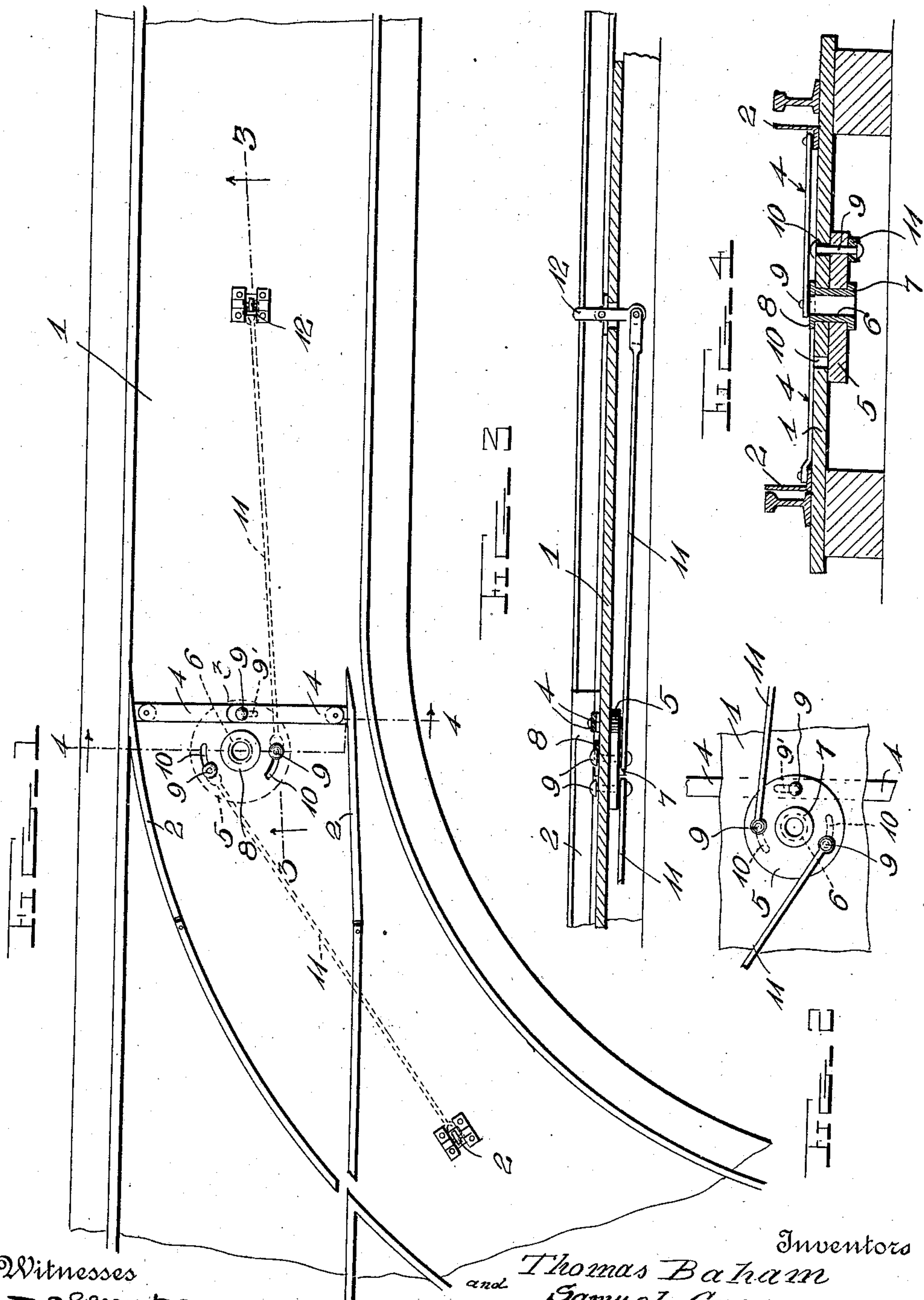


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 AUTOMATIC SWITCH THROWER.
 APPLICATION FILED AUG. 31, 1908.

915,709.

Patented Mar. 16, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

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AUTOMATIC SWITCH-THROWER.

No. 915,709.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that we, THOMAS BAHAM and SAMUEL CARR, citizens of the United States, residing at Independence, in the parish of Tangipahoa and State of Louisiana, have invented certain new and useful Improvements in Automatic Switch-Throwers; and we 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.

This invention relates to new and useful improvements in switch mechanisms especially adapted for use in connection with street railway switches, and has for its object to provide simple and efficiently operated mechanism of this type which may be actuated by any one of the many forms of switch actuating mechanisms usually carried by the car, thus obviating the necessity for the street railway company to incur the additional expense of employing an attendant to throw the switch.

With this and other objects in view, the invention consists of certain novel features of construction, combination and arrangement of parts, as will be more fully described and particularly pointed out in the appended claims.

In the accompanying drawings, Figure 1 is a plan view of a switch mechanism embodying our improvements; Fig. 2 is a bottom plan view showing a portion of the switch mechanism; Fig. 3 is a longitudinal section taken on line 3—3 of Fig. 1; and Fig. 4 is a transverse section taken on line 4—4 of Fig. 1.

In the embodiment illustrated, the numeral 1 indicates a bed plate which is arranged at the switch crossing and 2 the switch tongues, the free ends of which are connected by a transverse bar or link 3 made in two corresponding sections 4 connected at their inner ends in a manner to be hereinafter disclosed.

In carrying out the invention, an annular ring 5 is mounted to turn at the under surface of the bed plate, said ring being held in position by a tubular washer 6 which is inserted through said ring and is provided at its lower end with an annular flange 7 to engage a corresponding portion of the under surface of said ring and its upper end with an annular shoulder 8 between which and the top surface

of said ring is clamped or held a corresponding portion of the bed plate. The ring 5 is also provided near its periphery and at approximately opposite points with guide pins 9 which extend through corresponding arc-shaped slots 10 formed in the bed plate and one of said guide pins also through the inner ends of the bar or link sections 4 in order to hold said ends in connected relation. The upper ends of the other guide pins are headed or flattened against the face of the bed plate and constituting additional means for holding the ring 5 in position. Longitudinally disposed operating links 11 are connected at their inner ends to the lower ends of said last mentioned guide pins and at their opposite ends to the lower ends of upright levers 12 pivoted between their ends to the bed plate.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion and the minor details of the construction may be resorted to without departing from the principle or sacrificing any of the advantages of the invention as defined in the appended claims.

Having thus described and ascertained the nature of our invention, what we claim as new and desire to secure by Letters-Patent, is.

1. In a switch mechanism, the combination with a bed plate provided with a vertical opening and a plurality of spaced arcuate slots lying in a plane concentric with said opening, of a transverse link made in two sections arranged between the free ends of the switch tongues, a flat ring mounted beneath the apertured portion of the bed plate, guide pins extending eccentrically from said ring through said arcuate slots and one of said pins also through the inner ends of the link sections to hold the same in connected relation a tubular washer extending through the aperture of the bed plate and the center of said ring, said washer having a rim at its lower end to engage a corresponding portion of the bottom surface of the ring and a corresponding rim at its upper end to engage bed plate, longitudinally disposed operating members connected with the lower ends of two of the guide pins and operating levers pivoted to the bed plate and attached to the outer ends of said links.

2. In a switch mechanism, the combination with a bed plate provided with a vertical opening and a plurality of arcuate slots lying in a plane concentric with said opening, of a
5 transverse link arranged between the free ends of the switch tongues, a flat ring mounted beneath the apertured portion of the bed plate, guide pins extending eccentrically from said ring through said slots with one of
10 the pins engaging said link, a tubular washer extending through the aperture of the bed plate and said ring, said washer having a rim at its lower end to engage a corresponding portion of the bottom surface of the ring and
15 a corresponding rim at its upper end to engage the bed plate, longitudinally disposed operating links connected with the lower ends of two of the guide pins, and pivoted operating
20 levers connected with the outer ends of the links.

3. In a switch mechanism, the combination with a bed plate provided with a vertical opening and a plurality of spaced arcuate

slots lying in a plane concentric with said opening, of a transverse link arranged between the free ends of the switch tongues, a
25 flat ring mounted beneath the apertured portion of the bed plate, drive pins extending eccentrically from said ring through said slots with one of the pins engaging with said link and
30 a tubular washer extending through the bed plate and ring, and forming a bearing for the latter, longitudinally disposed operating links connected with the lower ends of two of the
35 guide pins, and operating levers pivoted in the bed plate and connected with the outer ends of said links.

In testimony whereof we have hereunto set our hands in presence of two subscribing witnesses.

THOMAS BAHAM.
SAMUEL CARR.

Witnesses:

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