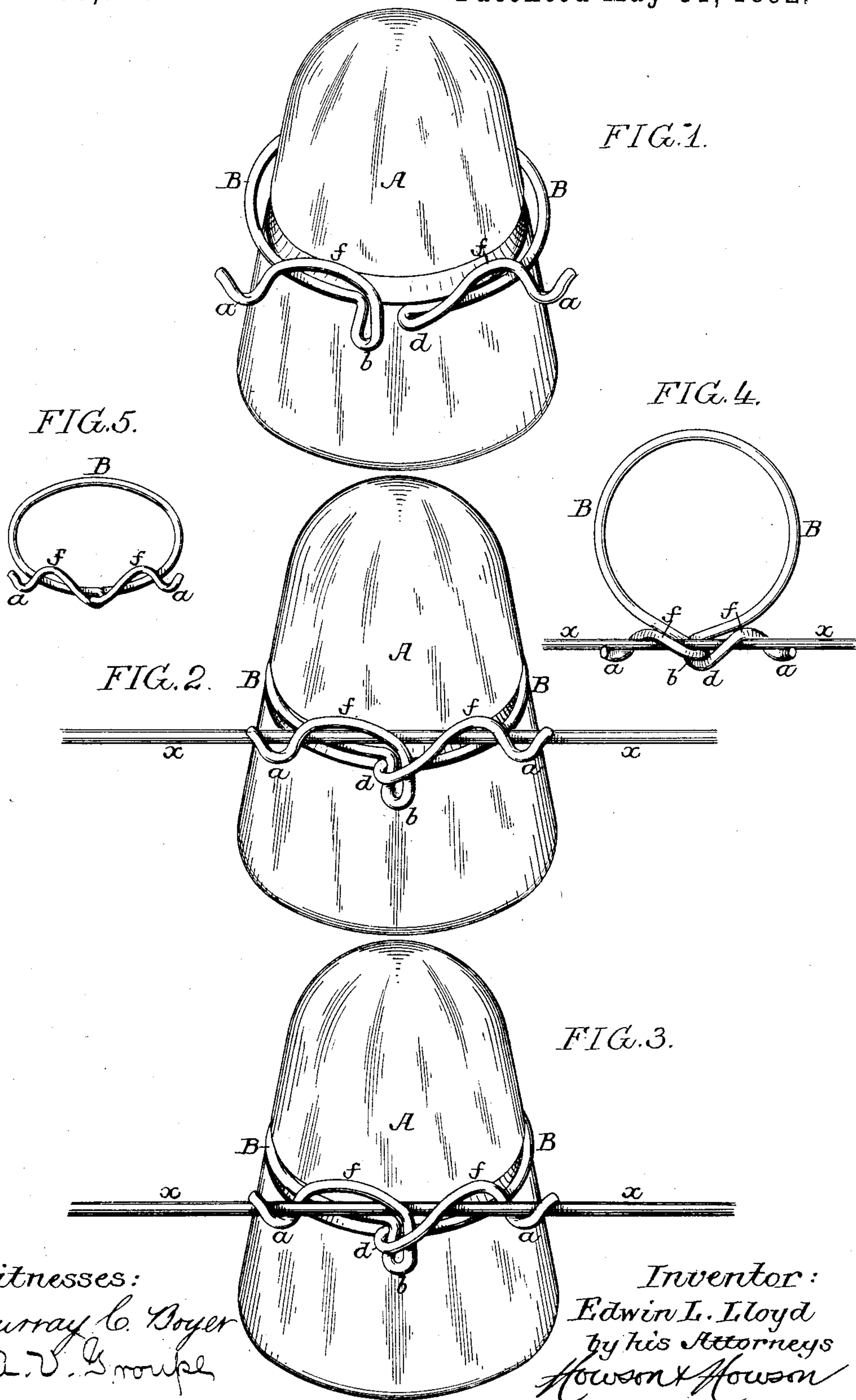


(No Model.)

E. L. LLOYD.  
ELECTRIC WIRE HOLDER.

No. 475,781.

Patented May 31, 1892.





# UNITED STATES PATENT OFFICE.

EDWIN L. LLOYD, OF PHILADELPHIA, PENNSYLVANIA.

## ELECTRIC-WIRE HOLDER.

SPECIFICATION forming part of Letters Patent No. 475,781, dated May 31, 1892.

Application filed August 6, 1891. Serial No. 401,871. (No model.)

*To all whom it may concern:*

Be it known that I, EDWIN L. LLOYD, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Line-Wire Holders for Insulators, of which the following is a specification.

The object of my invention is to so construct a line-wire holder for insulators that said holder can be readily applied to the insulator and the line-wire also readily applied to the holder, and so that when said line-wire is so applied it will be firmly locked in position upon the holder and cannot be pulled therefrom in the event of the breaking of the wire between the insulators.

In the accompanying drawings, Figure 1 is a perspective view of an insulator, showing my improved line-wire holder applied to but not tightened upon said insulator. Fig. 2 is a similar view showing the holder tightened upon the insulator and the line-wire supported loosely upon the holder. Fig. 3 is a like view showing the line-wire locked to the holder. Fig. 4 is a plan view on a slightly-reduced scale; and Fig. 5 is a perspective view, also reduced, of a modified form of holder.

A represents an insulator of the usual form, and B the line-wire holder, which consists of a simple wire, preferably of copper, bent so as to embrace the insulator and enter the groove of the same, each end of the wire being then bent backward, so as to form a line-wire-supporting loop or hook *a*. Before being thus bent backward, however, one end of the wire is bent downward, so as to form a hook *b*, and the backward bend of the other end of the wire forms a loop *d*, which, when the holder is tightened on the insulator, receives the hook *b*, and thus prevents the separation of the ends of the holder by any strains which may be exerted thereupon when the line-wire is under tension.

The holder can be readily snapped upon the insulator by manipulating it so as to cause the hook *b* to enter the loop *d*, and the line-wire *x* in the first instance rests on the holder behind the backward loops or bends *f*, which project somewhat above the encircling portion of the holder, as shown in Fig. 2, the

locking of the line-wire to the holder being effected by slipping the hooks *a* first backward over and then forward under the line-wire, so that the latter rests in said hooks, as shown in Fig. 3. By this means the wire is positively held against either vertical or in-and-out movement, and the frictional hold upon the line-wire is sufficient to prevent longitudinal movement of the latter in the holder, especially if the said line-wire is broken on one side of the insulator, for in this case the strain upon the line-wire on the other side of the insulator will cause the holder to slip around on said insulator, so as to kink said line-wire and prevent it from being withdrawn longitudinally.

Although I prefer that the improved holder should be made with a hook and loop, as shown, so as to provide for securing the holder to the insulator by simply slipping the hook into the loop, other plans of securing together the ends of the holder may be adopted, if desired. For instance, in Fig. 5 I have shown a holder in which the ends of the wire are simply interlooped or twisted one around the other before forming the bends *f* and hooks *a*, and the latter may be closed, if desired, after the line-wire is applied to the holder.

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

1. The within-described line-wire holder for insulators, the same consisting of a wire bent to embrace the insulator, but free to turn thereon, and having its ends interlocked and bent so as to form open supports for the line-wire, substantially as specified.

2. A line-wire holder for insulators, having line-wire supports, and an engaging hook and loop whereby the holder is clasped upon the insulator, substantially as specified.

3. The within-described line-wire holder for insulators, the same consisting of a wire bent to embrace the insulator and having supports for the line-wire, and an engaging hook and loop for securing the meeting portions of the holder together, substantially as specified.

4. The within-described line-wire holder for insulators, the same consisting of a wire

bent to embrace the insulator and having an  
engaging hook and loop at the meeting por-  
tion, each end of the wire beyond said meet-  
ing portion forming a loop for laterally re-  
5 taining the line-wire, and a hook for receiv-  
ing said line-wire, substantially as specified.  
In testimony whereof I have signed my

name to this specification in the presence of  
two subscribing witnesses.

EDWIN L. LLOYD.

Witnesses:

EUGENE ELTERICH,  
HARRY SMITH.