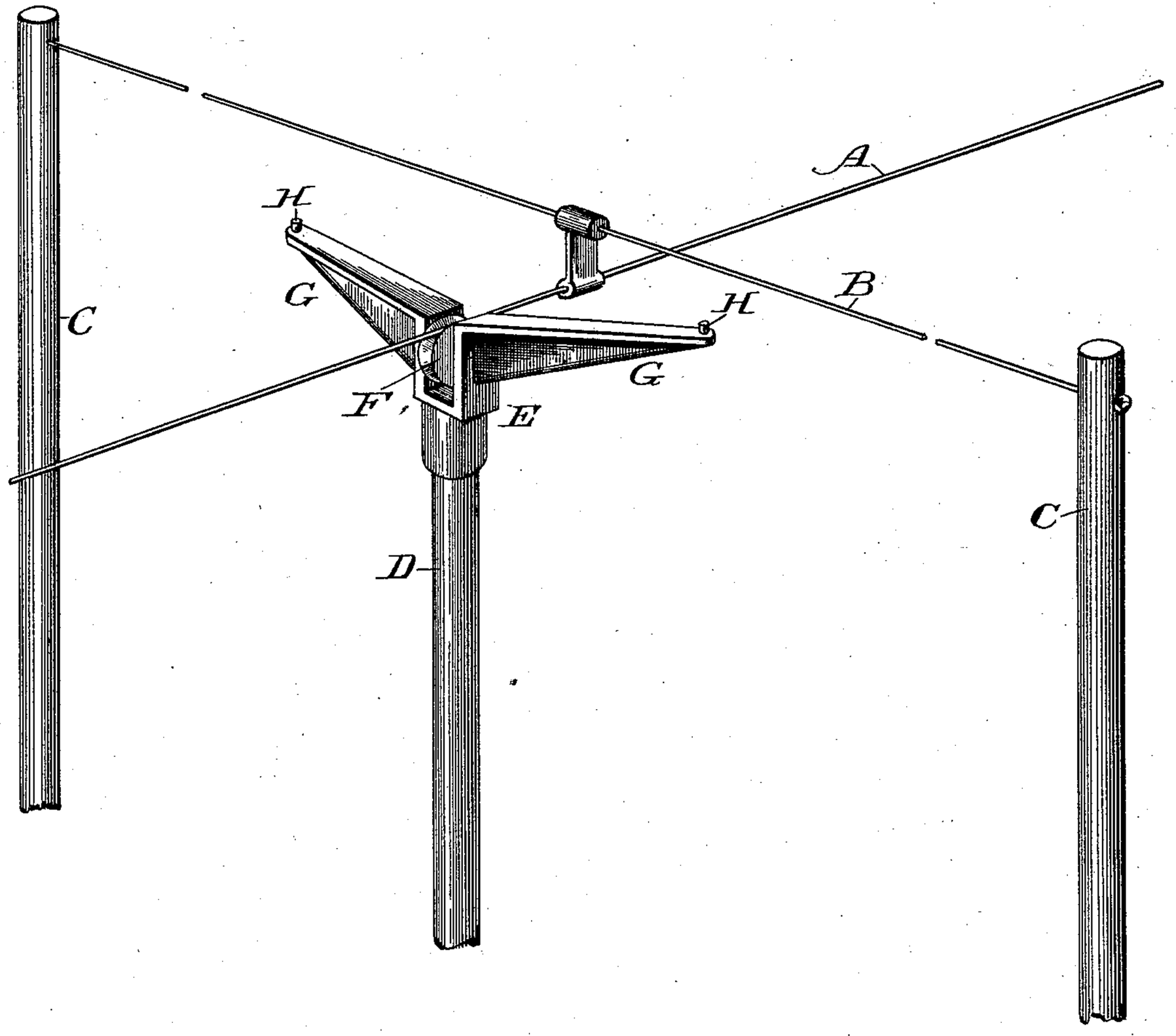
(No Model.)

C. E. POWELL.

TROLLEY.

No. 531,331. Patented Dec. 25, 1894.



Witnesses
M. Reynolde
Fred'k L. Gatchell.

Inventor
Charles E. Powell
By John Wedderburn
his Attorney

UNITED STATES PATENT OFFICE.

CHARLES E. POWELL, OF PHILADELPHIA, PENNSYLVANIA.

TROLLEY.

SPECIFICATION forming part of Letters Patent No. 531,331, dated December 25, 1894.

Application filed October 31, 1894. Serial No. 527,522. (No model.)

To all whom it may concern:

Be it known that I, CHARLES E. POWELL, 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 Trolleys; and I do hereby 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.

In the operation of the overhead system of electric railways in the past great inconveniences have arisen by reason of the fact that the trolley wheel or collector attached to the end of the trolley pole projecting from the car is thrown off the main supply wire by knocking against the cross or supporting wires of the road. This is due to the fact that the connection between the main supply wire and the cross wire is made by a metallic clip which often projects below the plane of said wire, and when the car is running at a high rate of speed, the trolley striking this projection, is thrown to one side or the other out of connection with the main supply wire, and the current is cut off from the motor of the car, thereby stopping the same.

My invention is designed to overcome these inconveniences, and the same consists of providing the trolley pole with a fender on each side of the roller therein. The said fenders are formed with slightly inclined upper faces leading downwardly to the center, where the roller is situated, and having pins or projections on their outer ends. By this construction it will be seen that when the trolley is thrown out of contact with the main supply wire, the said wire may be caught on one side or the other by the fender by reason of its inclined upper surfaces, and drawn down in connection with the roller again.

The invention is clearly illustrated in the accompanying drawing, forming a part of this specification, in which is shown in perspective the main line and cross wires of an electric railway system, and a trolley in connection with the main line having my improved attachment thereon.

A represents the main supply wire and B the cross or supporting wire therefor, connected at its ends to two uprights C suitably supported upon the ground.

D is a trolley pole having at its upper end a bifurcated bracket or support E in which is rotatably mounted the roller F, which moves in connection with the main supply wire A. On each side of the roller F and integral with the bracket E are two outwardly projecting arms G which form what I call my fender. These arms have inclined upper surfaces leading downwardly to the center, at which point the roller F is located, and are further provided with upwardly projecting pins H thereon.

It will be seen by the construction described that if the roller F is thrown out of contact in any way with the main supply wire A, the latter will be caught by the projecting arms of my fender G and brought back into contact with the said roller. By this means the annoyance of stopping the car to re-apply the trolley to the wire is obviated, the same being done automatically by means of my device. The pins H on the side of the projecting arms of the fender prevent the wire A from slipping off the fender after it has been caught.

Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A trolley rod for use on overhead electric railway systems, having a bracket at its upper end, in which is mounted a roller, the said bracket being provided with a fender, consisting of two integrally formed outwardly projecting arms one on each side of the roller, said arms having inclined upper faces, and pins projecting from their outer ends, substantially as and for the purpose described.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

CHARLES E. POWELL.

Witnesses:
JOSEPH SHOLDERS,
ANDREW FISHER.