(No Model.)

D. McNAMARA.

ADJUSTABLE RAILROAD CROSSING.

No. 480,608. Patented Aug. 9, 1892.

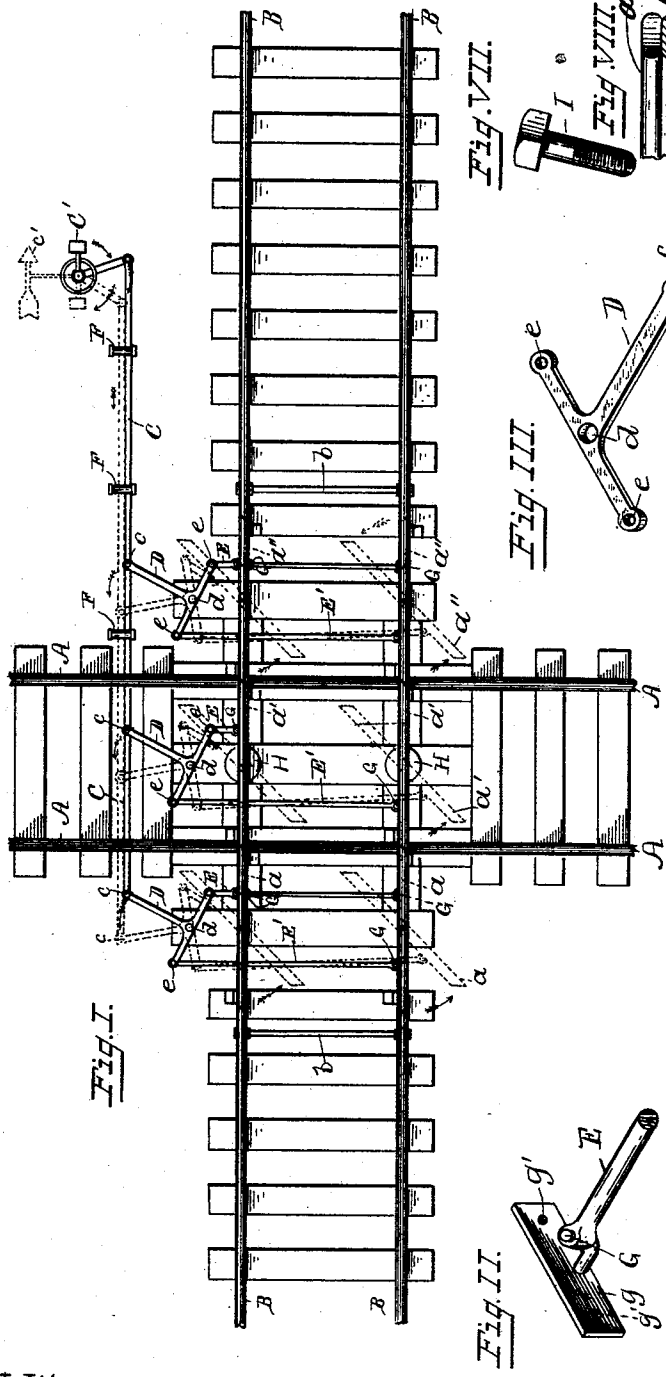

Fig. I.

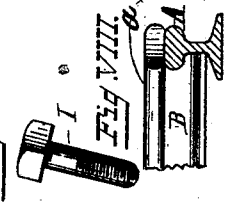

Fig. VIII.

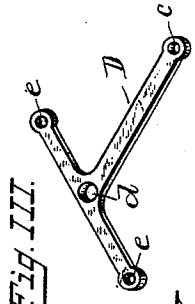

Fig. III.

Fig. II.

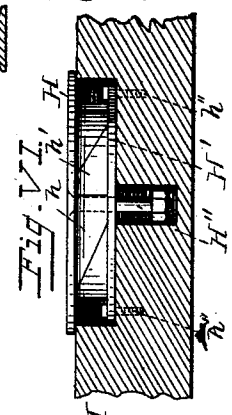

Fig. VI.

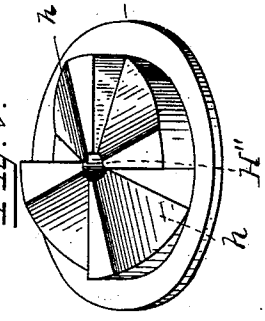

Fig. V.

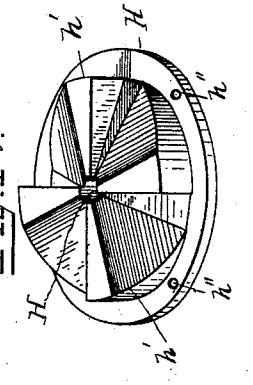

Fig. IV.

Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

DANIEL MCNAMARA, OF KANSAS CITY, MISSOURI.

ADJUSTABLE RAILROAD-CROSSING.

SPECIFICATION forming part of Letters Patent No. 480,608, dated August 9, 1892.

Application filed October 7, 1891. Serial No. 408,006. (No model.)

To all whom it may concern:

Be it known that I, DANIEL MCNAMARA, a citizen of the United States, residing at Kansas City, in the county of Jackson, State of Missouri, have invented certain new and useful Improvements in Adjustable Railroad-Crossings, of which the following is a full, clear and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates to improvements in railroad-crossings; and it consists in the novel construction and arrangement hereinafter fully set forth and described.

The objects of my invention are: first, to provide an adjustable railroad-crossing with a diagonal joint, thus forming an even continuous track, which will obviate the jolting of the cars and engine as they pass over said crossing, and, second, to construct an adjustable crossing which is composed of sections, said sections being operated by means of levers, bridles, &c. These ends I attain by using the devices and parts illustrated in the accompanying drawings, in which—

Figure I is a plan view of a railroad-crossing, showing by dotted lines the position of the movable sections when thrown out of position. Fig. II is a detail in perspective of one of the plates, to which are secured the draw-arms E E′. Fig. III is a detail in perspective of the T-shaped equalizer, to which the draw-arms E E′ are secured. Fig. IV is a detail in perspective of the ratchet-plate which raises the rail when the crossing is closed. Fig. V is a similar view showing the top ratchet-plate, which operates in coincidence with the bed-plate. Fig. VI is a sectional view of one of the ties, showing the position of the plates H and H′ when the sections of track *a a′ a″* are thrown out of position. Fig. VII is a detail view of one of the bolts which hold the rails down on plate H; and Fig. VIII is a detail view of the rails, showing the manner in which the section-rails cross over the main track.

Referring to the drawings by letter, A represents the main track of the railroad running through unbroken. B is a similar track running at right angle to track A, and in this track the adjustable sections *a*, *a′*, and *a″* are secured. These adjustable sections *a a′*, *a″* are fulcrumed at their respective centers by suitable bolts, and are operated by draw-arms E E′, which are hinged or jointed to T-shaped equalizers D, and these equalizers D are secured to the draw-rod C by bolts *c*. Said draw-rod C is operated by the switch-lever C′, which may be secured to one side of the track or in a switch-house.

F is a series of friction-rollers provided for draw-rod C, and are for the purpose of guiding and bracing same and to prevent it from dragging over the ties as it passes back and forth when operated by lever C′.

G are lugs secured on plates *g*, which in turn are rigidly bolted to the web of the rails, and over these lugs the draw-arms E and E′ are secured.

H is a circular plate having a series of ratchets *h*, and this plate rests on a similar ratchet bed-plate H′, which is countersunk in the tie and rigidly secured by suitable wood-screws *h″*. Said plates H H′ are held together by a king-bolt H″, which is made sufficiently long to allow plate H to rise its full height when the sections of the track *a′* are thrown in position to form a continuous track.

I is a screw-bolt, which passes through the seat of rail *a′* and into plate H, securely holding same in position. The ratchet-plates H H′ are so constructed that when the track is thrown open, as shown by dotted lines in Fig. I, the sections *a′* are lowered by means of the inclined ratchets *h h′* on said plates. Then as the tracks are thrown back into position the sections *a′* rise, so that the entire ball of the rail is above the rail of track A, thus forming a joint which will be continuous and perfectly smooth, so that the rails of track A are protected from unnecessary wear.

b are bridles which prevent the rails from spreading.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. An adjustable railroad-crossing constructed in sections which are pivoted at their centers and operated by draw-arms E and E′, which are secured to equalizers D, these be-

ing operated by a draw-rod C, as fully set forth and described.

2. An adjustable railroad-crossing consisting of the sections *a*, *a'*, and *a''*, the ratchet-plates H and H', the hinged draw-arms E and E', and the equalizers D, substantially as set forth and described.

3. In an adjustable crossing, the sections *a*, *a'*, and *a''*, with diagonal joints operating above the main track, substantially as specified.

In testimony whereof I affix my signature in presence of two witnesses.

DANIEL McNAMARA.

Witnesses:
JAMES K. LATHY,
PEARL YOUNG.