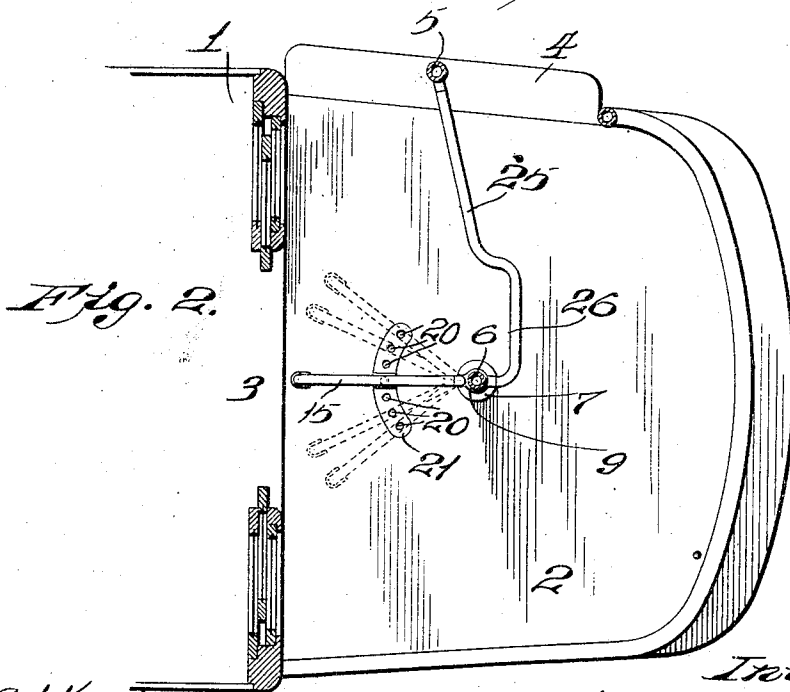
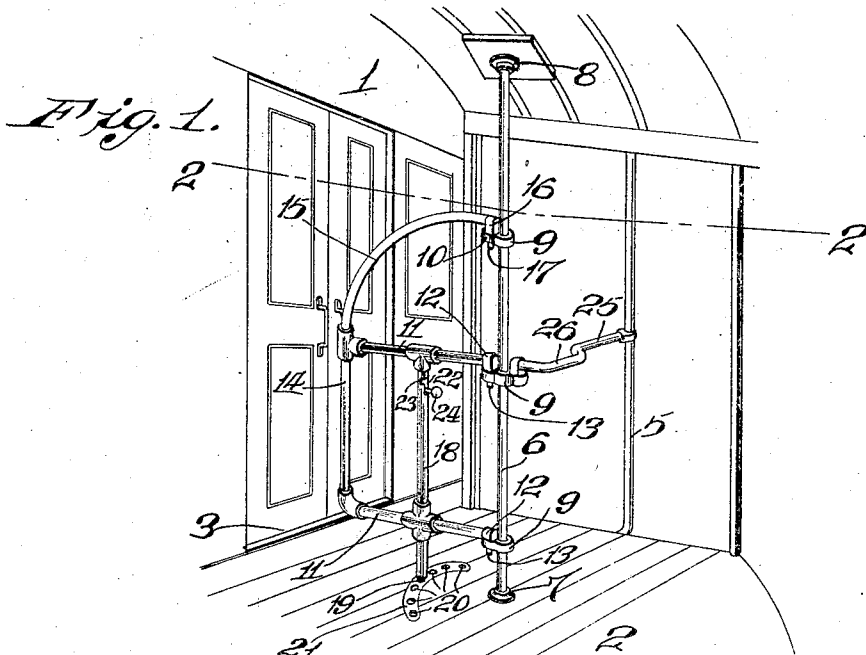


G. O. BIRNEY.
STREET CAR.
APPLICATION FILED JAN. 28, 1909.

931,724.

Patented Aug. 24, 1909.

2 SHEETS—SHEET 1.



attest.
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2 SHEETS—SHEET 2.

Fig. 3.

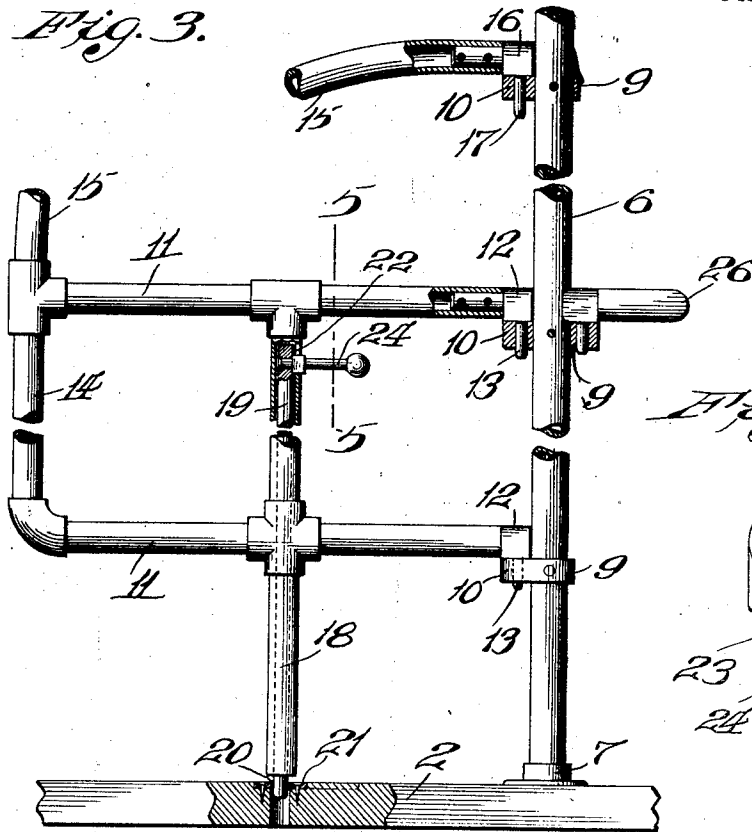


Fig. 5.

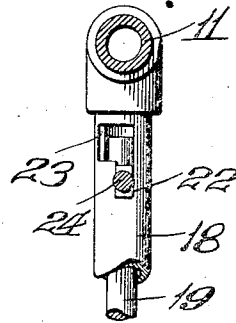


Fig. 4.

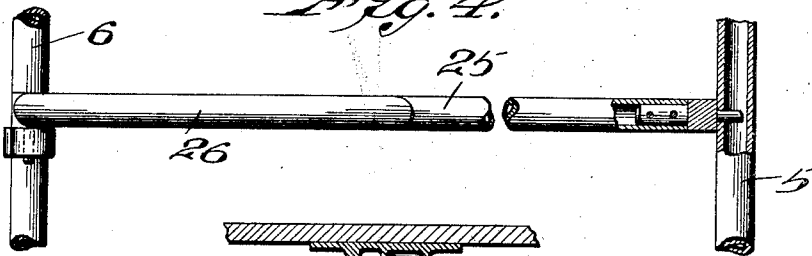
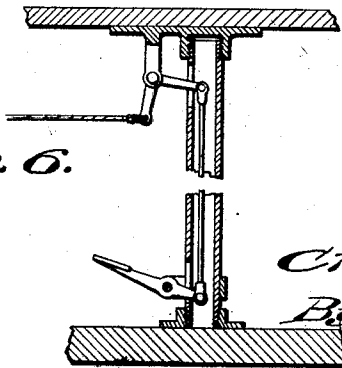


Fig. 6.



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UNITED STATES PATENT OFFICE.

CHARLES O. BIRNEY, OF ST. LOUIS, MISSOURI.

STREET-CAR.

931,724.

Specification of Letters Patent. Patented Aug. 24, 1909.

Application filed January 28, 1909. Serial No. 474,684.

To all whom it may concern:

Be it known that I, CHARLES O. BIRNEY, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Street-Cars, of which the following is a specification, containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates generally to street cars and more particularly to the construction and arrangement of the car platform and entrance, my object being to construct a car and platform embodying what is known as the pay on platform principle, whereby all of the passengers entering the car pass the conductor stationed on the platform adjacent the car door and there being a swinging gate or barrier operated by the conductor for controlling the entrance and exit passageways leading to and from said door, which arrangement prevents crowding and consequent confusion of the in-coming and out-going passengers at the car door and upon the car platform.

A further object of my invention is to provide simple means whereby the gate or barrier may be locked to the car platform at various points in its travel and said gate or barrier being readily detachable from a support post or stanchion on the car platform, thus permitting said gate or barrier to be readily transferred from one end of the car to another.

My present invention is an improvement upon the subject matter shown and described in an application for Letters Patent filed by me April 2, 1908, Serial Number 424,851.

To the above purposes my invention consists in certain novel features of construction and arrangement of parts which will be hereinafter more fully set forth, pointed out in the claims and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view illustrating a portion of a car and car platform and showing my improved gate or barrier in position on said platform; Fig. 2 is a horizontal section taken approximately on the line 2—2 of Fig. 1; Fig. 3 is an enlarged side elevation of the gate or barrier with parts shown in section; Fig. 4 is an elevation partly in section of a rail which is detachably arranged between the post or stanchion on the car platform and a post arranged on

the step side of the platform; Fig. 5 is an enlarged vertical section taken on the line 5—5 of Fig. 3; and Fig. 6 is a vertical section taken through the center of the post or stanchion located on the car platform and showing means operating through said post for actuating the fare register.

Referring by numerals to the accompanying drawings, 1 designates the car body; 2 the platform thereof; 3 the door opening, which in the present arrangement is shown in the center of the car end; 4 the step at the side of the platform and 5 a vertically disposed post which extends from the center of the step to the hood over the car platform; 6 designates a post or stanchion, which is preferably in the form of a tube the lower end of which is fixed in a socket 7 which is positioned on the car platform in front of the door opening 3, and the upper end of said post or stanchion is fixed in a socket 8, carried by the underside of the hood.

Fixed on the post or stanchion 6, is a series of collars 9, which are provided with lugs 10, which latter are provided with vertically disposed apertures which serve as bearings for the arms of the gate or barrier. This gate or barrier is preferably constructed of tubular material, such as ordinary gas pipe, and comprises a pair of horizontally disposed rails 11, the rear ends of which are provided with blocks 12, and formed integral with said blocks are pins 13 which engage in the bearings formed in the lower pair of lugs 10.

The outer or forward ends of the rails 11 are connected in any suitable manner to a vertically disposed rail 14, the upper portion of which is curved rearward as designated by 15, and the rear end of said portion being provided with a block 16 carrying a pin 17 which operates in the upper one of the bearing lugs 10. Thus the gate is detachably connected to and is arranged to swing upon the post or stanchion 6, and the front end of said gate or barrier, comprising the vertically disposed rail 14, is adapted to swing from one side of the door opening 3 to the other, so as to control the inlet and outlet passage-ways leading to and from said door opening.

A vertically disposed tube 18 is connected in any suitable manner to the central portions of the rail 11, the lower end of which tube 18 occupies a plane just above the top of the platform, 2, and arranged to move

through said tube 18 is a rod 19, the lower end of which is adapted to enter any one of a series of apertures 20 formed through a segmental plate 21, which is fixed to the platform 2 between the post 6 and the door opening 3. Formed in the upper portion of the tube 18 is a vertically disposed slot 22, the upper end of which is extended laterally a short distance as designated by 23, and passing through said slot 22, and seated in the upper end of the rod 19 is a short horizontally disposed pin 24, which forms a handle for operating the rod 19.

25 designates a horizontally disposed rail, which extends between the posts 5 and 6 and the ends of said rail are detachably connected to said posts. The end of this rail 25, immediately adjacent the post 6, is bent rearward as designated by 26 to form a compartment or space to be occupied by the conductor of the car.

When a car of my improved construction is in use, the conductor occupies a position just inside the bent portion 26 of the rail 25 and by engaging the handle 24 and lifting the rod 19, so as to disengage the lower end thereof from the plate 21, which permits the gate or barrier to be swung in either direction to control the entrance and exit passage-ways. The passengers entering the car pass to the rear of the rail 25 and after paying fare to the conductor, said passengers pass around the post or stanchion 6, and as the gate or barrier is swung to the right-hand side of the door opening by the conductor, said passengers are free to enter the car through said door opening. When a passenger desires to leave the car, the conductor swings the gate or barrier to the left-hand side of the door opening and said passenger is free to pass through the exit passage-way between the end of the car body and the rail 25.

The gate or barrier is always under the control of the conductor and by manipulating the rod 19, said gate or barrier can be locked at various points throughout its travel, thus positively controlling the width of the entrance and exit passage-ways leading to and from the door opening. (See Fig. 2).

In some instances it may be found desirable to arrange the post or stanchion 6 in bearings so that it will rotate, and where such arrangement is carried out the gate can be rigidly fixed to said post or stanchion.

If desired, the entire gate or barrier and the rail 25 may be readily detached from the post or stanchion 6 and post 5 and positioned on the opposite end of the car, or upon the platform of another car.

When it is desired to hold the rod 19 elevated to permit the gate to swing freely in both directions, the handle 24 is shifted into the laterally projecting end 23 of the slot 22.

In some instances it may be found advantageous to arrange a foot lever at the lower end of the post or stanchion 6 and to extend a rod through said post or stanchion and connecting the upper end thereof to a bell crank fulcrumed beneath the car hood for the purpose of operating a fare register.

To facilitate the unloading of the passengers from the car, for instance, at the end of the line, or at a point where all of the passengers leave the car, the rail 25 is detached from the posts 5 and 6, and the gate or barrier is swung to its limit of movement to the left-hand side of the door opening, thus providing an extra wide exit passage-way for the passengers leaving the car.

My improved gate or barrier is very simple, can be easily applied to, or removed from, a car, can be locked at various points throughout its movement, and is easily swung from one side of the door opening to the other to control the entrance and exit passage-ways leading to and from said doorway.

I claim:

1. The combination with a street car of a post arranged on the car platform in front of the door opening, and a barrier carried by the stanchion, the free side of which barrier is adapted to swing from one side of the car door opening to the other and means whereby said barrier is locked to the car platform at various points in its travel.
2. The combination with a street car of a post arranged on the car platform in front of the door opening, and a barrier carried by the stanchion, the free side of which barrier is adapted to swing from one side of the car door opening to the other and means carried by said barrier whereby the same is locked to the car platform at various points in its travel.
3. The combination with a street car of a post arranged on the car platform in front of the door opening in the end of the car body, a barrier detachably arranged on the post, the free side of which barrier swings from one side of the car door opening to the other, a post on the step side of the car platform and a rail extending from one post to the other and the ends of which rail are detachably connected to said post.
4. An attachment for street cars comprising a support adapted to be positioned on the car platform in front of the door opening in the end of the car, a barrier carried by said support the free side of which barrier swings from one side of the car door opening to the other and means whereby said barrier is locked to the car platform at different points to vary the width of the door opening.
5. The combination with a street car provided with a wide door opening in one end of a post arranged on the car platform, a

barrier detachably arranged on the post and adapted to be swung from one side of the door opening to the other to control the entrance and exit passage-ways leading to and from the car door, and means whereby said barrier is locked to the car platform.

6. The combination with a street car provided with a wide door opening in one end of a post arranged on the car platform in front of said opening, a barrier detachably arranged on the post and adapted to be swung from one side of said opening to the other to control the entrance and exit passage-ways leading to and from the car door and locking means carried by the barrier for engaging the car platform.

7. The combination with a street car provided with a wide door opening in one end of a post arranged on the car platform, a barrier detachably arranged on the post and adapted to be swung from one side of said opening to the other to control the entrance and exit passage ways leading to and from the car door, means whereby said barrier is locked to the car platform, and a rail extending from the post to the step side of the car platform.

8. The combination with a street car pro-

vided with a wide door opening in one end of a post arranged on the car platform, a barrier detachably arranged on the post and adapted to be swung from one side of said opening to the other to control the entrance and exit passage-ways leading to and from the car door, locking means carried by the barrier for engaging the car platform, and a rail extending from the post to the step side of the car platform.

9. The combination with a street car of a post arranged on the car platform, bearings carried by said post, a swinging barrier, there being pivotal connections between one side of said barrier and the bearings on the post, means carried by the barrier whereby the same is locked to the car platform, and a rail detachably connected to the post and extending to the open side of the car platform.

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

CHARLES O. BIRNEY.

Witnesses:

M. P. SMITH,
E. L. WALLACE.