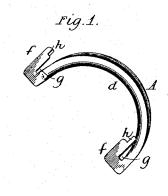
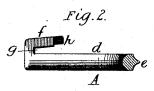
(No Model.)

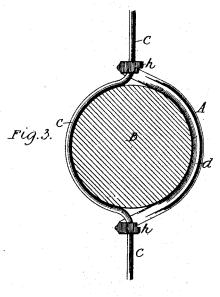
## W. H. EDMUNDS. INSULATOR CLIP.

No. 491,208.

Patented Feb. 7, 1893.









Inventor

Witnesses Wells Nortons Geo. Ho. Browns

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## United States Patent Office.

WILLIAM H. EDMUNDS, OF NEW YORK, N. Y.

## INSULATOR-CLIP.

SPECIFICATION forming part of Letters Patent No. 491,208, dated February 7, 1893.

Application filed August 9, 1892. Serial No. 442,588. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. EDMUNDS, a citizen of the United States, residing at New York, in the county of New York and State 5 of New York, have invented certain new and useful Improvements in Attachments for Securing Electrical Conducting-Wires to Insulators; and I do declare the following to be a full, clear, and exact description of the invento tion, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this 15 specification.

This invention has reference to improvements in attachments for securing electrical conducting wires to insulators, and has for its object to provide an attachment which 20 shall be inexpensive in its manufacture, easy to apply, and efficient in operation, and which will overcome the difficulties attending the use of such devices heretofore employed.

The invention consists in an attachment 25 constructed of malleable cast iron or other material, having a loop which partially embraces the insulator, and which terminates in two wedge-shaped slots for receiving the wire, and in short projections or teats which are 30 adapted to be bent over to close the slotafter the wire is inserted.

The construction and operation of my improved attachment will more fully appear from the following description taken in con-35 nection with the accompanying drawings which form a part of this specification, and in which

Figure 1 illustrates in perspective view my improved attachment; Fig. 2, a central sec-40 tion of the same; Fig. 3, a section through an insulator showing the attachment in position, and Fig. 4, is a view in elevation showing the wire inserted, and the teats bent downward to close the slot.

Like letters of reference denote like parts in the several figures of the drawings.

The reference letter A denotes the attachment.

B is the insulator, and C the conducting 50 wire.

The attachment A which is preferably made

from malleable cast iron, is formed with the loop d which is convex on its inner surface to conform to the shape of the groove in the insulator, and the outer surface is formed 55 with double concave faces which meet to form a bead e to produce the requisite rigidity. At the ends of said loop are two lugs f f which extend upward and over the loop for a sufficient distance to form slots g g for receiving 60 the wire. These slots are wedge-shaped or tapering as shown in Figs. 2 and 4 for the purpose of securely holding the wire when inserted against displacement, as it will be evident that the pull on the wire will tend to 65 force the same toward the inner end of the slots and be tightly wedged thereby. The inner ends of the loop and the lugs are substantially rectangular in cross section to present flat surfaces to the wire in order that no 70 injury to the latter may ensue. At the outer end of the lugs are formed teats h h which are adapted to be bent over to close the slot when the wire is inserted to hold the latter permanently in place.

In operation the attachment is placed in position around one side of the insulator with loop seated in the groove, and the wire is then placed in one of the slots and passed around the other side of the insulator and in 80 the opposite slot, the pull on the wire tending to force it to the inner end of the slot, to bind it in position. The teats are then bent downward by pliers or other means to close the slots and prevent accidental disconnection. 85

While I prefer to employ cast malleable iron in the construction of my improved attachments it is evident that other metal may be advantageously employed, as for instance drop-forged iron, sheet iron and steel, or their 90 equivalents; and if necessary the attachment may be covered with a suitable insulating material, or these attachments may be constructed entirely from insulating material.

The attachments when constructed in ac- 95 cordance with the above description are very effective in operation, and may be easily and quickly placed in position. By reason of the simplicity of construction they may be very cheaply made, and the liability to become 100 broken or displaced is reduced to minimum.

I claim

An attachment for securing electrical conducting wires to insulators, comprising in combination with a loop, lugs ff extending upward and over to ends of said loop to form tapering slots for receiving the wire, and teats h h arranged on the ends of the lugs and adapted to be bent over to close the slots, substantially as set forth.

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

WILLIAM H. EDMUNDS.

Witnesses:
WILL T. NORTON,
ARTHUR BROWNING.