

S. J. EDMISTON.
INSULATOR PIN.

APPLICATION FILED JUNE 26, 1908.

910,799.

Patented Jan. 26, 1909.

Fig. 1.

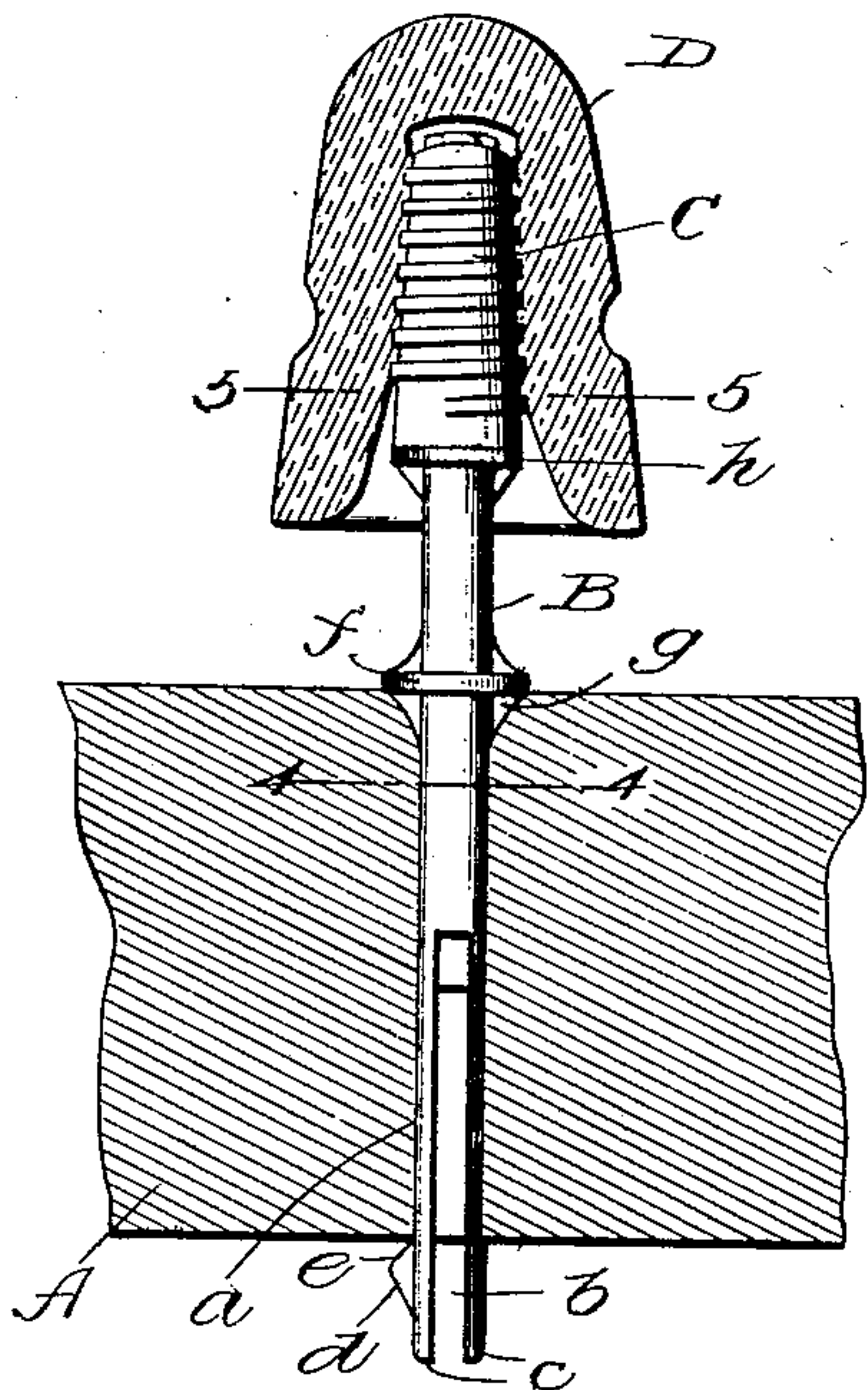


Fig. 2.

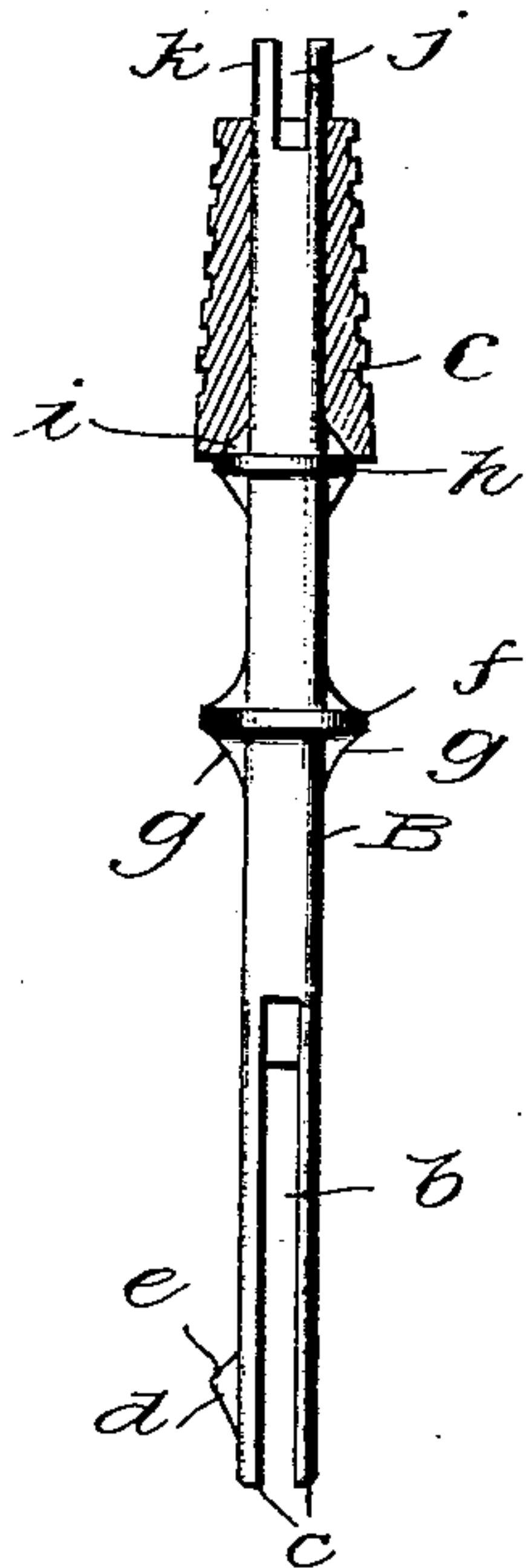


Fig. 3.

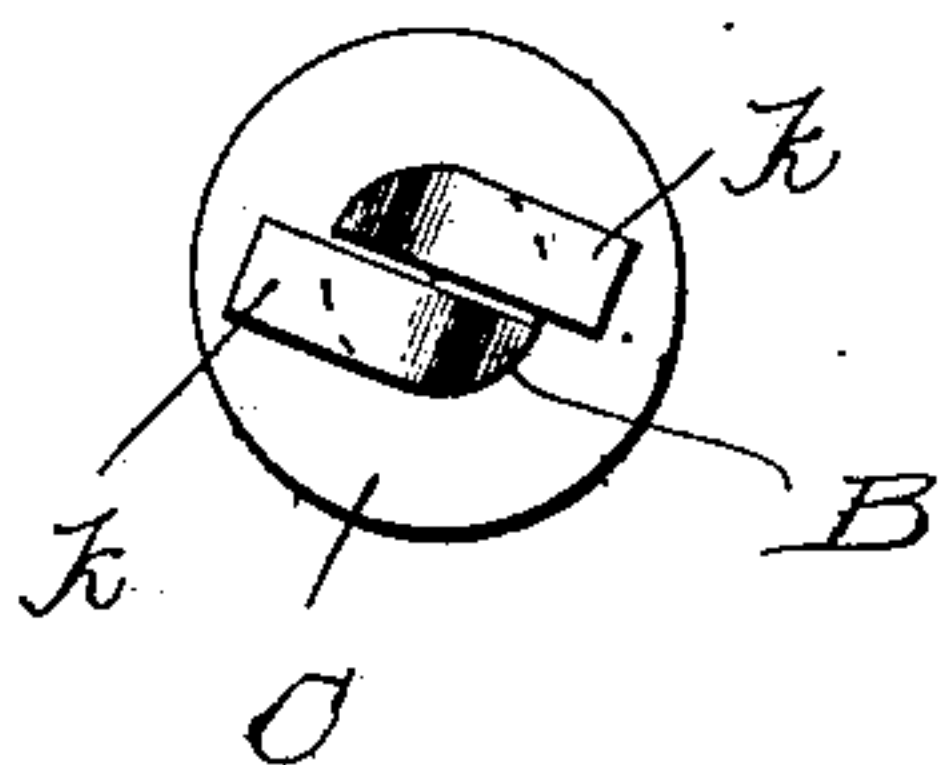


Fig. 4.

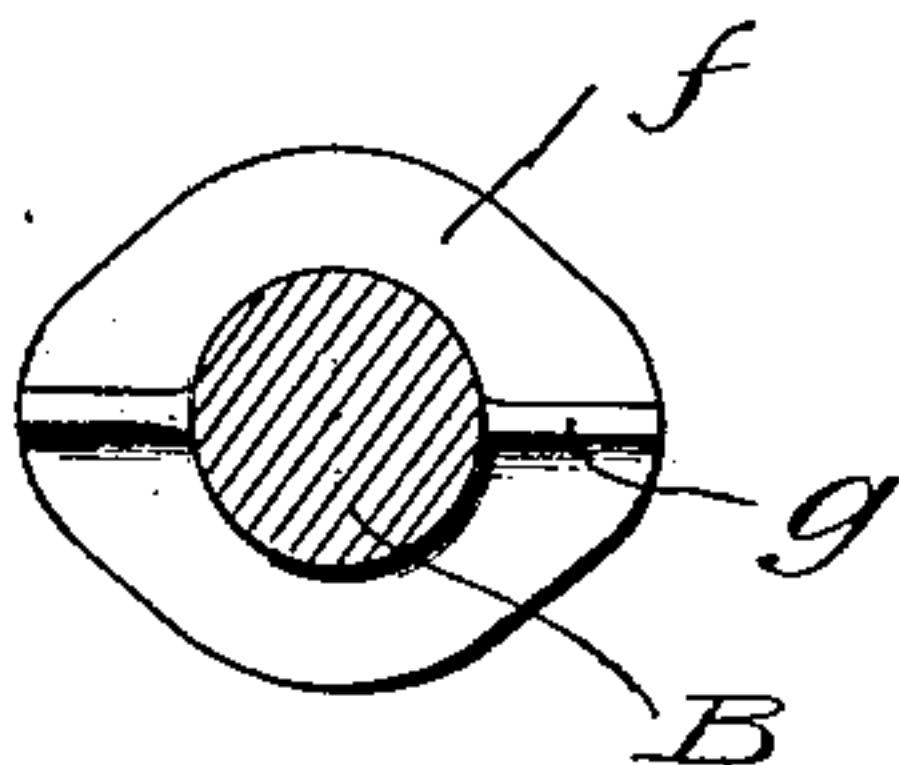


Fig. 5.

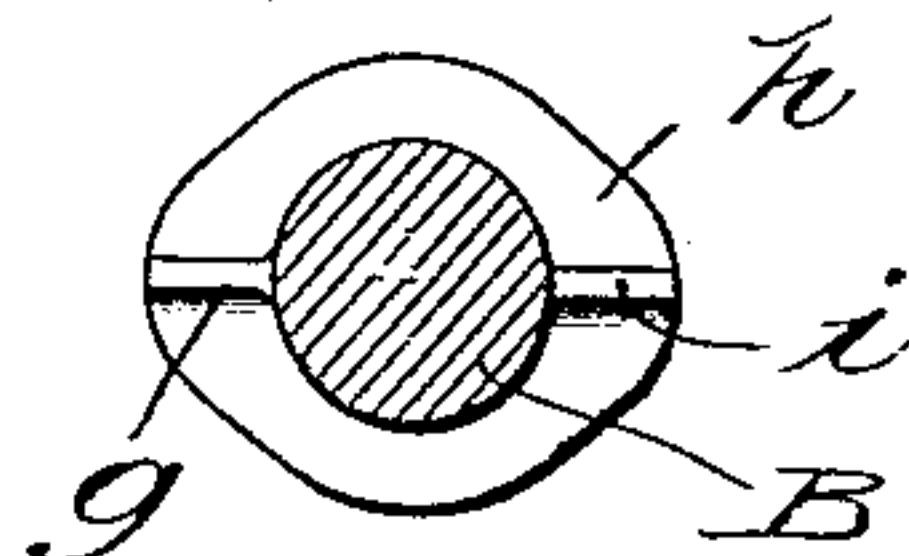
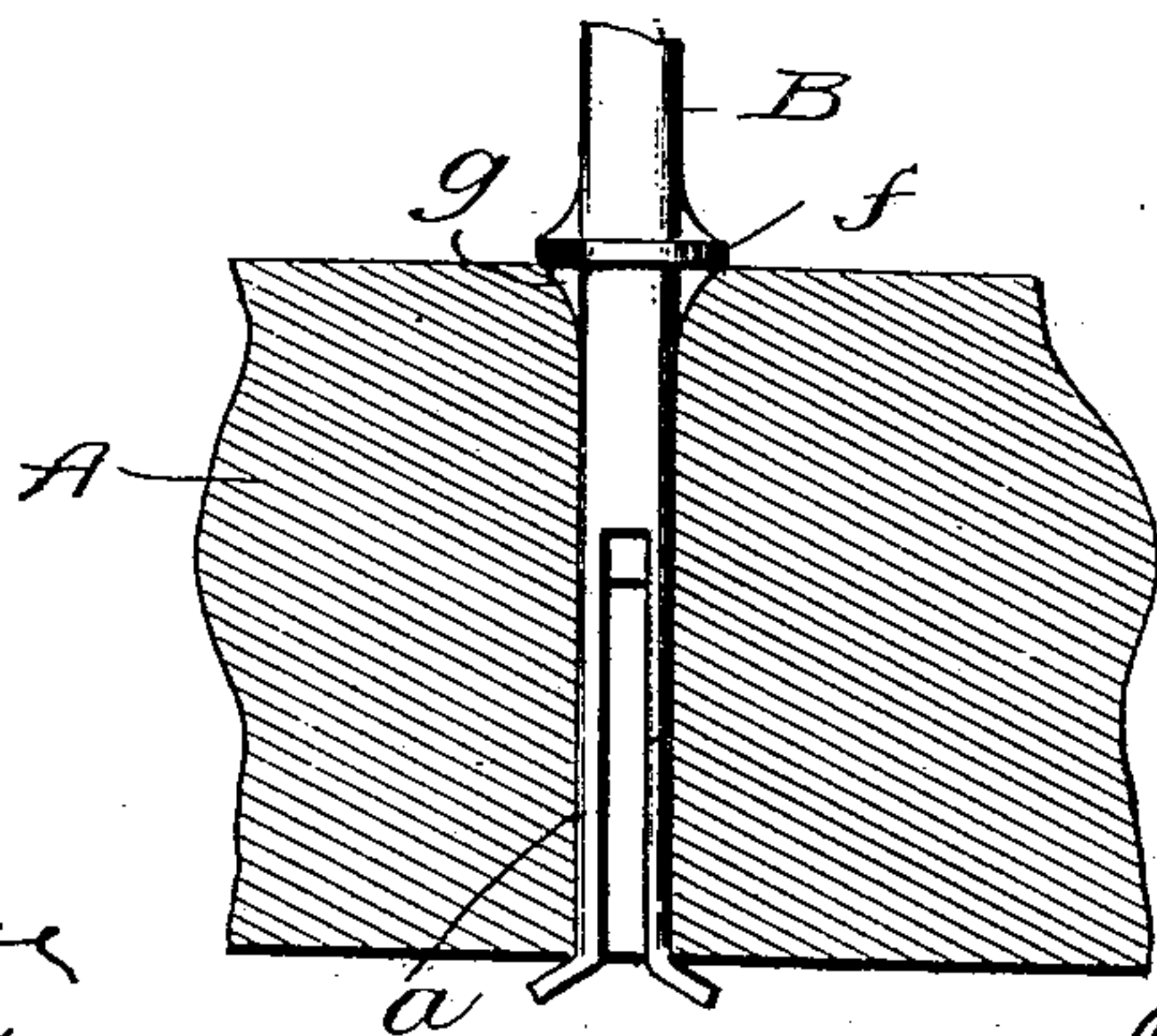


Fig. 6.



Inventor

Samuel J. Edmiston.

By William O. Seane
his Attorney

Witnesses

T. L. Hockaday
E. O. Crocker.

UNITED STATES PATENT OFFICE.

SAMUEL J. EDMISTON, OF GREENWICH, NEW YORK.

INSULATOR-PIN.

No. 910,799.

Specification of Letters Patent.

Patented Jan. 26, 1909.

Application filed June 26, 1908. Serial No. 440,561.

To all whom it may concern:

Be it known that I, SAMUEL J. EDMISTON, citizen of the United States, residing at Greenwich, in the county of Washington and State of New York, have invented certain new and useful Improvements in Insulator-Pins, of which the following is a specification.

My present invention pertains to means for supporting and holding insulators and effecting connection between the same and the cross-arms of telegraph and telephone poles; and it has for one of its objects to provide an insulator pin equipped with means, whereby when the pin is socketed in a cross-arm, it is adapted to lock itself against casual release or displacement, and this in such manner that, when desired, it may by a strong upward pull be withdrawn from the cross-arm.

Another object of the invention is the provision of an insulator pin adapted to hold and support a wooden insulator-plug in such manner that driving of the pin into its socket in the cross-arm is not liable to be attended by splitting of or other injury to the said plug.

Other advantageous characteristics of the invention will be fully understood from the following description and claims when the same are read in connection with the drawings, accompanying and forming part of this specification, in which:—

Figure 1 is a view, partly in elevation and partly in vertical section, illustrating my novel pin as properly secured in a cross-arm and as supporting a conventional glass insulator. Fig. 2 is a view showing the lower portion of the pin in elevation and the upper end of the pin and wooden plug in section and also illustrating the split upper end of the pin as the same appears precedent to the upsetting of its upper portions against the upper end of the plug. Fig. 3 is a plan view showing the upper end of the pin and the wooden plug secured on the pin. Fig. 4 is a horizontal section taken through the pin in the line 4—4 of Fig. 2, looking upwardly, and showing the fins on the under side of the stop of the pin. Fig. 5 is a horizontal section taken in the plane indicated by the line 5—5 of Fig. 2, looking downwardly. Fig. 6 is a detail view showing a portion of a pin constructed according to a modification.

Similar letters designate corresponding parts in all of the views of the drawings, referring to which:

A is a cross-arm in which is a vertical bore or socket *a*.

B is my novel pin which is formed of a metal consonant with its purpose.

C is the wooden plug which I prefer to employ in combination with the pin, and D is a conventional glass insulator secured on the threaded exterior of the plug.

The pin B is bifurcated at *b* to render its lower portions *c* resilient or springy, and it is provided on the outer side of one of said portions *c* with a downwardly tapered projection *d*. Thus it will be manifest that when the pin is driven downward in the socket *a* of the cross-arm, the resiliency of the portions *c* enables the projection *d* to take passage through the socket, and when said projection clears the underside of the cross-arm, it springs outwardly and assumes a position below the cross-arm, whereby it is enabled to effectually prevent casual displacement of the pin. The upper side or end *e* of the projection *d* is preferably tapered upwardly as shown, this being materially advantageous inasmuch as the projection is adapted to serve the purpose just stated, and yet when the pin is strongly pulled upward, the projection is adapted to pass upwardly through the socket *a* and permit of the withdrawal of the pin from the cross-arm.

At a slight distance above the bifurcation *b*, the pin B is provided with a stop *f* which has diametrically-opposite, tapered fins *g* at its underside. When the pin is driven as stated in the socket *a* of the cross-arm A, the fins *g* are embedded in the cross-arm, and in that way enabled to prevent turning of the pin about its axis in the socket.

About the proportional distance shown above the stop *f*, the pin B is provided with a platform *h* on the upper side of which are diametrically-opposite fins *i*. The said platform *h* is designed to support the plug C, and the fins *i* to penetrate the base of the plug and prevent turning of the same on the pin.

The upper end of the pin B is split, as indicated by *j*, and from this it follows that after the plug C is slipped on the upper portion of the pin, the upper end portions *k* of the pin may be upset—i. e., bent down, against the upper end of the plug so as to retain the plug on the pin and at the same time afford a hard surface for the blows of the hammer employed to socket the pin in the cross-arm. In this connection it will be noted that the bent end portions *k* of the pin

will protect the wooden plug C against the hammer blows, and that the platform h of the pin will support the plug C incidental to the driving of the pin with the result that
5 said operation is not liable to be attended by splitting of or other injury to the plug.

It will be readily appreciated from the foregoing that my novel pin is adapted to be expeditiously and easily secured in a cross-
10 arm, and that while there is no liability of the pin being accidentally released, yet when occasion demands the pin may be readily withdrawn from the cross-arm for use in other cross arms *ad infinitum*. It will also
15 be appreciated from the foregoing that my novel mode of securing the wooden plug on the pin is materially advantageous inasmuch as it does not entail threading of either the pin or the plug.

20 As will be readily understood from the modified form of pin shown in Fig. 6, the projection may be eliminated from the bifurcated portion thereof, and in such event when the pin is inserted in the socket of the
25 cross-arm the ends of said bifurcated portions are spread slightly apart to prevent displacement of the pin.

The construction herein illustrated and described constitutes the best practical embodiment of my invention of which I am
30 cognizant, but it is obvious that in the future practice of the invention such changes or modifications may be made as fairly fall within the scope of my invention as hereinafter claimed.

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

1. A pin provided with means for the con-

nection of an insulator, and bifurcated from
40 its lower end upwardly to form resilient portions and having at the lower end of its bifurcated portion an exterior projection adapted to normally prevent withdrawal of the pin from a socket.

2. A pin provided with means for the connection of an insulator, and bifurcated from its lower end upwardly to form resilient portions, and having on the outer side of one of
50 said portions a lateral projection which is tapered from its lower end upwardly.

3. A pin provided with means for the connection of an insulator, and bifurcated from its lower end upwardly to form resilient portions, and having on the outer side of one of
55 said portions a lateral projection which is tapered from an intermediate point of its height downwardly and upwardly.

4. The combination with an insulator pin having a platform and also having bent portions at its upper end; of a bored plug receiving the pin and interposed between the platform and the bent portions thereof.

5. A bored plug of wood or other suitable material, in combination with an insulator
65 pin extending through the bore of the plug and having a platform disposed below the plug, and a fin embedded in the lower end of the plug and also having a bifurcated upper end and portions bent downward against the
70 upper end of the plug.

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

SAMUEL J. EDMISTON.

Witnesses:

A. L. HOUGH,
WM. W. DEANE.