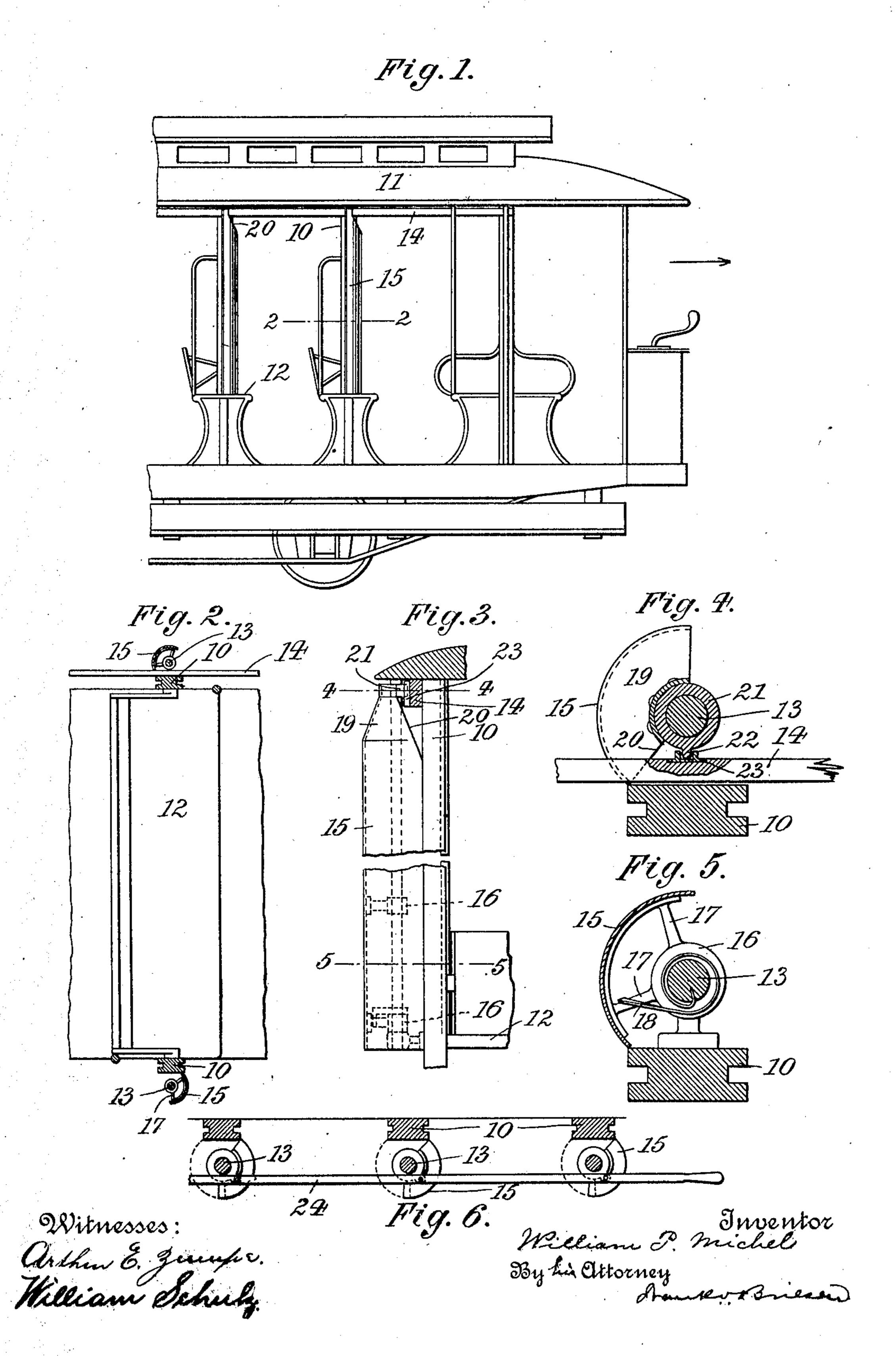
W. P. MICHEL. STREET CAR. APPLICATION FILED AUG. 28, 1907.



UNITED STATES PATENT OFFICE.

WILLIAM P. MICHEL, OF NEW YORK, N. Y.

STREET-CAR.

No. 871,514.

Specification of Letters Patent.

Patented Nov. 19, 1907.

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To all whom it may concern:

Be it known that I, WILLIAM P. MICHEL, a citizen of the United States, residing at New York city, Manhattan, county and State of 5 New York, have invented new and useful Improvements in Street-Cars, of which the following is a specification.

This invention relates to a street car provided with novel means for so guarding the 10 handles that the passengers alighting from the car can grasp the handles only when facing forward. In this way accidents resulting from passengers stepping off backward are effectively prevented.

15 In the accompanying drawing: Figure 1 is a side elevation of part of a car embodying my invention; Fig. 2 a horizontal section on line 2-2, Fig. 1; Fig. 3 a front view, partly in section, of one of the posts and adjoining 20 parts; Fig. 4 an enlarged horizontal section on line 4—-4, Fig. 3; Fig. 5 a similar section on line 5-5, Fig. 3, and Fig. 6 a horizontal section of a modification.

The posts 10 supporting the roof 11 of a 25 car are arranged opposite the center of each of the transverse seats or benches 12. At a distance from each post and alined therewith is the usual upright rod 13 constituting the handle. Within the clearance between posts 30 10 and handles 13 there is accommodated the

vertically movable guard rail 14, which is let down on that side of the car which is to be closed. Each handle 13 is partly encompassed by a curved shield 15 mounted con-35 centrically to the handle and movable rela-

tively thereto. As shown, each shield is pivoted to the handle by means of collars 16 that loosely surround the handle and are provided with arms 17 to which the shield is 40 secured. A spiral spring 13 engaging with

its ends the parts 13, 17 respectively, tends to draw the shield into contact with the outer front edge of its post 10. In this way the handle is rendered inaccessible at its front,

45 so that a passenger turning backward from his seat cannot reach it, but must resort to the handle in front, the back of which remains exposed. At its upper end shield 15 is made tapering as at 19, and provided with

50 an inclined edge 20. Fast on tapering end 19 is a collar 21, loosely surrounding handle 13 and provided with a nose 22, cooperating with a grooved plate 23 of guard rail 14.

When rail 14 is raised, it will clear shield 15 and permit spring 18 to swing the shield 55 against post 10. At the same time grooved plate 23 is brought into engagement with nose 22 and thereby locks collar 21 and consequently shield 15 against rotation. When rail 14 is lowered, nose 22 will first be liber- 60 ated to unlock the shield and then the latter will be partly rotated by the engagement of rail 14 with inclined edge 20 to throw the shield off post 10 and thereby provide the necessary space for accommodating the rail 65 while being lowered.

In Fig. 6, the springs 18 are dispensed with, and all the shields 15 located on the same side of the car are operatively connected to each other by means of a shipping 70 rod 24. When the direction of travel is to be changed, the shields are reversed by such rod, so that at the egress side or sides of the car all the handles are covered at the front,

and exposed at the rear.

1 claim:

1. A street car provided with a handle, and a shield that partly encompasses the handle and is movable relatively thereto, substantially as specified.

2. A street car provided with a handle, and a shield pivoted to the handle and partly encompassing the same, substantially as

specified.

3. A street car provided with a handle, 85 collars loosely mounted thereon, and a shield secured to the collars, substantially as specified.

- 4. A street car provided with a handle, a shield that partly encompasses the handle, 90 and means for rotating the shield upon the

handle, substantially as specified.

5. A street car provided with a handle, a shield that partly encompasses the handle, means for rotating the shield upon the han- 95 dle, and means for locking the shield relatively to the handle, substantially as specified.

Signed by me at New York city, (Manhattan,) N. Y., this 27th day of August, 1907.

WILLIAM P. MICHEL.

Witnesses: W. R. Schulz, FRANK V. BRIESEN.