

No. 812,040.

PATENTED FEB. 6, 1906.

F. C. HOFFMAN.

RAIL BOND FOR STEAM AND ELECTRIC RAILWAYS.

APPLICATION FILED NOV. 12, 1904.

Fig. 1.

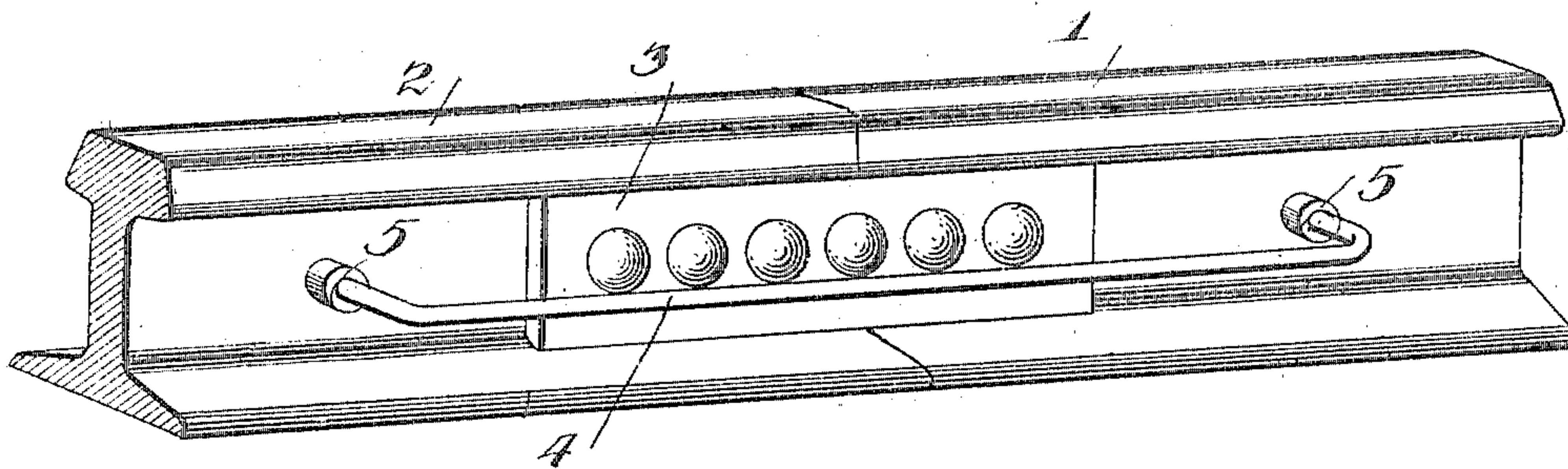


Fig. 2.

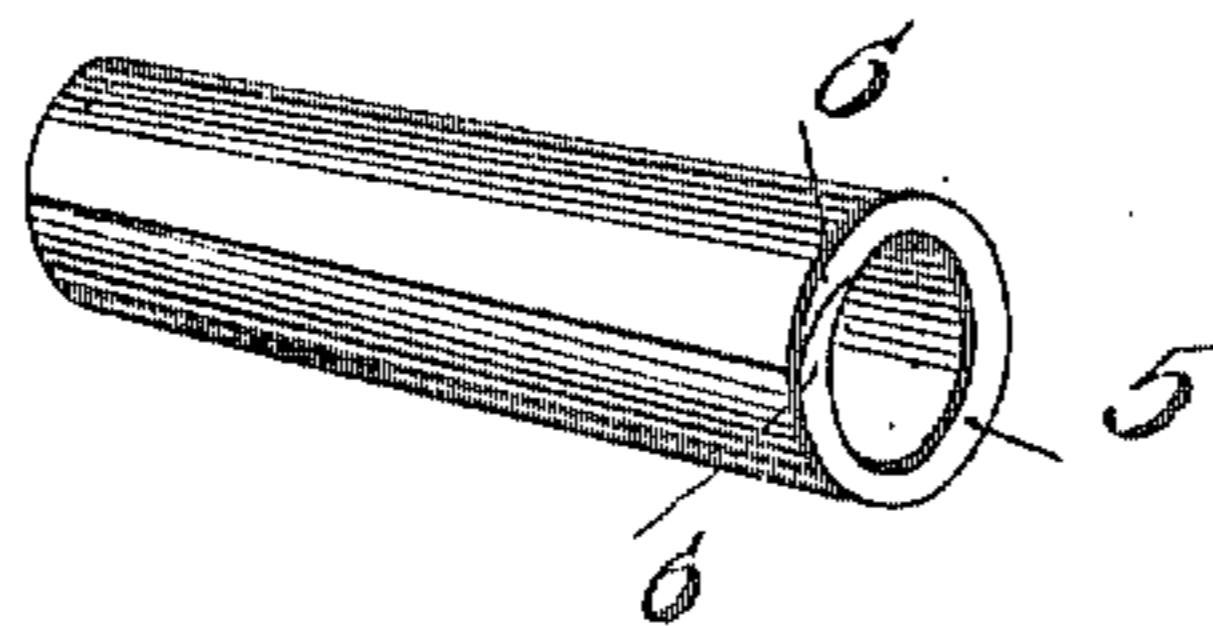


Fig. 3.

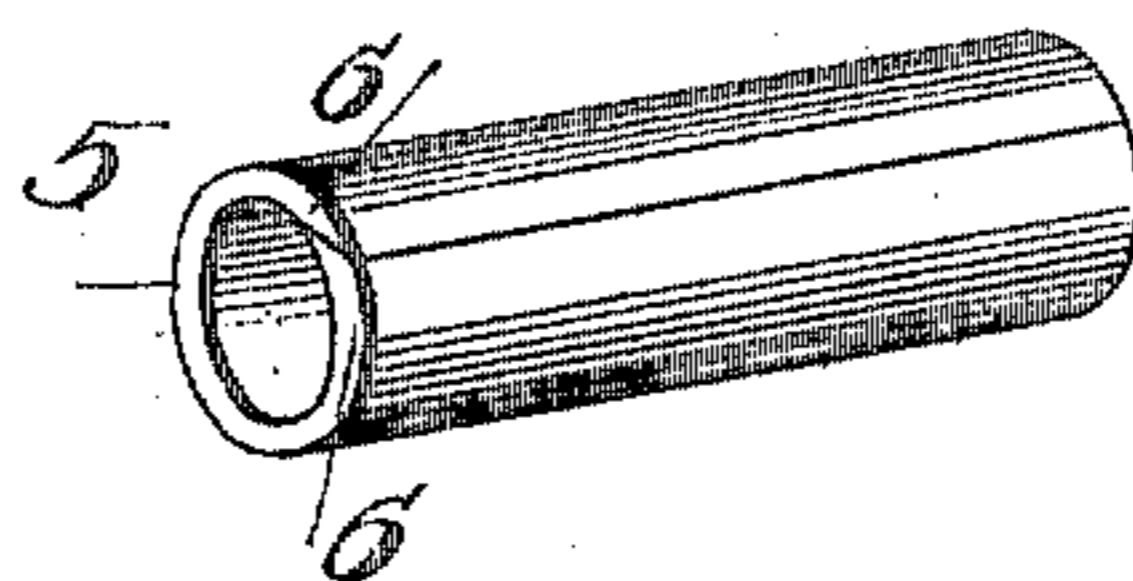
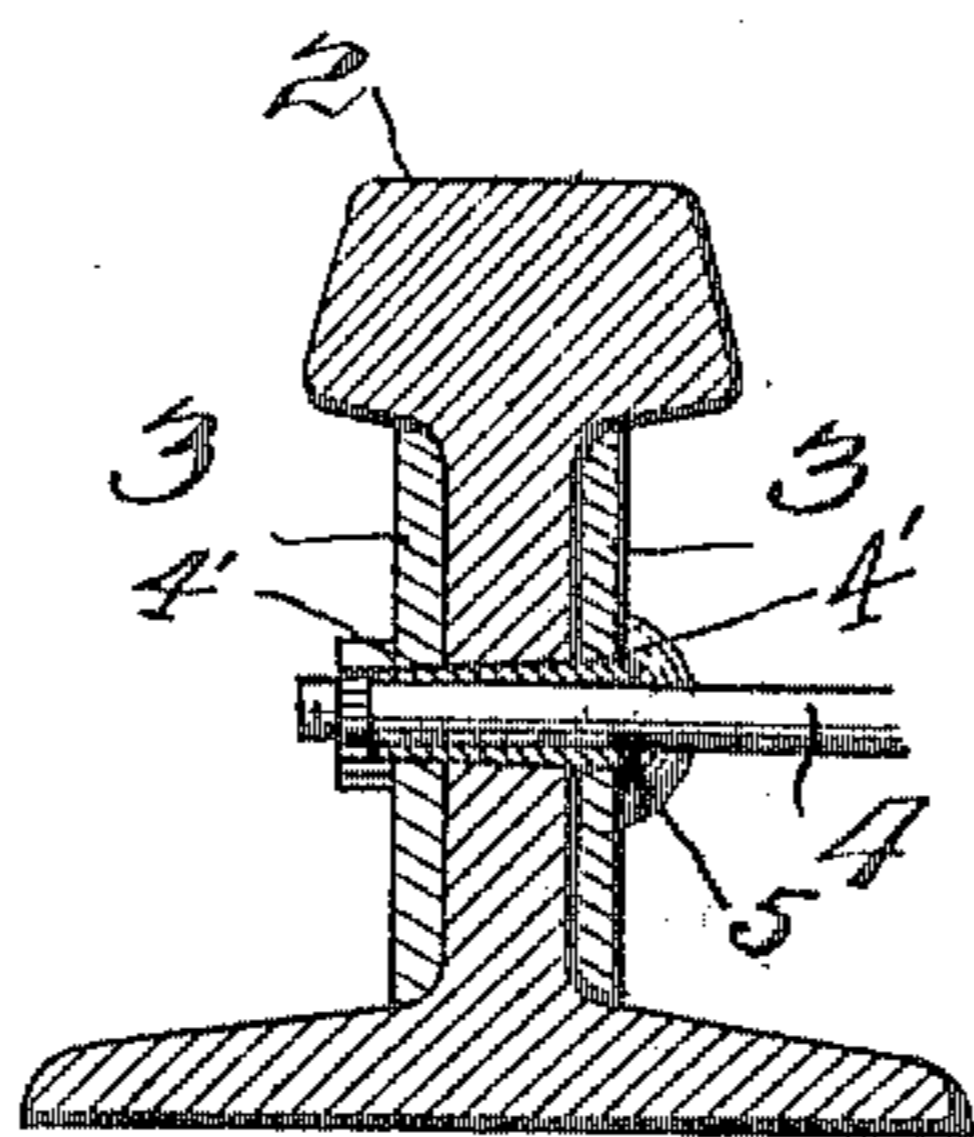


Fig. 4.



Witnesses
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RAIL-BOND FOR STEAM AND ELECTRIC RAILWAYS.

No. 812,040.

Specification of Letters Patent.

Patented Feb. 6, 1906.

Application filed November 12, 1904. Serial No. 232,539.

To all whom it may concern:

Be it known that I, FRANK C. HOFFMAN, a citizen of the United States, residing at Somerville, in the county of Somerset and State of New Jersey, have invented new and useful Improvements in Rail-Bonds for Steam and Electric Railways, of which the following is a specification.

This invention relates to rail-bonds for steam and electric railways.

The objects of the invention are to improve and simplify the construction of such devices; furthermore, to increase their efficiency in operation.

With the foregoing and other objects in view, which will appear as the description proceeds, the invention resides in the precise combination and arrangement of parts and in the exact details of construction hereinafter described and claimed as a practical embodiment thereof.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a rail-bond constructed in accordance with the present invention. Fig. 2 is a perspective view of a split sleeve having curved overlapping edges. Fig. 3 is a similar view of a split sleeve having straight overlapping edges. Fig. 4 is a transverse section through the rail-joint.

Like reference-numerals indicate corresponding parts in the different views.

The reference-numerals 1 and 2 indicate rail ends, which are connected, by means of the fish-plates 3, in the usual manner. The bond-wire 4 has its ends fitted into tapered openings 4' of the web portions of the two rails, as shown, and a split sleeve, such as 5, having cut-away overlapping edges 6 and preferably being tapered in form, is fitted around the bond-wire and is driven into the

rail-webs to conform to the configuration of the tapered openings therein. As each of the split sleeves 5 is driven into the rail it rolls tightly around the bond-wire, this rolling action being facilitated by the inclined or cut-away edges of the sleeves, which slide freely upon each other. In this manner a firm, uniform, and waterproof joint between the bond-wire and the rail is produced.

In manufacturing the improved split sleeves the overlapping edges 6 thereof may be either curved, as shown in Fig. 2, or straight, as shown in Fig. 3.

I am aware that split sleeves or bushings have been employed heretofore in connection with rail-bonds, and I do not claim the use of a split sleeve broadly. I am not aware, however, that a split sleeve having overlapping edges for the purpose specified has been employed, and my invention resides in this particular construction.

Having thus described the invention, what is claimed is—

A rail-bond comprising rail-sections having the webs of their meeting ends provided with tapered openings therein, split sleeves having cut-away overlapping edges mounted in said openings, a wire having angular bent ends, said ends passing through said sleeves, and said sleeves serving to be forced or driven into said openings to tightly embrace the inclosed ends of the wire which action also permits of said sleeves being capable of conforming to the configuration of said tapered openings in said webs, substantially as specified.

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

FRANK C. HOFFMAN.

Witnesses:

AUSTIN MOORE,
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