T. LENNOX.

RAILWAY CROSSING.

APPLICATION FILED JULY 30, 1908. RENEWED MAY 20, 1912.

1,043,443.

Patented Nov. 5, 1912.

Fig. 1.

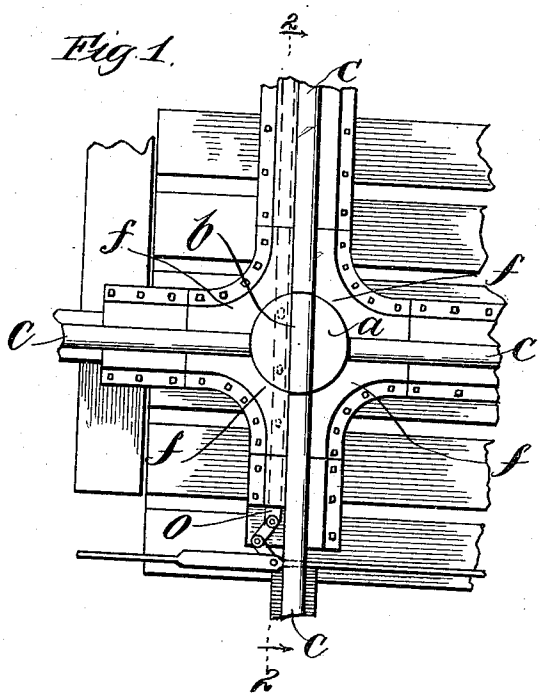


Fig. 3.

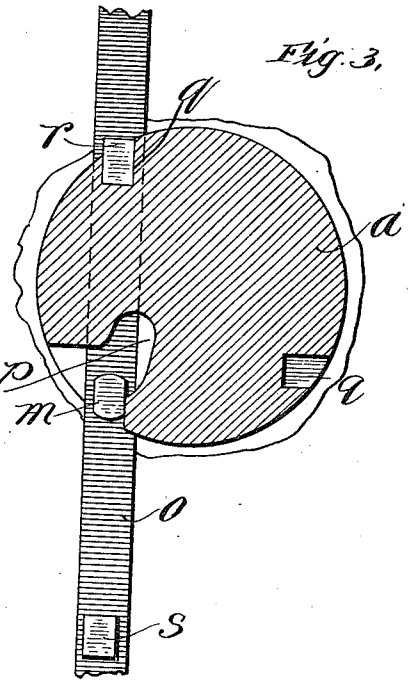


Fig. 2.

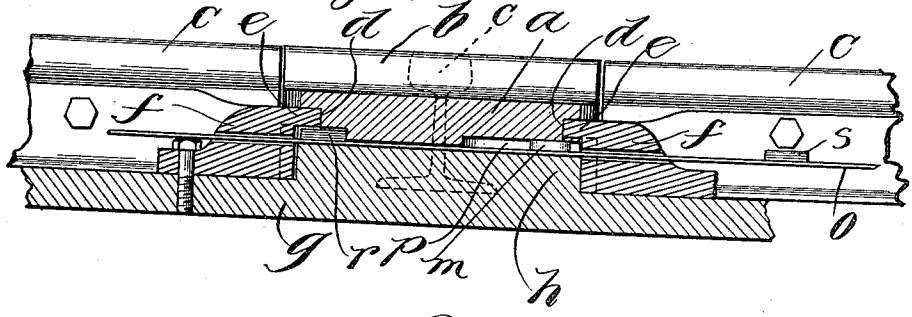
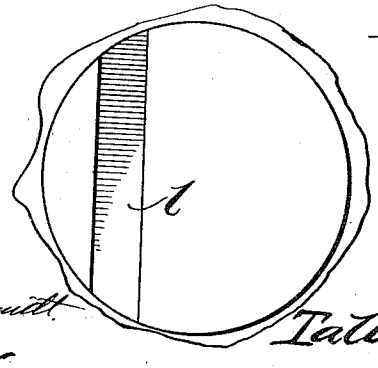


Fig. 4.



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RAILWAY-CROSSING.

REISSUED

1,043,443. Specification of Letters Patent. Patented Nov. 5, 1912.

Application filed July 30, 1908, Serial No. 446,120. Renewed May 20, 1912. Serial No. 698,627.

To all whom it may concern:

Be it known that I, TALBOT LENNOX, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Railway-Crossings, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to structures for rendering intersecting track rails continuous and particularly to that class of structures in which turn-tables are employed that carry rail sections adapted for alinement with stationary sections of intersecting track rails.

My invention will be well understood by reference to the preferred embodiment thereof shown in the accompanying drawing, in which—

Figure 1 shows a turn-table structure in association with rail sections that are to be made continuous by the rail section carried by the turn-table structure. Fig. 2 is a sectional view on line 2 2 of Fig. 1. Fig. 3 is a detail view illustrating a portion of the turn-table and an actuating bar therefor. Fig. 4 is a plan view of a portion of the base plate structure having a slot for directing the actuating bar in a straight line of travel.

Like parts are indicated by similar characters of reference throughout the different figures.

I have illustrated a structure for rendering track rails that intersect at right-angles, continuous. While I have illustrated and will specifically describe a structure adapted to track rails that intersect at right angles, I do not thereby limit myself to the adaptation of my invention to track rails that intersect at right-angles, for the adaptation of my invention to track rails that intersect at other angles, is obvious.

In the embodiment of the invention shown, there are four turn-tables per crossing, one turn-table being located at each crossing corner. Where there are four turn-tables per crossing, each turn-table *a* carries but one rail section *b* that is adapted for alinement with the stationary sections *c c* of track rails. The rail section *b* carried by the turn-table is preferably integrally formed with the turn-table, as illustrated most clearly in Fig. 2, though I do not wish to be limited to a construction in which the rail section *b* is integrally formed with the turn-table. Each turn-table has a peripheral groove *d* that receives the insetting flanges *e* of clamping quadrants *f* which are bolted to a base plate *g* and which have clamping engagement with the flanges of the rail sections *c*, as indicated in Fig. 6. The base plate *g* is provided with an upwardly projecting vertical portion *h* that constitutes a supporting plate upon which the turn-table may move, the extension *h* being circular and of a diameter slightly in excess of the diameter of the turn-table *a*, so that a sufficient clearance is assured between the periphery of the turn-table and the clamping quadrants *f* and between the periphery of the turn-table and the opposing end faces of the rail sections *c*. The insetting flanges *e*, by engagement with the peripheral grooves *d* in the turn-table, serve to prevent vertical displacement of the turn-table, while at the same time permitting the turn-table to move upon the top of the base plate portion *h*. The insetting flanges *d* take part in confining the turn-table to a fixed vertical axis of rotation.

The fixed position of the base plate is always assured, inasmuch as the clamping quadrants *f* are suitably secured to the base plate and snugly fill the spaces between the associate approach rail sections *c*. In the preferred embodiment of the invention, the movement of the turn-table is effected by the co-action of operating mechanism with the rigidly secured base plate *h* and the turn-table *a*. In order that the base plate *h* may take part in effecting the fractional rotation of the turn-table supported thereon, it is provided with a suitable formation, which is preferably a slot *l*, for engaging an actuating bar *o*, the slot *l* guiding said bar in straight line travel. The pin *m* carried by the bar *o*, engages a slot *p* in the turn-table. The slots *l* and *p* are so inter-related that an operating movement imparted to the actuating bar *o* by a switch attendant, will effect the rotation of the turn-table through the desired angle.

The slot *l* in the base plate is straight, so as to confine the actuating bar to a substantially straight line of travel. The periphery of the turn-table is provided with two notches *q*, while the actuating bar carries two pins *r* and *s*. When the turn-table is moved in one position, the pin *r* engages one

slot *q*, thereby to lock the turn-table in that position, and when the turn-table is turned in an alternative position, the pin *s* engages the slot *q* and holds the turn-table in the alternative position. The portions of the turn-table where the slots *a* are provided and the pins *r* and *s* thus constitute two locking devices, one for holding the turn-table in one position of adjustment and the other for holding the turn-table in the other position of adjustment.

While I have herein shown and particularly described the preferred embodiment of my invention, I do not wish to limit myself to the precise construction shown, as changes may readily be made without departing from the spirit thereof.

Having thus described my invention, I claim as new and desire to secure by Letters Patent the following:—

1. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar for turning the turn-table, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

2. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said turn-table and bar being provided with interlocking elements for holding the turn-table in an adjusted position.

3. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said turn-table and bar being provided with interlocking elements for holding the turn-table in each of its adjusted positions.

4. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

5. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar for turning the turn-table, said bar being in shifting engagement with the turn-table and base plate, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

6. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar being in shifting engagement with the turn-table and base plate, said turn-table and bar being provided with interlocking elements for holding the turn-table in an adjusted position.

7. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar being in shifting engagement with the turn-table and base plate, said turn-table and bar being provided with interlocking elements for holding the turn-table in each of its adjusted positions.

8. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar being in shifting engagement with the turn-table and base plate, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

9. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar for turning the turn-table, said bar entering between the turn-table and its base plate, said turn-table and base plate being provided with slots with which said bar has engagement to effect the operation of the turn table, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

10. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar entering between the turn-table and its base plate, said turn-table and

base plate being provided with slots with which said bar has engagement to effect the operation of the turn-table, said turn-table and bar being provided with interlocking elements for holding the turn-table in an adjusted position.

11. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar entering between the turn-table and its base plate, said turn-table and base plate being provided with slots with which said bar has engagement to effect the operation of the turn-table, said turn-table and bar being provided with interlocking elements for holding the turn-table in each of its adjusted positions.

12. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and an actuating bar confined to substantially straight line travel, for turning the turn-table, said bar entering between the turn-table and its base plate, said turn-table and base plate being provided with slots with which said bar has engagement to effect the operation of the turn-table, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

13. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections and a turn-table actuating bar entering between the base plate and turn-table and guided by the base plate in a substantially straight line of travel, the bar having sliding operating engagement with the turn-table, such sliding connection being gearless.

14. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and a turn-table actuating bar entering between the base plate and turn-table and guided by the base plate in a substantially straight line of travel, said turn-table and bar being provided with interlocking elements for holding the turn-table in an adjusted position.

15. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections and a turn-table actuating bar entering between the base plate and turn-table and guided by the base plate in a substantially straight line of travel, said turn-table and bar being provided with one set of interlocking elements to hold the turn-table in one adjusted position and another set of interlocking elements to hold the turn-table in an alternative position.

16. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and a turn-table actuating bar entering between the base plate and turn-table and guided by the base plate in a substantially straight line of travel, said turn-table and bar being provided with interlocking elements for holding the turn-table in each of its adjusted positions.

17. A railroad crossing structure, including a base plate, a turn-table mounted thereon and carrying a rail section adapted for alinement with track rail sections, and a turn-table actuating bar in pin and slot engagement with the turn-table, entering between the base plate and turn-table and guided by the base plate in a substantially straight line of travel.

In witness whereof, I hereunto subscribe my name this 27th day of July, A. D. 1908.

TALBOT LENNOX.

Witnesses:
G. L. CRAGG,
L. G. STROH.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents. Washington, D. C."