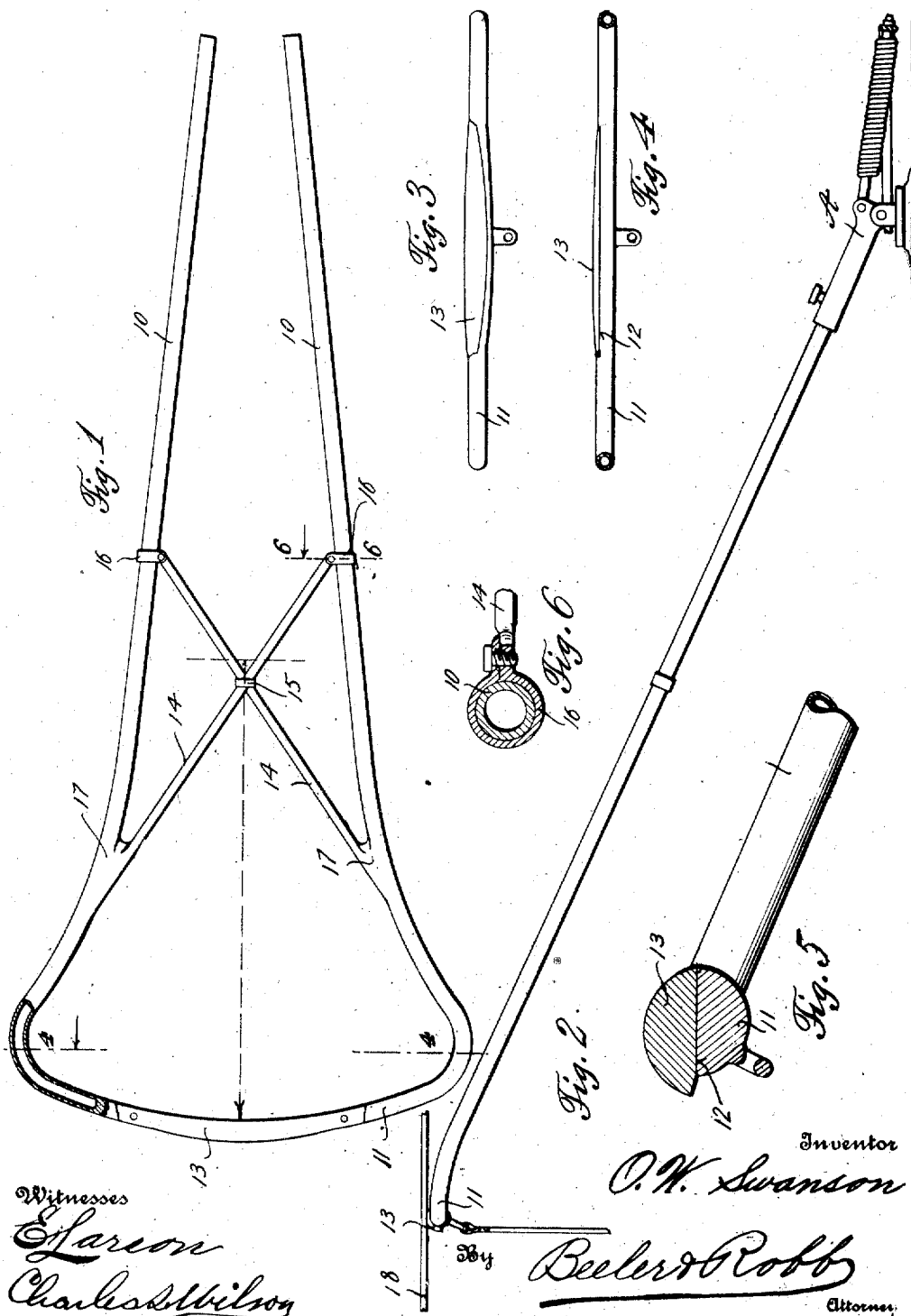


991,389.

Patented May 2, 1911.



UNITED STATES PATENT OFFICE.

OSCAR W. SWANSON, OF NEW HAVEN, CONNECTICUT.

TROLLEY-POLE.

991,389.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed June 29, 1910. Serial No. 569,595.

To all whom it may concern:

Be it known that I, OSCAR W. SWANSON, a Swedish subject, residing at New Haven, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Trolley-Poles, of which the following is a specification.

This invention relates to trolley poles, and is designed to construct a trolley pole which will eliminate the wheels that have been necessary heretofore, and which will constantly return the wire to the center of the bearing surface of the pole after the same has passed around a curve.

Heretofore it has been necessary in the trolley poles wherein wheels were used to construct the base of a pole with very strong springs in order to keep the wheel from jumping the wire. This construction caused a great strain to be exerted on the wire, thereby weakening the same, and after a certain length of time causing the same to break.

It is the object of the present invention to eliminate the necessity of creating such a strong pressure against the wire and to construct a pole having an elongated bearing surface which no matter where the wire rests, should the pole jump the wire, it will return normally to the center of the bearing surface.

It also contemplates the construction of a trolley pole which will permit the same to pass the supporting or stay-wire of the main trolley wire without in any way interfering with the same.

With the above and other objects in view, this invention consists in the construction, combination, and arrangement of parts, wherein—

Figure 1 is an elevation of a trolley pole, embodying the present invention, illustrating parts thereof in section; Fig. 2 is a side elevation of a trolley pole illustrating the operation thereof; Fig. 3 is a rear elevation of the bearing surface of a trolley pole; Fig. 4 is a section taken along the line 4—4 of Fig. 1; Fig. 5 is a central section taken through the bearing surface of a trolley pole; Fig. 6 is a transverse section taken along the line 6—6 of Fig. 1.

The trolley pole forming the subject-matter of the present invention is constructed of a continuous piece of metal bent upon itself and curved at its upper end rearwardly, said

curved portion being in substantially a horizontal plane and having a depression provided centrally in the upper surface thereof. This depression has a bearing shoe secured therein which is enlarged centrally where the wear is the most. Disposed between the arms of the trolley pole are a pair of cross braces which adjacent to the curved bearing portion of the pole are welded to the pole and are secured in such a manner that no short corners are presented; thus should the braces contact with an obstruction, such as a down-hanging wire, said obstruction will not catch in the pole.

In carrying out the present invention a pair of arms 10 are mounted to a base A of the usual construction and are connected at their upper terminals by a continuation 11 thereof. The arms 10 are bent adjacent their upper terminals at 12 in such a manner that the connection 11 will rest in a substantially horizontal plane. The curvature of the connection 11 is from a center O located between the base A and the connection 11, thus causing a different curve to be taken by the bearing surface than that taken by the pole. The connection 11 is provided with a central depression 12 in which is mounted a bearing shoe 13, said bearing shoe being curved upwardly slightly centrally to increase the thickness where there is the most wear.

A pair of cross braces 14 are welded or otherwise secured to the arms 10 adjacent to the connection 11, and where they are crossed are connected by a collar 15. The free terminals 16 of the braces 14 are flattened and encircle the arms 10, being bent upon themselves and are riveted, thus insuring a substantial connection. The joint 17 where the crossed braces are connected to the arms 10 are rounded so that should the same contact with an obstruction such as a down-hanging wire, said obstruction will not be caught by said joint. From this construction it will readily be seen that after the car has passed around the curve the curvature given the connection 11 will cause the bearing shoe 13 to be brought centrally into contact with the wire 18.

Having thus fully described my invention, what is claimed as new is:

1. A trolley pole formed of one continuous piece of material having the upper terminal thereof curved, said curved portion being

bent rearwardly so that the same rests in substantially a horizontal plane when said pole is in operative position.

2. A trolley pole formed of one piece of
5 continuous material bent upon itself to form a curved contact member for engagement with a trolley wire, the curvature of said member being such that the center of curvature is located between the base of the trolley pole and the upper terminal thereof, and
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said curved portion being bent so that the entire length thereof rests in substantially a horizontal plane when said pole is in operative position.

In testimony whereof I affix my signature 15
in presence of two witnesses.

OSCAR W. SWANSON.

Witnesses:

J. AUG. SVENSON,

EDMUND A. DINNEEN.