No. 849,896. PATENTED APR. 9, 1907.

C. GRIFFITH.

INSULATOR.

APPLICATION FILED MAR. 24, 1906.

Fig. 1.

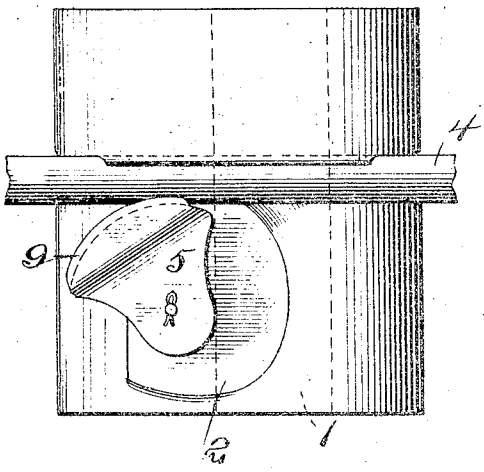


Fig. 2.

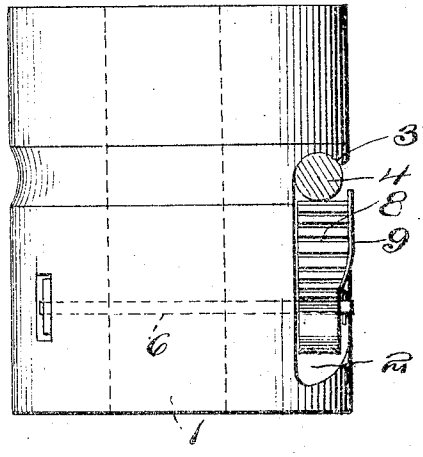


Fig. 3.

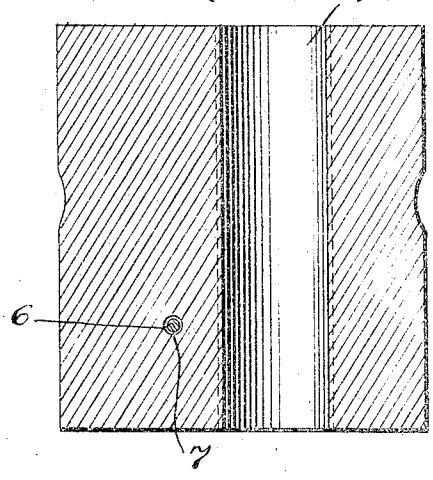
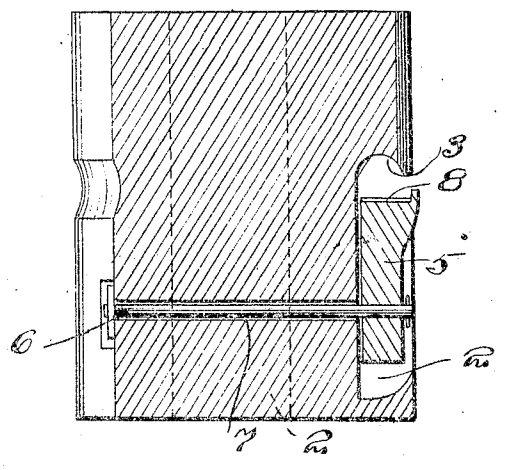


Fig. 4.



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UNITED STATES PATENT OFFICE.

CHARLES GRIFFITH, OF ELIZABETH, PENNSYLVANIA.

INSULATOR.

No. 849,896. Specification of Letters Patent. Patented April 9, 1907.

Application filed March 24, 1906. Serial No. 307,818.

To all whom it may concern:

Be it known that I, CHARLES GRIFFITH, a citizen of the United States of America, residing at Elizabeth, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Insulators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in insulators. The invention relates more particularly to a novel form of insulator employed for supporting an electrical conduit within mines.

The primary object of my invention is to provide a simple and inexpensive insulator to which an electrical conduit can be easily and quickly detachably connected.

Another object of this invention is to dispense with the wrappings heretofore employed in connection with insulators for retaining the electrical conduit in engagement therewith, the operation of connecting a conduit to an insulator requiring considerable time and labor, which I aim to save by the novel construction of the insulator to be hereinafter more fully described.

With the above and other objects in view, which will more readily appear as the nature of the invention is understood, the same consists in the novel construction, combination, and arrangement of parts, as will presently appear.

Referring to the drawings accompanying this application, like numerals of reference designate corresponding parts throughout the several views, in which—

Figure 1 is a front elevation of an insulator constructed in accordance with my invention. Fig. 2 is a side elevation of the same. Fig. 3 is a vertical sectional view of the same, and Fig. 4 is a vertical transverse sectional view of the same.

To put my invention into practice, I preferably construct my improved insulator of wood, which serves functionally the same purpose as porcelain and glass heretofore used. The insulator is substantially cylindrical and is provided with a vertically-disposed opening or bore 1 to receive the bracket or support in connection with which it is used, said bracket or support being generally secured to the side wall or ceiling of a mine to support an electrical conduit therein. The vertically-disposed opening or bore 1 is formed eccentrically within the insulator relative to the periphery thereof, the object of which will presently appear.

The one side of the insulator is recessed, as at 2, and the upper edge of said recess, as at 3, to receive an electrical conduit 4. To retain the electrical conduit within the recess of the insulator and against said lip, I pivotally mount a cam-shaped member 5 within the recess, said member being retained therein by a pin or bolt 6 extending transversely through an opening 7 formed in the insulator. The cam-shaped portion of the member 5 is provided with teeth or serrations 8 to engage the underneath surface of the electrical conduit 4 and retain it within the cut-away portion 3 of the insulator. To further insure the correct positioning of the conduit in the insulator, I provide the cam-shaped member 5 with a side flange 9, said flange preventing the conduit from slipping off of the member 5 as said member impinges the conduit and locks it therein.

To prevent the recess 2 and the cut-away portion 3 thereof from weakening the construction of the insulator, I have formed the opening or bore 1 to one side of the vertical axis thereof, this arrangement of the opening or bore 1 also serving to hold the electrical conduit as far distant as possible from the bracket or support upon which the insulator is mounted.

By the novel construction of the insulator and the manner of detachably connecting the conduit thereto my improved insulator is particularly adapted for use in mines, where the location of a conduit prevents the same from being wrapped to an insulator, also on account of the conduits of the mine being changed from time to time. While I have herein described the insulator as applicable for mines, it is obvious that it may be readily used for other purposes. Therefore I do not care to confine myself to its specific use.

While the preferred embodiments of my invention have been described and illustrated, I desire to be understood that such changes as are permissible by the appended claim may be resorted to without departing from the spirit of my invention.

Having fully described my invention, what I claim, and desire to secure by Letters Patent, is—

An insulator comprising a body having a

vertical opening eccentric to the vertical axis of said body, and having a recess in that side of body which is of greater thickness between the wall of said opening and periphery, the said body being also cut away at the end of said recess to form a lip, a bolt extending transversely through said body and into said recess, and a toothed cam mounted on said bolt within the recess substantially as described.

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

CHARLES GRIFFITH

Witnesses:
E. E. POTTER,
H. C. EVERT.