

J. V. McILROY.
Street Railway-Switch.

No. 206,957.

Patented Aug. 13, 1878.

Fig. 1.

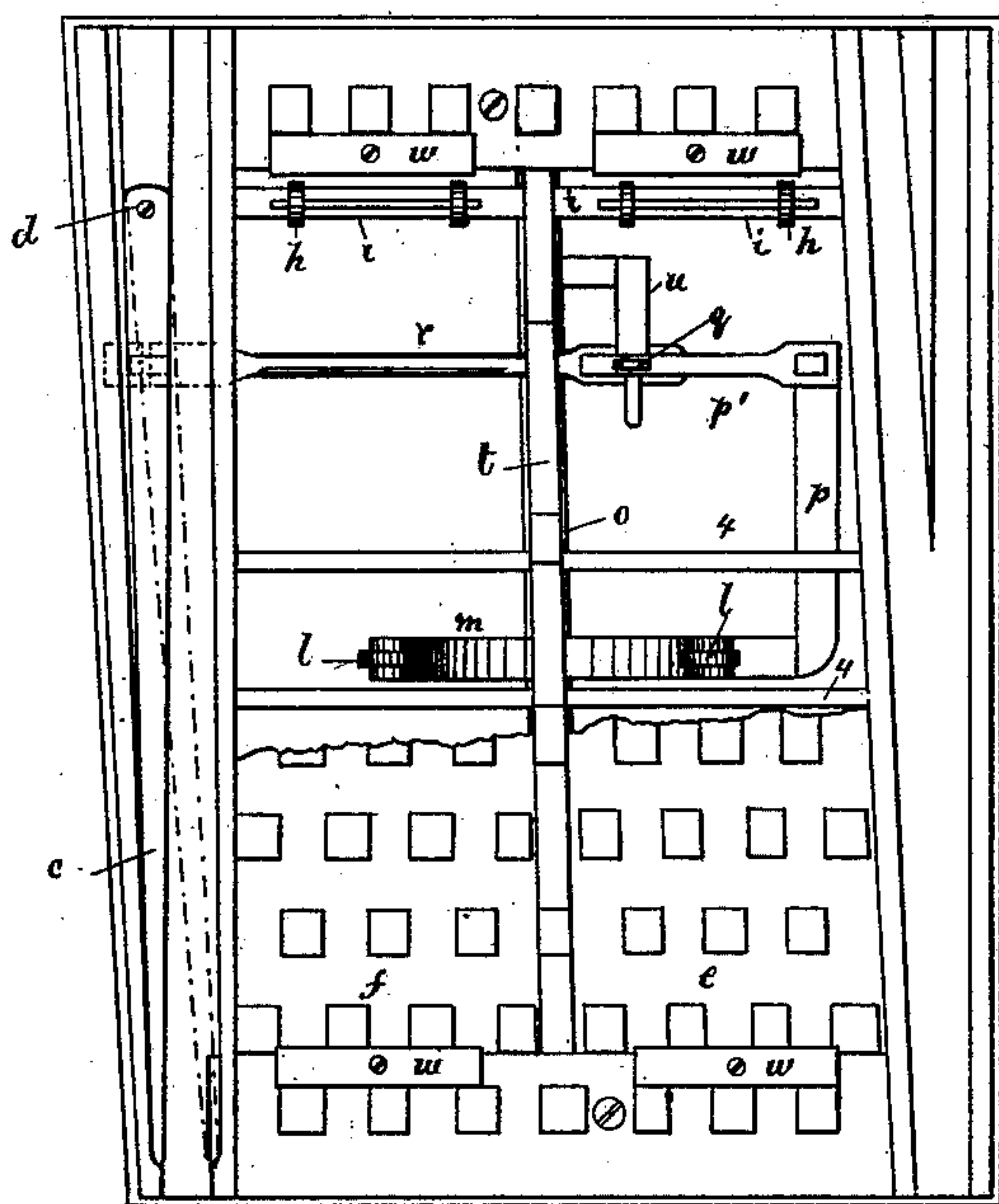


Fig: 2

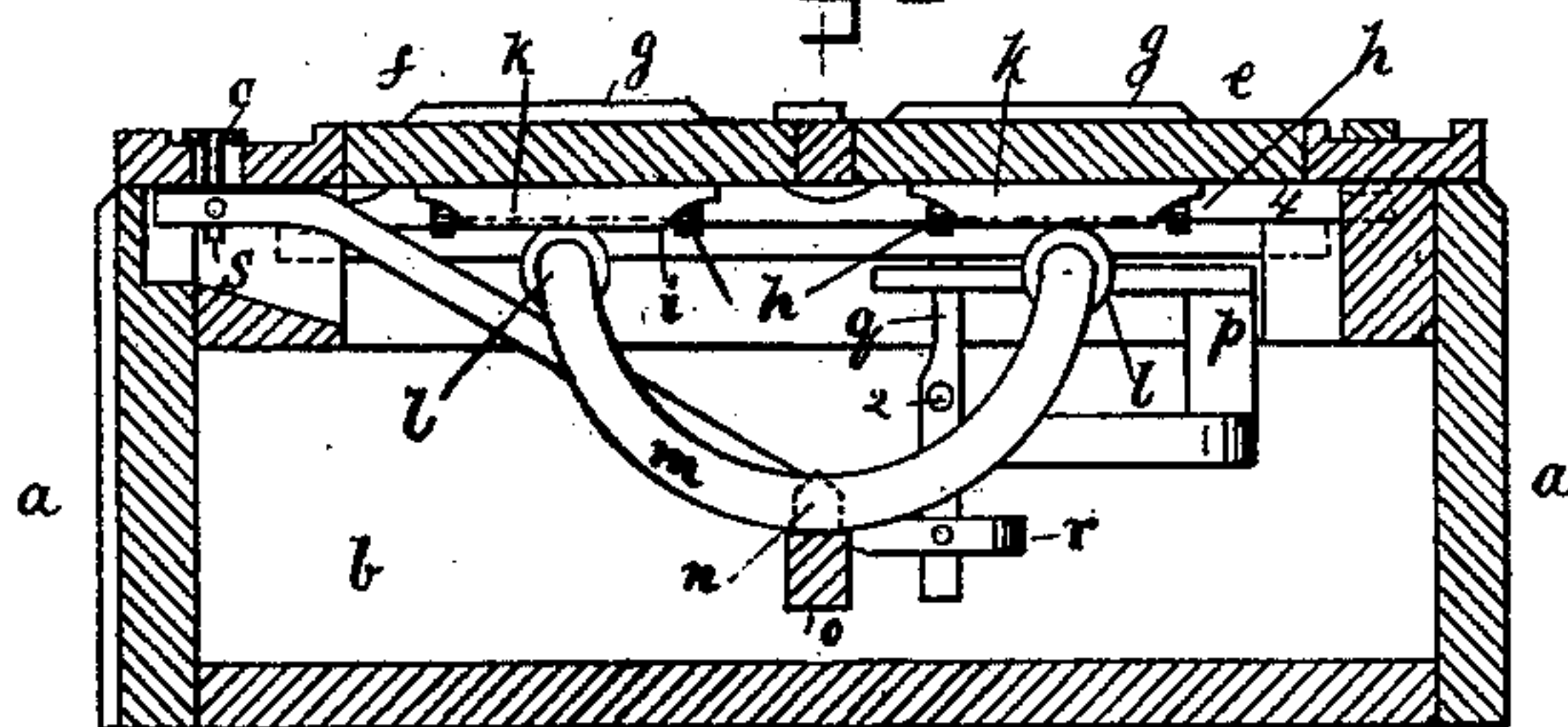


Fig: 3.



Witnesses.

L. F. Connor,
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JOHN V. McILROY, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN STREET-RAILWAY SWITCHES.

Specification forming part of Letters Patent No. **206,957**, dated August 13, 1878; application filed June 22, 1878.

To all whom it may concern:

Be it known that I, JOHN V. McILROY, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Street-Railway Switches, of which the following is a specification:

This invention relates to switch-operating mechanism for street-railways; and consists in the combination, with two independent or separated platforms, of a semicircular lever, arranged to rock upon a rigid fulcrum-bar, and levers connecting said roller-lever with the switch-point.

Figure 1 represents, in top view, one of my improved switches for street-railroads, the platforms being broken away to show the working parts below them; Fig. 2, a cross-section thereof, and Fig. 3 a longitudinal section taken through one of the platforms detached.

The box or case *a* is supposed to represent brick or stone work or other proper wall below the street-bed, within which is formed the well *b*, in which are placed the operating devices for moving the switch *c*, pivoted at *d*, and operated to guide the car-wheels from one to the other track, all as usual.

Each platform *e f* is composed of two castings, hinged together at *g*, or near their centers, (see Fig. 3,) and the ends of each platform rest upon bearings *h* on rigid cross-bars *i*. The hinges are so placed that the platforms may rise and descend at their centers.

Each platform has a grooved block, *k*, which rests upon one of the rollers *l* at the ends of lever *m*, pivoted at *n* on the fixed beam *o*. This lever *m* has an arm, *p p'*, which is connected with the upper end of a lever, *q*, pivoted at 2, the lower end of the lever being jointed with the lower end of the link *r*, the upper end of said link being attached at *s* with a pin or eye projecting downward from the switch-point *c*, as shown in Fig. 2.

A horse on platform *e* will depress it, turn the end of lever *m* below it down, and shift the switch into the position shown in Fig. 1, such movement of lever *m* acting to elevate the central part of platform *f*.

A horse walking or stepping on platform *f* will depress it, turn the switch into the position shown in dotted lines, Fig. 1, and elevate the platform *e* centrally.

The two platforms are separated by a rigid bar, *t*, and a horse, when leaving the table, cannot shift the switch improperly without stepping considerably beyond the center of the table.

In the pivoted table now in use strain of the horse's foot upon its surface at or near its center upon that side next the horse operating it will frequently tend to rock the table and shift the switch, especially if the horizontal strain or pull on the table by the horse's foot is greater than the downward pressure exerted by the horses thereon.

The projection *u* from the bar *o* serves to sustain the part 2.

The ends of the platforms *e f* may be retained in place by the holders *w w*. The rollers *l* insure easy movement of the platforms and lever without friction. With this plan of switch the well may be very shallow.

Either platform may be easily lifted off to permit access to the well.

When the platform *e* or *f* has been pressed down far enough to operate the switch-point it meets the cross-bars 4 4.

I claim—

1. The combination of two independent or separated platforms, *e f*, the semicircular lever *m*, arranged to rock upon the rigid fulcrum-bar *o*, and devices (as levers) for connecting said platforms and the switch-point, substantially as shown and described.

2. The combination of the two separated platforms *e f*, bar *t*, rigid bar *o*, roller-lever *m*, and switch-point connecting-levers, substantially as described.

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

JOHN V. McILROY.

Witnesses:

G. W. GREGORY,
L. F. CONNOR.