

939,899.

2 SHEETS--SHEET 1

Fig. 1.

Thomas M. Smith  
G. M. Connerston

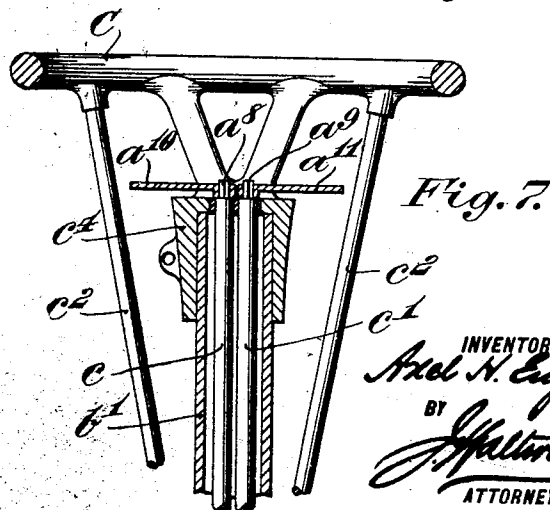
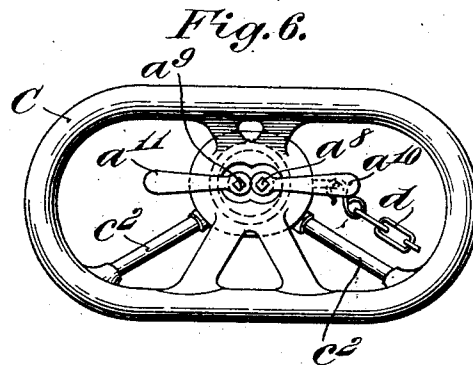
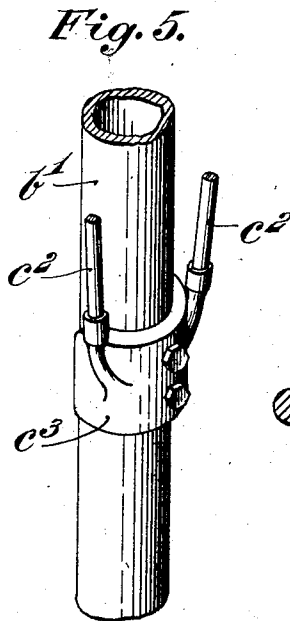
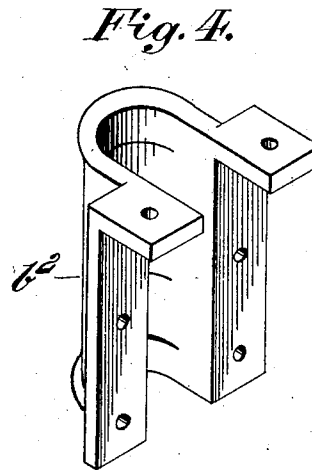
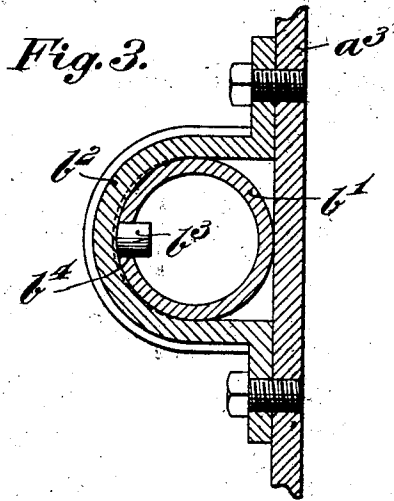
INVENTOR  
And H. England,  
BY  
J. Walter England,  
ATTORNEY.

A. H. ENGLUND.  
 PAY-WITHIN PASSENGER RAILWAY CAR.  
 APPLICATION FILED MAR. 16, 1909.

939,899.

Patented Nov. 9, 1909.

2 SHEETS—SHEET 2.



WITNESSES:

Thomas M. Smith  
 H. W. Conner

INVENTOR  
 Axel H. Englund  
 BY *J. Walter Dwyer*  
 ATTORNEY.

# UNITED STATES PATENT OFFICE.

AXEL H. ENGLUND, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE PAY-WITHIN CAR COMPANY, OF WILMINGTON, DELAWARE, A CORPORATION OF DELAWARE.

PAY-WITHIN PASSENGER RAILWAY-CAR

939,899.

Specification of Letters Patent.

Patented Nov. 9, 1909.

Application filed March 16, 1909. Serial No. 483,680.

*To all whom it may concern:*

Be it known that I, AXEL H. ENGLUND, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Pay-Within Passenger Railway-Cars, of which the following is a specification.

My invention has relation, in a car of the character defined, of a conductor's standard or station, with reference particularly to the constructive arrangement of the same, in which operation of the platform or vestibule doors and in some instances steps leading thereto and therefrom are had from said station and in addition the safe-guarding through sudden starting up of the car of entering passengers, before fare paying and entrance into the main body portion of the car in which the passengers are either seated or stand, as internal conditions warrant, during transit of the car.

The nature, scope and characteristic features of my present invention will be more fully understood from the following description taken in connection with the accompanying drawings forming part hereof, in which—

Figure 1, is a longitudinal sectional view through a "pay-within car", showing the type of conductor's station, embodying main features of my said invention. Fig. 2, is a transverse sectional view of a "pay-within passenger car", with a standard located where a door closed platform merges into the main body of the car and also a chain cut-off of one of the ways to and from the main car-body. Fig. 3, is a transverse sectional view through the clamping bracket for the standard forming the conductor's station through which two operating rods extend for controlling the doors as well as steps of a platform of said type of car, the said bracket provided with a projection or pint to lock the standard against turning in said bracket. Fig. 4, is a perspective view of the bracket for the standard forming the conductor's station. Fig. 5, is a similar view, in broken section, of the hollow standard with a collar fitted and held thereto and the said collar formed with a series of arms or rods with which a substantially circular grip-hold is formed preferably therewith as in Figs. 1 and 2. Fig. 6, is a top or plan view of the grip-hold, also showing the hand

levers connected with the operating rods for the opening and closing of either of the doors or steps or both of the platform or vestibule of the car; and Fig. 7, is a view partly in elevation, and partly in section, of the conductor's station with the grip-hold, showing also how the operating rods for controlling the doors or steps or both of the platform or vestibule are actuated by right and left hand levers, confined within the field bounded by the said grip-hold with its depending inwardly inclined rods connected with a collar encircling and secured to the standard, as illustrated in Fig. 5.

Referring to the drawings *a*, represents a passenger car provided with end vestibules or platforms, closed by side doors *a'*, and movable steps *a''*, either of which doors and steps can be operated by mechanism and devices, such as shown and described in the Letters Patent No. 824209, of June 26th, 1906; and No. 870051, of November 5th, 1903, when employed in connection with means of my present invention, in application thereto and in the type of car, now widely known as a "pay-within passenger car", in which the conductor's station is arranged midway of where a platform or vestibule merges into the main body portion of the car, in which passengers stand or sit during transit, as constantly changing conditions therein permit. The said conductor's station *b*, comprises a vertical tube *b'*, forming a standard fitting the flooring and clipped or bound thereto by a side flanged bracket *b''*, to the wall of the flooring *a''*, if raised above the flooring *a''*, of a vestibule or platform *a''*, as in Figs. 1 and 2, to form a step into the main body portion *a''*, of the car *a*. The inverted substantially U-shaped bracket *b''*, Fig. 3, is provided interiorly with a pin *b'''*, to fit an opening *b''''*, in the tube *b'*, to hold it to position against turning.

Through the hollow standard extends the operating rods *c*, *c'*, connected with a door or step operating motor or engine or both of the vestibules or platforms *a'*, not shown, but which may be of the type of either of the patents hereinbefore referred to. These rods at the top are respectively provided with square key-ways or projections *a''*, *a'''*, for receiving right and left hand levers *a''''* and *a'''''*, as clearly shown in Fig. 6. The standard *b*, is provided with a detachable circular or other shape grip-hold *C*, ar-

ranged in connection with the standard, so as to occupy a position above the position of the hand operating levers  $a^{10}$  and  $a^{11}$ , see Figs. 6 and 7. This grip-hold C, has a series of integral depending arms  $c^2$ , inwardly inclined and terminating in a collar  $c^3$ , arranged to snugly fit the standard  $b$ , as in Fig. 5, with an upper perforated bearing cap  $c^4$ , fitting over and around the standard  $b$ , as in Figs. 6 and 7, so that either the grip-hold or the arms thereof may be grasped by entering passengers from a platform or vestibule  $a^5$ , to steady themselves while paying fares at the conductor's station. The hereinabove described device is especially useful in case of the sudden starting of a car calculated to throw persons backward, unless care is exercised to prevent such action taking place, owing mainly to vibrations or teeterings of the car due to inequalities in the road-bed over which the car is traveling as well as in cases of the cars starting on curves or turn-outs.  $d$ , is a chain or other device connected with the standard  $b$ , and side of the car for cutting off temporarily, if desired, one of the ways about the conductor's station  $b$ .

Having thus described the nature and objects of my invention, what I claim as new and desire to secure by Letters Patent is:—

1. In a passenger car, a door control stand situated at a point in the space where the car-body merges into a platform, an operating handle thereon, and a grip placed so as to guard the operating handle from contact while an object is leaning against the upper end of said grip, substantially as and for the purposes described.

2. In a passenger car, the combination of a car-body and platform, the car body merging into the platform, a door control stand situated at a point where the car-body merges into the platform and at approximately a central point to the cross-section area, an operating means therefor and a guard for protecting the operating means from contacting

with passengers, substantially as and for the purposes described.

3. In a passenger car, a standard to define a conductor's station between a vestibule or platform and the main body of the car and to control a door and step of said vestibule or platform, the said standard having a passenger grip-hold connected therewith, substantially as and for the purposes described.

4. In a passenger car, a standard to define a conductor's station, interposed between a platform or vestibule and main body of the car and therefrom arranged to control the positions of a door and step of said platform or vestibule by means of a hand-lever and said standard having a grip-hold arranged in connection therewith so as not to interfere with the operation by said hand-lever of the platform or vestibule door and step for admitting persons to the car, substantially as and for the purposes described.

5. In a passenger car, a hollow standard interposed between a vestibule or platform and main body of the car, a bracket embracing said standard and having a pin projection for entering said standard to lock the same and a grip-hold having arms and a collar connected with said standard, substantially as and for the purposes described.

6. In a passenger car, a hollow standard interposed between a vestibule or platform and main body of the car, a bracket embracing said standard and having a pin for entering said standard to lock the same and a grip-hold having inwardly tapering arms and a collar, and a perforated cap with connections therefrom with said grip-hold, and the latter connected with said standard, substantially as and for the purposes described.

In witness whereof, I have hereunto set my signature in the presence of two subscribing witnesses.

AXEL H. ENGLUND.

Witnesses:

W. S. KIRK,  
EDWIN B. ROSS.