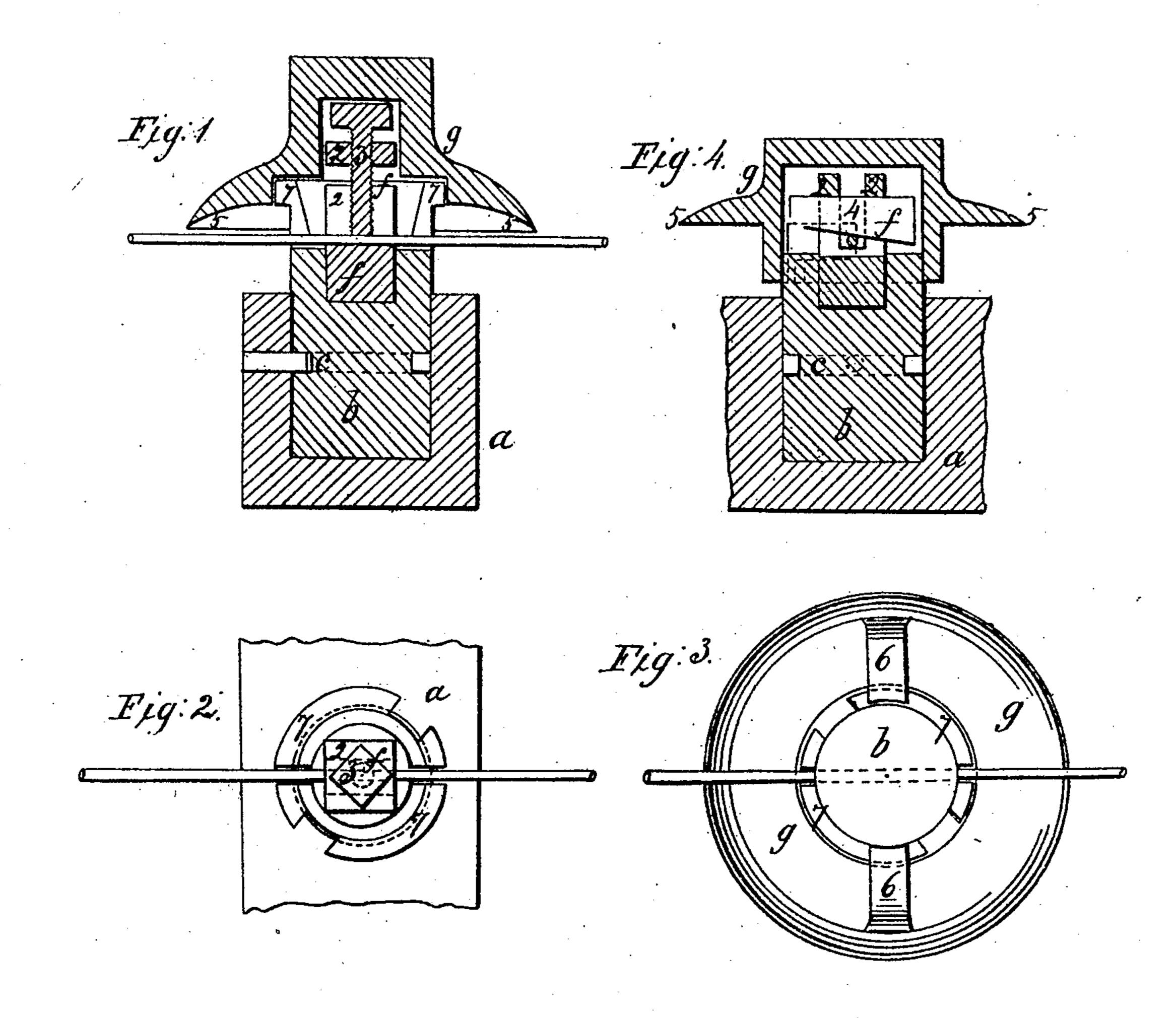
## S. L. FINLEY.

## Telegraph Insulator.

No. 99,873.

Patented Feb 15, 1870.



Witnesses; Geo. Draeker Chart-Chnick Inventor; I L. Tinley for L. W. Ferrell

## Anited States Patent Office.

STEPHEN L. FINLEY, OF MORRISANIA, NEW YORK, ASSIGNOR TO HIMSELF AND MARSHALL LEFFERTS, OF NEW YORK CITY.

Letters Patent No. 99,873, dated February 15, 1870; antedated February 3, 1870.

## IMPROVEMENT IN INSULATORS FOR TELEGRAPHS.

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, STEPHEN L. FINLEY, of Morrisania, in the county of Westchester, and State of New York, have invented, made, and applied to use a certain new and useful Improvement in Insulators for Telegraph Wires; and I do hereby declare the following to be a full, clear, and exact description of the said invention, reference being had to the annexed drawing, making part of this specification, wherein—

Figure 1 is a vertical section of my said insulator

complete.

Figure 2 is a plan of the same with the cap removed.

Figure 3 is an inverted plan of the insulator.

Figure 4 is a section of a modification of the clamping device.

Similar marks of reference denote the same parts. Many characters of insulators have been made with reference to preventing the insulator becoming wet and thereby conducting off the electricity, but it is found that the spiders' webs and the nests and filaments formed by insects are liable to become conductors when wet, and largely interfere with the successful working of the telegraph line.

The object of this invention is to cover up the point of insulation so that it is effectually excluded from moisture, and so that there will be but little change for the accumulation of spider and other webs.

The nature of my said invention consists in a non-conducting base to a clamp that receives and holds the wire, in combination with a cap that surrounds the upper end of the non-conductor and encloses the clamping mechanism, so that the insulator is inclosed and kept dry and free from extraneous substances at the point of insulation.

In the drawing—

a represents a portion of the telegraph pole or the cross-arm thereof, in the upper surface of which a hole is bored of a size and shape to receive the insulator base b, that is formed of glass or any suitable insulating material, and the same may be secured by a pin or dowel driven transversely of the arm a, and into the neck or groove c.

The upper part of the insulator b is formed with a cavity, into which the clamping mechanism f is introduced, or the insulator b may be cast or otherwise formed around the shank or tang of this clamping mechanism f.

The clamping mechanism f consists of a jaw, 2, and screw 3, as shown in figs. 1 and 2, or a transverse key may be inserted through the jaws and driven up to clamp the wire, as seen at 4, fig. 4, or any other suitable means may be employed in the upper part of the insulator b to clamp the wire firmly.

The cap g is formed with an inclined upper surface, with a dripping edge, 5, and with a cavity in the middle part of the under side to set over the clamping mechanism f and pass down around the upper end of the insulator b, so as to inclose the clamping mechanism and the point of insulation, viz: the upper portion of the base b.

The cap g may be secured upon the insulator b by projections 6, that pass through notches in the flange 7 of the insulator b, and then are partially rotated beneath said flange 7 by turning the cap, (see fig. 3,) or the cap may be provided with a pendent cylindrical flange to surround the upper end of the insulator b, with bayonet-lock slots to set over the wire. (See fig. 4.)

This construction of insulator enables me to keep the point of insulation dry and free from the accumulation of webs and other extraneous matters.

I do not claim a cap above the clamp or hook that receives the telegraph wire, nor attaching such cap by lugs and slots.

What I claim, and desire to secured to me by Letters Patent, is—

The cap g, sitting down over the insulator b, and enclosing the clamping mechanism f that secures the wire to the insulator b, substantially as set forth.

In witness whereof, I have hereunto set my signature, this 11th day of July, A. D. 1868.

S. L. FINLEY.

Witnesses:

CHAS. H. SMITH, GEO. T. PINCKNEY.