

C. E. BARKMAN.
RAILWAY SWITCH.
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924,958.

Patented June 15, 1909.

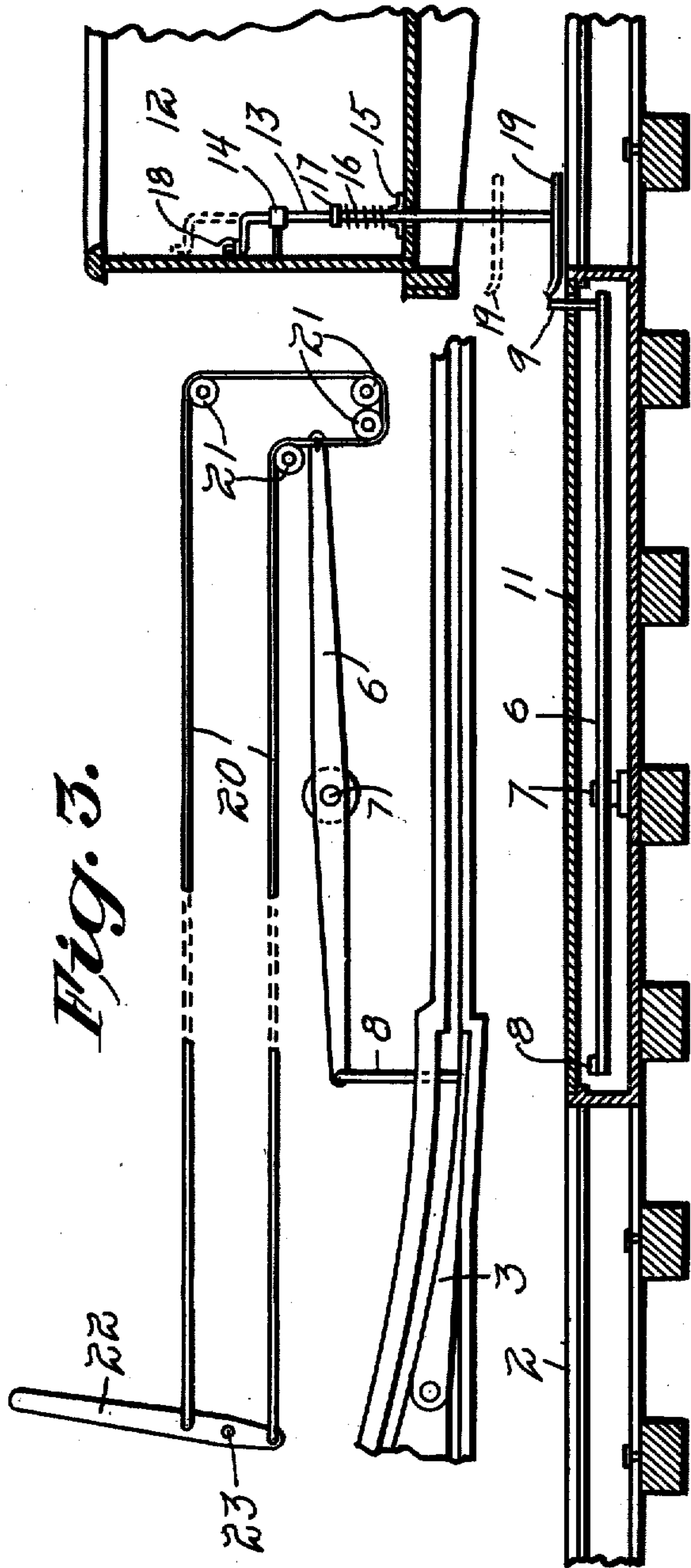


Fig. 3.

Fig. 2.

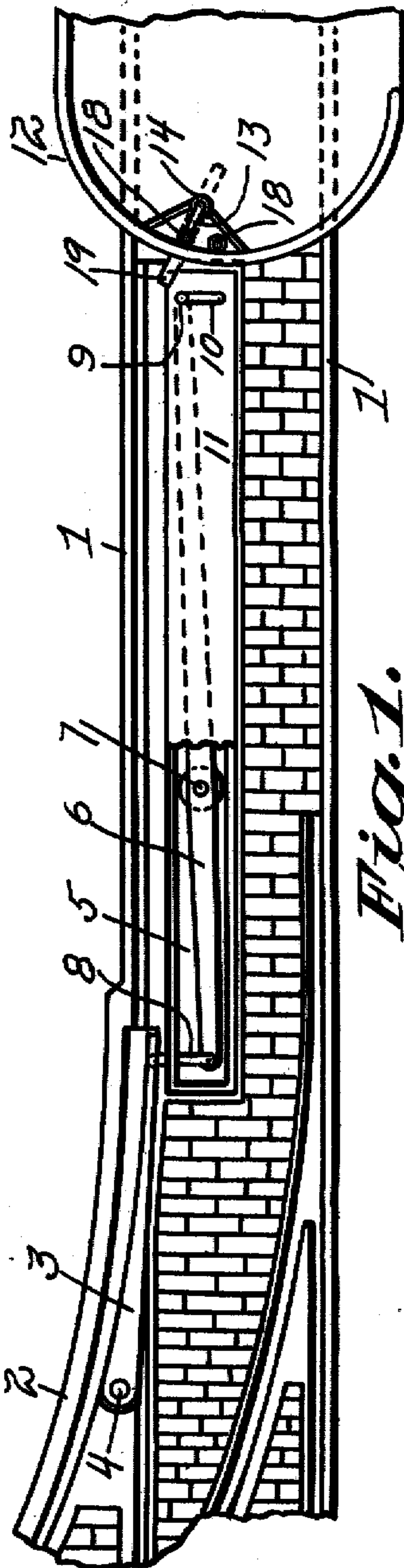


Fig. 1.

Witnesses:
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UNITED STATES PATENT OFFICE.

CLAUDE E. BARKMAN, OF DAYTON, OHIO.

RAILWAY-SWITCH.

No. 924,958.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed June 4, 1908. Serial No. 436,590.

To all whom it may concern:

Be it known that I, CLAUDE E. BARKMAN, citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Railway-Switches; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in railway switches, and consists of the novel features hereinafter described and claimed.

The object of the invention is to provide a simple and effective switch-shifting mechanism which may be operated from a moving car or from a station or tower.

Preceding a detailed description of the invention, reference is made to the accompanying drawings, of which—

Figure 1, is a plan view of a portion of a track and a portion of a car, in connection with my switch mechanism. Fig. 2, is a sectional elevation of Fig. 1. Fig. 3, is a plan view of a modification of the mechanism adapting the same to be shifted from a station or tower.

In a detail description of the invention, similar reference characters indicate corresponding parts.

1 designates the rails of a straight track, and 2 the rails of a converging track between which the switch tongue 3 is placed, said tongue being pivoted at 4. Adjacent to said switch tongue is a covered recess 5 in the form of an elongated box in which is arranged a lever 6 pivoted within said box at 7 and connected to the free end of the switch tongue by a link 8. The other end of the lever 6 has a pin 9 projected therefrom and extending through a slot 10 in the cover 11 of the box.

It will be clearly seen that by moving the lever 6 one way or the other through a suitable engagement with the pin 9, the switch tongue 3 will be shifted to cause the car to travel to or from the straight track as the case may be. The lever may be shifted by means located in the vestibule of a car in which the motorman stands.

12 designates the front end or vestibule of a car; 13 is a longitudinally-movable rod supported in guides 14 and 15, the former being in a bracket fixed to the front of the car and the guide 15 being secured to the floor of the front end of the car above an opening through which the rod 13 passes. 16 is a coil spring surrounding said rod and secured between the guide 15 and a collar 17 fixed to said rod, said spring exerting an upward pressure upon the rod through the collar 17.

The upper end of the rod 13 is bent at right angles in the form of a crank, and the extreme upper end thereof is adapted to be secured in one or the other of two eyes 18 which are secured to the front end of the car. The lower end of the rod 13 has fixed to it a shoe 19 which is adapted to engage the lever pin 9 when at either end of the slot 10 in the cover 11. As the rod 13 and the shoe 19 appear in the dotted position in Fig. 2, the rod is under the influence of the spring 16, the shoe being raised out of a position to engage the pin 9. In Fig. 1, the shoe 19 is lowered against the resistance of the spring 16 in a position to engage the lever pin 9, said shoe being held in such position by the upper end of the rod 16 being engaged with one of the eyes 18.

It will be understood that in lowering the rod 13 from the position shown in dotted lines in Fig. 2, it is turned to clear the eyes 18, and when lowered sufficiently below said eyes, it is elevated to engage the desired one of said eyes 18 by allowing the spring 16 to lift said rod until such engagement has been effected. In Fig. 3, the lever 6 is connected with the switch tongue 3 through the link 8, but said lever is operated by means of a suitable cable 20 which extends as far as necessary to a tower or station (not shown) after passing round a suitable number of guide pulleys 21. The cable and lever 6 are inclosed beneath the surface of the ground in any convenient manner, and said cable is operated by a hand lever 22 pivoted at 23. Fig. 3 is only intended to illustrate the mechanism for operating the switch.

It will be understood that the lever 22 is located within a suitable house or tower and that the cable 20 after extending down from said lever may extend along the interior of piping above the ground, or may be incased below the ground. Either of these methods of arranging the switch-operating mechanism

ism is well understood, and it is deemed that no further description or illustration is necessary.

I claim:

- 5 In a railway switch, the combination with a switch tongue, of a lever parallel with a main track, a connection between said lever and the switch tongue, a pin extending from said lever, a shoe adapted to engage said pin
10 in either of its extreme positions to operate the lever and thereby throw the switch tongue, an upright rod to which said shoe is fixed, a spring normally holding said rod in

an upper position to normally maintain the shoe out of the path of the pin, and means 15 for locking the rod in its lower position with the shoe adapted to engage the pin on the lever to throw the switch, substantially as specified.

In testimony whereof I affix my signature, 20 in presence of two witnesses.

CLAUDE E. BARKMAN.

Witnesses:

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