O. KNOERZER.

SERVICE POLE.

APPLICATION FILED DEC. 26, 1907.

907,817. Patented Dec. 29, 1908.

Fig. 1.

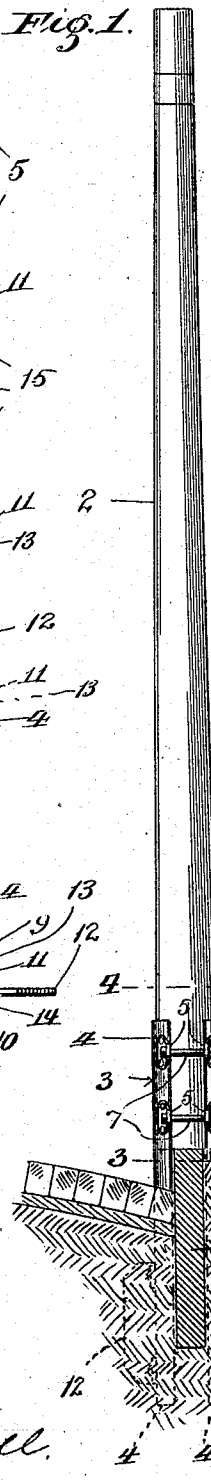


Fig. 2.

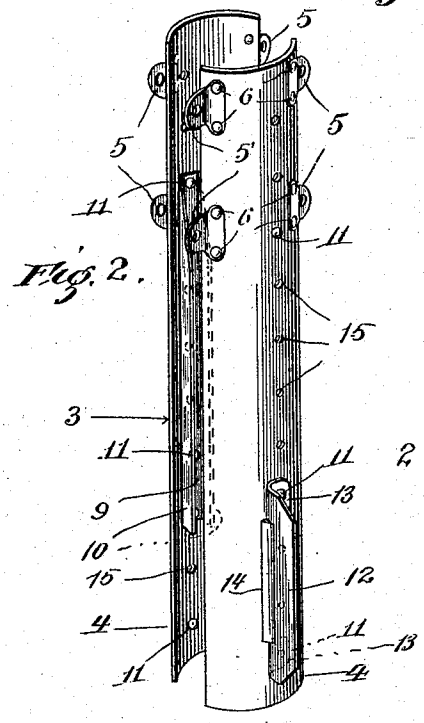


Fig. 3.

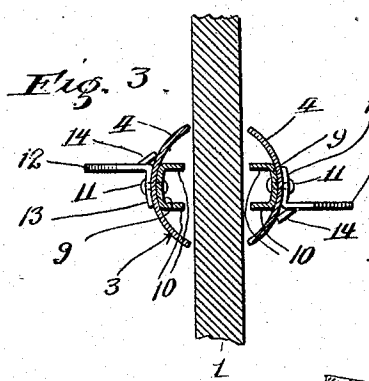


Fig. 4.

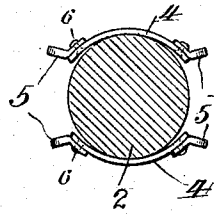


Fig. 5.

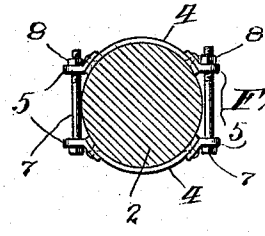


Fig. 6.

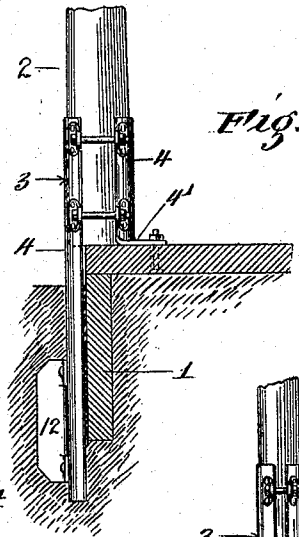
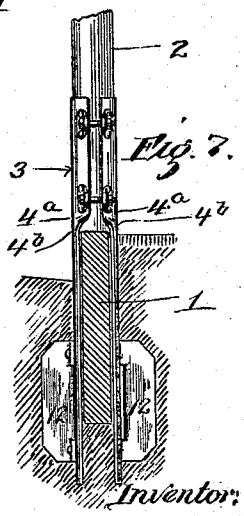


Fig. 7.



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UNITED STATES PATENT OFFICE.

OTTO KNOERZER, OF HAMMOND, INDIANA.

SERVICE-POLE.

No. 907,817. Specification of Letters Patent. Patented Dec. 29, 1908.

Application filed December 26, 1907. Serial No. 408,075.

To all whom it may concern:

Be it known that I, OTTO KNOERZER, a citizen of the United States, a resident of Hammond, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Service-Poles, of which the following is a full, clear, and exact description.

My invention relates to certain new and useful improvements in service poles, such as telegraph, trolley, electric light poles and the like, and more particularly to means for supporting the poles upon the ordinary curbstone.

The object of this invention is to provide a base for service poles whereby the pole may be positioned and supported directly on the "curb line," without destruction of the curbstone or in fact without any alteration or disfigurement of the same so that in case it afterwards becomes desirable to remove the poles and bases the curbstone will be left intact.

In most municipalities the desideratum is to have the poles on the "curb line" and many attempts have been made to accomplish this result, however, without much success, and as a result the poles are usually placed on either side of the curbstone.

With my invention I have attained the desired result, and to such end the invention consists in a base which is supportable in the ground adjacent to the curbstone, and independent of the stone itself, and so constructed and arranged as to hold the pole immediately above and in alinement with the curbstone.

The invention is fully described in this specification and illustrated in the accompanying drawing in which—

Figure 1 is a side view of a pole and the base, and showing a fragment of the roadway in cross section. Fig. 2 is a perspective view of the two sections which comprise the base. Fig. 3 is a horizontal section taken on line 3—3 Fig. 1. Fig. 4 is a horizontal section taken on the line 4—4, Fig. 1, showing the parts in a position occupied before the clamp bolts are applied. Fig. 5 is a similar view after the bolts are tightened up. Fig. 6 is a side view of a modified form and Fig. 7 is a view of a second modification.

Referring to the drawing 1 is a curbstone such as is ordinarily employed to separate the roadway from the terrace, or the sidewalk. The curb is formed in a variety of ways, sometimes being in the form of large flat slabs, and often of concrete, molded into the proper form. The form there shown is that of a stone slab set into the ground with 8 or 10 inches of its upper end exposed above ground. 2 is a trolley pole, or telegraph pole, as the case may be, and which it is proposed to support above and in alinement with the curbstone.

The preferred form of the base is seen at 3, Figs. 1 to 5 inclusive, and in general comprises two substantially similar plates 4, 4, one of which is arranged to extend on either side of the curbstone. Each half consists in a plate 4, which is bent into an arc of a circle with a radius substantially that of the pole to be supported. The radius of the arc of the plate before it is bolted on the pole is a little greater than the radius of the pole in order that it may be drawn snugly upon the pole. A number of ears 5 are secured upon the upper part of the plates 4, by rivets or the like 6, and each of the plates 4 are arranged to be drawn together by bolts 7 that pass through the ears 5, and have nuts 8, threaded upon their ends, the tightening up of which clamps the plates 4, upon the pole.

For certain conditions the plates are reinforced upon their inner or adjacent sides, by webs or ribs that are preferably formed of sheet metal bent up to form a base 9 and one or more flanges 10. The reinforcing plate is secured to the plate by bolts or rivets 11 which pass through the reinforcement and plate 4. Because of the curved form of the plates I am enabled to place these reinforcements at points best adapted for resisting the bending strain, inasmuch as the reinforcements can be placed on the concave face of the plate, between the latter and the curb. To guard against the twisting or tilting of the base I have found it advisable to provide a laterally projecting wing or flange 12 which is secured upon the outer face of the plate by rivets or bolts, 11, which pass through ears 13, of the wing or flange. As shown the wing or flange extends out from the plate and has a lip or edge 14 bent out to one side of the main body of the wing or flange and adapted to rest against the outer face of the plate. This lip, together with the ears 13, effectively prevents the flange from being bent or folded over upon the plate and materially strengthen and stiffen the wing itself.

Each plate 4 is preferably formed with a row of perforations 15, through which the

bolts or rivets may be passed to connect the reinforcement and wing to the plate. If desired lag screws may be passed through the upper holes and driven into the pole.

In Fig. 6 one of the two plates is supplanted by a plate, which instead of extending down into the ground, is formed with a horizontal flange 4^1 which may be bolted or otherwise secured to the sidewalk. This form is intended for use when the sidewalk extends to or over the curb, and it is not permissible to make a hole through the sidewalk for the plate. This form of base is very effectual for this purpose, is easily put in place and its removal leaves the curb and walk practically intact.

In Fig. 7 the plates 4^a, 4^a, are arranged to support a pole of much smaller diameter than the preceding poles, and when the curbstone is of practically the same thickness as before. In this form of the invention the lower parts of the plates are bent back as at 4^b, so that the parts above the curb may extend well towards the middle line of the pole. The lower part may be somewhat flattened if desired to give a wide surface.

I am well aware that various forms of bases have been devised for fence posts, hitching posts, etc., but I believe it to be broadly new to provide means for securing a telegraph, telephone, electric light, trolley pole, or like service pole, at a point immediately above the curb of a roadway without injury or alteration of the curb itself. This I accomplish by the use of a particular kind of base which is in two parts and arranged to straddle the curbstone. Because of the length of such poles and the constant strain upon them it is essential that a particularly rigid, strong and substantial base be provided and that at the same time it occupy no more space than is necessary. All of these requirements have been accomplished in this invention.

In putting the bases in place, the hole is first dug and the pole set in place. If desired a concrete foundation may be used in which the bottom of the base is embedded.

I am aware that various other alterations and modification, besides the ones which I have shown and described, are possible without departing from the spirit of my invention and I do not therefore desire to limit myself to the exact forms shown and described.

I claim as new and desire to secure by Letters Patent:—

1. In a device of the class described the combination with a service pole, of means for supporting said pole in alinement with a curbstone, comprising plates that are curved to substantially fit the pole, perforated ears secured upon said plates, clamp bolts extending through said ears and securing the plates upon the pole, said plates being independent of and disconnected from the curbstone and having wings for securing said plates against lateral sway.

2. A base for supporting service poles in alinement with a curbstone, comprising two substantially similar plates, each having the form of an arc of a circle practically fitting the pole, ears upon the upper end of the plates, clamp bolts connecting the ears to clamp the plates upon the pole, said plates being spaced apart sufficiently to straddle the curbstone, and of such length as to extend down below the curbstone and obtain a firm grip in the ground, and laterally extending webs secured upon the plates below the ground level.

3. A base for supporting service poles in alinement with a curbstone, comprising two substantially similar plates, each having the form of an arc of a circle, practically fitting the pole, ears upon the upper end of the plates, clamp bolts connecting the ears to clamp the plates upon the pole, said plates being spaced apart sufficiently to straddle the curbstone, and of such length as to extend down below the curbstone and obtain a firm grip in the ground, laterally extending webs secured upon the plates below the ground level, and vertically extending reinforcing webs secured upon the concave faces of the plates.

4. A base for supporting service poles in alinement with a curbstone, comprising two substantially similar plates, each having the form of an arc of a circle, practically fitting the pole, ears upon the upper end of the plates, clamp bolts connecting the ears to clamp the plates upon the pole, said plates being spaced apart sufficiently to straddle the curbstone, and of such length as to extend down below the curbstone and obtain a firm grip in the ground, laterally extending webs secured upon the plates below the ground level, and vertically extending reinforcing webs secured upon the concave faces of the plates, each of said plates being formed with a central row of perforations, through which the securing means for the webs and reinforcements extend.

5. In a service pole structure, the combination with a curbstone and a service pole which is to be supported upon said curbstone and in alinement therewith, of a pair of plates clamped upon the lower end of the pole to straddle the curbstone, said plates being of such length as to extend down considerably below the curbstone, laterally extending wings secured upon said plates below the ground line, and reinforcing webs secured upon the inner adjacent faces of the plate.

6. In a service pole structure, the combination with a curbstone, and a service pole which is to be supported upon said curbstone and in alinement therewith, of a pair of plates clamped upon the lower end of the pole to straddle the curbstone, said plates being of

such length as to extend down considerably below the curbstone, and each having a series of alined perforations laterally extending wings having perforations registering with the perforations in the plates and adapted to be secured upon the plates below the ground line by bolts or rivets passing through the registering perforations and reinforcing webs having perforations registering with perforations in the plates and secured upon the inner adjacent faces of the plate by bolts or rivets passing through registering perforations in the webs and plates.

In witness whereof, I have executed the above application this 23rd day of December, A. D. 1907 at Chicago, county of Cook, and State of Illinois.

OTTO KNOERZER.

Witnesses:
CHARLES O'SHERVEY,
FRANK BEMUS.