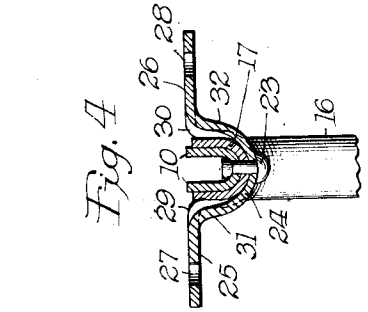
C. L. PEIRCE, JR.

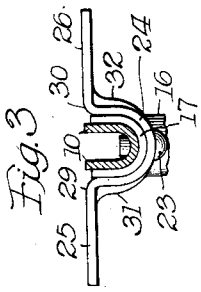
INSULATOR SUPPORTING FIXTURE.

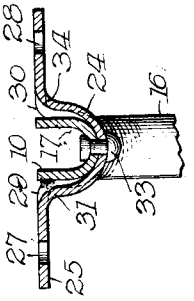
APPLICATION FILED APR. 6, 1916.

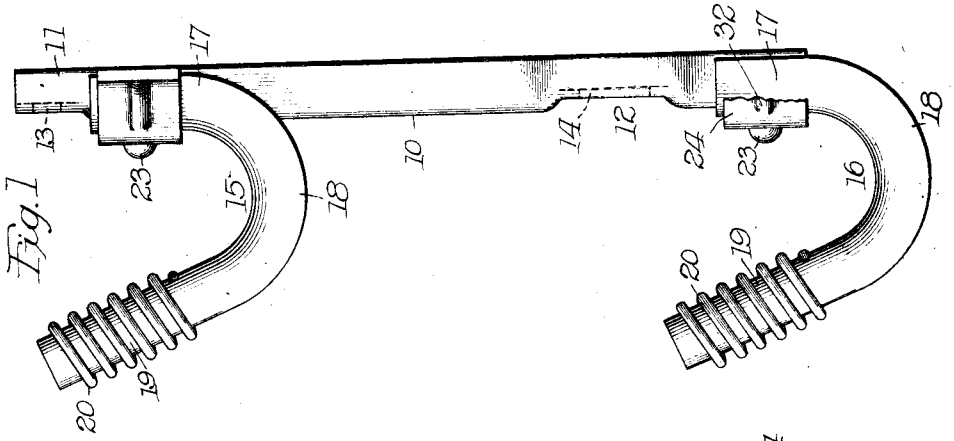
1,193,602.

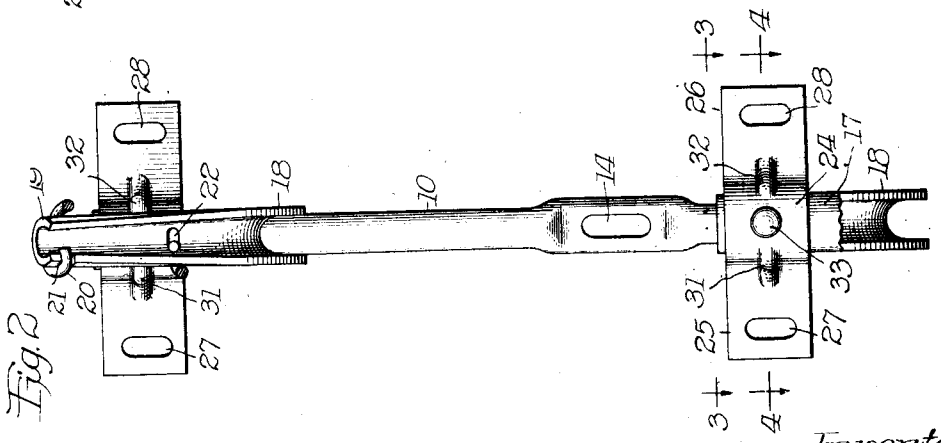
Patented Aug. 8, 1916.











Witnesses:
Leonard W. Novander.

Inventor
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Atty

UNITED STATES PATENT OFFICE.

CHARLES L. PEIRCE, JR., OF PITTSBURGH, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO HUBBARD & CO., OF PITTSBURGH, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

INSULATOR-SUPPORTING FIXTURE.

1,193,602. Specification of Letters Patent. Patented Aug. 8, 1916.

Application filed April 6, 1916. Serial No. 89,369.

To all whom it may concern:

Be it known that I, CHARLES L. PEIRCE, Jr., a citizen of the United States, and a resident of Pittsburgh, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Insulator-Supporting Fixtures, of which the following is a specification.

My invention relates to supporting fixtures, particularly to fixtures comprising a sheet metal body part and sheet metal bracket members secured thereto.

Supporting fixtures have been made heretofore in which the body part and bracket members are made of stock material as for example channel bars. In my Patent No. 1,007,138, issued October 31, 1911, particularly Figures 9 and 10, is shown a fixture in which the body is a length of channel bar and the bracket member is bent up from a length of channel bar of greater width than the body in order to saddle over the body with its sides overlapping the body sides, a strap saddling over the bracket member and a single rivet securing the strap, bracket member and body together, the strap having lateral ears provided with bolt holes for securing the fixture to a support. One disadvantage in the fixture of this patent is that the stock material is of fixed dimensions and has the same cross-section throughout whereas the strains to which the members are subjected in service are digerent at various sections. This means that in order to get the necessary strength at one section to meet a certain strain there will be over-weight at some other section where the strain is not so great and consequently there will be waste. Another disadvantage is that the bracket members will not fit intimately to the body for the reason that the outer corners of the channel bars are right angular and quite sharp whereas the inner corners are obtuse angular and rounded, the result being that when the bracket members saddle over the body part the overlapping sides will not engage snugly, this being clearly shown in Fig. 10, and consequently considerable strengthening inter-engagement is sacrificed. Another disadvantage is that the strap, in order to fit snugly against the top and sides of the bracket member must be bent sharply, and if after making the sharp bends the metal is not properly annealed the strap will be weak at the bend and frequently breakages have occurred for this reason.

The object of my invention is to produce a fixture in which all the above disadvantages are overcome and eliminated and in which the parts do not have sharp bends but are more curvilinear to engage snugly together the full distance, and which at the various sections are of form and dimension to be of maximum strength with minimum metal.

In accordance with my invention I press the body part and bracket members integral from sheet metal to arched cross-section with well rounded corners, the curvature being such that the bracket member will intimately saddle over and engage with the body part and the strap will intimately saddle over and engage with the top and sides of the bracket member, the bends of the strap between its body and ears being well rounded and preferably provided with lateral strengthening corrugations.

On the accompanying drawing I have shown an insulator supporting fixture which embodies the construction and features of my invention.

On this drawing Fig. 1 is a side elevational view, Fig. 2 is a front view with the end of the lower bracket member broken away, Fig. 3 is a sectional view on plane 3—3, Fig. 2, Fig. 4 is a sectional view on plane 4—4, Fig. 2, and Fig. 5 is a sectional view similar to Fig. 4 showing a modified arrangement.

In the fixture shown the body part 10 is bent up from a single piece of flat sheet metal to arched or U-shaped cross-section, the front being practically semi-cylindrical. At the top and bottom the body has the flattened sections 11 and 12 provided with the bolt or screw holes 13 and 14 respectively whereby the fixture may be secured to a pole or other support. The fixture has the upper and lower U-shaped bracket members 15 and 16 which are substantially identical in form and construction, each being pressed up from a single piece of flat sheet metal with its back and bend parts 17 and 18 of arch or U-shaped cross-section and with the limbs brought together at the end 19 to form a seat for an insulator supporting structure 20 shown in this case in the form of a wire helix engaging at its ends

in the upper and lower slots 21 and 22 respectively. The backs 17 of the bracket members saddle over and intimately fit the front and sides of the body part 10 as clearly shown in Figs. 3 and 4, and such engagement locks the bracket members to the body part against rotational displacement, the bracket members being further secured to the body part by the rivets 23.

To provide greater and more secure seating for the fixture a strap 24 is applied over the back of each bracket member. These straps are also pressed up from sheet metal and each has the central body portion of arch or U-shaped cross-section for intimately saddling over and engaging with the front and sides of the bracket member back, wings 25 and 26 extending laterally from the body of the strap providing the seating area for the fixture and having the bolt holes 27 and 28 by means of which the straps may be secured to a support. Each strap is preferably secured in place by the same rivet 23 which holds the bracket member to the body part. In other words, a single rivet passes through the strap, bracket member and body part as clearly shown in Figs. 3 and 4.

The bends 29 and 30 between the wings and body of the strap are rounded and to add strength corrugations 31 and 32 may be formed in the bends longitudinally of the strap.

With the above construction and arrangement the bracket members intimately saddle over and engage with the front and sides of the body part 10 and the straps intimately saddle over and engage with the front and sides of the bracket members and such intimate engagement adds great strength to the structure and such engagement together with the rivets 23 will resist any displacement, either rotational or longitudinal, of the parts. The bends in the strap being of considerable radius, the strap will retain full strength and when the straps are provided with the strengthening corrugations the fixture will be rigidly secured to its support particularly against swing or displacement under lateral strains under pull of wires at the insulator ends of the bracket members.

In Fig. 5 I have shown my invention applied to an individual bracket to be secured directly to a support. The structure is the same as in Fig. 4, the strap 24 intimately saddling over and engaging with the front and sides of the inner section 17 of the bracket member 15 and secured thereto by a rivet 33. When the strap is secured to a pole or wall the intimate engagement therein of the bracket member will secure the bracket member against rotational displacement.

I do not desire to be limited to the exact construction and arrangements shown and described as changes and modifications are no doubt possible which would still come within the scope of the invention.

I claim the following:

1. A fixture comprising an insulator receiving member and a strap for securing said member to a support, said member being pressed from flat sheet metal and being of arch shaped cross section open to the rear, said strap being arched to saddle over and intimately engage at all points with the front and sides of said member, means securing the strap to the member, and laterally extending wings on said strap provided with bolt holes.

2. A fixture comprising an insulator receiving member and a strap for securing said member to a support, said member being pressed from flat sheet metal and being of arch shaped cross section open to the rear, said strap being arched to saddle over and intimately engage at all points with the front and sides of said member, means securing the strap to the member, laterally extending wings on said strap provided with bolt holes, and transversely extending strengthening corrugations for the bends between the arch and wings of said strap.

3. An insulator supporting fixture comprising a body part and a bracket member, said body part being pressed up from sheet metal to arched cross-section and open at the rear, said bracket member being pressed up from sheet metal to arched transverse cross-section, the end of said bracket member saddling over and intimately engaging with the front and sides of the body part to be locked against rotational displacement, and means securing the bracket member to the body part against longitudinal displacement.

4. An insulator supporting fixture comprising a body part and a bracket member, said body part being pressed up from flat sheet metal to arched transverse cross-section and open to the rear, said bracket member being pressed up from flat sheet metal to arched transverse cross-section, the end of said bracket member saddling over and intimately engaging at all points with the front and sides of said arched body part, a strap pressed up from sheet metal and arched at its center to saddle over and intimately engage with the front and sides of the bracket member, means securing the strap, bracket member and body part intimately together, and lateral wings on said strap provided with bolt holes.

5. An insulator supporting fixture comprising a body part and a bracket member, said body part being pressed up from flat sheet metal to arched transverse cross-section and open to the rear, said bracket mem-

ber being pressed up from flat sheet metal to arched transverse cross-section, the end of said bracket member saddling over and intimately engaging at all points with the front and sides of said arched body part, a strap pressed up from sheet metal and arched at its center to saddle over and intimately engage with the front and sides of the bracket member, means securing the strap, bracket member and body part intimately together, and lateral wings on said strap provided with bolt holes, said strap having strengthening corrugations at its bends between its arched section and the wings.

In witness whereof I hereunto subscribe my name this 26th day of February, A. D., 1916.

CHARLES L. PEIRCE, JR.