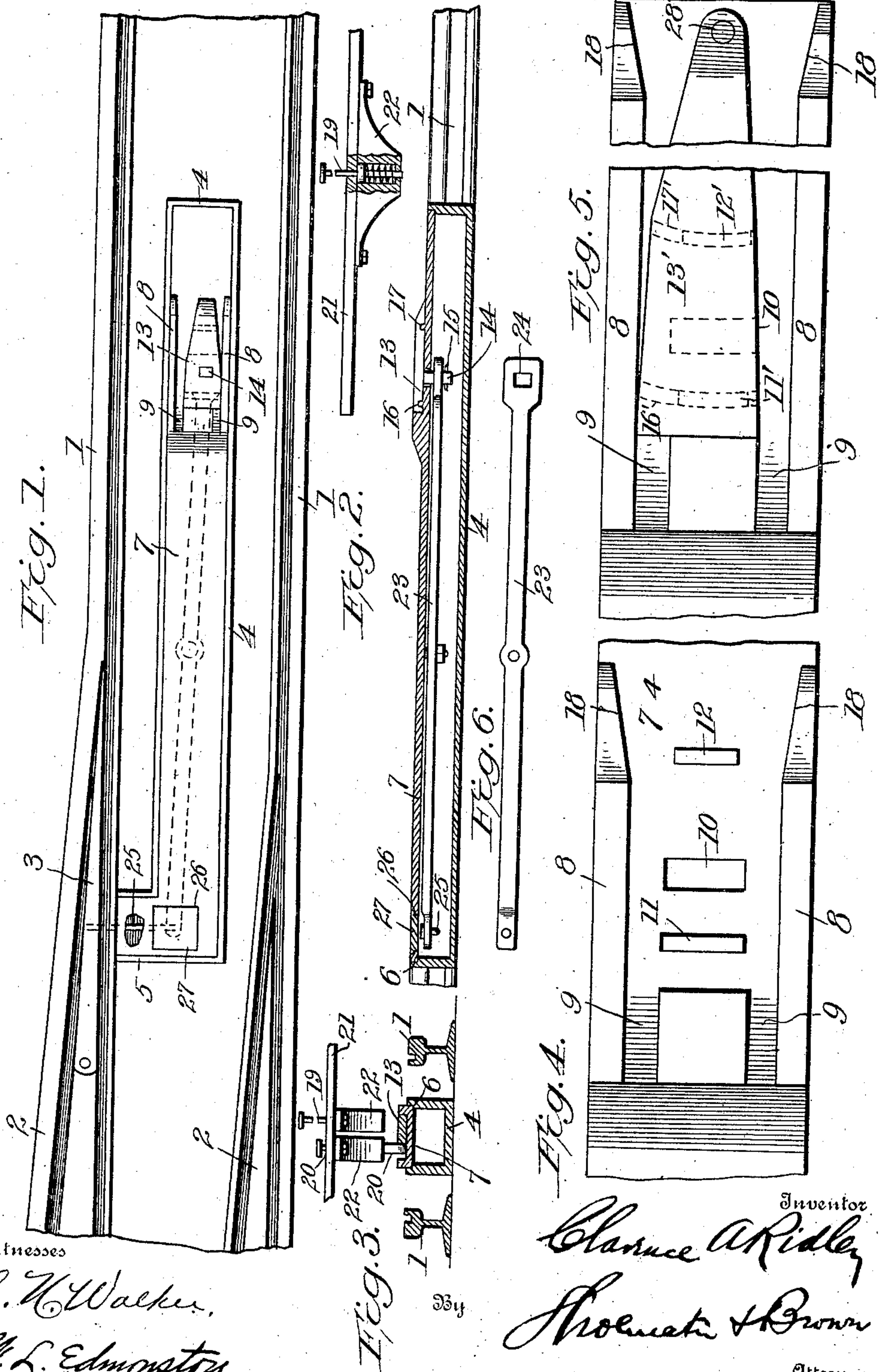


No. 850,318.

PATENTED APR. 16, 1907.

C. A. RIDLEY.
STREET RAILWAY SWITCH.
APPLICATION FILED JUNE 21, 1906.



Witnesses

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UNITED STATES PATENT OFFICE.

CLARENCE A. RIDLEY, OF NEW ORLEANS, LOUISIANA.

STREET-RAILWAY SWITCH.

No. 850,318.

Specification of Letters Patent.

Patented April 16, 1907.

Application filed June 21, 1906. Serial No. 322,708

To all whom it may concern:

Be it known that I, CLARENCE A. RIDLEY, a citizen of the United States, residing at New Orleans, in the parish of Orleans and State of Louisiana, 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.

One object is to provide a street-railway switch embodying such characteristics that it may be operated by a motorman on a car without leaving his post of duty.

Another object resides in the provision of a switch of the nature stated embodying such characteristics that the casing in which the mechanism is mounted is so constructed that dirt or other foreign matter cannot find its way thereinto and clog or otherwise interfere with a proper working of the mechanism confined therein.

A still further object is to provide a simple, inexpensive, durable, and efficient street-railway switch.

In the drawings, Figure 1 is a plan view of one form of my invention. Fig. 2 is a longitudinal sectional view through Fig. 1, also showing a portion of a car mounted above the switch. Fig. 3 is a sectional view illustrating the operating push-rods. Fig. 4 is a plan view, the movable block being omitted. Fig. 5 is a plan view of a modification.

Referring now more particularly to the accompanying drawings, reference character 1 indicates the main rails, and 2 the switch-rails, 3 indicating the pivoted switching-point.

Disposed between the rails is a casing 4, having a lateral extension 5 at one end. This casing has its upper edges channeled to form an inner marginal shoulder 6 to support the cover or top plate 7. The top plate has a depression in its upper face, resulting in the oppositely-disposed guide-flanges 8, there being inclines 9 adjacent each flange for a purpose presently explained. Formed transversely through the top plate and between the ends of the depression thereof is a transverse slot 10, and upon opposite sides of this slot are the transverse guiding-ribs 11 and 12.

Mounted for lateral movement within the depression of the top plate is a switching-block 13, provided with a depending member 14, designed to have sliding movement

in the aforesaid slot 10, and by means of a suitable key 15 passed through the depending member the block and its depending member cannot become accidentally displaced. This block 13 is guided in its lateral play by the aforesaid guiding-ribs 11 and 12, there being corresponding transverse grooves 16 and 17 formed in the under face of the block to receive said ribs. It will be seen that one end of the block tapers at opposite edges in a direction opposite to the taper 18 at the free ends of the aforesaid guide-flanges to provide a clear passage between the corresponding side of the block and the corresponding guide-flange for the corresponding operating-rods 19 and 20 upon the car-platform 21. These operating-rods are mounted in suitable casings 22 and are spring-actuated, as shown. The motorman presses one of the rods to slide the switching-block according to the direction he wishes to take at the switch.

Pivoted intermediate its ends to the under face of the top plate is a lever 23, provided at one end with an opening 24, designed to fit the aforesaid depending member 14, with its opposite end pivotally connected to the rod 25, which connects with the switching-point 3. Obviously, therefore, a lateral sliding of the switching-block 13 will cause a corresponding sliding movement of the switching-point. The lever 23 may be secured at one end against accidental displacement by disposing it between the aforesaid key 15 and the under face of the top plate, and in assembling the parts the lever may be thus secured in place, and the connection therebetween and the rod 25 may be effected through a hand-opening 26 in the top plate directly over the pivoted connection of the lever and rod. The switching-block effectually covers the slot 10, while the supplemental cover 27 covers the hand-hole 26, thereby preventing snow, dirt, or other foreign matter from finding its way into the casing and hinder or interfere with a proper operation of the parts.

In Fig. 5 I show a modification wherein the parts are similar in all respects to the mechanism hereinbefore described, save that the switching-block 13' is longer and has one end pivoted by a suitable pivot 28 and also has semicircular grooves 16' and 17' instead of straight grooves to work over correspondingly-formed ribs 11' and 12'. In this modified form the pivot 28 need not be retained, or the pivot may be retained and the semicircular grooves and ribs omitted.

What is claimed is—

1. A railway-switch comprising a casing provided with a removable cover, the cover having an opening, guiding-ribs mounted upon the cover, a switching-block provided with grooves in its under face for sliding engagement with the said ribs and also having a depending portion projecting through said opening, and a switching-lever arranged within the casing and having connection with said depending portion of the block.

2. A railway-switch comprising a casing provided with curved ribs, a block pivoted to slide upon the casing and provided with curved grooves in its under face for sliding engagement upon the ribs, and a lever arranged within the casing and having connection with said block.

3. A railway-switch comprising a casing provided with a removable cover, the cover having an opening, a switching-block arranged to slide upon the cover and having a depending portion projecting through said opening, a switching-lever arranged within the casing, and having connection with said depending portion of the block, the cover having a hand-opening, and a removable cover for the hand-opening.

4. A railway-switch comprising a casing,

guiding-ribs mounted upon the casing, a switching-block mounted to slide upon said ribs, and a switching-lever mounted within the casing and having connection with the switching-block to throw the switch.

5. A railway-switch comprising a casing, guiding-ribs mounted upon the casing, a switching-block mounted to slide upon said ribs, a switching-lever mounted within the casing and having connection with the switching-block to throw the switch and a hand-opening in the casing.

6. A railway-switch comprising a casing provided with exterior ribs and an opening intermediate the ribs, a switching-block pivoted to slide upon the casing and provided with grooves in its under face for sliding engagement with the corresponding ribs, and a lever arranged within the casing, the said block having means projecting through said opening for engagement with the lever.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLARENCE A. RIDLEY.

Witnesses:

CHESTER W. BROWN,
L. MAYENNO.