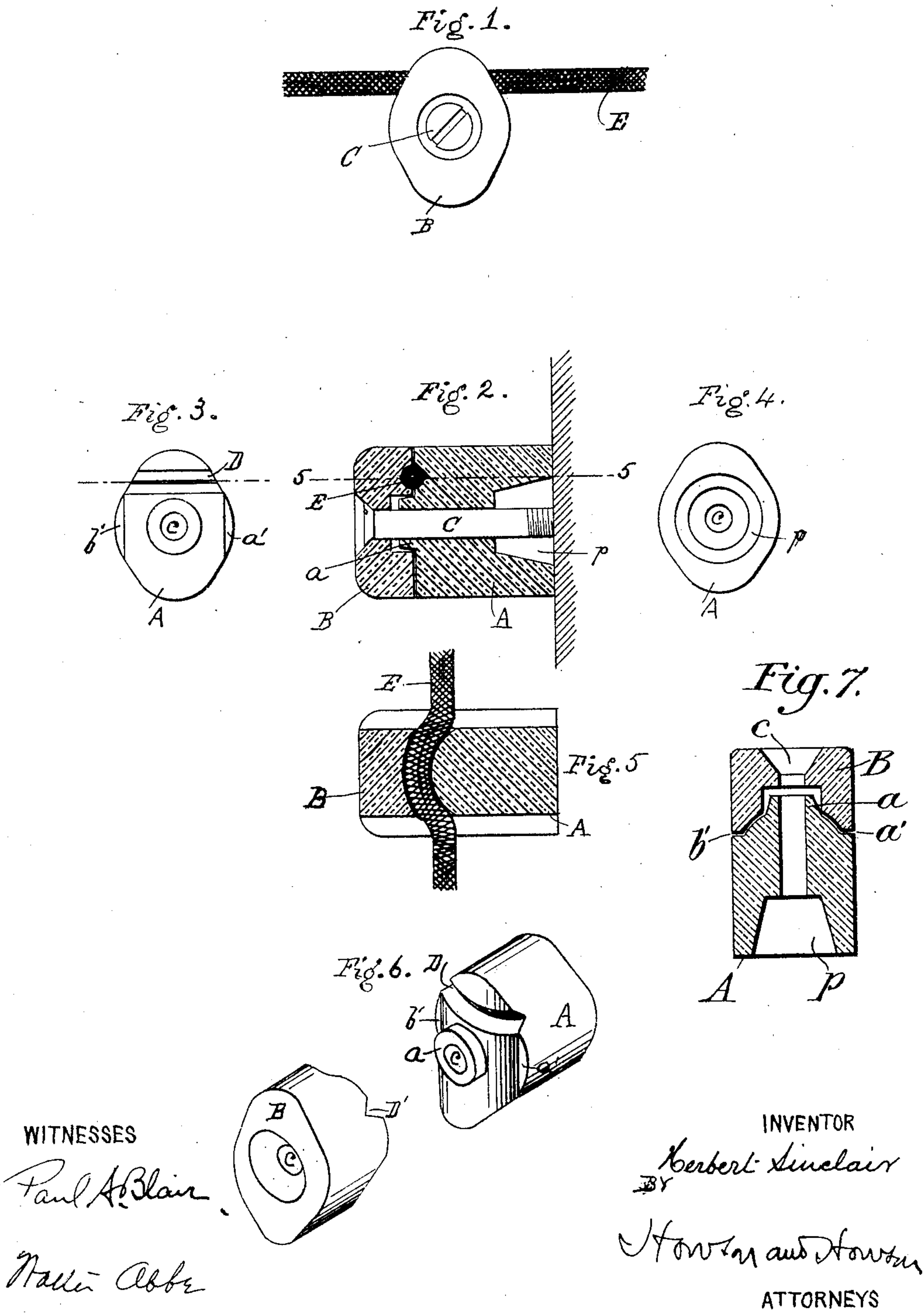


H. SINCLAIR.
ELECTRICAL INSULATOR.
APPLICATION FILED MAY 5, 1905.



UNITED STATES PATENT OFFICE.

HERBERT SINCLAIR, OF TRENTON, NEW JERSEY.

ELECTRICAL INSULATOR.

No. 806,588.

Specification of Letters Patent.

Patented Dec. 5, 1905.

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To all whom it may concern:

Be it known that I, HERBERT SINCLAIR, a citizen of the United States, residing in Trenton, Mercer county, State of New Jersey, have invented an Improved Electrical Insulator, of which the following is a specification.

My invention relates to that class of electrical insulators which are usually made of porcelain and in two parts—a body part and a cap—between which the conductor is clamped, a central screw passing through the two parts to secure them together and at the same time to secure them both to the wall, ceiling, or other structure where the wiring is to be placed.

The object of my invention is to provide such an insulator which will be less liable to be pulled out of place and will support the conductors better than those heretofore made.

In the accompanying drawings, Figure 1 is a top view of the insulator. Fig. 2 is a sectional view. Fig. 3 is a top view of the body part without the cap. Fig. 4 is a view of the bottom of the insulator. Fig. 5 is a sectional view on the line 5 5, Fig. 2; and Fig. 6 is a perspective view of the insulator with the body and cap separated. Fig. 7 is a section in a plane at right angles to the sections Fig. 2.

A is the body part of the insulator, and B is the cap part, which is fitted to the top of the body, and through both body and cap is the usual central opening *c* for the passage of the securing-screw C. In the adjacent faces of the body and cap and at one side of the central opening *c* I form the usual notches D D', preferably U-shaped, to form a groove to receive the conductor-wire E. I prefer to make the top of the body part convex, as shown, and to make the under side of the cap concave correspondingly, and also to make the wire-receiving grooves correspondingly curved to give a sufficient kink to the wire to hold it firmly from longitudinal slip. Insulators of this type as heretofore made have been of cylindrical form; but because of the necessities of economy in quantity and weight of porcelain the diameter of such insulators has been limited, and in consequence the base-support

afforded is often insufficient to withstand side strains of the wire and the holding-screws have been pulled out. To overcome this difficulty, I make the body of my insulator of oval cross-section, as shown in the drawings, the long axis of the oval being at right angles to the direction of the groove through which the wire is to pass, so that I provide a wide baseline, Fig. 2, and therefore efficient leverage in the bearing of that base against the wall or other support to withstand side strains of the wire E. This I accomplish without undue increase of the quantity, and therefore weight, of porcelain.

The body of the insulator is preferably formed with a central opening *p* underneath to reduce the quantity and weight of porcelain. To aid in positioning the cap, I prefer to provide at the edges of the concavo-convex faces of cap and body corresponding ledges *b' a'*. A centering-teat *a* may be provided on the body to enter a corresponding recess in the under side of the cap.

I claim as my invention—

1. An insulator consisting of a body part and cap with a central opening through them for the passage of the securing-screw and corresponding notches in the adjacent faces of body and cap to form a cross-groove for the wire, the body of the insulator being of oval cross-section, with the long axis of the oval in a plane perpendicular to the length of the wire-groove, for the purpose set forth.

2. An insulator consisting of a body part and cap with a central opening through them for the passage of the securing-screw and corresponding notches in the adjacent faces of body and cap to form a groove for the wire, said adjacent faces being correspondingly concave and convex with ledges *b' a'* at the edges, for the purpose described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HERBERT SINCLAIR.

Witnesses:

CHAS. A. REIGLE,
EDWARD P. BLOOM.