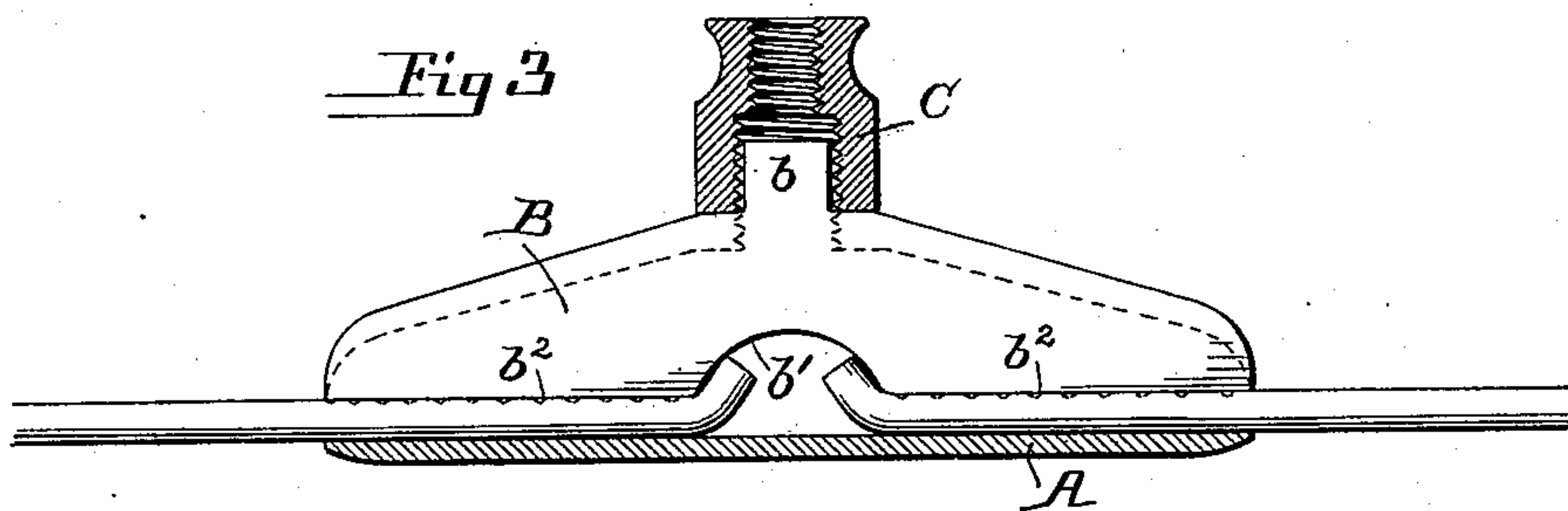
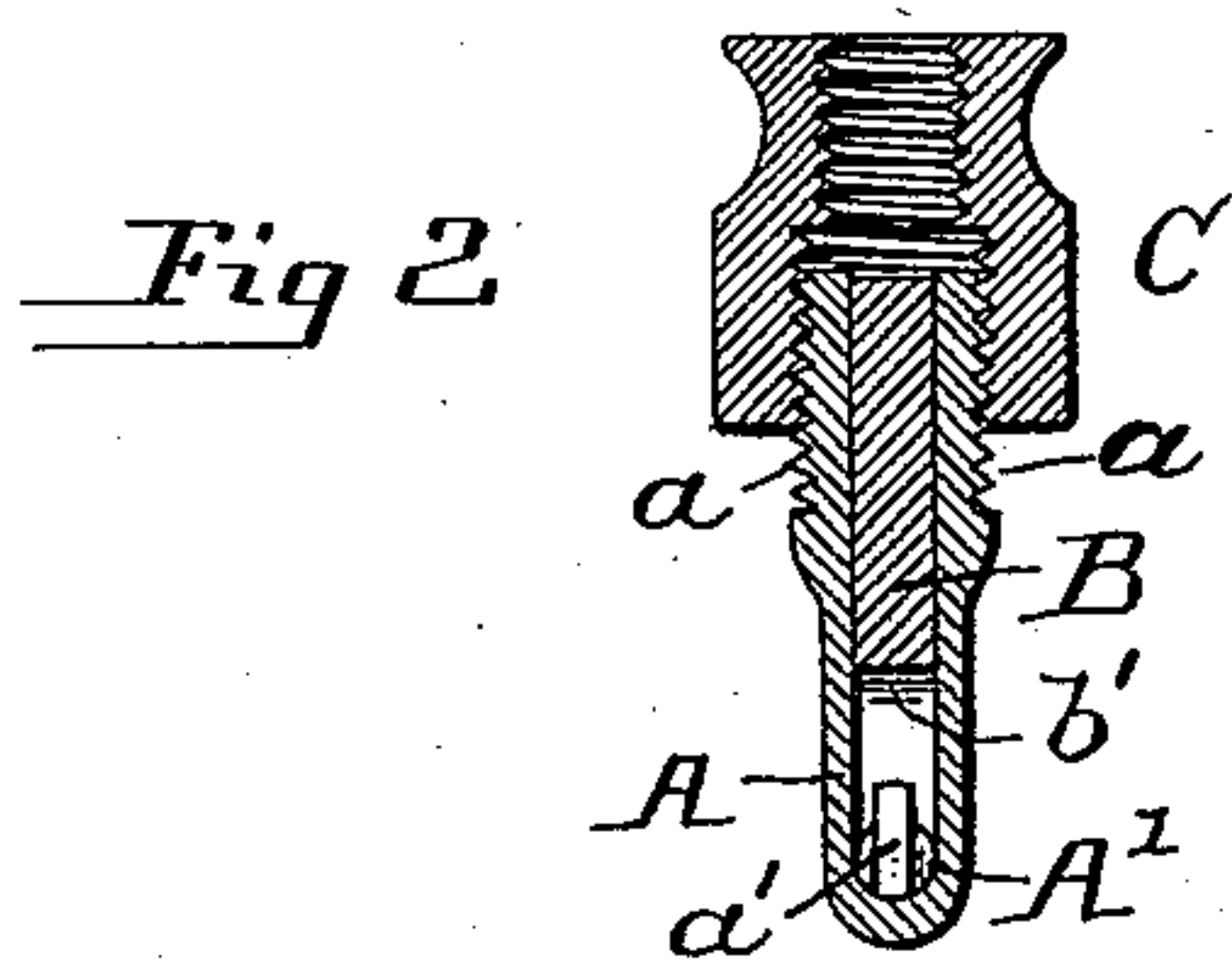
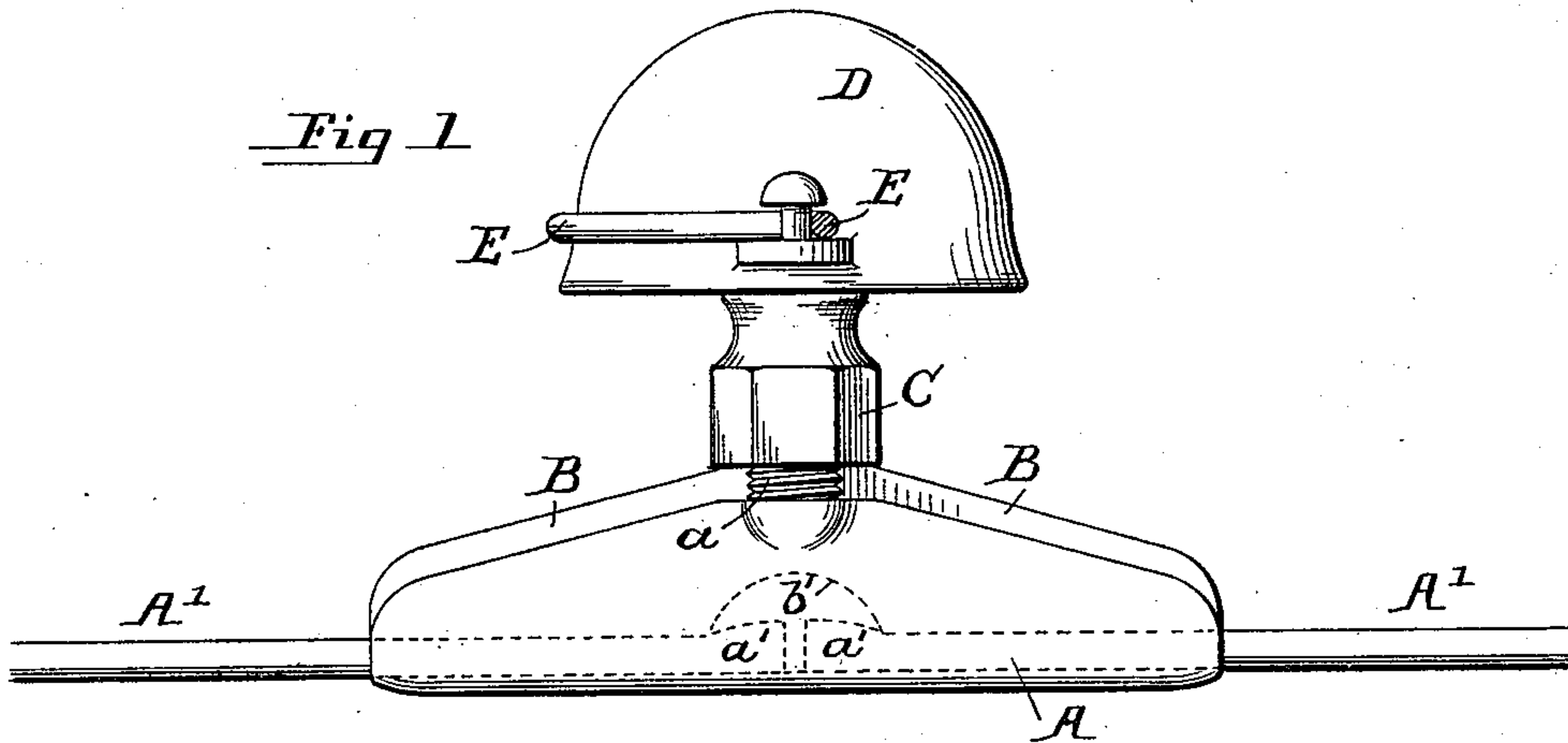


(No Model.)

M. F. VAN BUREN.
TROLLEY WIRE SUPPORT.

No. 534,411.

Patented Feb. 19, 1895.



Witnesses:

Frank J. Lumberg
J. W. Straub

Inventor.

Marmaduke F. Van Buren
By Thomas S. Snow
Attorney.

UNITED STATES PATENT OFFICE.

MARMADUKE F. VAN BUREN, OF PHILADELPHIA, PENNSYLVANIA.

TROLLEY-WIRE SUPPORT.

SPECIFICATION forming part of Letters Patent No. 534,411, dated February 19, 1895.

Application filed October 5, 1894. Serial No. 524,955. (No model.)

To all whom it may concern:

Be it known that I, MARMADUKE F. VAN BUREN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Trolley-Wire Supports; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

My invention relates to trolley wire supports and the object of the improvement is to construct a trolley wire support that will hold up the trolley wire in the regular way and can also be used to connect and securely hold together the two ends of a broken wire or join together the free ends of wires, when putting up new work. I accomplish the desired result by the construction and arrangement of the parts of the device as hereinafter shown and particularly pointed out in the claims.

In the accompanying drawings Figure 1, represents a side elevation of my improved trolley wire support, showing the connected ends of the wire in dotted lines. Fig. 2, is a cross section of a support with the head carrying the cross wire removed. Fig. 3, is a longitudinal section of the support showing the ends of the connected wires bent upwardly instead of being flattened out as shown in Fig. 1.

A, represents a U shaped hanger supporting the trolley wires A'. *a, a*, are two screw threaded lugs or projections on the upper part of the hanger.

B, is a flat clamping piece fitting inside of the U shaped hanger and projecting some distance above it.

b, is a lug or projection formed on top of the clamping piece B.

b', is a semicircular opening in the bottom of the clamping piece B, directly under the lug *b*. This opening may be made any desired shape.

C, is a screw threaded nut fitting on the lugs *a, a*, of the U shaped hanger and over the lug *b*, on the clamp.

D, is a cross head secured to and surmounting the nut C.

E, is the cross or span wire, supporting the whole device.

a', a', are enlarged heads formed on the ends of the wires that it is desired to connect. These heads may be made by hammering the wire flat and thus spreading it out as shown in Fig. 1, or they may be made by bending the ends of the wires upward as shown in Fig. 3, or by any other convenient means.

b², b², are short spurs or projections formed on the under side of the clamp B. These spurs being forced into the soft metal of which the wires are formed, help to hold the wire from slipping out of the hanger. The bottom of the U shaped hanger and the bottom of the clamp B, are both preferably formed to the arc of a circle.

When the ends of the wires A', A', are enlarged by flattening them out as shown in Fig. 1, or they are bent up as shown in Fig. 3, and the clamping piece B, forced down tightly upon them by turning the screw threaded nut C, they cannot be pulled out of the hanger.

To connect two pieces of wire with my improved hanger, it is only necessary to enlarge or bend up the ends, place them in the U shaped hanger in the position shown in Figs. 1 and 2, and force down the clamping piece B, by turning the screw threaded nut C. The bottom of the hanger where the wire rests, being formed to the arc of a circle the round wire fits snugly therein and the bottom of the clamping piece B, likewise conforming to the shape of the wire and provided with the short spurs or projections, the hold on the wire is very secure and the wires cannot be withdrawn from the hanger without loosening the nut C.

Having thus described my invention, what I claim is—

1. In a trolley wire support, the combination of the U shaped hanger A, provided with the screw threaded lugs *a*, the nut C, and the clamping piece B, fitting into the U shaped hanger and having on the under side an opening for the reception of the enlarged or bent up ends of the trolley wires, substantially as shown.

2. The U shaped hanger A, provided with

the screw threaded lugs *a*, the nut C, operating upon the clamping piece B, arranged in the hanger, said clamping piece having a cut away part *b'*, on the under side thereof, in
5 combination with the trolley wires, A', having the enlarged or bent up ends, substantially as shown and for the purpose described.

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

MARMADUKE F. VAN BUREN.

Witnesses:

SAML. H. KIRKPATRICK,
THOS. D. MOWLDS.