

UNITED STATES PATENT OFFICE.

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RAIL BOND.

Application filed May 2, 1922. Serial No. 553,008.

To all whom it may concern:

Be it known that I, JAMES F. BROWN, a citizen of the United States, residing at Lookout, in the county of Pike, State of Kentucky, have invented certain new and useful Improvements in Rail Bonds; 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.

This invention relates to new and useful improvements in bonding devices and particularly to bonding devices for mine railways, although the bond is capable of use, with equal facility and benefits, in connection with ordinary steam or electric railways.

One object of the invention is to provide a bond which will obviate the necessity of severing the bond, when the rails are to be taken up and moved to another place. In mine railways, when the rails are taken up, the bond, which consists of a single length of strand wire connected to the meeting ends of the rails, must be cut, and then these severed ends soldered together, or an entirely new bond substituted. With the present device the bond comprises a pair of sections having their outer ends secured to the rail ends and their inner ends detachably secured together, so that when the rails are moved, these detachably connected ends are separated, and then rejoined, when the rails are again set up in their new location.

Other objects and advantages will be apparent from the following description when taken in connection with the accompanying drawing.

In the drawing:

Figure 1 is an elevation of a pair of rail ends, showing the bond in applied position.

Figure 2 is a perspective view of one of the sections of the bond.

Figure 3 is a perspective view of the other section of the bond.

Referring particularly to the accompanying drawing, 10 and 11 represent the meeting ends of a pair of rails, in connection with which the present invention is used.

The bond comprises a pair of sections A and B, each formed from a plurality of strands of wire 10', with one end thereof embedded in a fusible block 11', which block has a lateral stud 12 for engagement in an opening in a rail end, the same being properly soldered, or fused in said opening, so that the section of the bond will be permanently connected to the rail end. The other end of the section A is embedded in a block of metal 13, which has its other end formed with a longitudinal socket 14, and in the side of the block, and communicating with the socket, is an opening or slot 15. This socket is preferably tapered toward its inner end, for a purpose which will presently appear.

The other end of the section B is embedded in the larger end of a tapered plug 16, which is adapted to be wedged into the socket 14. It will be noted, upon inspection of Figure 1, that the inner end of the slot 15 is disposed in such position, and the taper of the socket and plug 16 such that, when the plug is within the socket, its inner end does not extend beyond the inner end of the slot, thus providing a space within which to insert a tool for the purpose of driving out the plug, when the bond sections are to be separated.

What is claimed is:

As an article of manufacture, a rail bond comprising a pair of conducting cables, one end of each of the cables having an elongated angular block formed with a laterally extending lug, the other end of one of the cables having a cylindrical body secured thereto and extending longitudinally therefrom, said body having a tapered bore extending inwardly from its outer end and a laterally extending opening communicating with the bore, the other end of the other cable having a plug secured thereon, the external contour of which is in correspondence with said tapered bore.

In testimony whereof, I affix my signature.

JAMES F. BROWN.