No. 849,446.

PATENTED APR. 9, 1907.

W. B. WESTON.

RAILWAY CROSSING.

APPLICATION FILED JAN. 10, 1907.

2 SHEETS—SHEET 1.

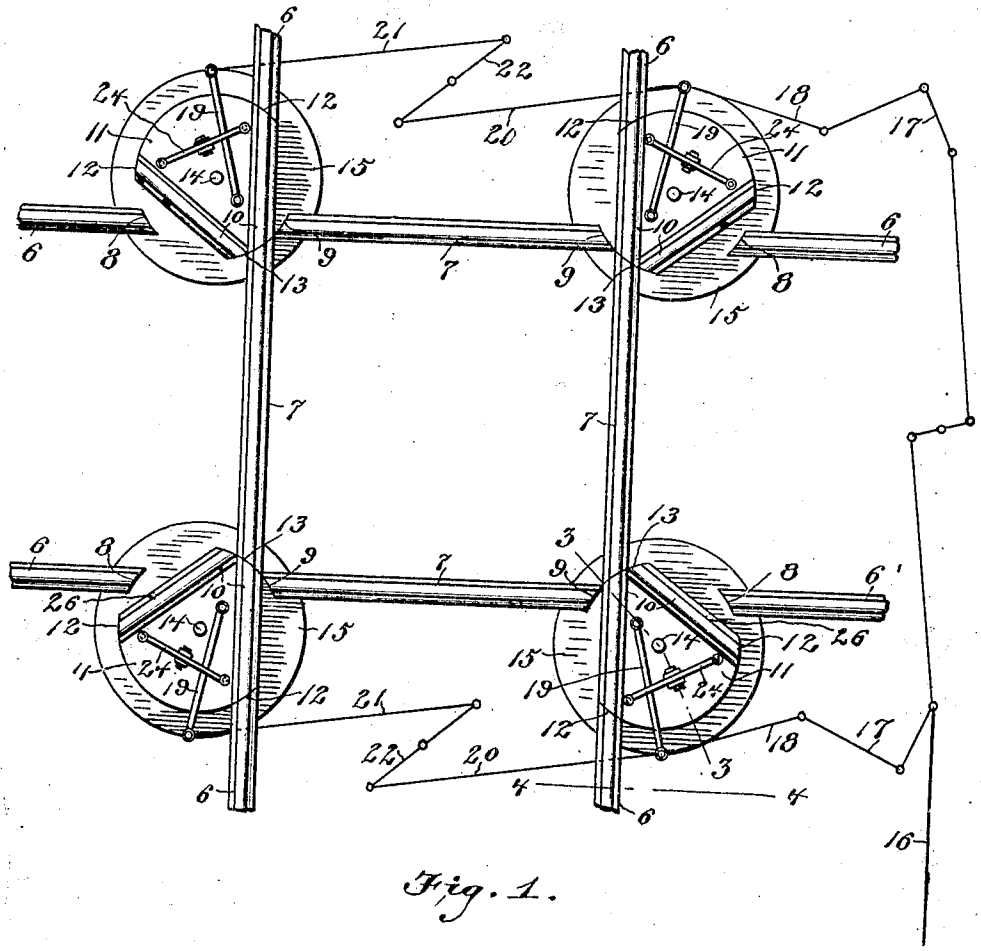

Fig. 1.

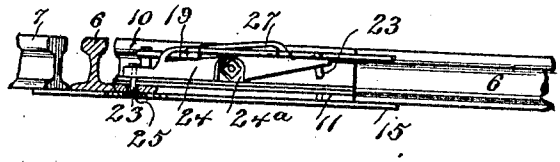

Fig. 4.

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2 SHEETS—SHEET 2.

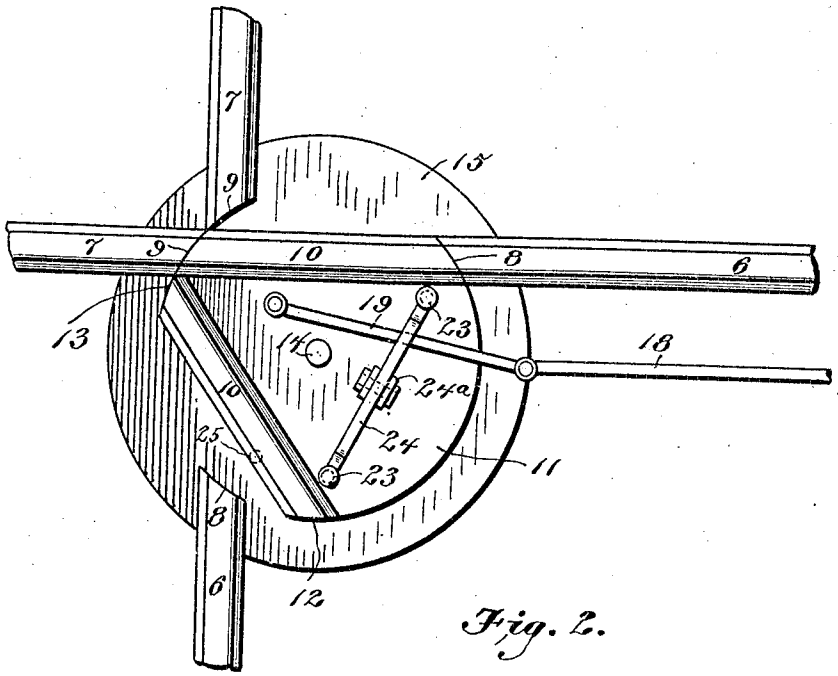

Fig. 2.

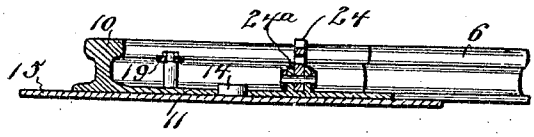

Fig. 3.

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UNITED STATES PATENT OFFICE.

WILLARD B. WESTON, OF CHICAGO, ILLINOIS.

RAILWAY-CROSSING.

No. 849,446. Specification of Letters Patent. Patented April 9, 1907.

Application filed January 10, 1907. Serial No. 351,724.

To all whom it may concern:

Be it known that I, WILLARD B. WESTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Railway-Crossings, of which the following is a specification.

This invention is a railway-crossing of the type having movable stub-rails which may be shifted by an arrangement of links and levers for opening either line.

The object of the invention is to provide an improved construction of the kind, characterized particularly by a pair of stub-rails at each corner of the crossing, mounted upon a pivoted plate which may be swung to shift either rail into position and provided with a latch which will lock the parts in either position.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a plan view of the crossing in one position. Fig. 2 is a similar view of one corner in the other position. Fig. 3 is a section on the line 3 3 of Fig. 1. Fig. 4 is a detail in side elevation.

Referring specifically to the drawings, the approach-rails from all sides are indicated at 6 and the crossing-rails therebetween at 7. The approach-rails are scarfed at the ends, as at 8, the plane of the bevel being vertical and on the outer side of the rails, so that the bevels are located opposite or face each other across the outer corners of the crossing.

The inner or crossing rails 7 are also beveled at the ends, as indicated at 9, the plane of the bevel being presented outwardly.

The stub-rails are indicated at 10 and are rigidly fixed in pairs to or made integral with plates 11 of substantially triangular outline. The stub-rails on each plate are arranged at an angle to each other along two sides or edges of the triangular piece and converge inwardly toward the corner of the crossing. The arrangement is similar at all four corners of the crossing. The stub-rails are scarfed at their outer ends, as indicated at 12, to match the ends of the approach-rails and are beveled at their inner ends, as at 13, to match the bevel of the crossing-rails 7. Each plate 11 is pivoted at 14 to a base-plate 15, which is fixed to the substructure and on which the ends of the approach-rails and also the ends of the crossing-rails rest, to insure level joints at the corners. The bevels 9 and 13 are cut on arcs having the points 14 as centers.

An arrangement for operating the stub-rails consists of a main rod 16, which may be operated from any central station, and this rod is connected by right-angle levers 17 and links 18 to levers 19, pivoted to the plates 11 on one side of the crossing and connected to similar levers 19 on the other side of the crossing by links 20 and 21 and short levers 22 to change the direction of motion.

In order to lock the crossing in position, pins 23 are provided, depending from opposite ends of a rocker 24, fulcrumed on ears 24^a upon the plate 11, and said bolts work through holes in the upper plate and are arranged to engage in either of the holes 25 or 26 in the plate 15, according to the way the crossing is set. The rocker 24 is slotted, as at 27, and the lever 19 extends through and works along the slot. When thrown to one end of the slot, that end of the rocker is depressed, and the pin at that end drops into the corresponding hole when the stub-rails reach proper position, the pin at the opposite end of the rocker having been lifted when the lever passed the fulcrum of the rocker.

In operation when the plates are swung either way one set of stub-rails will be thrown into parallel relation with the approach and crossing rails to form a continuous track, while the other stub-rails will turn to an angle across the other line and close the same or act as derailers. The crossing has the advantage that the open line is practically continuous without wide or square joints, and consequently a train can pass thereover without pounding. Furthermore, the parts are locked in position except when properly operated.

I claim—

1. In a railway-crossing, the combination with approach and crossing rails spaced apart at the corners of the crossing, of a pair of stub-rails at each corner connected together and pivoted to swing within such space, the stub-rails being arranged at an angle to each other and arranged to connect the respective rails of either line, and means to shift the said stub-rails.

2. In a railway-crossing, the combination with approach and crossing rails spaced apart at the corners of the crossing, of a pair

of stub-rails at each corner connected together at an angle, and pivoted to swing in said space, the apex of the angle being toward the corner and the angle being less than the angle of the corner.

3. In a railway-crossing, the combination with line-rails which cross and have spaces at the corners of the crossing, the ends of the rails being beveled at the spaces, of stub-rails connected together in pairs at the corners and beveled at the ends to join with the ends of the line-rails, the pairs being pivoted to swing in the spaces and connect the respective rails of either line.

4. In a railway-crossing, the combination with line-rails which cross and have spaces at the corners of the crossing, of pivoted plates in said spaces, stub-rails arranged at an angle to each other upon said plates, the ends of the line-rails at the spaces, and the ends of the stub-rails, being respectively scarfed and beveled at opposite ends, the plane of the bevels forming arcs concentric with the pivots of the plates.

5. In a railway-crossing, the combination with crossing line-rails having spaces at the corners of the crossing, of a pair of stub-rails at each corner connected together and pivoted to swing in said space, means to swing the stub-rails, and a lock for the said rails, connected to and operated by said means.

6. In a railway-crossing, the combination with crossing line-rails having spaces at the corners of the crossing, upper and lower plates under said crossing, the upper plate being pivoted and having holes therethrough and the lower plate having recesses which may register with said holes, stub-rails mounted upon the upper plate and arranged to match with either of the line-rails, a rocker pivoted on the upper plate and having locking-pins at the ends which work through the holes and into the recesses, and means to simultaneously operate the plate and rocker.

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

WILLARD B. WESTON.

Witnesses:
H. G. BATCHELOR,
CHAS. P. OLSEN.