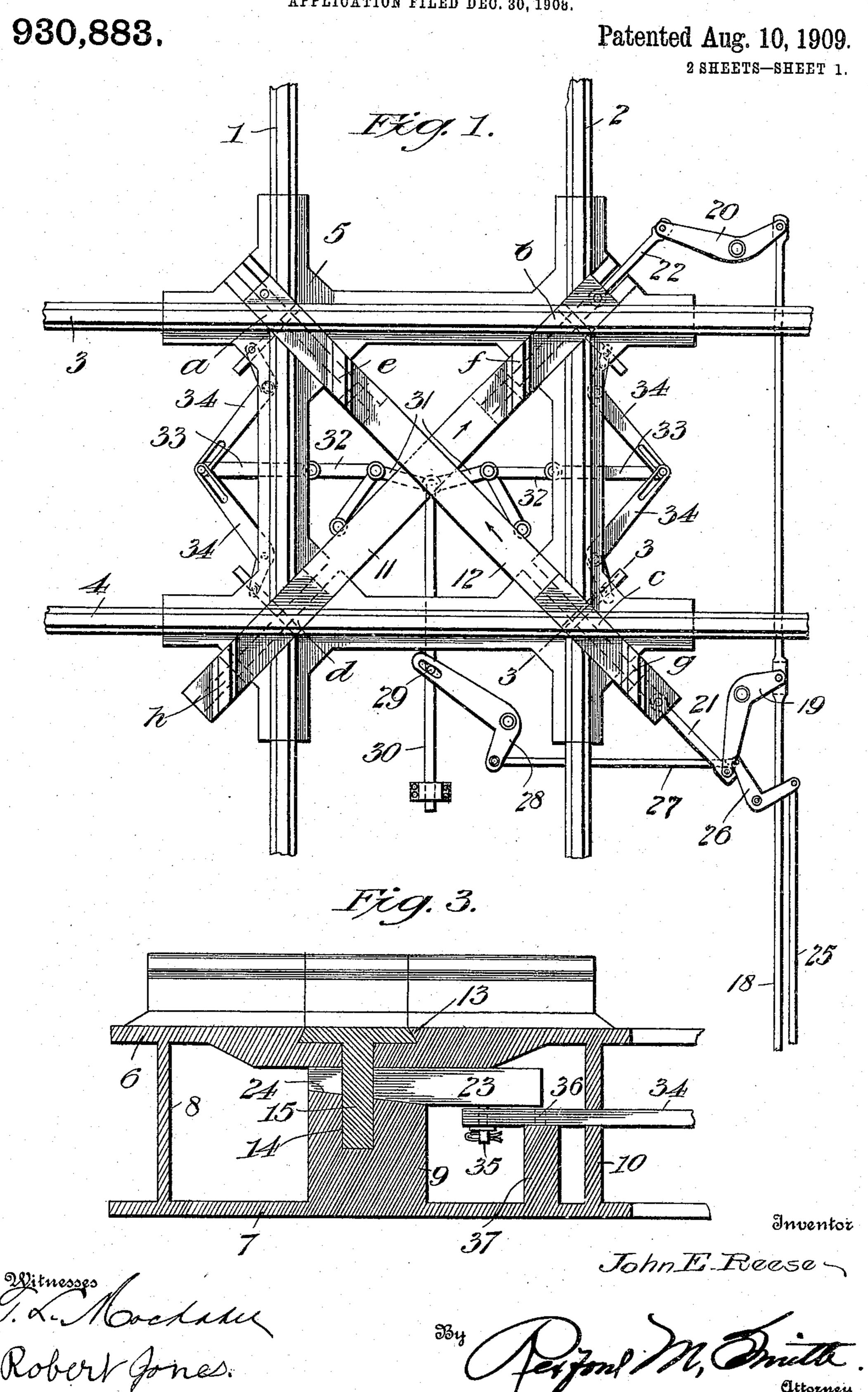
J. E. REESE.

RAILROAD CROSSING.

APPLICATION FILED DEC. 30, 1908.



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John E. Reese

UNITED STATES PATENT OFFICE.

JOHN EDWARD REESE, OF LOUISVILLE, KENTUCKY.

RAILROAD-CROSSING.

No. 930,883.

Specification of Letters Patent.

Patented Aug. 10, 1909.

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To all whom it may concern:

Be it known that I, John E. Reese, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a certain new and useful Railroad-Crossing, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to railroad crossings, the general object of the invention being to provide a simple, economical, practical and reliable railroad crossing embodying shiftable rail sections and means for securely locking said rail sections, a further object being to construct a railroad crossing in which the track rails are practically continuous when the shiftable sections are moved into alinement therewith, this being true of either the north and south bound or east and west bound tracks.

A further object of the invention is to provide a practical and effective foundation or supporting yoke for the crossing, by means of which the rails may be securely tied together and at the same time provision made for the arrangement of the operating connections beneath the plane of the rails.

With the above and other objects in view, the nature of which will more fully appear as the description proceeds, the invention consists in the novel construction, combination and arrangement of parts as herein fully described, illustrated and claimed.

In the accompanying drawings:—Figure 1 is a plan view of the railroad crossing showing the east and west bound track in readiness for use. Fig. 2 is a similar view showing the north and south bound track in condition for use. Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 1, illustrating the yoke construction and one of the locks. Fig. 4 is a side elevation of the end portion of one of the slide bars.

In the drawings, 1 and 2 designate the rails ample, while 3 and 4 designate the rails of the east and west bound track.

The rails above referred to are all supported upon and by a common yoke 5, the detailed construction of which is best illustrated in Fig. 3, wherein it is seen to comprise upper and lower plates 6 and 7 respectively and interposed connecting uprights 8, 9 and 10 arranged at all of the four corners of the yoke, only one corner of said yoke being illustrated in Fig. 3. Mounted to slide

upon the yoke are two diagonal slide bars 11 and 12 which extend at right angles to each other and cross each other in the center of the square space which occurs between the rails 60 of the crossing tracks, as shown in Figs. 1 and 2. The yoke is provided in the upper surface thereof with dove-tailed grooves or recesses 13 in which the end portions of the slide bars 11 and 12 are received as best 65 shown in Fig. 3 and the yoke is further provided with a recess 14 which extends downwardly from the groove or recess 13 and is adapted to receive a tongue 15 formed on the under side of the adjacent slide bar, the said 70 tongue being provided with a plurality of holes 16 and 17, the purpose of which will hereinafter appear.

Adjacent to each end, each slide bar 11 and 12 is provided with a plurality of re- 75 versely inclined rail sections, a, b, c, d representing, for example, the rail sections of the east and west bound track, and e, f, g, h representing the sections of the north and south bound track. These rail sections have their 80 opposite ends beveled on parallel lines so as

to fit between the separated extremities of the rails with which they are adapted to register as clearly indicated in Figs. 1 and 2. In order to simultaneously slide the bars 11 and 85 12, I provide an operating rod 18 which is connected to a pair of bell-crank levers 19 and 20, the same being connected by links 21 and 22 to the adjacent ends of the slide bars 11 and 12, so that by pulling on the rod 18 90 the said slide bars are moved in the direction indicated by the arrows in Fig. 1. By pushing on said rod 18, the slide bars are simultaneously moved in the opposite direction. Each slide bar is provided with two of the 95 tongues 15, above referred to, and each tougue is provided with two openings 16 and 17 which correspond with the two limits of movement of the slide bar. A locking wedge 23 is employed in connection with each 100 of the north and south bound track, for ex- | tongue, said wedge being in the form of a taper key, as best shown in Fig. 3 and adapted to enter and wedge itself within a correspondingly shaped opening 24 in the supporting yoke, with which opening 24, the 105 openings 16 and 17 are adapted to register at the two limits of movement of the tongue. This arrangement adapts the slide bars to be

> points, at each limit of its movement. 110 In order to simultaneously operate all of the locking wedges, I provide an operating

locked at two separate and independent

rod 25 which connects to a bell-crank lever 26 from which a connecting rod 27 extends to another bell-crank lever 28 having a pin and slot connection at 29 with a toggle rod 5 30 which is connected at one end by means of toggle links 31 to a pair of oppositely arranged angle levers 32. These angle levers are in turn connected by links 33 to a pair of slotted toggle levers 34 arranged at op-10 posite sides of the yoke, and the levers 34 are connected to the respective locking wedges 23, as best shown in Fig. 3 wherein it will be observed that each wedge or key is provided with a pendent stud 35 which extends 15 downward through an opening in the lever 34, the lever 34 being fulcrumed at 36 on a post 37.

In operation, the rod 25 is first operated to withdraw the locking wedges or keys 23. 20 The rod 18 is then operated to simultaneously shift the slide bars. Finally the rod 25 is again operated to reinsert the wedges or keys 23. This produces an absolutely reliable, safe and practical railroad crossing in 25 which the rails in use are practically continuous after the shifting operation has been

effected.

What is claimed is:—

1. In a railroad crossing, the combination 30 with the main crossing rails, of two slide bars crossing each other and extending diagonally of and across the space between the main rails, rail sections carried by said slide bars and movable thereby into and out of aline-35 ment with the main rails, means for sliding said bars, and locking wedges movable into and out of engagement with the slide bars.

2. In a railroad crossing, the combination with the main crossing rails, of two slide bars

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crossing each other and extending diagonally 40 of and across the space between the main rails, rail sections carried by said slide bars and movable thereby into and out of alinement with the main rails, means for sliding said bars, and locking wedges movable into 45 and out of engagement with the slide bars,

and means for sliding said wedges.

3. In a railroad crossing, the combination with the main crossing rails, of a supporting yoke, two slide bars mounted in the yoke and 50 crossing each other and extending diagonally of and across the space between the main rails, rail sections carried by the slide bars and movable thereby into and out of alinement with the main rails, tongues on the 55 slide bars, means for sliding said bars, locking wedges slidable into and out of engagement with said tongues, and means for simul-

taneously sliding said wedges.

4. In a railroad crossing, the combination 60 with the main crossing rails, of a supporting yoke, two slide bars mounted in the yoke and crossing each other and extending diagonally of and across the space between the main rails, rail sections carried by the slide bars 60 and movable thereby into and out of alinement with the main rails, tongues on the slide bars, means for sliding said bars, locking wedges slidable into and out of engagement with said tongues, and toggle lever con-70 nections for simultaneously sliding said wedges.

In testimony whereof I affix my signature

in presence of two witnesses.

JOHN EDWARD REESE.

Witnesses:

JOHN S. BUNTING, W. E. INGALLS.