

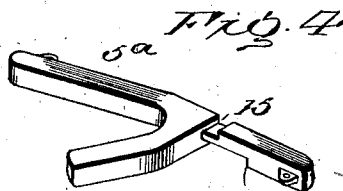
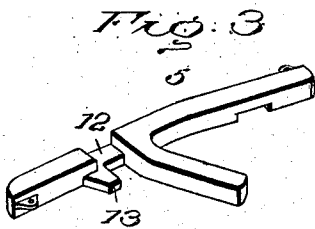
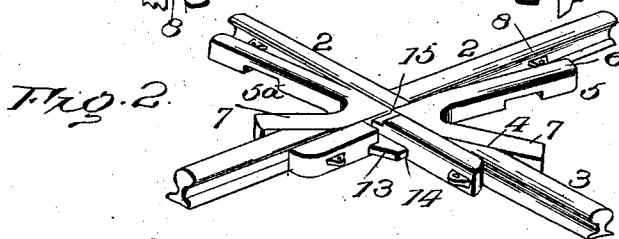
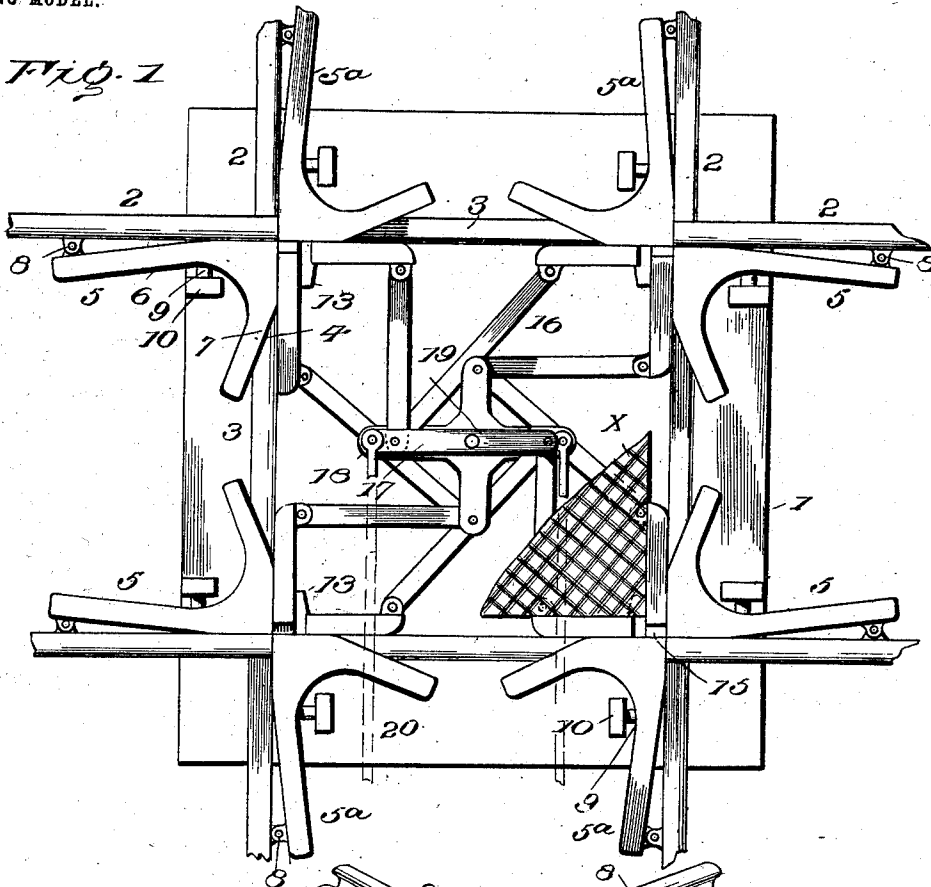
No. 748,469.

PATENTED DEC. 29, 1903.

J. W. BENNETT.
RAILWAY CROSSING.

APPLICATION FILED FEB. 4, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN W. BENNETT, OF STURGIS, MICHIGAN.

RAILWAY-CROSSING.

SPECIFICATION forming part of Letters Patent No. 748,469, dated December 29, 1903.

Application filed February 4, 1903. Serial No. 141,879. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BENNETT, of Sturgis, in the county of St. Joseph and State of Michigan, have invented certain new and useful Improvements in Railway-Crossings; 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.

Letters Patent No. 640,527 were issued to me January 2, 1900, for a railroad-crossing having improved means for obviating the jumping of car-wheels from one rail to another at the intersection of tracks, the rail-sections of the intersecting track being forced aside by the flanges of the car-wheels and returned to their normal positions under the action of springs or other means.

By my present improvements I contemplate the provision of means for positively locking the several movable sectional side rails during the passage of a car or train thereon, and also means for positively operating each set of movable rail-sections independently of the car-wheels.

The invention will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, Figure 1 is a plan view. Fig. 2 shows in perspective two of the movable sectional side rails. Fig. 3 is a view of one of the latter detached. Fig. 4 is a similar view of the other or complementary section.

Referring to the drawings, 1 designates a base-plate forming the bottom of a suitable boxing (a portion of which latter is indicated at X, Fig. 1) for inclosing the parts and protecting them from the weather. To this plate are secured by bolting or otherwise the meeting ends of intersecting track-rails 2 and also the intermediate short side rails 3, having beveled ends 4.

The movable sections 5 5^a for filling the spaces at the ends of the side rails 3 consist each of a curved bar 6, from which projects a lateral arm 7, beveled to conform to the ends of rails 3. Each bar at its outer end is pivoted, as at 8, and is preferably guided in its movements by a tongue 9 projecting into a box 10. Of each pair of complementary mov-

able sections, 5 is formed with a cut-out 12 on its upper surface and a laterally-projecting lug 13, while the complementary intersecting section 5^a, which fits in cut-out 12, is formed on its under side with a cut-out 14 of sufficient capacity to accommodate lug 13.

When the section 5, carrying the lug, is moved laterally, as will occur when the other section 5^a is to remain in place to allow of the uninterrupted passage of a car, such lug will engage the free end of such latter section 5^a, and thereby lock it as against accidental displacement or shifting. When, on the other hand, the section 5^a, having the slot in its under side, is shifted and the complementary section 5 remains stationary, the former in moving laterally incloses a portion of lug 13, and the end wall of its slot engaging with the latter holds such complementary section securely in place. Thus it will be seen that the sectional side rails when shifted securely lock in position the other or complementary rails over which the cars are passing. The groove 15 on the upper side of the upper one of the intersecting movable sections allows the flange of a car-wheel to pass without contacting with the bar.

To provide for the positive operation of the sections, I connect them in pairs, through the intermediary of links 16, to opposite ends of each of two levers or rocking beams 17 and 18, both of which are separately mounted on an upright pin 19, extending from base-plate 1. The levers 17 and 18 are connected by rods 20 to suitable controlling mechanism (not shown) in the watch-tower. By operating the mechanism controlling either rod the movable sections of an intersecting track may be thrown laterally, so as to leave the rails of the other track free and uninterrupted for the passage of a car, and as soon as the latter has passed a reverse movement of the controlling-rod will throw the several sections back into their normal positions.

It will be observed from what has been said that by my present improvement not only do I provide for the positive shifting of the several movable sections, but those sections of the intersecting track which are moved aside serve to securely lock the complementary sections as against accidental displacement, it being impossible for them

to move until the shifted sections are returned to their normal positions. By my present improvements I greatly simplify the construction of my crossing and add to the safety and permanency thereof and insure the free passage of cars or trains at intersecting points.

I claim as my invention—

1. A railway-crossing having sectional side rails, means for shifting such side rails laterally while the complementary rails remain stationary, and means for locking the latter in place while the others are shifted, as set forth.

2. A railway-crossing having sectional side rails, means for shifting one set of side rails laterally while the other set remains stationary, and means whereby the shifted set of rail-sections will lock the other rail-sections in place, as set forth.

3. A railway-crossing having intermediate short rails, movable rail-sections filling the spaces at the ends of such short rails, and co-operative means between complementary rail-sections for effecting the locking in place of the non-shifted rail-sections by the shifted rail-sections, as set forth.

4. A railway-crossing having intersecting sectional side rails, one of such rails having a laterally-projecting lug, and the other a slot to accommodate such lug, the latter rail-section being designed to be locked in place by the engagement of the lug therewith, and, in turn, to lock the lug-carrying rail-section when the former is shifted laterally as set forth.

5. The combination with the short side rails, of the movable section for filling the spaces at the ends of such short rails comprising each a bar pivoted at its outer end and having a lateral arm, the inner ends of the bars of adjacent sections intersecting each other and extended into the spaces between the side rails, and means within the crossing connected to the inner ends of such bars for positively shifting the sections, substantially as set forth.

6. A railway-crossing having sectional side rails, the movable sections of which are pivoted at their outer ends, two independently movable levers, links connecting such levers to the inner ends of said movable sections, and means for independently operating each lever, as set forth.

7. The combination with the base-plate to which the intersecting rails and the short intermediate rails are secured, of the shiftable sectional side rails, pivoted each at one end, and having their free ends extended inwardly over the base-plate, two levers centrally mounted on the latter, links connecting each lever to two sets of rail-sections, and means for independently operating each lever, as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

JOHN W. BENNETT.

Witnesses:

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