

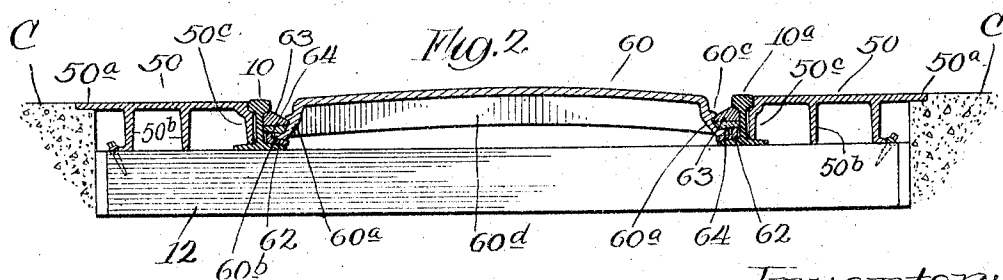
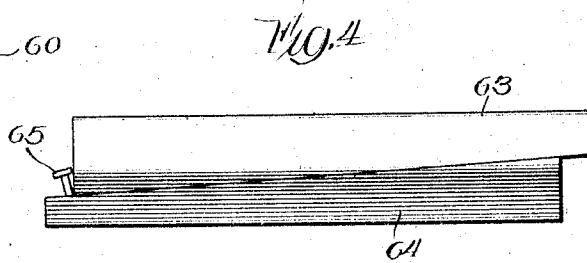
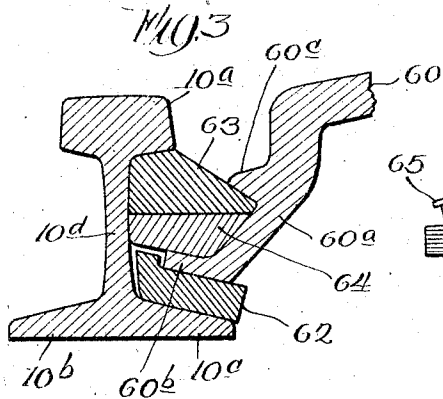
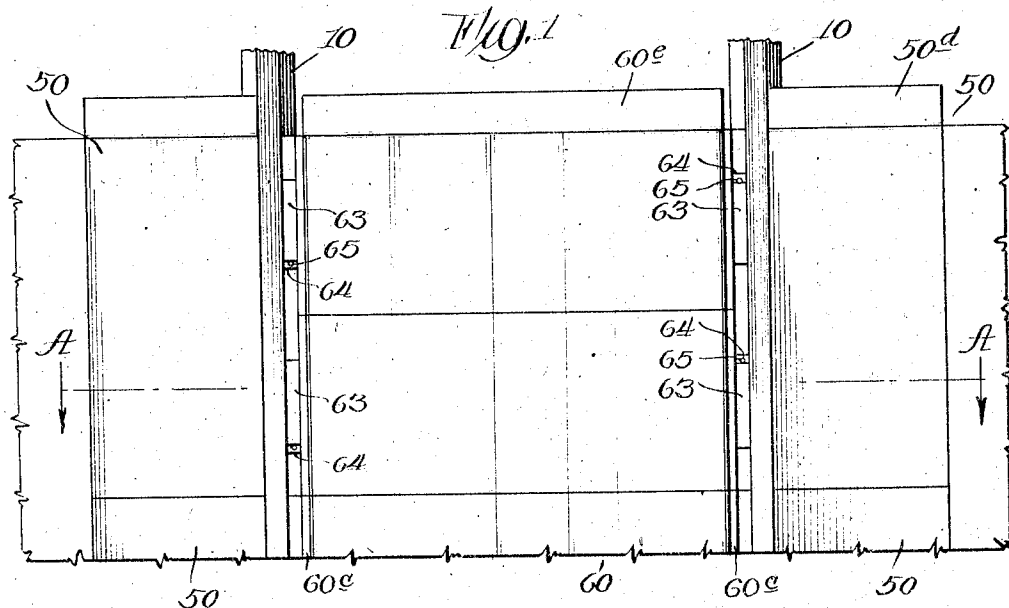
Aug. 25, 1925.

1,551,165

H. E. MUCHNIC

RAILWAY CROSSING

Filed July 26, 1924



UNITED STATES PATENT OFFICE.

HENRY E. MUCHNIC, OF ATCHISON, KANSAS.

RAILWAY CROSSING.

Application filed July 26, 1924. Serial No. 723,282.

To all whom it may concern:

Be it known that I, HENRY E. MUCHNIC, a citizen of the United States, residing at Atchison, in the county of Atchison and State of Kansas, have invented certain new and useful Improvements in Railway Crossings, of which the following is a specification.

This invention relates to improvements in railway crossings, and has for its object to provide a structure utilized to provide a continuation of a roadway across a railway track.

In my co-pending application, Serial No. 674,638, filed November 14, 1923, I have illustrated a somewhat similar structure as applied to an existing trackway. In the herein described invention, I have illustrated a modified structure utilized in conjunction with a concrete roadway.

The object of the present invention is to provide and secure a quickly applied means to lock the crossing plates to the track rails and to insulate the same therefrom to prevent short-circuiting of current for signalling or the like.

These and other objects will be more fully described in the following specifications and shown in the accompanying drawing, in which—

Fig. 1 is a plan view of one embodiment of my invention.

Fig. 2 is a vertical transverse section along the line A—A of Fig. 1.

Fig. 3 is a vertical section drawn to an enlarged scale of a portion of the structure showing the locking means.

Fig. 4 is a side elevation of a pair of co-acting wedge blocks.

Like numerals refer to like elements throughout the drawings, in which 10 designates generally the track rails having the usual head portions 10^a, web portions 10^b, and transverse base flanges 10^c and 10^d. The rails are supported in the usual manner upon ties or sleepers 12. I have illustrated a portion of the concrete roadway at either side of the track which, in the embodiment shown, is a single track line, although my invention is readily applicable to double or other track systems as will be obvious.

At the outer side of each rail is provided an approach plate 50, each plate having an edge 50^a inset in the concrete C. Depending webs 50^b are supported between the transverse ties 12, while a face flange 50^c pro-

jects slightly forward from the approach plate to partially underlie the rail head 10^a, being supported on the flange 10^b therebeneath.

The intermediate plates are designated by the numeral 60, and extend between and are supported upon the rail flanges as shown in Fig. 2, for example. In the form shown, the plates 60 are provided with the flanges 60^a, each having an angularly disposed, outwardly directed, bottom portion 60^b, and an outwardly projecting rib 60^c, forming with the adjacent bottom portion 60^b, a groove or seat. Strips 62 of wood, fiber or other insulating material are interposed between the flanged bottom portion 60^b and the rail flanges 10^c upon which they are supported, thus preventing short-circuiting of currents for signalling or the like. Instead of utilizing a single locking block, as in the above described form, I utilize pairs of co-acting wedge blocks 63 and 64, fitting in the grooves between the flanges 60^a and ribs 60^c, and having inclined contact surfaces as shown in Fig. 4, whereby relative displacement of one block with respect to its complementary block will increase the locking of the intermediate plate to the rail, as will be obvious. The nail or the like, indicated by the numeral 65, is driven into each lower wedge block 64 as shown in Fig. 4 after positioning of the blocks to prevent relative displacement thereof, which would release and permit vertical displacement of the plates. The wedges being in pairs are quickly insertable where desired, no wedging resistance being present until the upper section is moved relative to the bottom section.

Transverse ribs or stiffening flanges 60^d are cast or formed integrally with the plate 60 to increase the strength and rigidity thereof.

At its ends the intermediate crossing is provided with the sloping aprons 60^e and the approach with aprons 50^d extending downwardly and outwardly to adjacent the roadbed. This prevents engagement of the structure by chains, hose, or the like dangling from passing trains.

It will be obvious that by the structure above described and shown in the drawing, I am enabled to provide a strong crossing between and at the sides of the track, thus continuing a roadway without bumps or appreciable interruptions, the crossing being capable of economical construction of cast

iron or the like, and also capable of being quickly removed or installed, ready access to the roadway being afforded in the event of necessary repairs or the like. Any width of roadway may be accommodated by forming the plates integrally or in unit sections as desired.

It will be obvious that my invention is susceptible of modification, and I do not wish to be restricted to the form shown and described, except as defined in the appended claims.

What I claim is:

1. In combination with a pair of track rails having base flanges, a plate member extending between the said rails, said plate member having depending supporting flanges supported upon said rail flanges, and pairs of coacting wedges co-acting with said plate and said rails to lock the former relative to the latter.

2. In combination with a pair of track rails having base flanges, a plate member extending between the said rails, said plate member having depending supporting flanges, and locking means co-acting with said plate and said rails to lock the former relative to the latter, said locking means comprising a pair of co-acting wedges.

3. In combination with a pair of track rails having base flanges, a plate member having a depending supporting flange, locking means co-acting with said plate and the adjacent rail, said locking means comprising a pair of co-acting wedges located between said plate flange and said rail.

4. In combination with a pair of rails having base flanges, a plate member extending between said rails and provided with a downwardly extending supporting flange, said flange having a seat and a locking wedge co-acting with the adjacent rail and said seat to lock said plate against vertical displacement relative to said rail.

5. In combination with a pair of track rails having base flanges, a plate member extending between said rails and having a depending supporting flange, said flange being provided with an angularly disposed bottom portion supported upon a rail flange, and locking means co-acting with said bottom portion and said rail to prevent relative displacement of said plate with respect to said rail.

In witness whereof I hereunto subscribe my name to this specification.

HENRY E. MUCHNIC.