No. 888,154. PATENTED MAY 19, 1908.

H. FRIEND.

INSULATOR.

APPLICATION FILED OCT. 7, 1907.

Fig. 1.

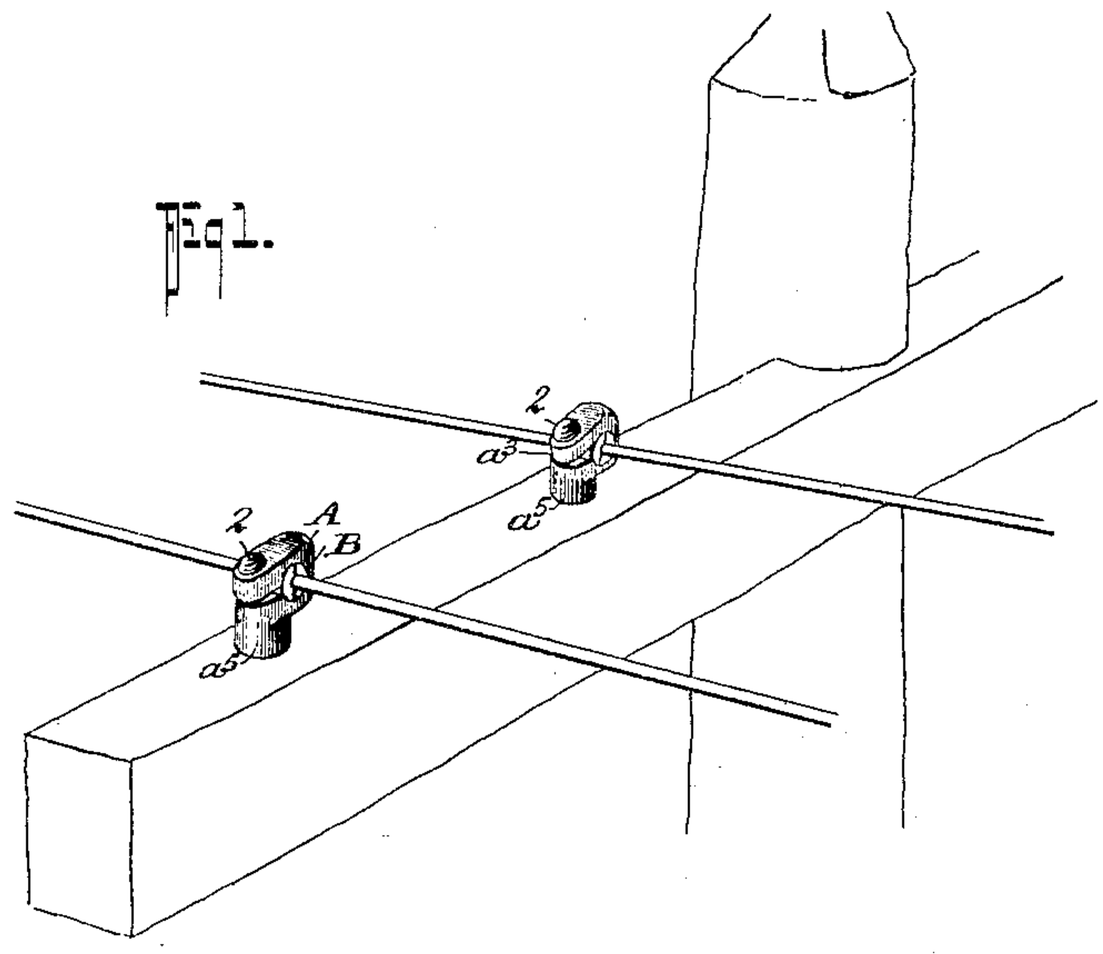


Fig. 2.

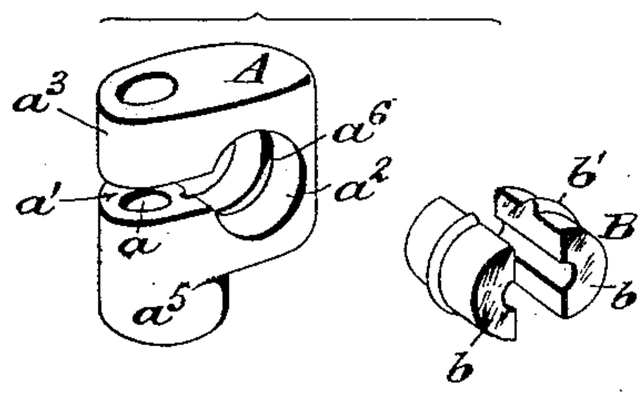


Fig. 4.

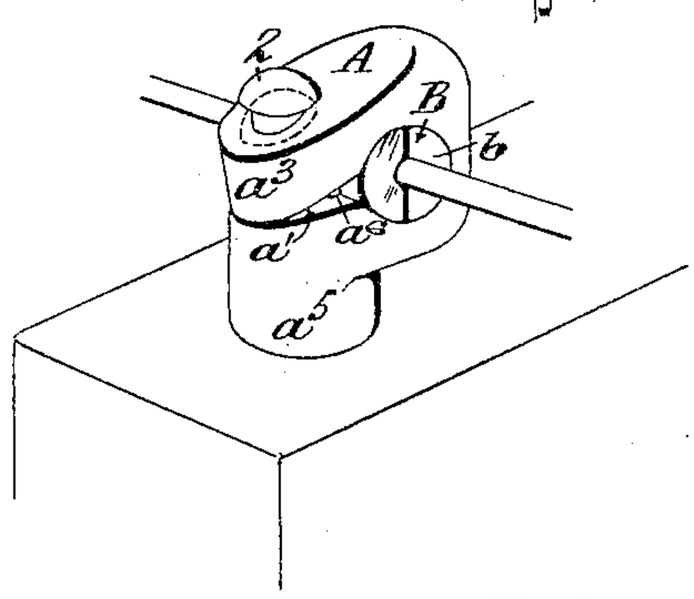


Fig. 3.

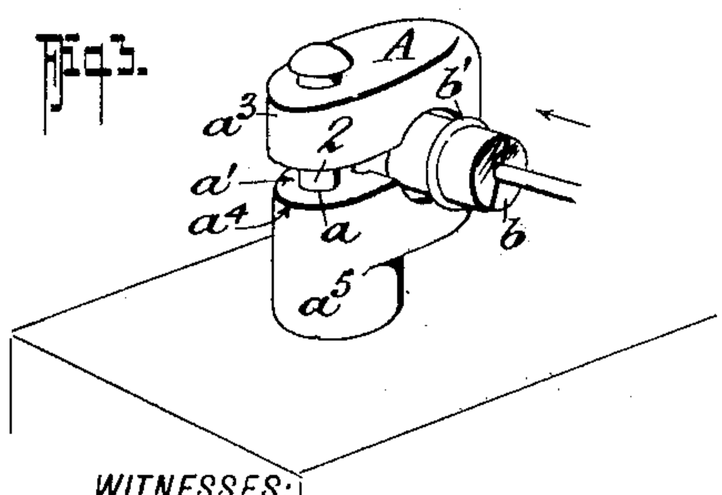
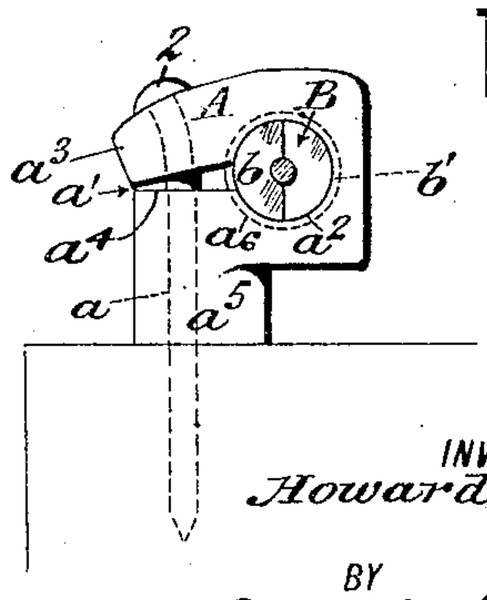


Fig. 5.



WITNESSES:

John T. Schrott.

Charles H. Wagner.

INVENTOR
Howard Friend.

BY
Fred G. Dieterich & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

HOWARD FRIEND, OF LEXINGTON, OKLAHOMA, ASSIGNOR OF ONE-HALF TO WALTER J. STEVENS, OF LEXINGTON, OKLAHOMA.

INSULATOR.

No. 888,154. Specification of Letters Patent. Patented May 19, 1908.

Application filed October 7, 1907. Serial No. 396,309.

To all whom it may concern:

Be it known that I, HOWARD FRIEND, residing at Lexington, in the county of Cleveland and State of Oklahoma, have invented a new and Improved Insulator, of which the following is a specification.

My invention seeks to provide a simple and economically made insulator for supporting telegraph and telephone wires, and it comprehends generally a body or supporting member formed of wrought or malleable cast metal, transversely apertured to form a seat or socket for the passage of the wire therethrough, a slot-way that extends from one edge of the body member and communicates with the transverse socket, and a tubular sleeve member adapted to be fit upon a wire formed of insulating material and to seat within the socket of the body member, means being also provided for holding the said insulating member from endwise movement within the main or metallic body portion of the complete device.

My invention, in its more subordinate features, consists in certain details of construction and novel combination of parts, all of which will be hereinafter fully explained, pointed out in the appended claims and illustrated in the accompanying drawing, in which:—

Figure 1, is a perspective view of my invention as applied for use. Fig. 2, is a perspective view of my improved device, the parts being separated. Fig. 3, is a similar view which illustrates the manner in which the insulating sleeve is fit into the main or body portion. Fig. 4, is a perspective view showing the device as clamped to a wire strand, and Fig. 5, is an end elevation of the part shown in Fig. 4.

In the practical application of my present invention I form the same substantially of two parts, the main or body portion A of wrought or malleable cast metal, one edge of which is formed with a longitudinal bore a extending its full length and with a slot or recess a' that bisects the said bore a and communicates with the transverse aperture a^2, the latter being disposed in a plane inside of the longitudinal bore or aperture a, for the reasons presently explained.

By forming the main or body portion with the transverse bore a^2 and the slot or recess a', the upper portion a^3 of the said body portion A is adapted for being bent downwardly against the face a^4 of the lower portion a^5, whereby to restrict or substantially close the said recess and for reducing the diameter of the transverse bore or aperture a^2, which in applying the insulator for use, is done by hammering home the nail or spike 2 that secures the complete device to the cross arm or post, as clearly shown in Fig. 4. B designates the other part of my complete device, in the nature of an insulator sleeve formed of two half and preferably semi-circular sections b—b whereby the two sections can be readily slipped onto the wire and close together for being shoved endwise into the transverse aperture a^2 of the member A, which aperture forms a socket or seat for retaining the rod B which is made of glass or any other suitable insulating material.

So far as described, it will be readily apparent that the device can be quickly fit on the wire by passing the slot or recessed portion over the wire and fixing the member A on to the cross arm or post by driving the spike 2 into the aperture a down into the cross arm sufficiently to secure the said member a thereon, while fitting the insulating member B therein, as will be clearly understood by reference to Fig. 3, from which figure it will also be seen that by holding the two members b—b together on the wire, they can be readily slipped endwise on the transverse socket or seat a^2 of the member A while the said socket is in its normal expanded condition. After the member B is slipped in the member A, it is clamped from endwise movement by hammering the spike 2 home, whereby to bend the upper part of the member A down against the lower part of the said member as shown in Fig. 4.

While under ordinary conditions the sleeve B can be clamped in the member A by bending the upper part down as stated, to positively hold the said member or insulator sleeve B from endwise movement within the member A, the members b—b constituting the sleeve B are formed with transverse ribs b'—b' and the inner face of the socket or transverse bore a^2 of the member A is formed with annular recesses a^6 which close over the said ribs b'—b' when the two parts of the member A are clamped together as before stated and as clearly shown in Fig. 4.

From the foregoing, taken in connection with the drawings, the advantages of my improved insulator will be readily apparent.

Among its advantageous features, it should be stated that the insulator cannot be broken by stones or other objects thrown thereagainst or by shots fired thereon. Furthermore, the telegraph wire cannot be thrown out of place without breaking the pole or cross arm to which it is bolted. Again, the main or body portion is so shaped that water cannot run down the bolt to rot out the cross bar, and the device is of such character that it can be easily connected to a wire for securing the same to the cross arm or telegraph pole.

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

1. The herein described improvement in insulators, consisting in combination with a main or body member formed of bendable cast metal, having transverse aperture and a recess extending from one edge that communicates with the said aperture, the said member having a longitudinal aperture extending its full length that bisects the recess, a transverse aperture having annular recesses; of a two part insulator sleeve adapted to be fitted upon the wire and to be slid endwise in the transverse aperture in the metallic member, said sleeve having peripheral ribs for engaging with the recesses in the transverse aperture in the metallic member and a means for securing the said member to a cross arm and for holding the parts of the said member clamped about the insulating sleeve, substantially as shown and described.

2. An insulator that is formed of bendable metal having a transverse aperture and a horizontal slot that extends from one edge into the said aperture, the slotted edge of the body having a pendently projected foot portion, the latter and the upper end of the body having alining vertical apertures, an insulator sleeve adapted to fit within the aperture in the body portion, the said body portion and the sleeve having interlocking means, said parts being so combined whereby the driving of a securing spike or nail through the alining vertical aperture secures the insulator to the cross arm and closes the slotted portion of the body to bring the interlocking means of the body and the sleeve into a light engagement for the purposes specified.

HOWARD FRIEND.

Witnesses:
J. L. GRAHAM,
R. L. CARPENTER.