

H. D. SEAVEY.

INSULATOR.

APPLICATION FILED JULY 3, 1918.

1,429,110.

Patented Sept. 12, 1922.

2 SHEETS—SHEET 1.

Fig. 1.

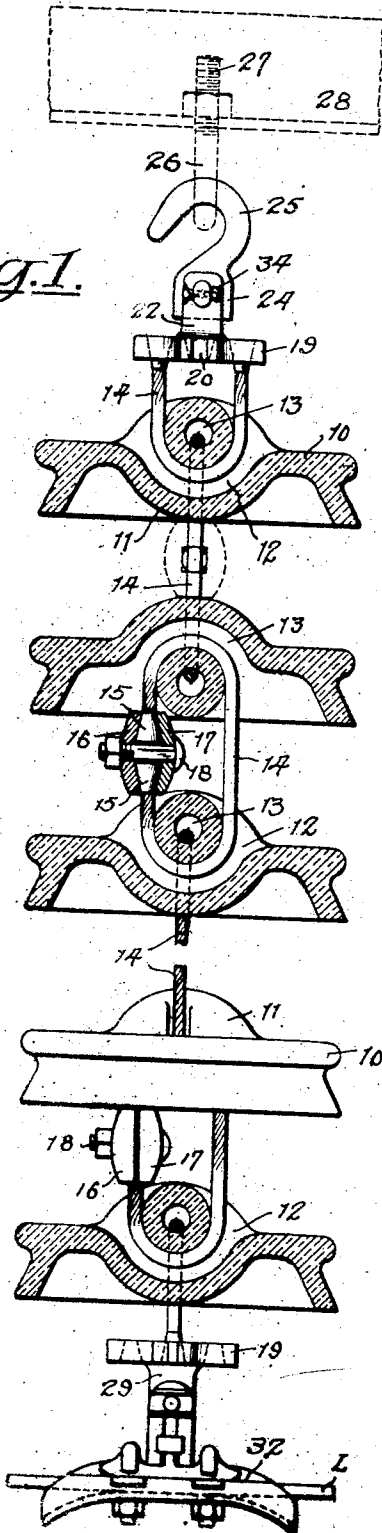


Fig. 2.

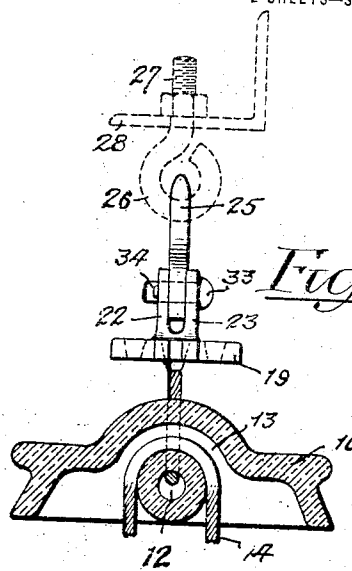
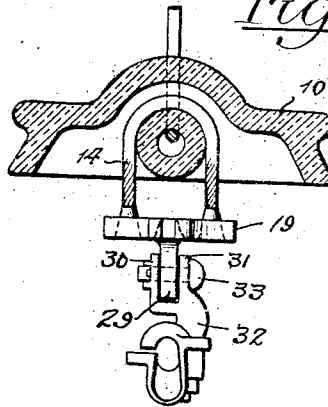


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

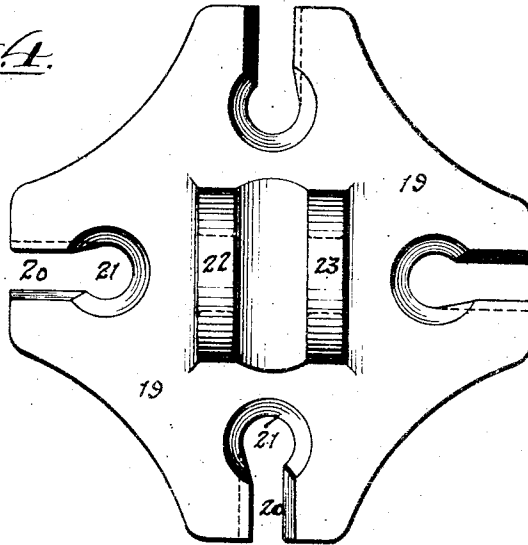


Fig. 5.

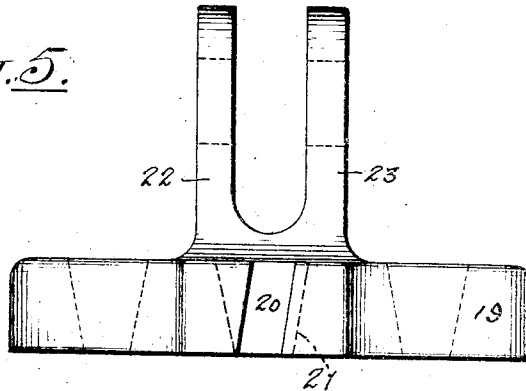
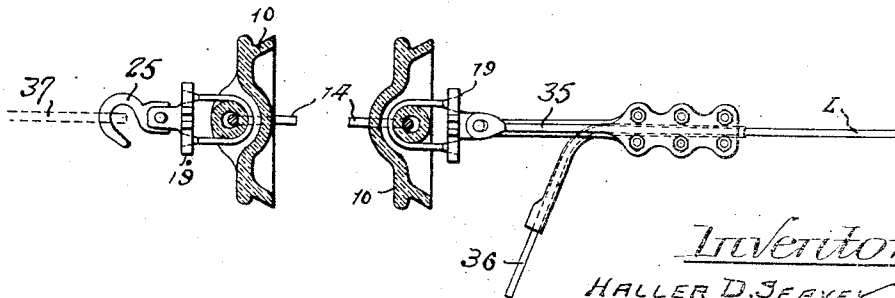


Fig. 6.



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UNITED STATES PATENT OFFICE.

HALLER D. SEAVEY, OF GREENFIELD, MASSACHUSETTS, ASSIGNOR TO MAXWELL
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PORATION OF NEW YORK.

INSULATOR.

Application filed July 3, 1918. Serial No. 243,198.

To all whom it may concern:

Be it known that I, HALLER D. SEAVEY, a citizen of the United States of America, residing at Greenfield, in the county of Franklin, State of Massachusetts, have invented certain new and useful Improvements in Insulators, of which the following is a specification.

My invention relates to insulators and particularly to insulators of the suspension or strain type, the object of my invention being to provide improved means not only for connecting together the insulator units of the insulator, but also for connecting the insulator as a whole to its support at one end and to the cable at the other.

In the accompanying drawings,

Fig. 1 is a vertical section, partially in elevation, through a suspension insulator in which my invention is embodied in one form;

Fig. 2 is a section of the top unit and its connections, taken at right angles to Fig. 1;

Fig. 3 is a similar view of the bottom unit;

Fig. 4 is a plan of the anchor plate at the top of the insulator;

Fig. 5 is a side elevation thereof;

Fig. 6 is a vertical section through a strain insulator to which my invention is applied.

The particular construction of the insulator units forms no part of my invention. I have shown, for convenience of illustration, units of common type comprising a flanged disk 10, the central or hub portion 11 of which is pierced by channels 12 and 13 lying at right angles to each other and through which connector loops may be passed to join the units together or to the devices by which the insulator is engaged with either its support or the line wire L.

The connector loops here shown comprise lengths of stranded steel cable 14, the ends of each length having terminal enlargements formed thereon, here indicated as cones 15. In uniting adjacent units, a connector loop is threaded through the passages 12 and 13 of the respective units and its coned ends clamped between the appropriately shaped juxtaposed faces of a pair of clamping plates 16 and 17 which are drawn together by a square-shanked carriage bolt 18.

At the end of the insulator string, the connector loop 14 is preferably somewhat

shorter than that used between the units, and the cones 15 are engaged in an anchor 19. This anchor is here shown in the general form of a plate radially slotted at 20 to permit the cable 14 to be passed laterally there-through into conical sockets 21 which form seats for the cones 15 at the cable ends. The slots 20 may be vertical, as shown in Figs. 1 and 2, but they are preferably inclined to the axis of the socket 21, as shown in Figs. 4 and 5, so as to prevent the escape of the cable therefrom should the cones be accidentally unseated. While but two sockets 21 are used for connection with the cable loop 14, the plates preferably have two pairs of sockets lying in planes at right angles to each other to receive the loop in either position and thus to accommodate the position of the anchor plate to the requirements of the particular installation. The upper anchor plate 19 is preferably provided with a pair of lugs 22-23, between which is received the shank 24 of the suspension hook 25 which takes into the eye 26 of the bolt 27 secured to the cross arm or other support 28 for the insulator. At the lower end of the insulator the anchor plate 19 has but a single lug 29 which is received between the lugs 30 and 31 of the line wire clamp 32. In both cases the lug 29 or lugs 22-23 are secured to their cooperating member by a bolt 33 passed therethrough and secured in position by a cotter pin 34.

In Fig. 6 I have shown my invention applied to a strain insulator. In this case one anchor plate 19 is connected to the insulator clamp 35 for the jumper loop 36, while the hook 25 is engaged with the support 37.

As previously stated, the type of insulator unit with which the present hardware is utilized may be of any suitable construction, and I do not limit my invention to the particular type shown. The anchor plates, in any event, serve to distribute the strains, and the end connections to the line wire and support, respectively, are of such nature as to remove the danger of injury to the cable loops incident to wear at these points, at which failure most frequently occurs. Moreover, the loop connections, on the one hand, to the clamps 16 and 17 between units and, on the other hand, to the anchor plates are such that they are not only quickly

and easily made, but also readily made by a single lineman—differing in this respect from the loop connections now in common use in which the installation is not only slow and laborious to make, but necessitates the presence of two linemen to accomplish the work. Again, the devices used are flexible in the sense that they may be readily adapted to different types of insulators, change in the length of the insulator, and to repairs of existing installations.

I do not limit my invention to the precise form of construction shown, which may be variously modified to accomplish the same end without departing from what I claim as my invention.

I claim:

An anchor for an insulator connecting

loop, said anchor comprising an anchor plate having means projecting at right angles to the plane of the plate and substantially from the center of the latter for establishing connection between the anchor and a hanger, said plate having two pairs of sockets lying in the same plane and spaced around said centrally projecting means, and being of a shape to receive the enlarged heads of a connection loop, the margins of the plate having radial slots which form lateral passageways leading to said sockets to permit the lateral insertion of the shanks of the connector loop to said sockets, substantially as described.

In testimony whereof I have signed my name to this specification.

HALLER D. SEAVEY.