

(No Model.)

A. G. CARLSON.
BOND OR CONNECTOR.

No. 550,941.

Patented Dec. 10, 1895.

Fig. 1.

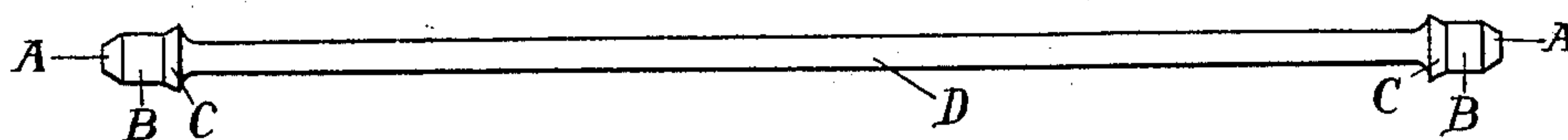


Fig. 2.

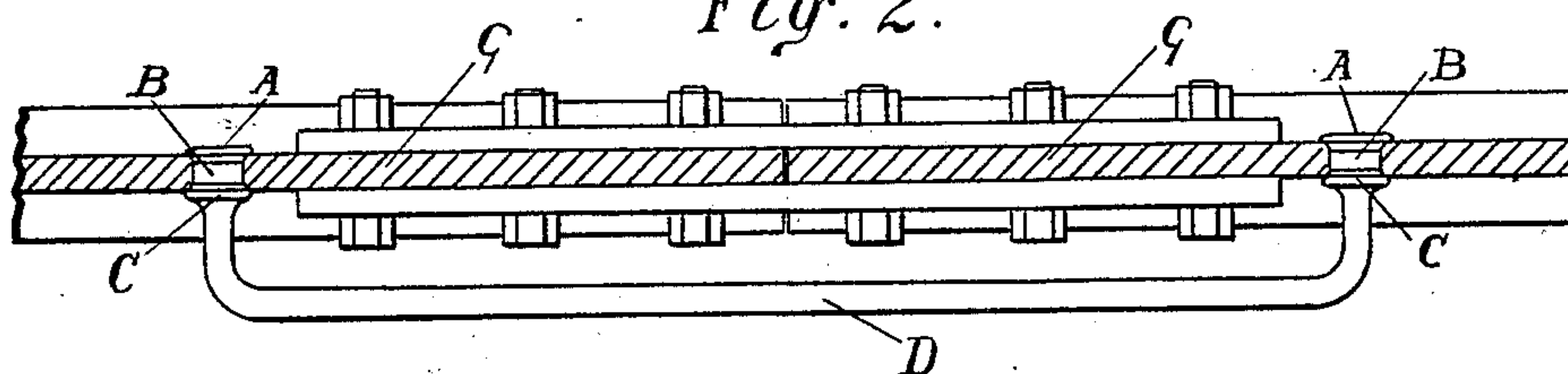


Fig. 3.

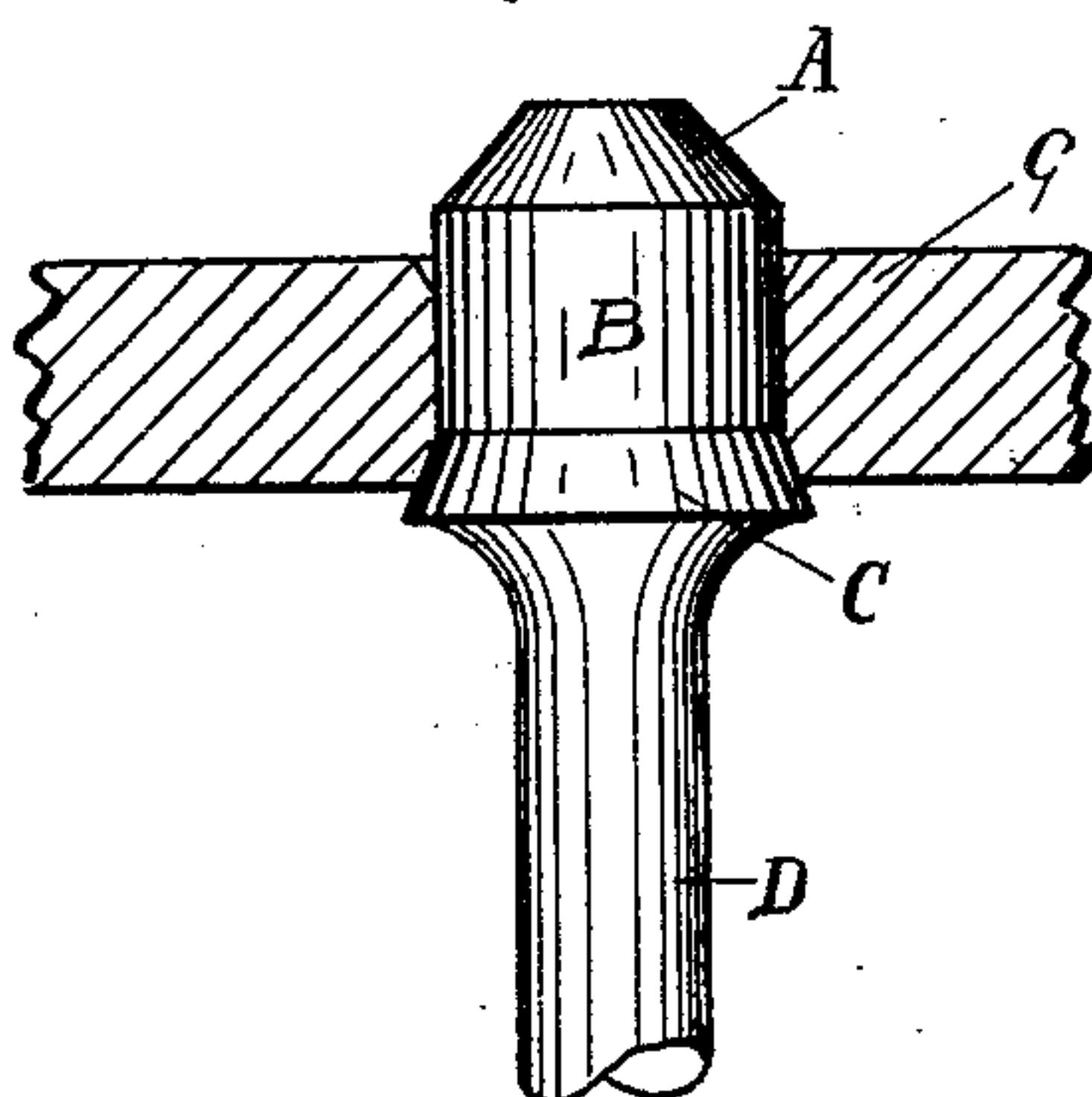
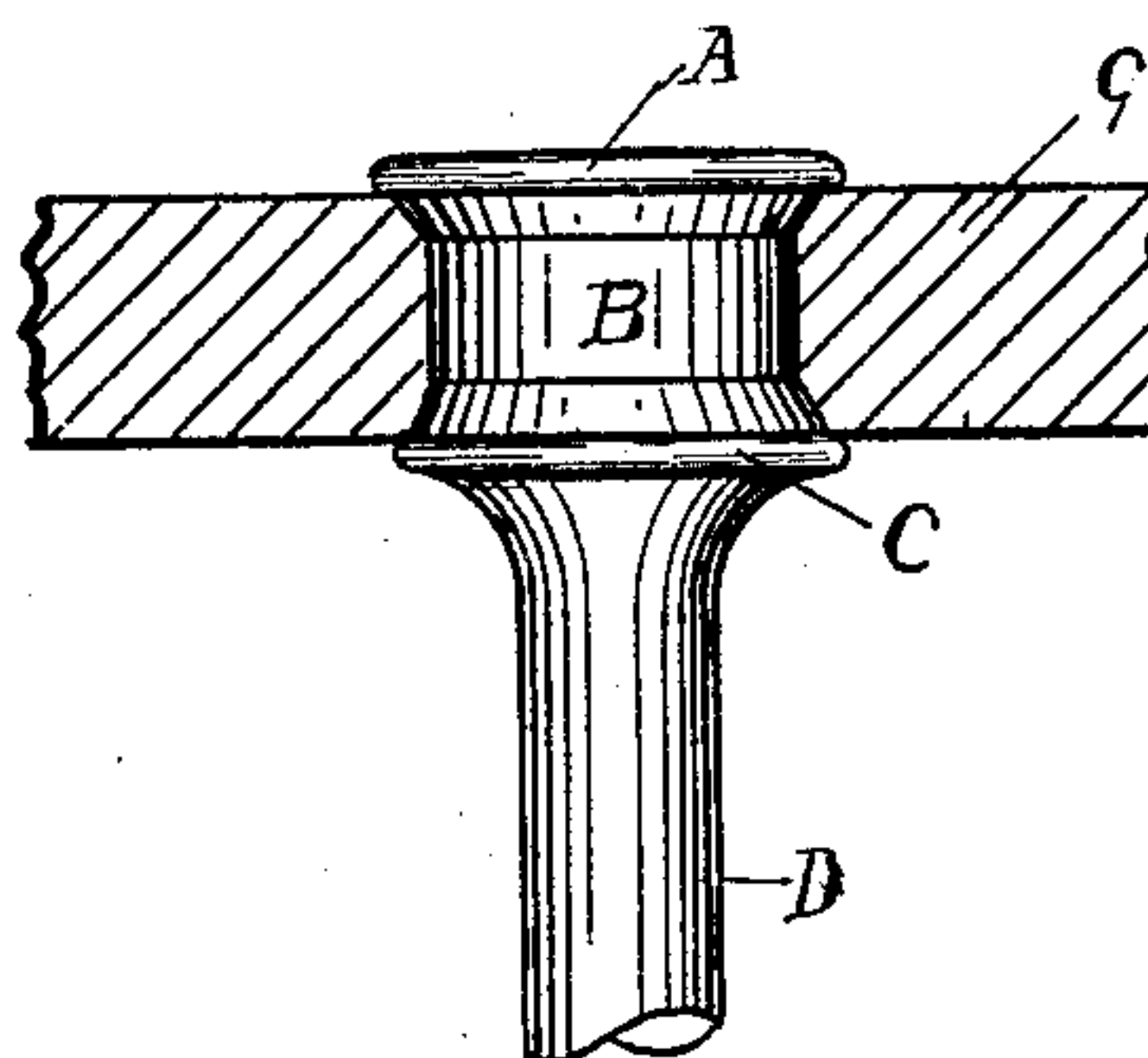


Fig. 4.



Witnesses.

J. Lyle Turner.
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UNITED STATES PATENT OFFICE.

ADOLPH G. CARLSON, OF CHICAGO, ILLINOIS.

BOND OR CONNECTOR.

SPECIFICATION forming part of Letters Patent No. 550,941, dated December 10, 1895.

Application filed July 13, 1895. Serial No. 555,879. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH G. CARLSON, a citizen of the United States, residing at Chicago, in the county of Cook, State of Illinois, have invented a new and useful Bond or Connector for Transmission of Electric Current from One Conductor to Another, of which the following is a specification.

My invention relates to a bond for connecting the ends of two or more conductors, which bond will carry uninterruptedly the electric current over or around the space between any two conductors composing the path of an electric current.

The object of my invention is to provide a perfect contact of the metal composing a bond or connector with holes in any two or more electric conductors. I attain this object by a bond made of a metal wire rod or bar with expanded terminals, as illustrated in the accompanying drawings, in which—

Figure 1 is a side view of bond or connector; Fig. 2, a horizontal section of two tram-rails or conductors at the joint or junction, showing bond in position; Fig. 3, a horizontal section through rail web or conductor, showing bond terminal in position before expanding or riveting the same; Fig. 4, a horizontal section through rail web or conductor, showing bond terminal in position after expanding or riveting the same.

Similar letters refer to similar parts throughout the several views.

The terminals A A B B C C are upset on ends of a metal wire rod or bar of any desired length, so that the circumference of terminals is greater than the circumference of the wire rod or bar.

The middle part of terminal B is a uniform diameter equal to or greater than the thickness of the conductor G, through which the hole is drilled to receive the terminal.

The inner part of terminal C is coned or

wedge shape, in order to be formed into or fit tightly a straight or countersunk bore in the conductor G.

The outer part of terminal is cone-shaped or raised, so that when in position and when struck with a riveting-hammer, or when subjected to pressure or a blow delivered with a pointed or bossed tool, the metal composing this part of the terminal A will be forced into the middle part of the terminal B, expanding the part B and filling the hole in the conductor G.

I am aware that prior to my invention bonds or connectors in one piece with upset or expanded terminals and shoulders have been made and used. I therefore do not claim as my invention these; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. A rail bond having enlarged ends, a cone-shaped shoulder on said enlarged ends, a rivet or stud on the circumference of which said cone-shaped shoulder terminates, and a cone-shaped end of said rivets or studs, said bond being adapted to be riveted in suitable holes in the ends of electrical conductors, as described and for the purpose set forth.

2. In an electric railway, the combination of a bond having enlarged ends, a cone-shaped shoulder on said ends, a rivet or stud on the circumference of which said cone-shaped shoulder terminates, and a cone-shaped end of said rivet or stud, with the rails each provided with a hole through its web, said hole having beveled edges, and adapted to receive the end of the bond which is to be expanded and firmly set therein by riveting, as and for the purpose set forth.

ADOLPH G. CARLSON.

Witnesses:

J. LYLE TURNER,
FRANK R. GREENE.