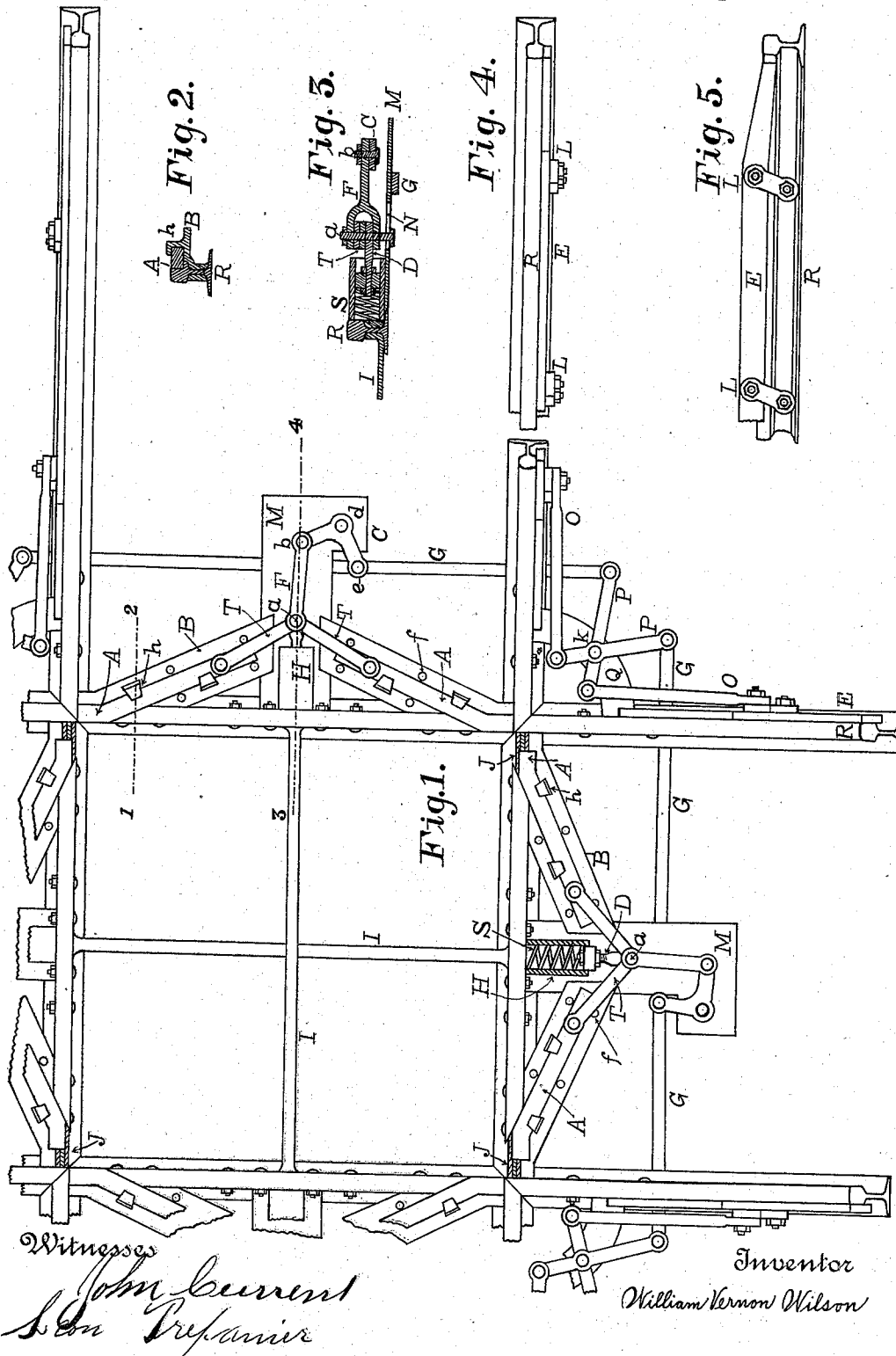


(No Model.)

W. V. WILSON.
RAILWAY CROSSING.

No. 557,927.

Patented Apr. 7, 1896.



UNITED STATES PATENT OFFICE.

WILLIAM VERNON WILSON, OF HASKINS, OHIO.

RAILWAY-CROSSING.

SPECIFICATION forming part of Letters Patent No. 557,927, dated April 7, 1896.

Application filed March 28, 1895. Serial No. 543,599. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM VERNON WILSON, a citizen of the United States, residing at Haskins, in the county of Wood and State of Ohio, have invented a new and useful Continuous Railway-Crossing, of which the following is a specification.

My invention relates to improvements in railway-crossings in which bars of steel are caused to slide into the flange-grooves of the track on which the train is crossing, thus making a continuous track; and the objects of my invention are, first, in providing a smooth passage of the train through the crossing to diminish the wear on the rolling-stock and on the track; second, to prevent the objectionable noise and jar produced by the car-wheels dropping into the flange-grooves of an ordinary railway-crossing, and, third, to reduce to a minimum the danger of derailment of a train at a railway-crossing. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a top view showing the flange-grooves of one track as being closed and those of the other track as being open; Fig. 2, a vertical section on the line 1 2 of Fig. 1; Fig. 3, a vertical section on the line 3 4 of Fig. 1; Fig. 4, a top view of a rail and elevated rail, showing the approach to the elevated rail E; Fig. 5, a side view of Fig. 4.

Similar letters refer to similar parts throughout the several views.

The rail R of a railway-crossing has an elevated rail E, attached to its outer side by the links L L in such a manner that said elevated rail may be depressed by the tread of the wheels of a passing train, producing a horizontal motion of said elevated rail, which horizontal motion is transmitted through the link O, the crank P, the link or bar G, the crank C, and the link F to the toggle-joint T T, producing a forward motion of the bars A A sufficient to close the flange-grooves J J of the track on which the train is passing. The elevated rail E is equal in length to the distance between truck centers of the longest cars in use on the railway using this crossing, so that the flange-grooves may be kept closed until the last pair of wheels has passed through the crossing.

The plate B is bolted to the web of the rail in such a manner that its upper surface is in the same horizontal plane as the bottom of

the flange-groove J. *f f* are friction-rollers, and *h h* are lugs to hold the bars A A in place. 55

The crank C is pivoted at *d* to the plate M.

The bolt or pin *a* of the toggle-joint T T is guided by the slot N of the plate M, Fig. 3.

The spring-housing H contains the opposing spring S and the plunger D, which automatically open the flange-grooves J J after the train has passed, and at the same time raises the elevated rails E E. 60

The tie-bars I I are to stiffen the crossing and to prevent the spreading of the rails. 65

The head of the rail R is beveled on the outside to a sharp angle and to the depth of the flange-groove to make room for the bar A, as shown in the accompanying drawings.

The cranks P P are independent of each other and are pivoted to the plate Q at *k*. 70

The rods or links G G are to have suitable turnbuckles or opposing springs to provide for suitable adjustment in length of the bars.

The elevated rails, links, and cranks form no part of my present invention. 75

The mechanism for which I claim the invention may be operated either by a system of elevated rails, links and cranks, as shown in the accompanying drawings, or by a hand-lever in connection with an interlocking system. 80

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, in a railway-crossing, of steel bars A A connected with a toggle-joint T T, the steel bars A A sliding on the plates B B to close the flange-grooves J J, substantially as set forth. 85

2. The combination, in a railway-crossing, of sliding steel bars connected with a toggle-joint; the steel bars sliding on the plates B B, and guided by the antifriction-rollers *f f*, and the lugs *h h*, substantially as set forth. 90

3. The combination, in a railway-crossing, of the steel bars A A, the toggle-joint T T, the plates B B, the opposing spring S, and the plunger D, contained in the spring-housing H; the plunger D being connected to the toggle-joint T T, so as to draw the steel bars A A from the flange-grooves J J, automatically, after the train has passed through the crossing, substantially as set forth. 95 100

WILLIAM VERNON WILSON.

Witnesses:

JOHN CURRENT,
LEON TREPANIER.