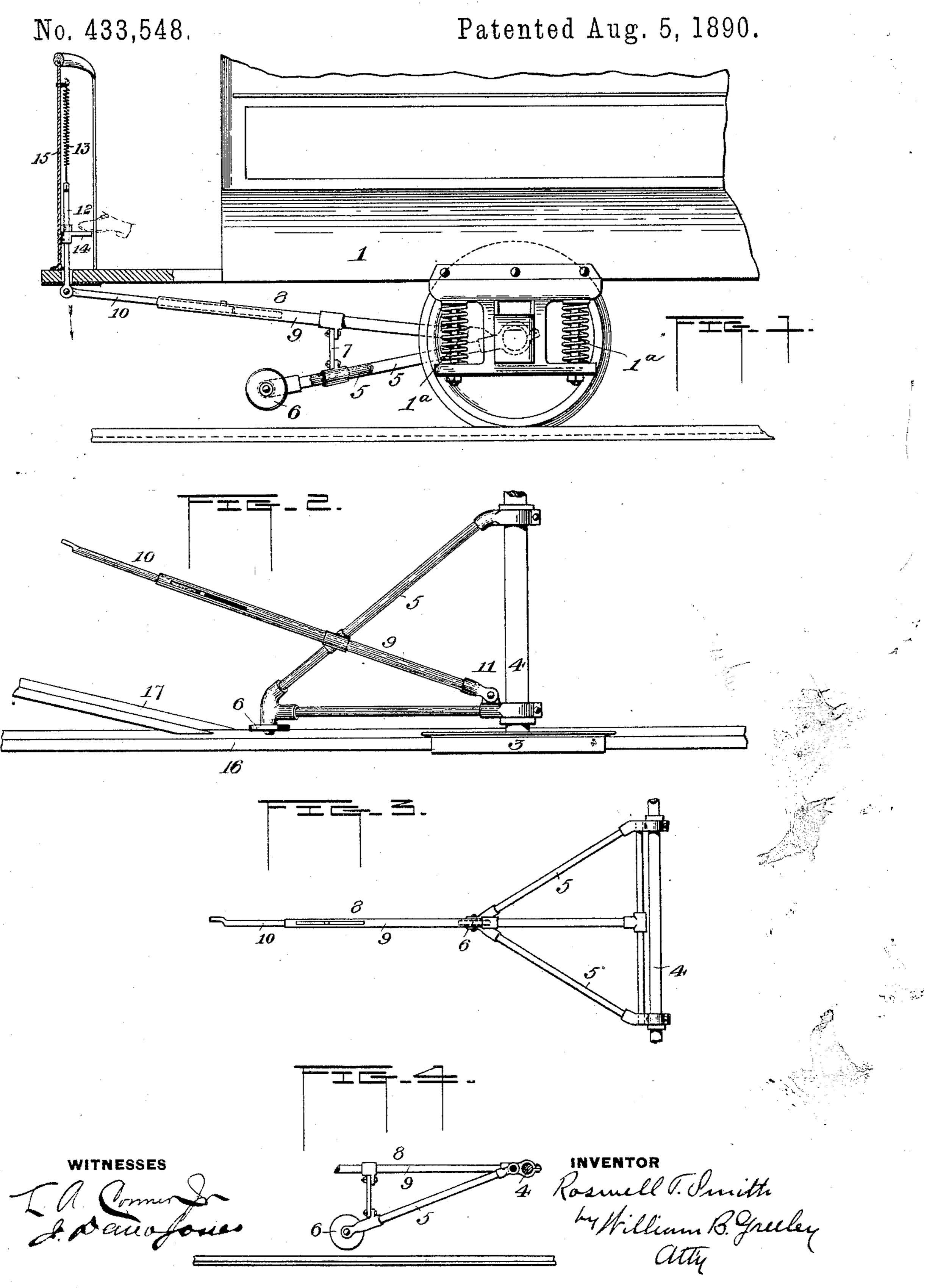
R. T. SMITH.
STREET RAILWAY SWITCHING DEVICE.



## United States Patent Office.

ROSWELL T. SMITH, OF NASHUA, NEW HAMPSHIRE.

## STREET-RAILWAY SWITCHING DEVICE.

SPECIFICATION forming part of Letters Patent No. 433,548, dated August 5, 1890.

Application filed April 29, 1890. Serial No. 349,946. (No model.)

To all whom it may concern:

Be it known that I, Roswell T. Smith, of Nashua, in the county of Hillsborough and State of New Hampshire, have invented certain new and useful Improvements in Street-Railway Switching Devices, of which the fol-

lowing is a specification.

My present invention relates to the class of devices referred to in my application for 10 Letters Patent, filed concurrently herewith, (Case A,) and its general object is the same to wit, so to improve the devices for holding, raising, and lowering the guide-wheel as to render it impossible for the movements of the car-hody with respect to the axles and wheels, either under variations in load or through the usual oscillations incident to the forward movement of the car to affect the position of the guide-wheel with relation to the 20 wheels and the track; and, further, to maintain the simplicity and efficiency of these devices while keeping the guide-wheel under full control from the platform of the car.

The invention consists in the devices here-

25 inafter described and claimed.

In the drawings, Figure 1 is an elevation of a portion of a street-car having my improvement applied thereto, the front platform being shown partly in section and a portion of the track being indicated. Fig. 2 is a plan view of the principal features of my improvement as applied to a car-axle with a portion of the track. Figs. 3 and 4 are plan and elevational views of a slightly-modified form of the parts shown in Fig. 2.

The car-body 1 is supported through the mediums of spring 1° by the wheels and axles 3 4, as usual. Supported by the axle 4 to swing vertically is the triangular bracket 5, carrying at its apex the guide-wheel 6, which is adapted to be lowered to engage the turn-

is adapted to be lowered to engage the turnout or switch-rail 17 and crowd the car from
the main track 16, as fully set forth in my
said application. The bracket is supported
by a pivoted link 7 from an extensible lever
8, which is pivoted loosely at 11 to the bracket
itself near the axle. The lever is formed in
two parts, one of which 10 is free to slide
longitudinally in the other part 9, and is conso nected at its outer end to a rod 12, which

passes up through the platform and is held up, together with the lever, bracket, and guidewheel, by a spring 13, attached to the dashboard 15. The rod 12 also bears a foot-plate 14, whereby the parts may be readily depressed 55 and the guide-wheel caused to engage with the switch-rail.

In the construction shown in Figs. 3 and 4, the form of the swinging bracket 5 and the manner of hinging the lever 8 are varied 60 slightly in order to bring the guide-wheel over the middle of the track, where it may engage with a special fixed guide-rail, and the car be turned to one side or the other, according to the inclination of said guide-rail.

In both constructions, as above described, it is evident that through the pivoting of the bracket to the axle the loose hinging and extensibility of the lever 8 and the supporting of the bracket by the pivoted link the car 70 may move freely in every direction without affecting materially the position of the guidewheel with relation to the rail and wheel, especially when the guide-wheel is depressed by the foot of the driver upon the plate 14, 75 and that the guide-wheel may be depressed or raised readily from the platform whenever desired.

It is obvious that the bracket 5 may be hinged directly to the axle or to a support 80 carried thereby, and that if the hole in the platform through which the rod 12 passes is somewhat elongated the lever 8 in some cases need not be extensible, but may be made in one piece.

I claim—

1. In a device for switching cars, the combination of a swinging bracket adapted to be pivotally supported by the car-axle and carrying a guide-wheel, a lever hinged to said 9° bracket near the axle, a pivoted link connecting said bracket and lever, and means to move said lever, substantially as described.

2. The combination of the car-body, the car-axle, a swinging bracket pivoted thereon 95 and carrying a guide-wheel, an extensible lever hinged to said bracket near the axle, a pivoted link connecting said bracket and lever, a rod connected to said lever and projecting up through the car-platform, and a 100

spring to hold said movable parts in elevated position, substantially as described.

3. The combination of the spring-supported car-body, the car-axle, swinging bracket 5, carrying guide-wheel 6, link 7, extensible lever 8, rod 12, and spring 13, substantially as described.

In witness whereof I have hereunto set my hand.

ROSWELL T. SMITH.

Witnesses:
ALICE L. INGALLS,
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