(No Model.)

L. S. BEARDSLEY.

SUPPORTING INSULATOR FOR ELECTRIC WIRES.

No. 524,100. Patented Aug. 7, 1894.

Fig. 1.

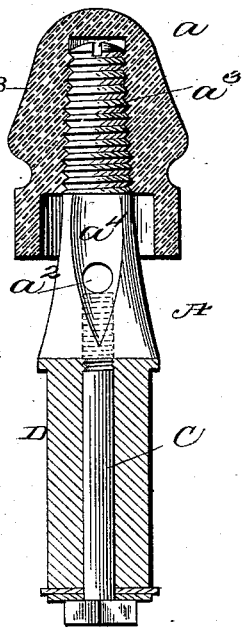


Fig. 2.

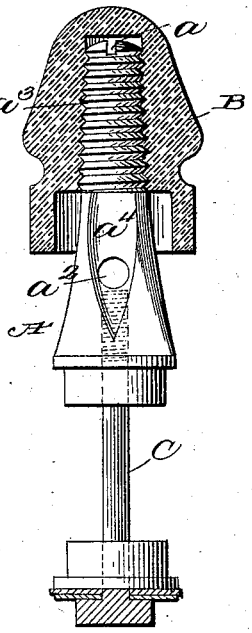


Fig. 3.

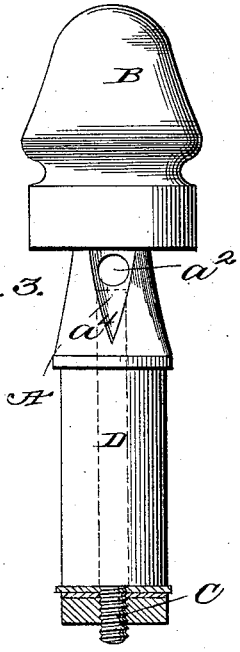


Fig. 4.

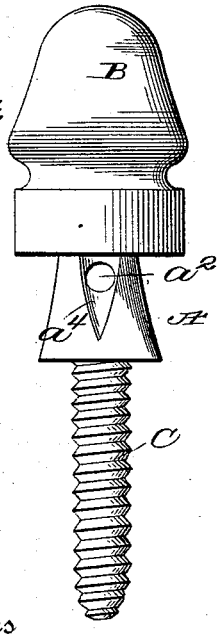
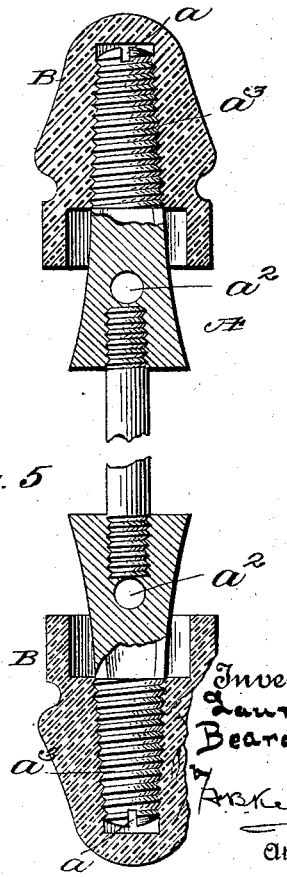


Fig. 5



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UNITED STATES PATENT OFFICE.

LAUREN S. BEARDSLEY, OF NAUGATUCK, CONNECTICUT.

SUPPORTING-INSULATOR FOR ELECTRIC WIRES.

SPECIFICATION forming part of Letters Patent No. 524,100, dated August 7, 1894.

Application filed June 11, 1894. Serial No. 514,118. (No model.)

To all whom it may concern:

Be it known that I, LAUREN S. BEARDSLEY, a citizen of the United States, residing at Naugatuck, in the county of New Haven, State of Connecticut, have invented certain new and useful Improvements in Supporting-Insulators for Electric Wires; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to insulators for electric wires and it relates particularly to the construction of devices for holding in place the usual form of glass insulators employed on telegraph, telephone, electric light and other lines.

The object of the invention is to produce a device for holding insulators of the kind referred to, which shall be simple and cheap in construction; which can be readily and rapidly placed in position for use or removed therefrom, when desired, which can be used with facility on a conducting or non-conducting arm or the like, and which can be applied to openings on the cross-arms of telegraph poles or the like, wherein wood or other pins have been used, and from which they have been removed by reason of having become useless on account of breakage, or other cause.

With these objects in view, the invention consists essentially of a holder for insulators comprising a pin of metal, wood, or other suitable substance, provided exteriorly with a screw-thread for the reception of the interior-screw-threads of an insulator, with or without having a transverse groove in its upper ends, and a bolt attached to the pin, for securing the pin in position; furthermore, the invention consists of a holder for insulators comprising a pin for the reception of an insulator, the pin being provided with or without a transverse opening which may be of different shapes for the reception of a bar or rod, and a bolt attached to the pin; furthermore, the invention consists of a pin provided with screw threads designed to engage the screw threads in the interior of a glass or other insulator, the pin having projecting therefrom a bolt, a bolster on the bolt, and means for securing the bolt in position; and finally, the invention consists of various novel details of construction whereby the objects of the invention are attained.

The invention is illustrated in the accompanying drawings, in which—

Figure 1— is a side elevation of a holder for insulators constructed in accordance with my invention, the glass insulator and the bolster attached to the bolt being shown in section. Fig. 2— is a view showing a modified form of bolster applied to the bolt. Fig. 3— is a view illustrating a modified form of holder, the bolt being formed with, or having the pin attached thereto; and Fig. 4— is a view illustrating a modified form of holder, in which the bolt is made in the form of a metal "wood" or metal "lag" screw, permanently attached to the pin. Fig. 5 is a view illustrating a modified form of holder in which the rod is threaded on both ends, and making a double pin.

In the drawings, A represents the main portion, or pin of the holder. This pin may be made of metal, wood, or any other suitable substance, and to facilitate turning it to cause a part attached to it to enter a nut, or the like, or to cause a screw to enter an opening in the lower end, may be provided in its upper end, with a transverse groove a, for the reception of a tool, and with a transverse opening a^2 for the reception of a rod, or screw driver. The upper end of the pin portion is provided with screw threads a^3 for engaging screw threads on the inner face of the insulator B. Below the screw-threaded portion, the pin is provided with flat sides a^4 for convenience in grasping the pin with a wrench.

Projecting from the lower end of the pin A is a bolt C, and this bolt may be formed with the pin A, or be attached thereto in any suitable manner. In the preferred form of holder, shown in Fig. 1 of the drawings, the bolt is provided at its upper end with an external screw-thread designed to enter a screw threaded opening in the lower end of the pin A and at the lower end with a head or nut; in the modified form shown in Fig. 3, the bolt is permanently attached to the pin, and has its lower end adapted for the reception of a nut; and in the modified form shown in Fig.

4, the bolt is permanently attached to the pin, and has its lower end formed into a metal "wood" or metal "lag" screw, and in modified form shown in Fig. 5 has a rod threaded on both ends, the lower end being adapted to either a nut or an additional pin *a*.

The forms of holders shown in Figs. 1, 2, 3 and 5 are those particularly adapted for attachment to cross arms of telegraph poles and like structures, when the bolt is to be passed entirely through arms of wood or metal and secured in that position. When the holder is to be employed in the hole provided for a wooden pin, it is necessary to provide a bolster B, of a size to fit the hole, and provided with a central opening for the reception of the bolt. The bolster may be made of one piece as shown in Figs. 1 and 3, or it may be made in two parts as shown in Fig. 2 designed to be placed respectively near the upper and the lower faces of the cross piece, or the like, to which the holder is to be attached. When the holder is to be attached to a wooden arm, the bolster is preferably of metal, porcelain, glass, wood fiber or other non-conducting substance, and when it is to be attached to a metal arm, the bolster is of wood, or some non-conducting substance.

In the form shown in Fig. 4, the bolt is provided at its lower end with a metal "wood" or metal "lag" screw, designed to enter a proper opening in the body to which the holder is to be attached.

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

A holder for insulators consisting of a pin provided with screw threads designed to engage the screw threads in the interior of a glass insulator, the pin having projecting therefrom a bolt, a bolster for the bolt, and means for securing the bolt in position, substantially as described.

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

LAUREN S. BEARDSLEY.

Witnesses:
MARGUERITE MCCARTHY,
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