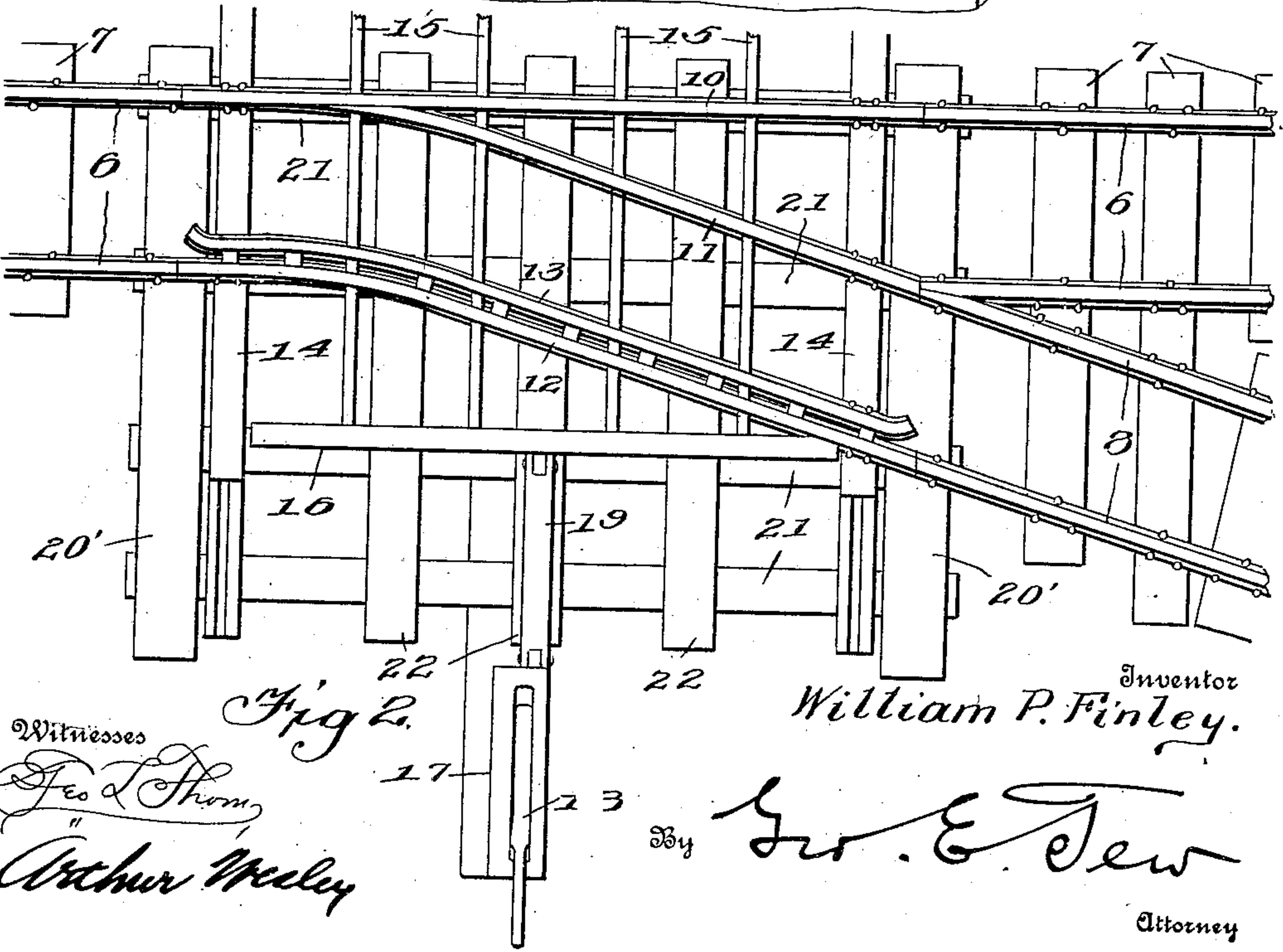
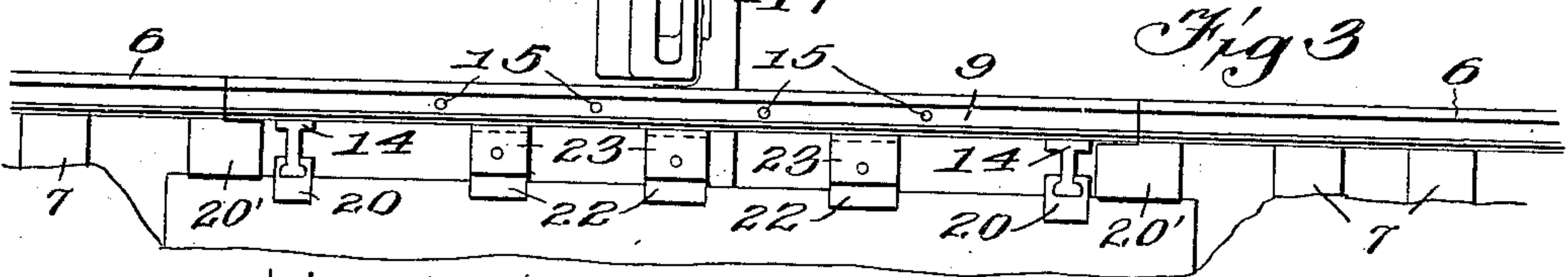
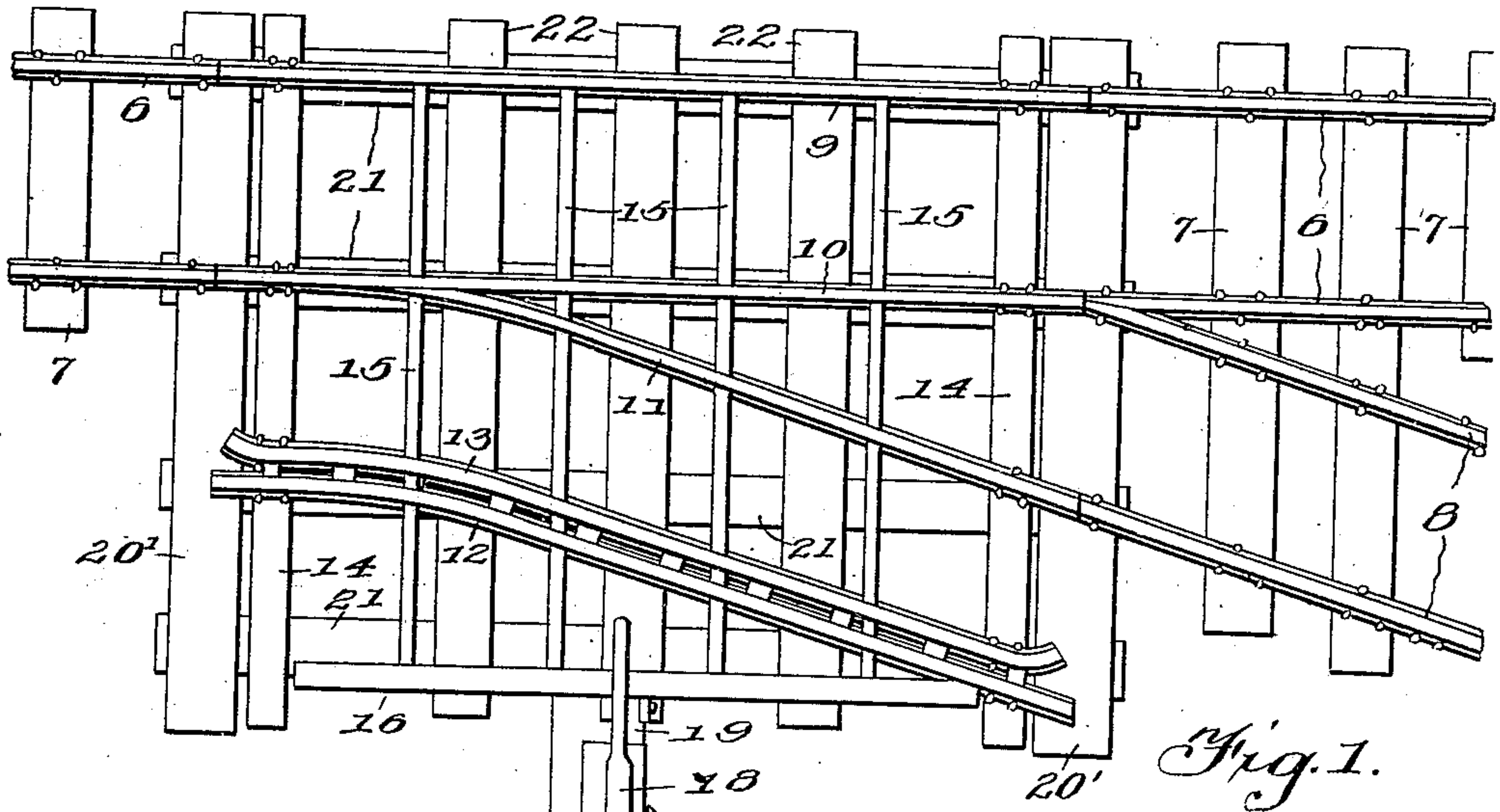


W. P. FINLEY.
RAILWAY SWITCH.
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908,554.

Patented Jan. 5, 1909.



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UNITED STATES PATENT OFFICE.

WILLIAM PHILANDER FINLEY, OF KANSAS, ILLINOIS.

RAILWAY-SWITCH.

No. 908,554.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed June 24, 1908. Serial No. 440,101.

To all whom it may concern:

Be it known that I, WILLIAM PHILANDER FINLEY, citizen of the United States, residing at Kansas, in the county of Edgar and State of Illinois, have invented certain new and useful Improvements in Railway-Switches, of which the following is a specification.

This invention relates to railway switches, and has for its object to provide an improved switch without a frog and which will give a clear or continuous track on the main line when the switch is closed. The absence of a frog or break in the rails will prevent jolting or pounding and also the frequent accidents caused by the flange of a wheel catching in a frog and wrecking the car or train.

The invention embodies the use at the switch of a track section movable bodily from one side to the other, to open or close the switch, as will more clearly appear from the following detailed description and the accompanying drawings.

In the drawings, Figure 1 is a plan view with the switch closed. Fig. 2 is a similar view with the switch open. Fig. 3 is a side elevation.

Referring specifically to the drawings, 6 indicates the main line rails, fastened to ties 7, and 8 are the side track rails.

The switch embraces or includes two parallel rail sections 9 and 10, a fixed switch point 11, the beveled end of which rests against the outer side of the rail section 10, and a curved side rail 12 with its guard rail 13. These various rails are fastened by suitable clips or bolts to a pair of beams 14. These beams are T-beams, that is, flanged at top and bottom, and the rail sections are fastened to the upper flanges, the rails being connected together and held in proper position by tie rods 15, which also connect the switch to a bar 16 on the side toward the switch stand 17, which is provided with a lever 18 connected to the bar by a rod 19.

The lower flanges and webs of the T-beams 14 fit within channel beams 20 extending crosswise of the track and resting on sills 21 extending lengthwise. And the beams 14 are slidable in the channels, which are grooved or shaped to receive the beams and which accordingly prevent lift or shift of the

switch out of position. The rail sections 9, 10, 11, 12 and 13, forming the switch, also rest upon cross ties 22, located between the beams 20, the ties being covered on top with metallic wear plates 23, on which the said rail sections forming the switch slide from side to side. The ends of the main track rails 16 preferably lap and rest upon the channeled beams 20.

The movable parts, then, comprise the T-beams 14 and the rail sections mounted thereon, and the connecting devices to the switch lever.

For a straight track, as shown in Fig. 1, the lever is thrown in, bringing the rails 9 and 10 in line with the main rails 6, and forming a continuous track without break or frog. To open the switch, the lever is thrown outwardly and shifting the whole switch structure to the side, causing the rails 10 and 12 to match with the main track rails and completing the way to the side track 8. There is an entire absence of pivoted parts, springs, and other devices apt to get out of order, and the possibility of a wheel running into a closed switch is wholly eliminated.

I claim:

1. The combination with a main and a side track, of a switch comprising a supporting structure having straight guide ways extending across the track, a pair of main rail sections and a pair of switch rail sections rigidly connected together and fastened to cross beams slidable in said guide ways, and adapted to connect either the main or the side track, and means to shift said sections and beams.

2. The combination with a main and a side track, of a switch comprising a supporting structure having cross beams with undercut channels therein, flanged cross beams slidable in said channels, a pair of main rail sections and a pair of switch rail sections fastened to said slidable beams and adapted to connect either the main track or the side track, and means to shift said slidable beams and rail sections.

3. The combination with a main track and a side track, of a frogless switch comprising two parallel rail sections adapted to connect the main track, a switch point rail rest-

ing against the outer side of one of said sections, switch and guard rail sections adapted to connect rails of the main and side track, said sections being rigidly connected together, a guiding and supporting structure on which said sections are slidable laterally, and means to shift said sections.

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

WILLIAM PHILANDER FINLEY.

Witnesses:

FRANK S. ANDERSON,
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