(No Model.) 2 Sheets—Sheet 1.

J. F. BARRETT.

RAILWAY SWITCH.

No. 524,521. Patented Aug. 14, 1894.

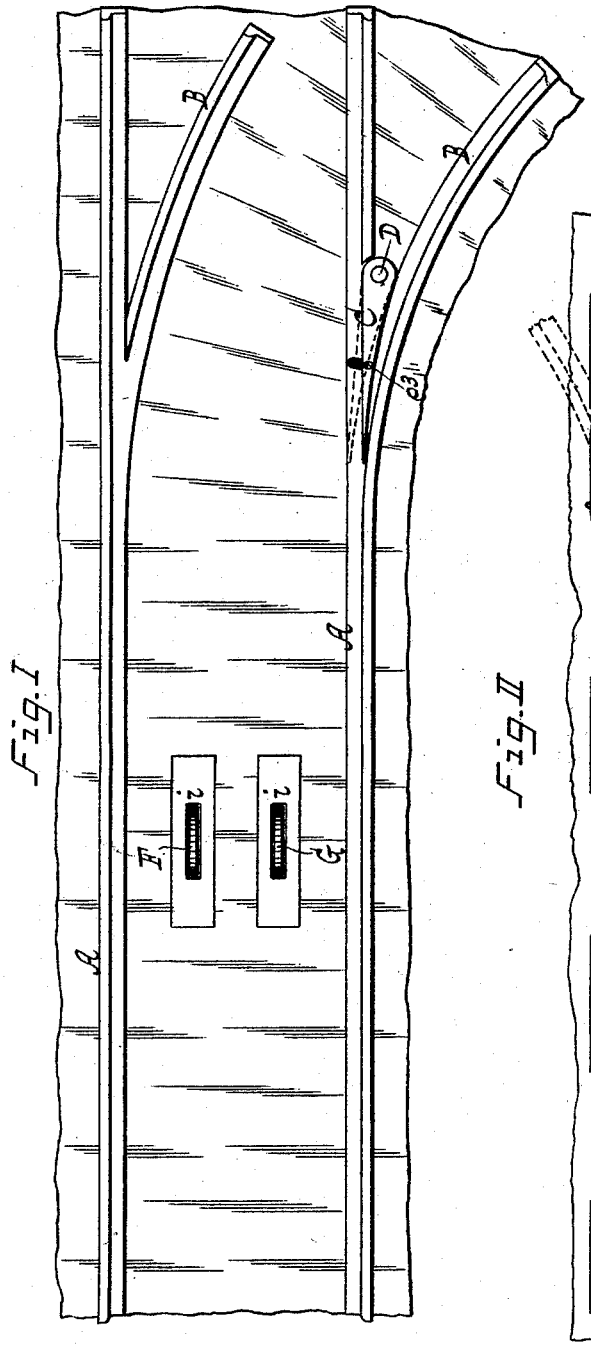

Fig. I

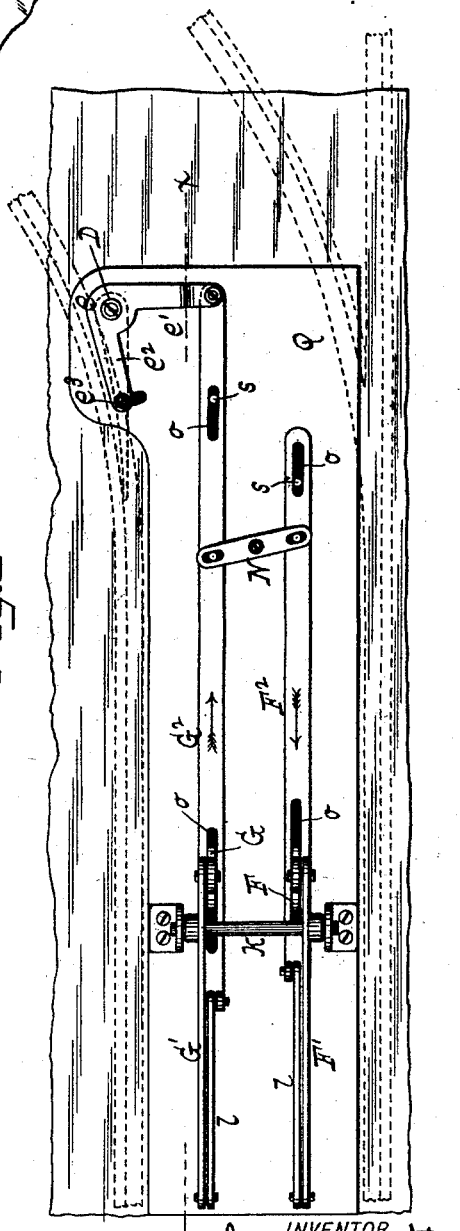

Fig. II

WITNESSES:

Chas. Wahlers

R. F. Van Bokkelen

INVENTOR

John F. Barrett

BY

Whales & Coe

ATTORNEY

(No Model.)

2 Sheets—Sheet 2.

J. F. BARRETT.

RAILWAY SWITCH.

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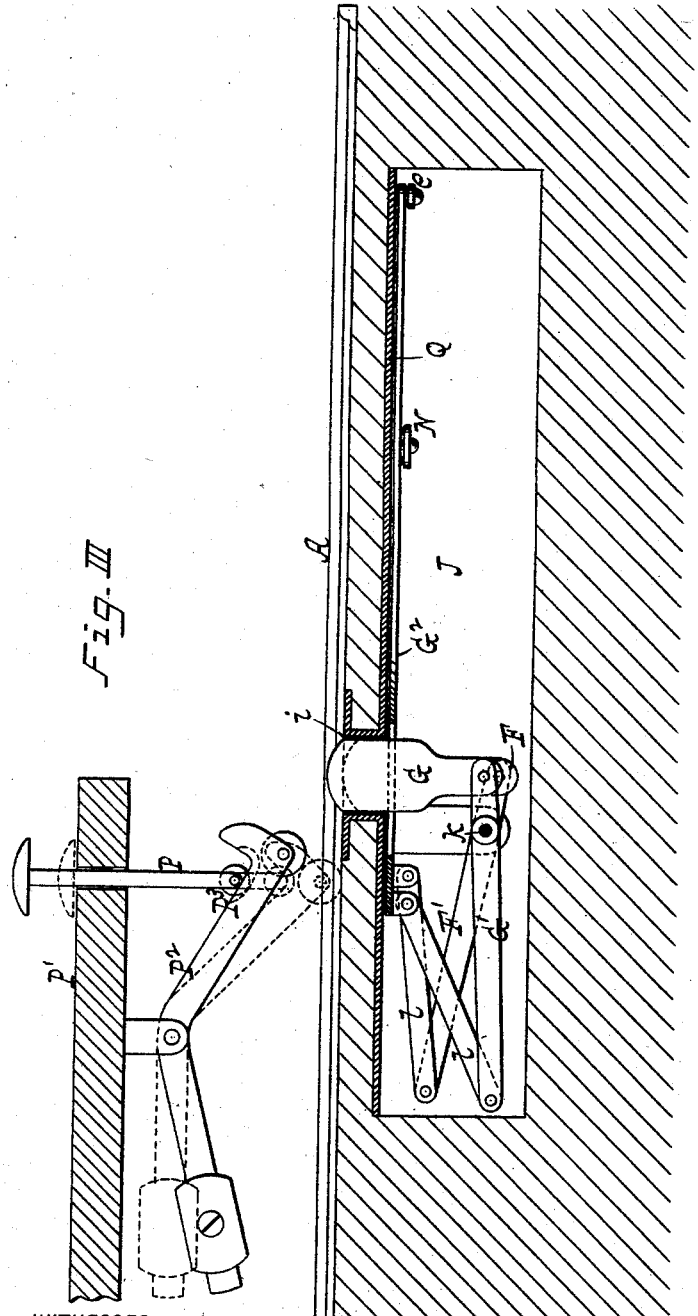

Fig. III

WITNESSES:

Chas. Wahlers

R. F. Van Bokkerek

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UNITED STATES PATENT OFFICE.

JOHN F. BARRETT, OF BROOKLYN, NEW YORK.

RAILWAY-SWITCH.

SPECIFICATION forming part of Letters Patent No. 524,521, dated August 14, 1894.

Application filed December 5, 1892. Serial No. 454,084. (No model.)

To all whom it may concern:

Be it known that I, JOHN F. BARRETT, a citizen of the United States, residing in the city of Brooklyn, Kings county, New York, have invented certain new and useful Improvements in Railway-Switches, of which the following is a specification.

My invention relates to the class of railway switches incorporating a setting mechanism to be operated from an approaching car; and it consists in a certain novel construction of such mechanism, as hereinafter fully described, for simplifying the same and promoting its efficiency.

In the accompanying drawings:—Figure I represents a plan view of a railway with a switch embodying my invention. Fig. II represents an inverted plan view of the switch-setting-mechanism. Fig. III represents a side view partly in section thereof, the plane of section being indicated by the line $x\,x$, of Fig. II.

Similar letters of reference indicate similar parts.

The letter A indicates rails of the main track and B rails of the side track, of the railway.

C indicates the switch-tongue joining one of the rails A B of the two tracks in the usual manner. This switch-tongue C is on a vertical pivot D, which also carries a horizontal switch-operating lever *e* (Fig. II) usually with two arms e' e^2.

The letters F G indicate two setting-instruments, both of which are at a point in advance of the switch, on the line of the railway, they being in proximity to each other intermediate of the rails of the main track. Each of these setting instruments F G consists of a cam, which is fitted in a suitable guideway *i* to move freely in vertical direction, for bringing its face alternately above and below the bed of the railway. In operation, the cams F G are interchangeable, one rising above the railway bed when the other is depressed.

In a suitable well J below the bed of the railway, are two vertical levers F′ G′ serving to transmit power from the vertical cams F G to the horizontal switch-operating-lever *e*. These power-transmitting-levers F G are hung on a common pivot *k;* and by one of its arms each of the levers is pivoted to either of the cams F G, while by its other arm each of the levers is connected to either of two rods F^2 G^2, namely through the medium of a pivoted link *l*. The rods F^2 G^2 are arranged to slide horizontally in the well J, each being provided with two guide slots *o*, by one of which it straddles either of the cams F G and by the other straddles a guide-pin *s;* and one of said rods is pivoted to the main arm e' of the switch-operating-lever. At a suitable point between the ends of the slide rods F G they are connected to each other by a pivoted latch N so as to move in unison with each other.

For convenience of mounting the parts in the well J the latter has a supporting plate Q secured in the top part thereof.

The operation of the mechanism thus constructed, is as follows: When either of the vertical cams F G is depressed, motion is imparted to both transmitting levers F′ G′, both slide rods F^2 G^2 and the switch operating lever *e*, with the effect of throwing the switch tongue C in one or the other direction and at the same time reversing the position of the other cam.

For the purpose of actuating the cams F G each of the cars of the railway is to be equipped with two pedals, which may be of the form shown in Fig. III. In this figure P indicates a treadle working in the car platform P′; and P^2 a weighted lever which is subjected to the action of the pedal for bringing it, or a roller P^3 thereon, in contact with either of the cams.

In order to relieve the switch pivot D of undue strain, the second arm e^2 of the switch lever, is preferably connected to the shank of the switch, at some distance from the pivot, as by means of a stud e^3 working in a suitable slot.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination with a railway having a main track, side track, and pivoted switch-tongue, of the two vertically-movable cams, forming switch-setting instruments, interme-

diate of the rails of the main track and at a point in advance of the switch, the two vertical power-transmitting levers each pivoted to one of the cams, the two horizontal slide-rods, pivoted links connecting said transmitting levers to the slide rods, the pivoted latch connecting the slide-rods to each other, and the horizontal operating-lever on the pivot of the switch-tongue, pivoted to one of the slide rods, all substantially as and for the purpose herein described.

JOHN F. BARRETT.

Witnesses:
CHARLES G. COE,
CHAS. WAHLERS.