

(No Model.)

E. H. GOODMAN.
CONNECTOR FOR TRACK CIRCUITS.

No. 502,229.

Patented July 25, 1893.

FIG. 1.

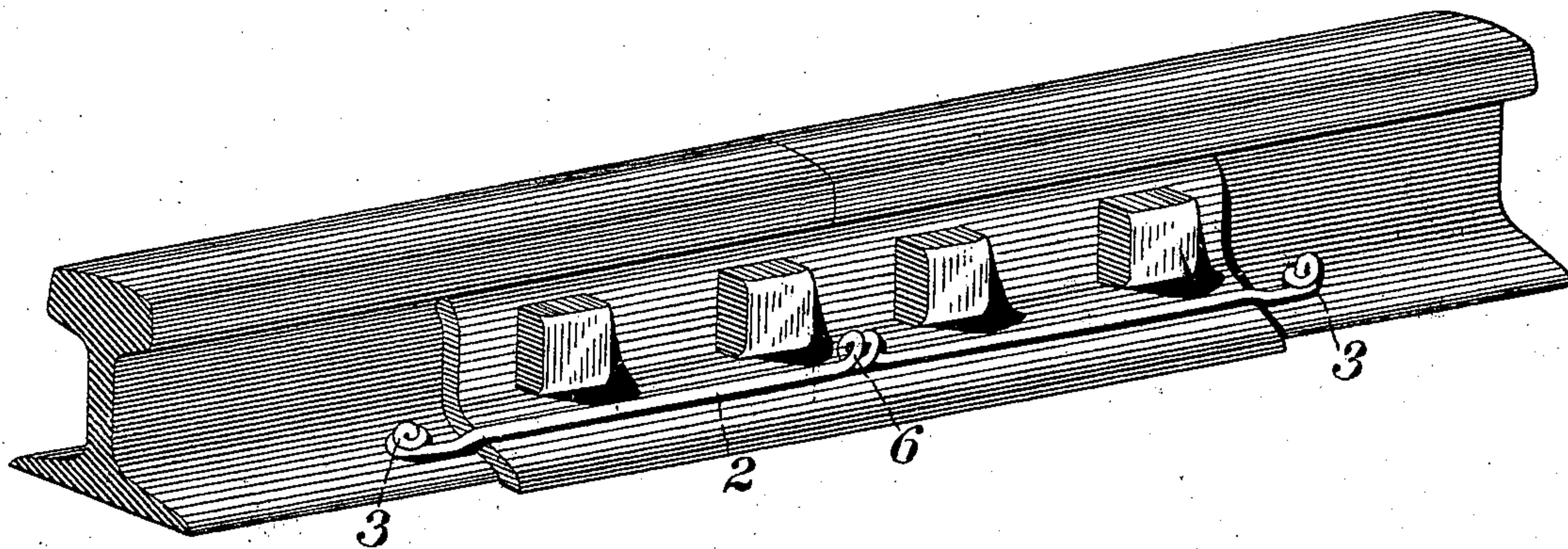
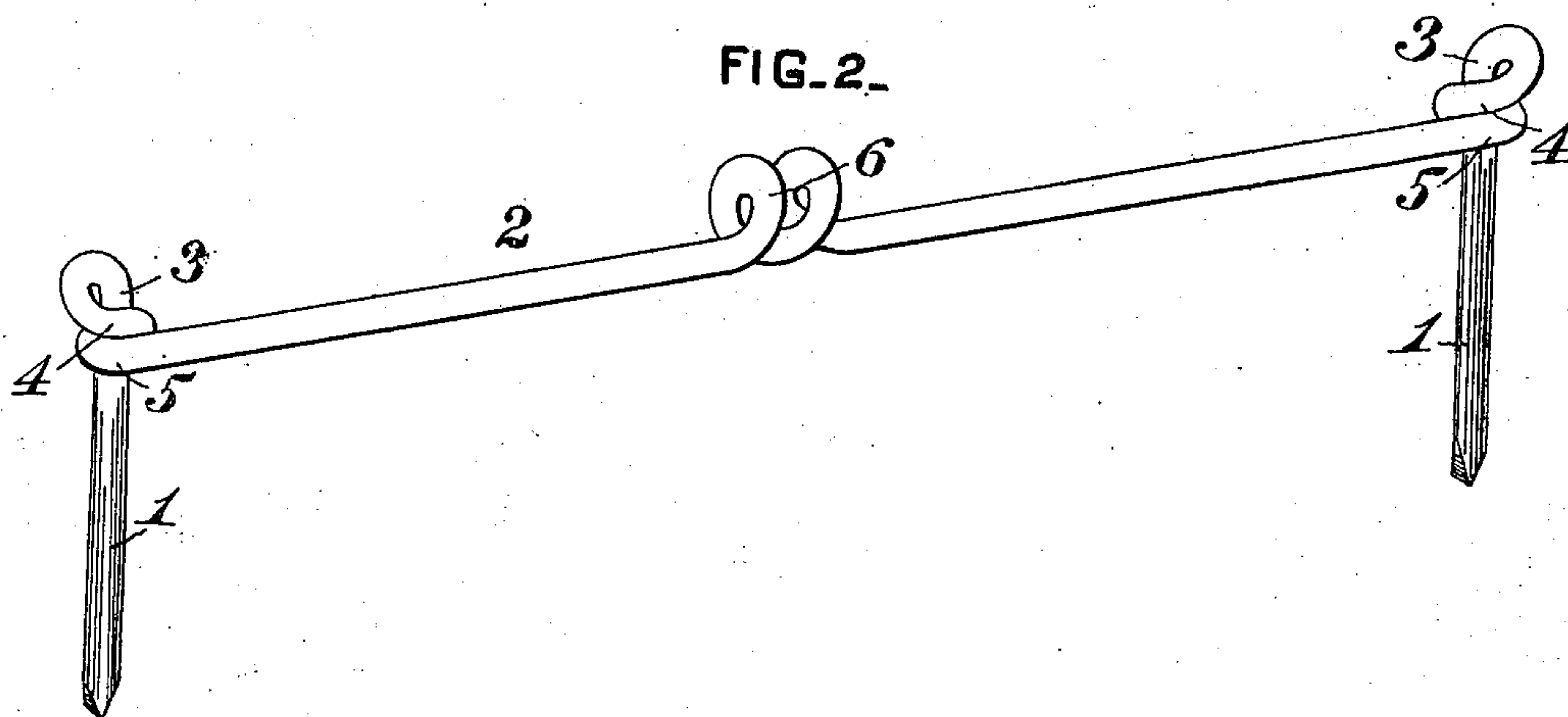


FIG. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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CONNECTOR FOR TRACK-CIRCUITS.

SPECIFICATION forming part of Letters Patent No. 502,229, dated July 25, 1893.

Application filed November 1, 1892. Serial No. 450,601. (No model.)

To all whom it may concern:

Be it known that I, EDWARD H. GOODMAN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented or discovered certain new and useful Improvements in Connectors for Track-Circuits, of which improvements the following is a specification.

The invention described herein relates to certain improvements in rail connectors for electric track circuits.

One form of connector now in general use consists of headed pins driven into holes formed near adjacent ends of rails and connected by wire tightly wound around and soldered to the projecting ends of the pins. It is almost impossible in the manufacture of large quantities of such connectors to remove all trace of the acid employed in soldering and any which may remain is active in corroding the wire, thereby weakening it and reducing the contact surfaces between the wire and pin.

Another form of connector extensively used, consists of a wire whose ends are so bent as to form a shoulder to facilitate the driving of the ends or pin portions of the connectors into holes in the rails. While this form of connector is free from the objections incident to connectors consisting of three or more parts the driving shoulders or heads and parts adjacent thereto are liable to be distorted in driving the ends of the connectors into the rails.

The object of the present invention is to so construct the connector as to form strong rigid heads on the pins which are at the same time integral with the portion of the connector uniting the pins.

In the accompanying drawings forming a part of this specification, Figure 1 is a perspective view of a rail joint, showing my improved connector applied thereto, and Fig. 2 is a perspective view on an enlarged scale of the connector.

In the practice of my invention, the end portions 1 of a suitable length of wire are

folded back parallel or approximately so with the body portion 2 of the wire, thereby forming the heads 3 of the pins. Bends 4 are then formed in the body portion of the wire immediately below the folds or heads 3, so that the body portion will stand at right angles or approximately so with the pins. One or more coils or wraps 5 of the body portion are then formed around the pins immediately below the heads 3. The coils or wraps are preferably made so as to tightly compress the pins and in such proximity to the heads as to support or reinforce the same.

It will be observed that the heads of the pins are formed by bending or folding the wire upon itself, and that said heads are reinforced as against distortion or further bending by coils or wraps tightly grasping the pins below the heads.

The pins are preferably coated with solder or other non-oxidizable metal so as to provide good electrical contact with the walls of the holes in the rails, when driven thereinto.

One, two or more coils 6 are formed in the portion 2 of the connector to permit the pins to move toward or from each other as the rails contract or expand.

I claim herein as my invention—

1. An electrical rail connector having the pins and body portion formed integral with each other, the heads consisting of two parts of wire parallel or approximately parallel with each other and formed by folding the wire upon itself, substantially as set forth.

2. An electrical rail connector having the pins and body portion formed integral with each other, the heads of the pins being formed by folding the wire upon itself, and reinforced by one or more coils surrounding the pins below the heads, substantially as set forth.

In testimony whereof I have hereunto set my hand.

EDWARD H. GOODMAN.

Witnesses:

R. H. WHITTLESEY,
DARWIN S. WOLCOTT.