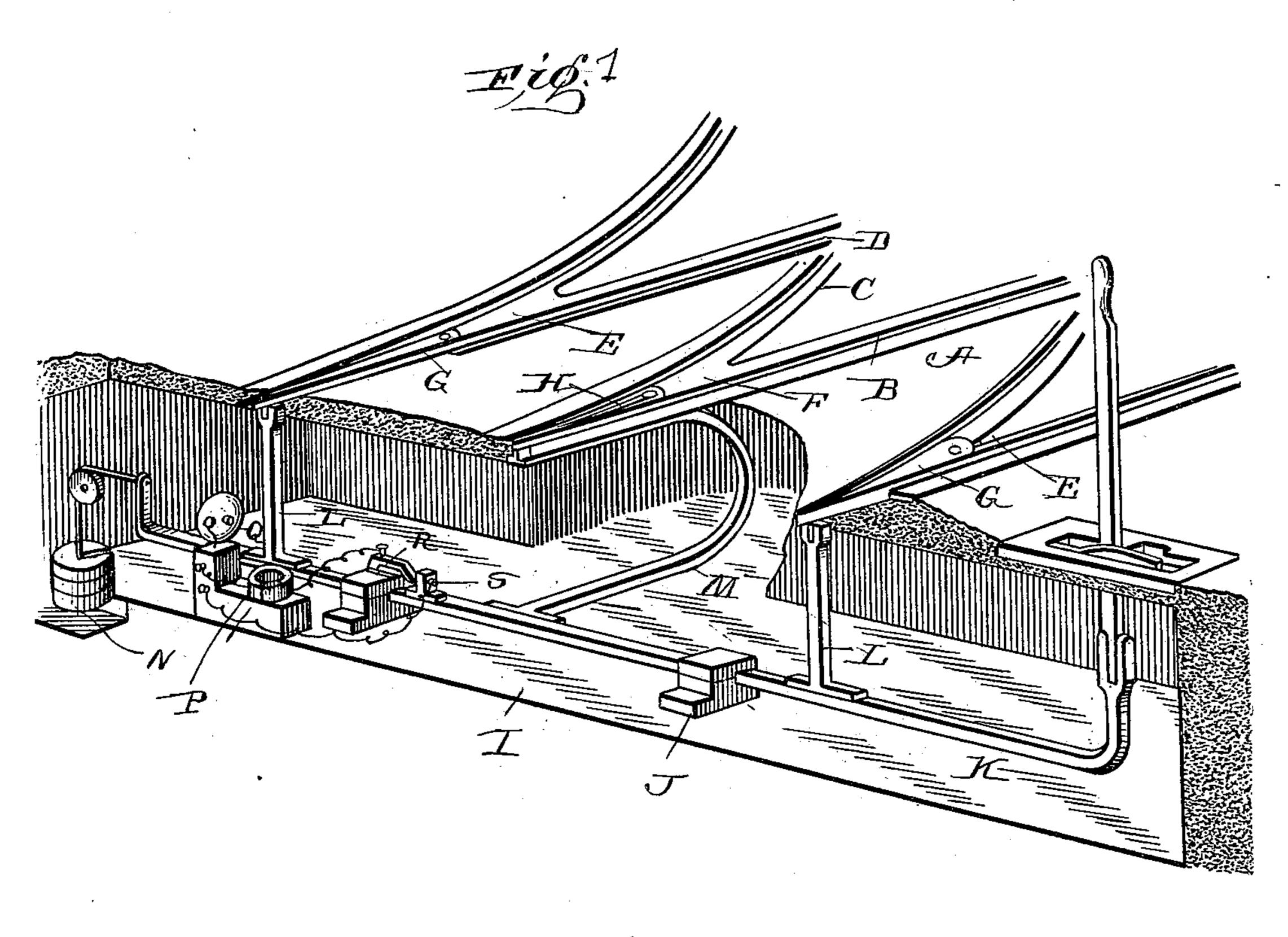
No. 668,509.

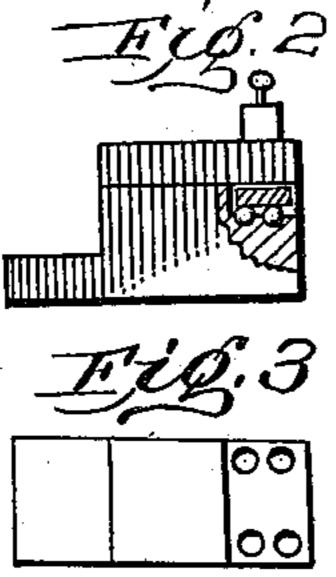
Patented Feb. 19, 1901.

## J. FLOYD. STREET RAILWAY SWITCH.

(Application filed Feb. 3, 1900.)

(No Model.)





Witnesses, J.Mo. Frowler f. E.M. Ryan.

John Hoyd Syllands Harrell Allands Harrell AH15.

## United States Patent Office.

JOHN FLOYD, OF WASHINGTON, DISTRICT OF COLUMBIA.

## STREET-RAILWAY SWITCH.

SPECIFICATION forming part of Letters Patent No. 668,509, dated February 19, 1901.

Application filed February 3, 1900. Serial No. 3,912. (No model.)

To all whom it may concern:

Be it known that I, JOHN FLOYD, a citizen of the United States of America, residing at Washington, in the District of Columbia, 5 have invented certain new and useful Improvements in Street-Railway Switches, of which the following is a specification.

This invention relates to street-railway switches, and more particularly to that class to in which the rail and slot points are moved

automatically.

The object of my present invention is to provide a switch of such a character with an alarm which will be turned on when the 15 switch is set for the branch track.

With this and other objects in view my invention consists in the particular construction of the various parts and in the novel manner of combination and arrangement of 20 said parts, all of which will be described hereinafter and pointed out in the claims.

In the drawings forming a part of this specification, Figure 1 is a perspective view of the complete invention. Fig. 2 is a detail view of 25 the circuit-closing device. Fig. 3 is an enlarged detail sectional view of one of the roller-

bearings.

Referring by letters to the drawings, A represents the rails of the main track, having in 30 the center thereof a slot B and C, the rails of the branching track having in the center thereof a slot D. The main and branching tracks form at the point of junction frogs E. Likewise the slots between the tracks form a 35 frog F. Pivoted to the frogs formed by the rails are points G, and pivoted to the frogformed by the slots is a point H, which is cut out in the center, as clearly shown in Fig. 1 of the drawings, in order to make that por-40 tion of the construction light and to give it as little bearing-surface as possible, which will prevent it from sticking in frosty weather to a great degree. The adjustment of these points will be hereinafter explained. Extend-45 ing across and beneath the tracks at the point of junction is a casing I, having mounted therein, upon socket roller-bearings J, a sliding or shifting bar K, provided with two uprights L, which are connected to the rail-50 points G, and a curved arm M, which is connected to the slot-point H and which is so constructed that it provides against the plow coming in contact therewith. This bar is l

further provided with a weight N upon one end and a lever upon the other for shifting 55

the bar and operating the switch.

Situated within the casing, approximately near the sliding bar, are a battery P and a bell Q, which are connected by suitable wiring to a contact-block R, mounted on one of the 60 roller - bearings, and to a similar block S, mounted on the shifting bar. These blocks are adapted to be forced into contact when the switch is set for the branch track, thus automatically giving an alarm, which will in- 65 dicate that the branching track is open.

It will be obvious that various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of 70

the advantages of this invention.

Having thus described the main features of my invention, what I claim as new, and desire

to secure by Letters Patent, is—

1. In a railway-switch, a shifting bar 75 mounted in roller-bearings having a curved arm attached to a skeleton slot-point and two uprights connected to the rail-points, of a weight upon one end of the slot-bar and a lever upon the other for operating the switch, 80 substantially as shown and described.

2. In a railway-switch, the combination with the rail and slot points, a shifting bar mounted in roller-bearings having a curved arm connected to a skeleton slot-point, and 85 two uprights connected to the rail-points, of a weight upon one end of the shifting bar and a lever upon the other, of an alarm adapted to be turned on by the shifting bar, the bar being operated by the said lever, substan- 90 tially as shown and described.

3. In a railway-switch, the combination with the rail and slot points, a shifting bar mounted in roller-bearings, the said bar having a curved arm connected to a skeleton 95 slot-point and two uprights connected to the rail-points, of a circuit-closing device upon the shifting bar, connected to the battery and to a bell, of a weight upon one end of the shifting bar and a lever upon the other adapt- 100 ed to operate the switch, substantially as shown and described.

JOHN FLOYD.

Witnesses:

A. E. MULLÂN, B. L. HEREFORD.