

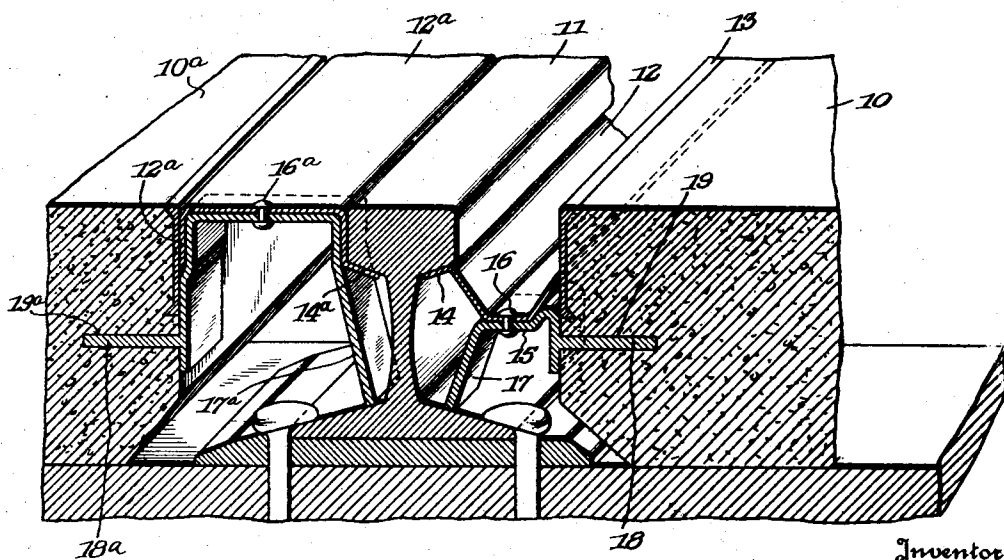
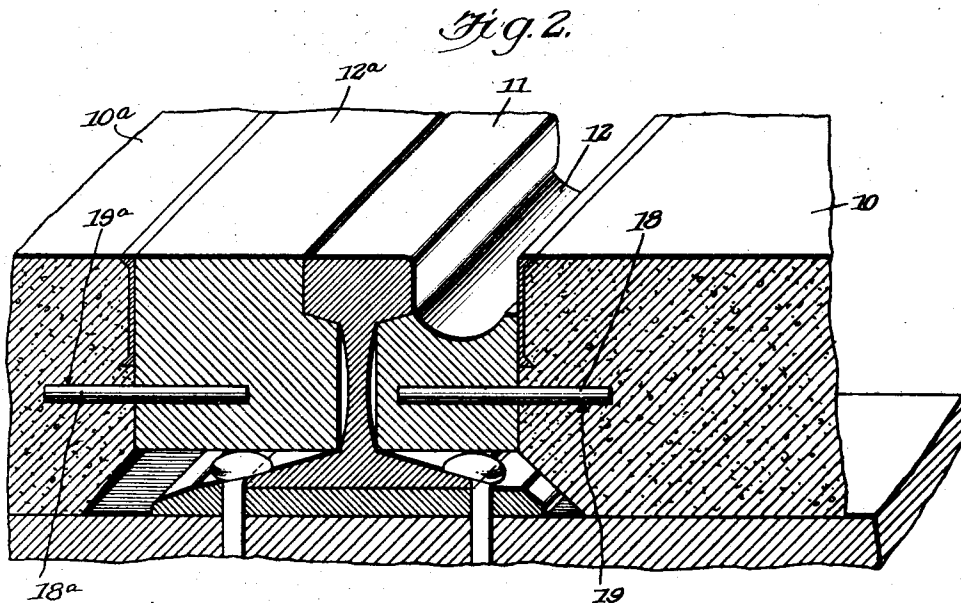
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FILLER FOR RAILWAY CROSSINGS

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FILLER FOR RAILWAY CROSSINGS.

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Broadly, this invention relates to improvements in roadway surfaces at railway grade crossings.

At grade crossings of railroads, it is common practice to place concrete slabs, and sometimes timbers, between the rails, so as to provide easy passage of vehicles. It is, however, more or less impracticable to make a close fit between the rails and the slabs or timbers, so that the latter quite often heave up or become elevated, thereby imparting an undulating surface to the roadway. In view of this, the present invention seeks to provide means for anchoring concrete slabs between the rails, so that said slabs will always remain substantially flush with the upper surface of the rail head. More specifically, the invention contemplates a filler adapted to close whatever space there might be between each rail and a concrete slab positioned between the rails, this filler being adapted to be held against vertical displacement by the rails and provided with means adapted to engage the concrete slab so as to prevent vertical displacement of the same.

With these and other objects in view, the invention consists in certain novel details of construction and combinations and arrangements of parts, all as will hereinafter be more fully described and the novel features thereof particularly pointed out in the appended claims.

In the accompanying drawings:

Figure 1 is a perspective view of a portion of a grade crossing, showing one form of filler for locking the concrete slabs against vertical displacement, and

Figure 2 is a similar view of a modified form of filler.

In accordance with this general practice, concrete slabs 10, usually about six feet in length, are laid between each two juxtaposed rails 11 at grade crossings of railroads. Due to the necessity of providing a clearance between each rail 11 and at least one of the slabs, for accommodation of the wheel flange, it is impossible to permit the slabs to abut against the rails. Furthermore, by having the slabs terminate short of the rails, the bottom surfaces of the slabs do not have to be provided with irregularities to accommodate the base of the rail and the means for fastening the rails to the ties. It is, however, necessary for the spaces between the slabs and rails to be filled. It is also necessary, as before pointed out, that the slabs be prevented from rising

up above the level of the top surfaces of the rail heads or otherwise undulations will occur in the surface over which vehicles must pass in crossing the railroad.

In view of this, the present invention seeks to provide a filler for the space between slabs 10 and rails 11, such filler being provided with means for anchoring the slabs between the rails. In the preferred form, the filler comprises an elongated plate 12, corresponding substantially in length to the length of the slab. One edge of said plate is adapted to engage against a corner wear plate 13 embedded in the slab, and the other edge of said filler is formed with an offset portion or flange 14, adapted to fit beneath the under surface of the head of rail 11. As this filler 12 is adapted to be positioned at that side of the rail on which the flange of the wheel runs, it is pressed intermediate its side edges so as to lie a considerable distance below the top surface of the rail. To properly support the filler, there is attached to the same at proper intervals through its length, a series of supports 15, the supports and filler being connected as by rivet 16. At one side, each support is formed with a leg 17, adapted to engage the rail base, the inclination of said leg and of flange 14 of filler 12 being such that the filler with its supports can be rather tightly wedged between the rail head and base. The side of support 15 adjacent block 10 carries an elongated pin 18, preferably formed integrally, which is adapted to project into a socket 19, formed in slab 10.

The filler at the opposite side of the rail need not be depressed, but, on the contrary, may be positioned flush with the road surface or top of slab 10^a at that side of the rail. For this reason, the cross-sectional contour of the filler plate and the supports of the plate are a little different from that just described. In this instance, the filler plate 12^a is perfectly plain, with one edge turned down as at 12^b, to engage against the wear plate 13 in the slab, while the other edge is turned down and formed with a flange 14^a adapted to engage beneath the rail head. The supports for this filler are secured thereto by rivets 16^a, and have a depending leg 17^a at one edge adapted to engage the rail base, while at its opposite edge it is formed with a depending portion provided with a pin 18^a, adapted to engage in the socket 19^a of the slab.

With fillers such as described, it will be apparent that when the same are positioned or

held in place between the rail base and rail head and the anchor pins 18, 18^a, positioned in the sockets of the slabs, said slabs will be securely anchored against rising up above the rail surfaces so as to destroy the evenness of the roadway.

In the modified form illustrated in Figure 2, the fillers 12, 12^a are formed of timbers, each adapted to fit between the base and head of the rail 11, and each provided with pins 18, 18^a, adapted to project into the sockets 19, 19^a in the slabs 10, 10^a. As in the prior instance, timber 12 has its upper surface formed with a depression to accommodate the flange of the wheel passing over the rail, while filler 12^a lies substantially flush with the upper surface of the slabs and the head of rail 11. In this construction, the pins 18, 18^a are of metal and are, of course, formed separately from the fillers 12, 12^a.

What I claim is:

1. The combination of a pair of rails, a slab positioned between said rails, two sides

of said slab being spaced from the rails and having sockets therein, fillers in the spaces between said slab and rails, and anchor pins carried by said fillers projecting into the sockets in the slab.

2. A filler for railroad grade crossings comprising an elongated member adapted to engage the under face of a rail head and bridge the space between said rail and a juxtaposed slab, a plurality of fillers for said bridge member adapted to engage the base of said rail, and means carried by said fillers for anchoring said slab.

3. A filler for railroad grade crossings comprising an elongated member adapted to engage the under face of a rail head and bridge the space between said rail and a juxtaposed slab, a plurality of fillers for said bridge member adapted to engage the base of said rail, and pins formed integrally with said fillers adapted to engage and anchor said slab beside said rail.

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