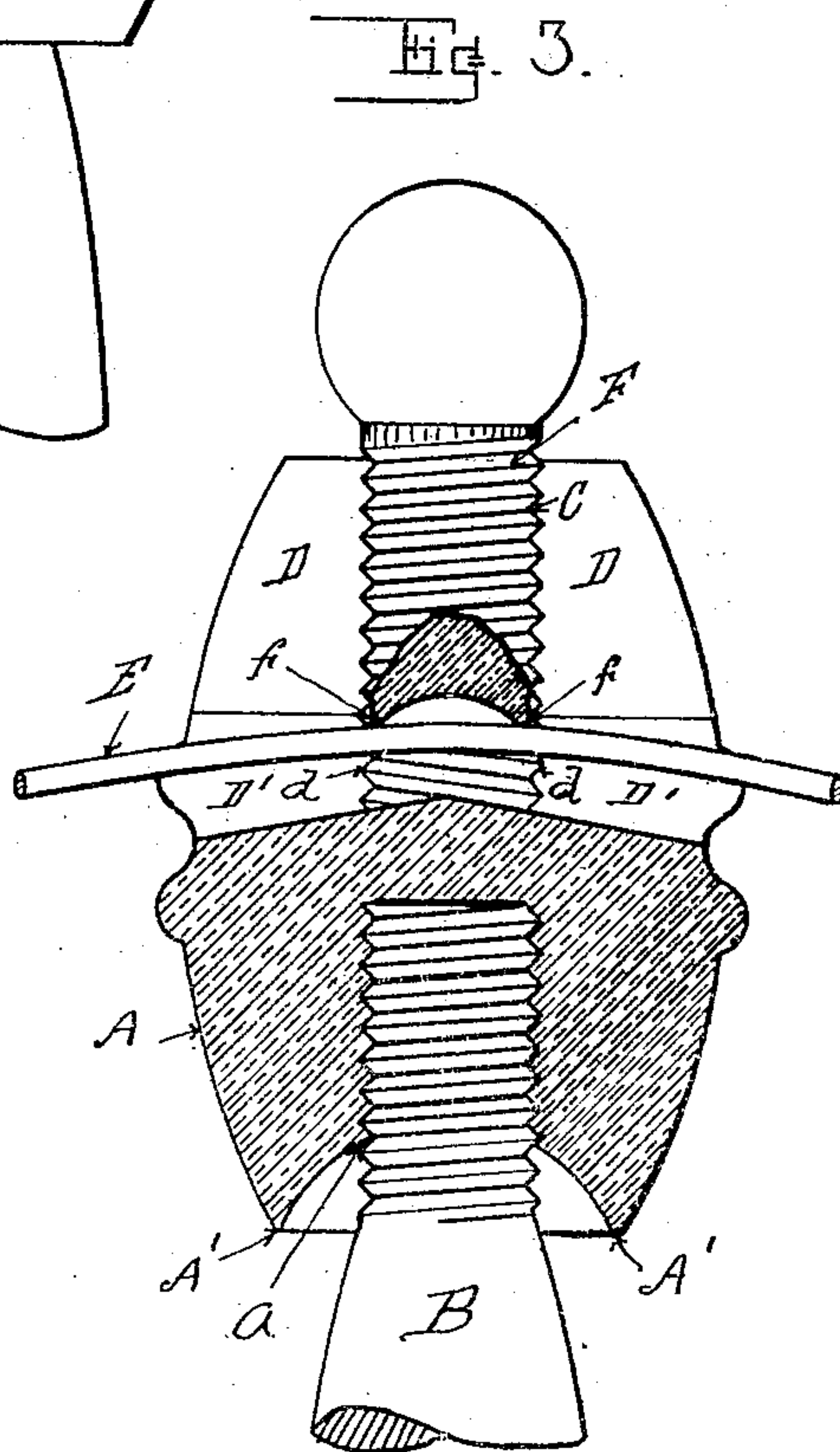
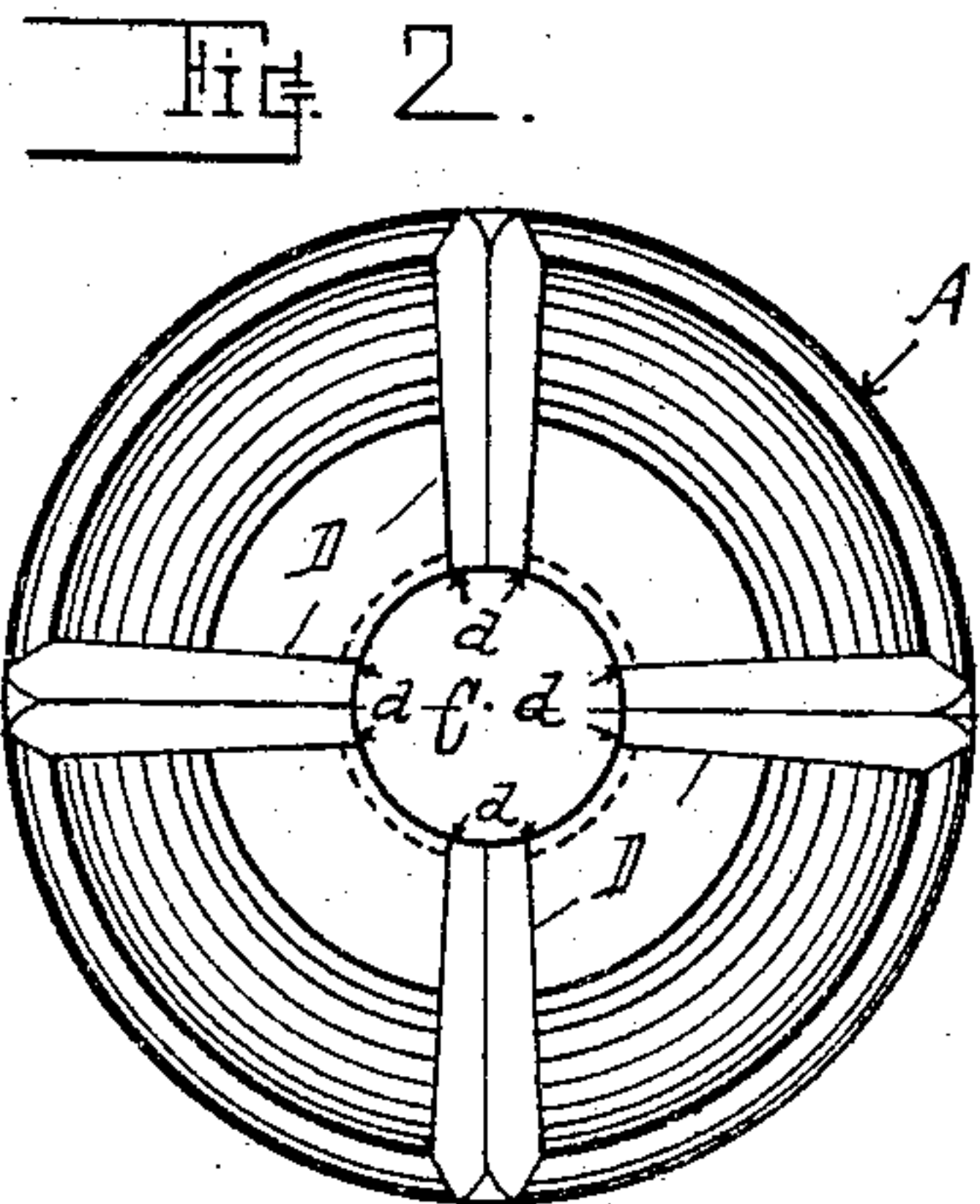
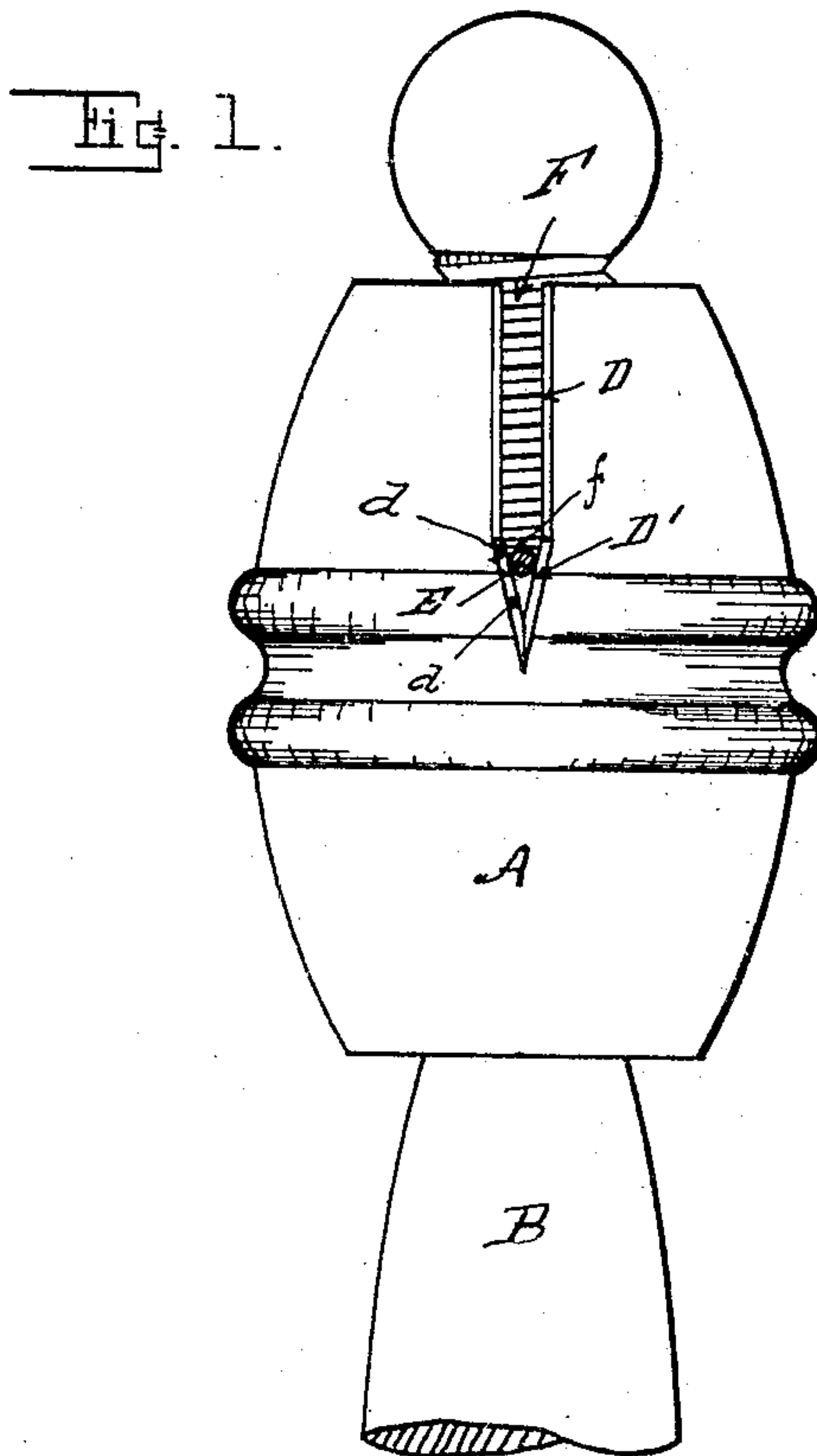
No. 770,962.

PATENTED SEPT. 27, 1904.

J. F. GILL.
INSULATOR.

APPLICATION FILED JUNE 2, 1904.

NO MODEL.



Witnesses.
Florence Stockert.
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UNITED STATES PATENT OFFICE.

JACOB F. GILL, OF NORTHEAST, PENNSYLVANIA.

INSULATOR.

SPECIFICATION forming part of Letters Patent No. 770,962, dated September 27, 1904.

Application filed June 2, 1904. Serial No. 210,855. (No model.)

To all whom it may concern:

Be it known that I, JACOB F. GILL, a subject of the King of Great Britain, residing at Northeast, in the county of Erie and State of Pennsylvania, have invented certain new and useful Improvements in Insulators; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, forming part of this specification.

My invention relates to improvements in insulators for telegraph, telephone, and other electric line-wires; and it consists, substantially, of a glass insulator of such construction that a line-wire can be firmly secured therein without the use of the tie-wires or other appliances.

The features of my invention are hereinafter fully set forth and explained, and illustrated in the accompanying drawings, in which—

Figure 1 is a view in elevation of my improved insulator. Fig. 2 is a top or plan view of the same. Fig. 3 is a vertical central section of the same.

In the drawings illustrating my invention, A is an insulator, preferably made of glass or other non-conducting substance. The lower portion of the insulator A is provided with a screw-threaded socket *a*, adapted to engage a screw-threaded insulator-pin B. The lower end of the insulator A is also provided with an overhanging edge A' to protect the pin B from water. The upper portion of the insulator A is provided with a central screw-threaded opening C, and radiating therefrom are vertical slots D, the lower portions D' of which are V-shaped, which V-shaped parts D' of the slots D are considerably narrower where they join the central opening C than they are at the periphery of the insulator, so that at that point they form sharp gripping edges *d*, which when a wire E is placed therein the edges *d* of the V-shaped parts D' of the

slots D grip the wire strongly at each side of the screw-threaded opening C in the insulator.

In the screw-threaded opening C, I place a screw-threaded plug F, having its lower end preferably concaved, so as to provide a sharp peripheral edge *f*, which when the plug F is screwed down upon a wire E operates not only to force it down between the sharp edges *d* of the V-shaped part D' of the slots, but the sharp peripheral edge *f* of the plug also bites sharply into the wire E, so that the wire E is firmly held against any movement in the slots D of the insulator. The bottom of the V-shaped portion D' of the slots D slopes downward from the bottom of the opening C, so that water cannot accumulate and freeze therein.

I am aware that slots have been heretofore made in insulators and that screw-threaded plugs and screw-threaded caps have also been used to force a wire down into the slots; but I am not aware that the slots have been made of such shape as to grip a wire placed therein as mine does, nor am I aware of a screw-plug having been made to engage a wire as mine does, so as to produce the results I get from an insulator constructed as hereinbefore described. Therefore I do not claim, broadly, slots in the insulator; but

What I do claim is—

An insulator consisting substantially of a body having a central vertical screw-threaded opening therein, with vertical slots radiating therefrom, the lower parts of which slots are V-shaped and narrower at their junction with the central opening than at the periphery of the insulator, and a screw-threaded plug fitting said central screw-threaded opening, having its lower end concaved, substantially as and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

JACOB F. GILL.

Witnesses:

H. M. STURGEON,
G. J. MEAD.