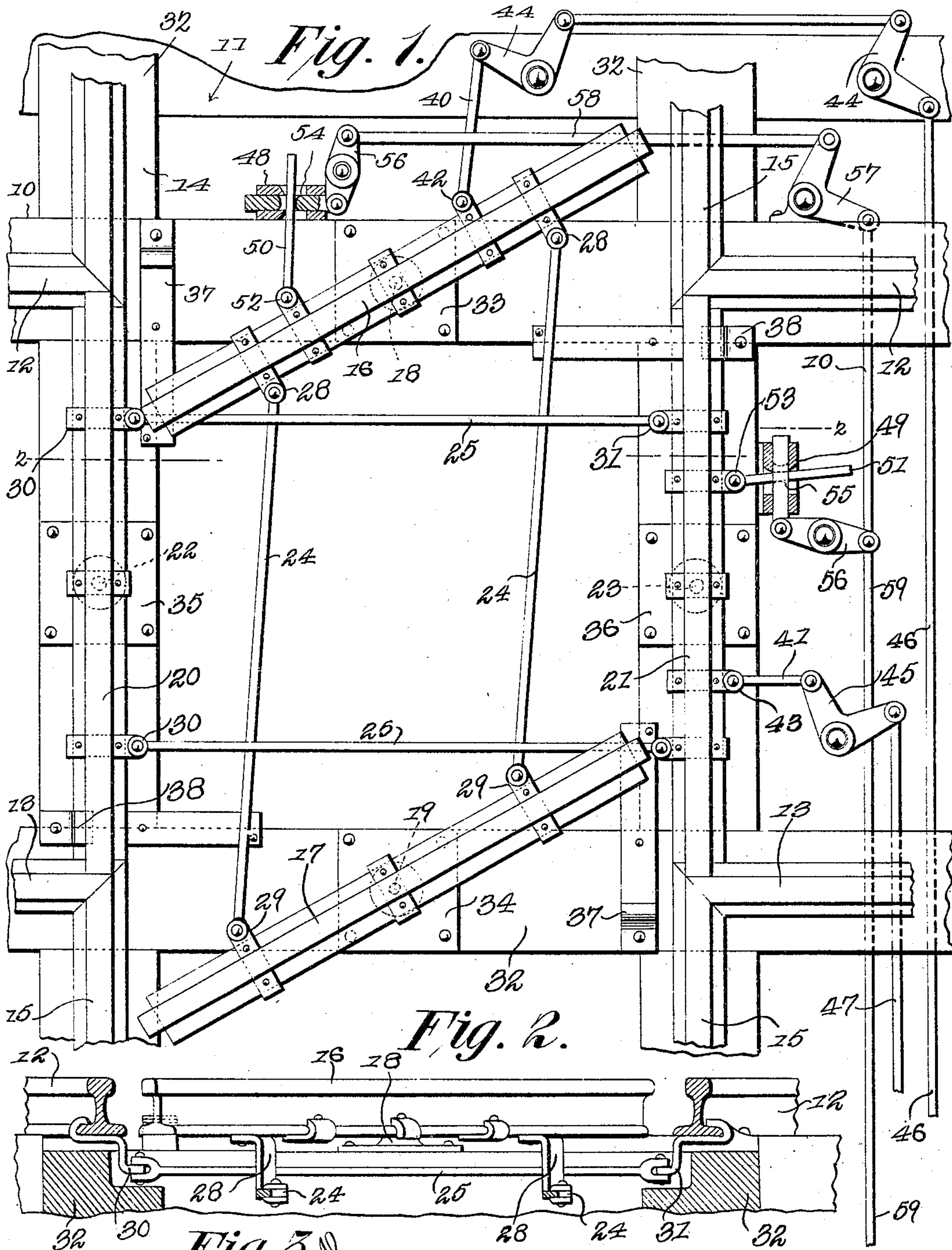


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PATENTED OCT. 25, 1904.

R. THOMPSON.
RAILWAY CROSSING.
APPLICATION FILED JULY 23, 1904.

NO MODEL.



Witnesses
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UNITED STATES PATENT OFFICE.

ROY THOMPSON, OF LODGE, ILLINOIS.

RAILWAY-CROSSING.

SPECIFICATION forming part of Letters Patent No. 773,300, dated October 25, 1904.

Application filed July 23, 1904. Serial No. 217,852. (No model.)

To all whom it may concern:

Be it known that I, ROY THOMPSON, a citizen of the United States, residing at Lodge, in the county of Piatt and State of Illinois, have invented a new and useful Railway-Crossing, of which the following is a specification.

This invention relates to railway-crossings, and has for its object to produce a simply-constructed and efficient means whereby continuous tracks are provided for either of the crossing lines, as required.

With this and other objects in view, which will appear as the nature of the invention is better understood, the same consists in certain novel features of construction, as hereinafter fully described and claimed.

In the accompanying drawings, forming a part of this specification, and in which corresponding parts are denoted by like designating characters, is illustrated the preferred form of the embodiment of the invention capable of carrying the same into practical operation, it being understood that the invention is not necessarily limited thereto, as various changes in the shape, proportions, and general assemblage of the parts may be resorted to without departing from the principle of the invention or sacrificing any of its advantages.

In the drawings thus employed, Figure 1 is a plan view of the improved device. Fig. 2 is a section on the line 2-2 of Fig. 1. Fig. 3 is a detail view, on a reduced scale, of the switch-operating mechanism.

The two crossing lines are represented, respectively, at 10 11 with the ends of the rails 12 13 of one line abutting against the ends of the rails 14 15 of the other line and with the abutting ends preferably mitered, as shown.

By this arrangement it will be noted that no part of the line-rails extend across the area within the crossing, thus leaving gaps between the rail ends at the crossing. Two rail-sections 16 17 are pivoted, respectively, at 18 19 between the spaced ends of the line-rails 12 13, and like rail-sections 20 21 are pivoted at 22 23 between the spaced ends of the line-rails 14 15. The rail-sections 16 17 are coupled by spaced links 24, and the rail-sections 20 21 are likewise coupled by spaced links 25, the

links being united to the rail-sections by clips 28, 29, 30, and 31, to which the links are pivoted, as shown. The links are bent downwardly, so that they may be independently moved without interference when the rail-sections are operated. By this arrangement it is obvious that rail-sections 16 17 may be simultaneously moved into or out of alinement with the line-rails 14 15 and the rail-sections 20 21 likewise moved into and out of alinement with the line-rails 12 13, so that either line may be provided with continuous tracks when required, while the other line remains broken, as in Fig. 1.

The foundation upon which the rails 12 13 and 14 15 are supported is represented as an entirety at 32 and may be of any suitable form and will also support the pivot-plates 33 34 35 36 of the swinging rail-sections. Stops 37 38 will be provided for limiting the movements of the swinging rail-sections, these stops preferably resting on the foundation member 32.

Rods 40 41 are connected, respectively, to the rail-sections 16 21, as by clips 42 43, and lead by a system of bell-cranks 44 45 and rods 46 47 to a convenient distance for the operator, who can thus alternately manipulate the rail-sections as required. Thus if the train is coming over the line 10 the rods 46 47 will be moved to set the rail-sections 20 21 in alinement with the line-rails 12 13 and throw the rail-sections 16 17 out of alinement with the line-rails 14 15 to provide a continuous track for the train and at the same time move the rail-sections 16 17 out of the path of the wheel-flanges of the passing train. If the train is coming over the other line, 11, it will be necessary to simply reverse the movements, as will be obvious.

To insure the safety of the device, positive locking means are provided for firmly locking the swinging rail-sections at the ends of their movements, and this locking means consists of standards 48 49, having transverse apertures through which rods 50 51 extend, the rods being pivotally connected, as by clips 52 53, respectively, to the rail-sections 16 and 21. Passing through the standards 48 49, transversely of the apertures therein, are lock-bolts

54 55, having apertures through which the rods 50 51 pass. The lock-bolts 54 55 are connected by a system of levers and bell-cranks 56 57, connecting-rods 58, and draw-rod 59, 5 the latter extended to a position adjacent to the terminals of the rods 46 47, by which the swinging rail-sections are operated. By this arrangement it will be obvious that after the swinging rails are set as required they may 10 be firmly locked in position by simply drawing upon the rod 59 to cause the bolts 54 55 to firmly pinch and lock the rods 50 51 within the standards 48 49.

Suitable means, such as lever-arms 60 61 62, 15 will be provided for the terminals of the various rods 46, 47, and 59, operating over notched segments 63 64, engaging the same, as by pawls 66, 67, and 68, to enable the several rail-sections and lock-rods to be firmly held at 20 any desired position, either open or closed, as will be obvious. Of course it will be understood that the arrangement of the operating means for the rail-sections and locking-bolts may be modified to correspond to the various 25 conditions and the surroundings of the particular structure to which it may be applied without departing from the principle of the invention.

The device may be applied to crossings disposed at right angles or at lesser or greater 30 angles than right angles, as may be preferred. By this arrangement each of the crossing lines will have an unbroken or continuous track and all the objectionable and dangerous 35 jolting and jarring at crossings obviated and the crossings made as free from gaps as other parts of the lines.

Having thus described the invention, what is claimed is—

40 1. The combination in a railway-crossing, of two sets of pivotally-mounted rails movable into and out of alinement with the main traffic-rails leading to the crossing, means for adjust-

ing the rails to operative and inoperative position, separate locking devices for each pair 45 of rails, and a single operating means connected to said locking devices whereby when one set is in operative position the other set will be locked in inoperative position.

2. In a railway-crossing, the tracks transversely disposed with the rails wanting within 50 the crossing area, rail-sections pivoted between the spaced ends of the track-rails for bridging the gaps between the same, coupling-links between each opposite pair of said rail-sections, 55 means for alternately swinging said pairs of coupled rail-sections into alinement with said transversely-disposed tracks, standards having transverse apertures, rods connected to said rail-sections for extension through said 60 apertures, clamp-bolts movably disposed in said standards for bearing against said rods, and means for actuating said bolts.

3. In a railway-crossing, the tracks transversely disposed with the rails wanting within 65 the crossing area, rail-sections pivoted between the spaced ends of the track-rails for bridging the gaps between the same, coupling-links between each opposite pair of said rail-sections, means for alternately swinging said pairs of 70 coupled rail-sections into alinement with said transversely-disposed tracks, standards having transverse apertures, rods connected to said rail-sections for extension through said 75 apertures, clamp-bolts movable through said standards and having transverse apertures to receive said rods, and means for actuating said bolts.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in 80 the presence of two witnesses.

ROY THOMPSON.

Witnesses:

E. G. LANIER,
S. MADDEN.