

H. E. MARSHALL.  
LINEMAN'S PROTECTOR.  
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992,738.

Patented May 16, 1911.

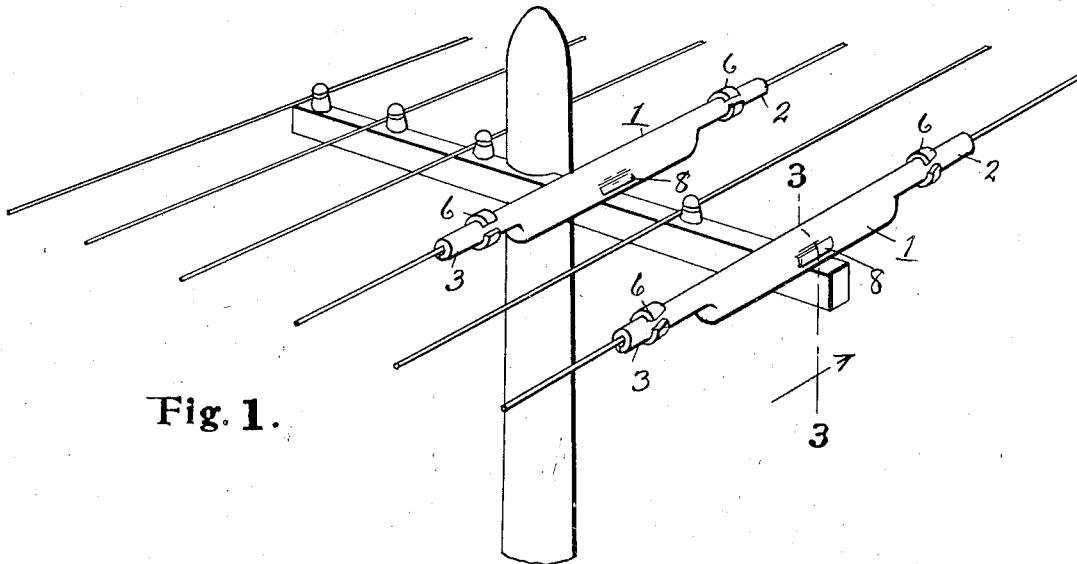


Fig. 1.

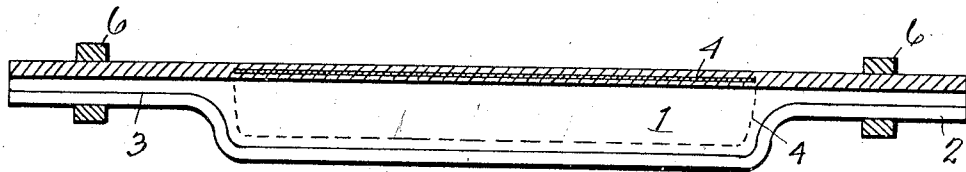


Fig. 2.

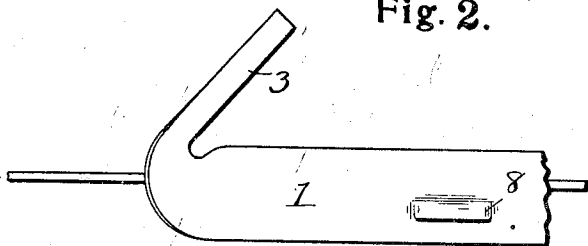


Fig. 6.

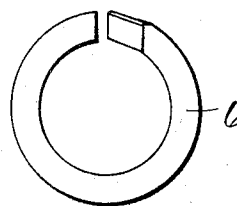


Fig. 4.

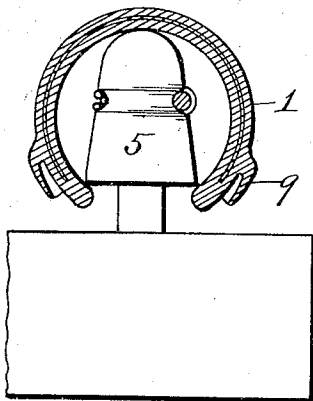


Fig. 3.



Fig. 5.

Witnesses

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# UNITED STATES PATENT OFFICE.

HARRY E. MARSHALL, OF DETROIT, MICHIGAN.

## LINEMAN'S PROTECTOR.

992,738.

Specification of Letters Patent.

Patented May 16, 1911.

Application filed June 20, 1910. Serial No. 567,837.

### *To all whom it may concern:*

Be it known that I, HARRY E. MARSHALL, a citizen of the United States, residing at Detroit, county of Wayne, State of Michigan, have invented a certain new and useful Improvement in Linemen's Protectors, and declare the following to be a full, clear, and exact description of the same, such as it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to linemen's protectors, a device adapted to be used by workmen in stringing and repairing the conductor wires through which electricity is carried.

The invention has for its object an improved device that may be placed in position and which will retain its position with great security, and which can be safely removed from its position of use on a wire, and which incidentally may be used in a great many other and different ways than simply for the covering of a wire on a cross tree of an electric wire pole. The main use is to cover wires as illustrated in Figure 1 of the accompanying drawings, but many incidental uses may be made of the device, a few of which will be referred to hereinafter.

In the drawings:—Fig. 1, is a perspective indicating the use of the article. Fig. 2, is a longitudinal section of the protector. Fig. 3, is a cross section at the middle of the protector. Fig. 4, is an elevation of a holding ring employed in the protector. Fig. 5, is an elevation of the ring. Fig. 6, indicates the manner of placing the protector on the wire.

The protector is made from heavy rubber and canvas, a heavy rubber split tube having a central split tubular portion 1 and terminal split portions 2 and 3, of which the terminal portions 2 and 3 are made of clear rubber, that is, rubber without interposed canvas. The central body part of the device is reinforced with inlaid canvas 4 that extends almost the entire length of the body part and strengthens and solidifies this part of the guard. The canvas is not continued to the edges or to the ends 2 and 3, thus keeping the canvas protected from any possible access of water; moreover, it is common in use to bend the tube as indicated in Fig. 6 when it is put in place on the wire, and if the canvas extends across the portion

shown as bent in Fig. 6, the article is apt to crack at the end and the canvas is not carried across the neck between the large and the small tubular parts. The terminals 2 and 3 have the rigidity and resiliency of heavy rubber, and the split tube will not readily open to admit the passage of a wire from the outside to the inside of the tube when the protector is being placed on the wire with the central part covering the insulator 5 as shown in Fig. 3, and to insure the proper engagement of the tubular ends 2 and 3 around the wire, the workman bends the small tube back as indicated in Fig. 6 which causes the split to open out nearly to the end of the small tube, and he then straightens the part bearing down with his hand until the tube is nearly in place when it will spring to its final position and entirely inclose the wire. A split ring 6 of hard rubber with the split part crossing the body of the ring at an angle to the axis thereof is placed over the ring and slipped on to the end whose rigid rubber ring finally secures the protector in place.

The body of the protector is provided midway its length with pocket-like grips 9, by which the workman seizes the protector when he wishes to put it on or remove it from the wire, and which affords him a secure hold of the protector, entirely safe and protected from any possible contact with the wire which is inclosed within, and after the rings have been slipped off from the ends the protector may be opened out and lifted off from the wire. The protector after opened out with the ends 2 and 3 bent back as shown in Fig. 6 may be straightened out into a somewhat boat-shaped structure with the curvature the reverse of that shown in Fig. 3, although the curvature is less deeply dishd, in which condition it may be used to stand on and may even be used in wet places where there would be liability to injury because of the workman standing on wet ground or wet floors while engaged in work around electric wires. The shield in this condition is shaped like a large bowl or boat which will prevent water to a depth of 2 or 3 inches from entering the cavity, and in substantially the same shape the article may be placed in front of the workman with the ends 3 brought behind back of the workman in which they afford a guard for the workman leaning over placed wire which would be liable to contact the electric wires. The

article is useful in many other places, but its particular usefulness in the place mentioned has been practically demonstrated in many instances.

5 What I claim is:—

1. A lineman's protector having a central body, a split tubular part of large diameter, terminals, tubular parts of smaller diameter, the central part being reinforced with a canvas interlining, and the terminals being of  
10 homogeneous rubber, substantially as described.

2. A lineman's protector, having a central split tubular portion of large diameter, terminals, split tubes of smaller diameter, the  
15 central part being reinforced with a canvas interlining and with grip pockets at the sides of said central part, substantially as described.

20 3. In combination with a lineman's protector having a central part, tubular part

and split tubular terminals, a holding ring of hard rubber adapted to engage over the terminals, substantially as described.

4. A lineman's protector, having in combination with a split tubular protecting device, rigid split rings of hard rubber adapted to engage over and secure the split tubes of the protecting device, substantially as described.  
25

5. A lineman's protector having in combination a split tubular protector adapted to engage over a wire and a hard rubber split ring, the said split being arranged at an angle to the axis of the ring.  
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In testimony whereof, I sign this specification in the presence of two witnesses.  
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HARRY E. MARSHALL.

Witnesses:

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