J. ZIEG.

INSULATOR CLAMP OR BRACKET.

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1,147,065.

Patented July 20, 1915.

Fig. 1.

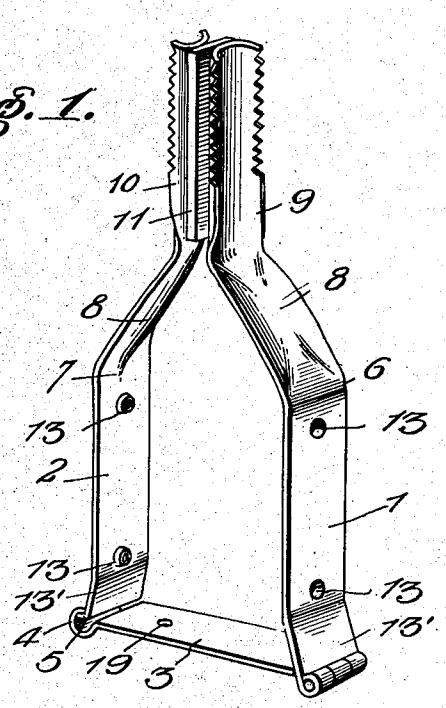


Fig. 2.

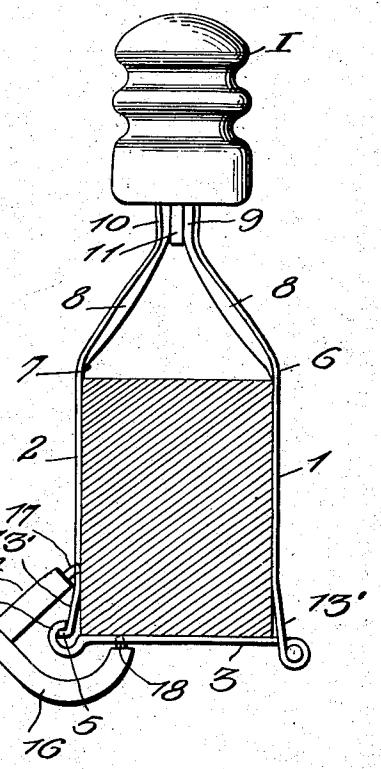


Fig. 3.

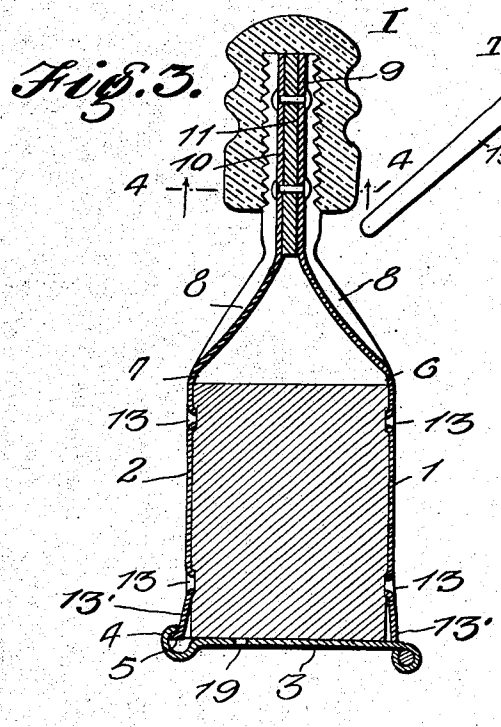
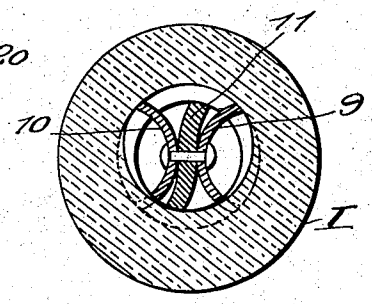


Fig. 4.



Inventor

Joseph Zieg

Witnesses

H. Woodard

C. Allen Parker

By H. B. Williamson & Co

Attorneys

UNITED STATES PATENT OFFICE.

JOSEPH ZIEG, OF LINCOLN, NEBRASKA.

INSULATOR CLAMP OR BRACKET.

1,147,065. Specification of Letters Patent. Patented July 20, 1915.

Application filed April 27, 1914. Serial No. 834,740.

To all whom it may concern:

Be it known that I, JOSEPH ZIEG, a citizen of the United States, residing at Lincoln, in the county of Lancaster and State of Nebraska, have invented certain new and useful Improvements in Insulator Clamps or Brackets; and I do 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 an insulator clamp or bracket particularly intended for use in clamping and maintaining glass or porcelain insulators on cross arms utilized for supporting wires and cables.

The object of the invention is to provide a simple inexpensive clamp which is easily and quickly applied to the cross arm without necessitating the boring of a hole through said arm which action naturally results in weakening of the arm and which clamp may be readily loosened when desired and adjusted in either direction upon the cross arm.

Another object is to provide a device of this character which does not require the use of a thread or nut thereby providing for its quick application and removal.

With these and other objects in view, the invention consists of certain novel features of construction and the combination and arrangement of parts as will be hereinafter referred to and claimed.

In the accompanying drawings:—Figure 1 represents a perspective view of the bracket detached; Fig. 2 represents a front elevation of the insulator bracket or clamp constructed in accordance with this invention and shown arranged in operative position on a pole cross arm, said arm being shown in section, and a tool for releasing and securing said bracket being also shown in operative position; Fig. 3 represents a longitudinal vertical section through the clamp; Fig. 4 is a transverse section through the point or shank of the clamp taken on the line 4—4 of Fig. 3.

In the embodiment illustrated this improved insulator support or bracket is shown composed of strips 1 and 2 of sheet metal, detachably connected at one end by a cross bar 3 and shaped to form a yoke adapted to embrace a pole cross arm A as shown in Fig. 2. The cross bar 3 is hinged at one end to one end of the side bar 1 and at its other end is bent to form an inturned hook 4 designed for interlocking engagement with an outturned hook 5 on one end of the side bar 2.

The strips or side bars 1 and 2 are bent to form shoulders 6 and 7 which are crimped longitudinally as shown at 8 to strengthen or reinforce them and these shoulders merge into parallel shank members 9 and 10 which are secured together and carry the insulator I. Arranged between these members 9 and 10 is a stiff piece of cloth or leather 11 through which the rivets which secure the members 9 and 10 together pass and which is designed to prevent sudden jars on the glass insulator carried by the shank. These shank members are concavo-convex in cross section with their rounded or convexed faces disposed adjacent to each other and the edges of said members are notched as shown at 12 to form a thread for engagement with the insulator I.

The side bars 1 and 2 are preferably provided with a plurality of longitudinally spaced apertures 13 punched inward to form roughened cross arm engaging spurs for holding the clamp in position when applied, and the lower ends of these bars are bent outwardly as shown at 13′ to permit them to yieldably engage the cross bar 3 to provide for the application and removal of the bracket.

When a clamp constructed as above described is to be applied to a cross arm the hooks 4 and 5 of the cross bar 3 and side member 2 are disengaged and the clamp is then seated on the cross arm with the bur like projections formed by the apertures 13 engaging said cross arm and the hooks 4 and 5 are then engaged by any suitable means and the clamp is securely held in position on the cross arm.

The insulator I may be engaged with the shank formed by the members 9 and 10 either before the clamp is applied to the cross arm or afterward as may be desired, and when said clamp is engaged as above described, said insulator is held firmly and substantially in position upon the cross arm.

Any suitable tool may be employed for connecting and disconnecting the hooked ends of the clamp, the tool T being shown in Fig. 1 for this purpose. This tool T as shown comprises a rigid jaw 14 merging into a handle member 15 and having a pivoted outwardly bowed gripping jaw 16

mounted thereon, the engaging spurs 17 and 18 at the terminals of said jaws being arranged in planes at right angles to each other and are adapted to be engaged with an aperture 19 in the cross bar 3 near the free end thereof and with one of the apertures 13 in the side bar 2. This tool has a key 20 secured thereto by a chain or other flexible element which is designed to be engaged with the hook 4 of the cross bar 3 when the tool is employed to release said members for preventing the hooks from springing back into engagement when so released thus enabling an operator to use one hand for manipulating the tool.

I claim as my invention:

1. An insulator bracket comprising a yoke-shaped member having an insulator engaging shank at the apex thereof, and a cross bar hingedly connected at one end to the free end of one of the side members of yoke and having an inturned hook at its free end, the free end of the other side member having an outturned hook for interlocking engagement with the hooked end of said cross bar for detachably connecting them.

2. An insulator bracket comprising a yoke composed of side bars having shoulders at one end merging into parallel shank members, said members being concavo-convex in cross section and secured together with their convex faces toward each other, the edges of said shank members being notched to receive an insulator, and a cushioning element arranged between said shank members.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

JOSEPH ZIEG.

Witnesses:
HAROLD W. WOOD,
G. J. MAUEL.