March 7, 1939. G. J. CARLSON 2,149,760

INSULATOR CLAMP

Filed April 20, 1937

Fig. 1.

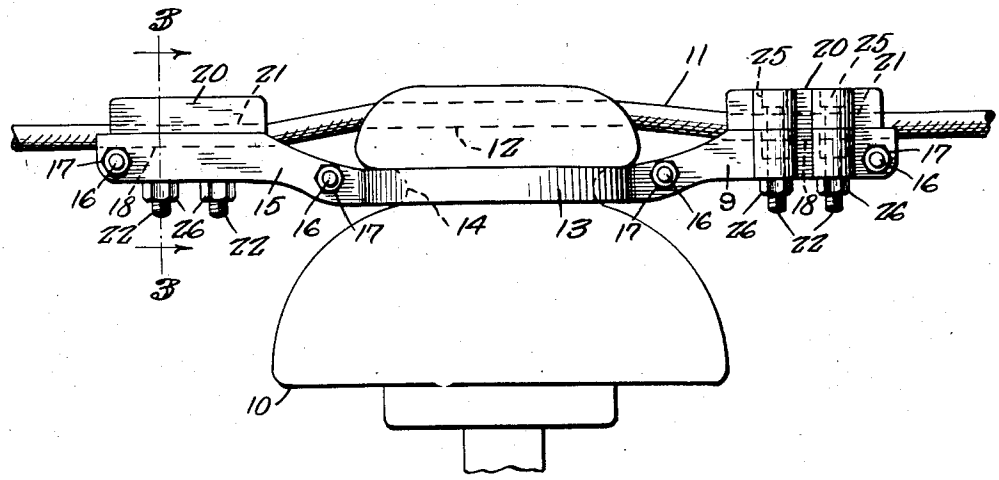


Fig. 2.

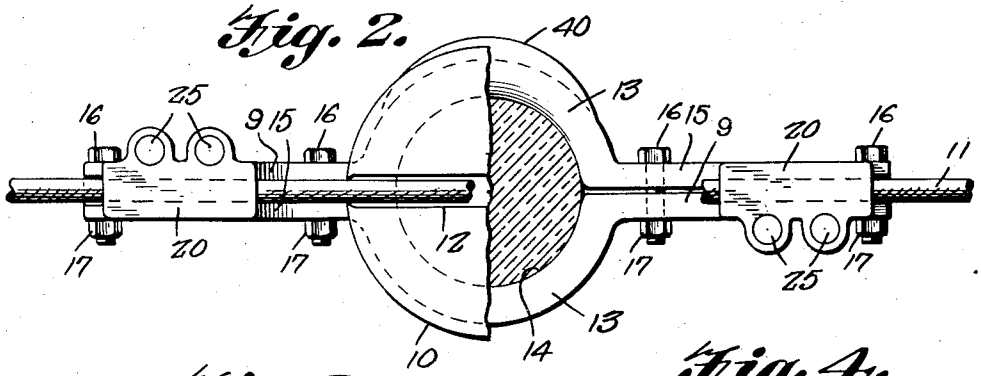


Fig. 3.

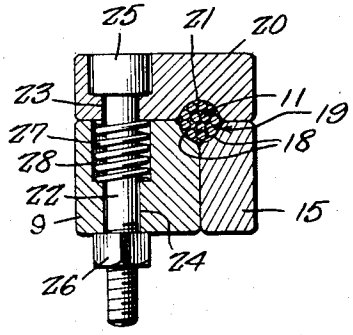
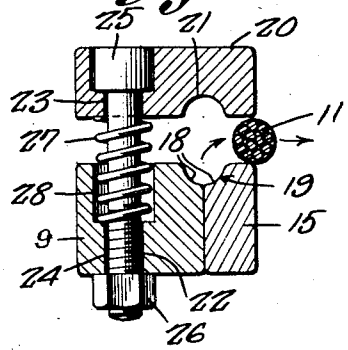


Fig. 4.



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WITNESS

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INSULATOR CLAMP

Gilbert J. Carlson, Bradford, Pa.

Application April 20, 1937, Serial No. 138,018

2 Claims. (Cl. 174—172)

This invention relates to insulator clamps and has for an object to provide a clamp adapted to provide a quick applying and securing means for connecting an electric conductor, such as a power line, to the insulator without having to resort to a tire wire.

A further object is to provide a wire clamp which may be easily secured to the insulator, and subsequently may be applied to the line and which readily adapts itself to the use of protective tools for the clamping of live wires.

A further object is to provide an insulator clamp which will be formed of a few strong simple and durable parts, which will be inexpensive to manufacture, and which will not easily get out of order.

With the above and other objects in view the invention consists of certain novel details of construction and combinations of parts hereinafter fully described and claimed, it being understood that various modifications may be resorted to within the scope of the appended claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the accompanying drawing forming part of this specification,

Figure 1 is a side elevation of an insulator clamp constructed in accordance with the invention.

Figure 2 is a plan view of the clamp shown in Figure 1, with parts broken away.

Figure 3 is an enlarged cross sectional view taken on the line 3—3 of Figure 1.

Figure 4 is a view similar to Figure 3 but showing the removable jaw in open position.

Referring now to the drawing in which like characters of reference designate similar parts in the various views, 10 designates a conventional insulator and 11 designates a conductor wire carried thereby, the insulator having the usual wire receiving groove 12 in the top.

The insulator clamp comprising the subject matter of this invention includes a pair of annular members 13 adapted to embrace opposite sides of the insulator in the circumferential groove 14 thereof. The members are provided with respective stationary jaws 15 and 9 which are adapted to extend longitudinally along the conductor wire 11 on opposite sides of the insulator with each jaw 15 of one member confronting the jaw 9 of the other member. Preferably four bolts 16 are passed transversely through the stationary jaws and when the nuts 17 of the bolts are tightened the annular members 13 of the clamp are drawn snugly upon the insulator.

The stationary jaws are formed with mating cavities 18 which coact in forming a groove 19 to receive the conductor wire 11. The jaws are of such height that the groove 19 will be disposed below and spaced from the wire when the wire is in its rectilinear position.

A pair of movable jaws 20, one on each side of the insulator, are disposed to bridge the pair of stationary jaws 15 and 9 on the same side of the insulator. Each movable jaw is provided with a wire receiving groove 21 adapted to receive the upper side of the conductor wire 11. For clamping each movable jaw 20 to the respective stationary jaws, a pair of clamp bolts 22 are employed. Each clamp bolt is passed vertically through aligned openings 23 and 24 in the movable jaw and in the stationary jaw 9.

The heads 25 of the bolts are countersunk in the top face of the movable jaw 20 and nuts 26 are threaded on to the bolts below the stationary jaw 9. A helical spring 27 is sleeved upon the bolt in a recess 28 formed in the top face of said stationary jaw 9 and tends constantly to urge the movable jaw upwardly.

When the nuts 26 are loosened the springs 27 of the clamp bolts 22 urge the movable jaws 20 upwardly from the closed position shown in Figure 3 to the open position shown in Figure 4 to permit application and removal of the conductor wire. By virtue of the stationary jaws being disposed below and spaced from the conductor wire when the wire is in rectilinear position, it will be pointed out that when the nuts 26 are tightened upon the clamp bolts 22 to move the movable jaws 20 to clamping position, a bend will be made in the conductor wire, as best shown in Figure 1, so that the wire will be tightly engaged with the insulator.

From the above description it is thought that the construction and operation of the invention will be fully understood without further explanation.

What is claimed is:

1. An insulator clamp including members adapted to embrace opposite sides of an insulator, stationary jaws on the ends of said members confronting each other, movable jaws each disposed to bridge a pair of the stationary jaws, bolts for clamping the movable jaws to the statitonary jaws, and springs sleeved upon the bolts and tending constantly to urge the movable jaws to open position.

2. An insulator clamp including members adapted to embrace opposite sides of an insulator, stationary jaws on the ends of said members confronting each other, movable jaws each disposed to bridge a pair of the stationary jaws, said stationary jaws being disposed below the normal position of an electric conductor when mounted in the groove of the insulator, and clamp bolts passed through the movable jaws and the stationary jaws for holding the jaws closed to maintain a bend in the conductor between the jaws and the insulator whereby the conductor will be tightly engaged with the insulator.

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