

J. F. OHMER.

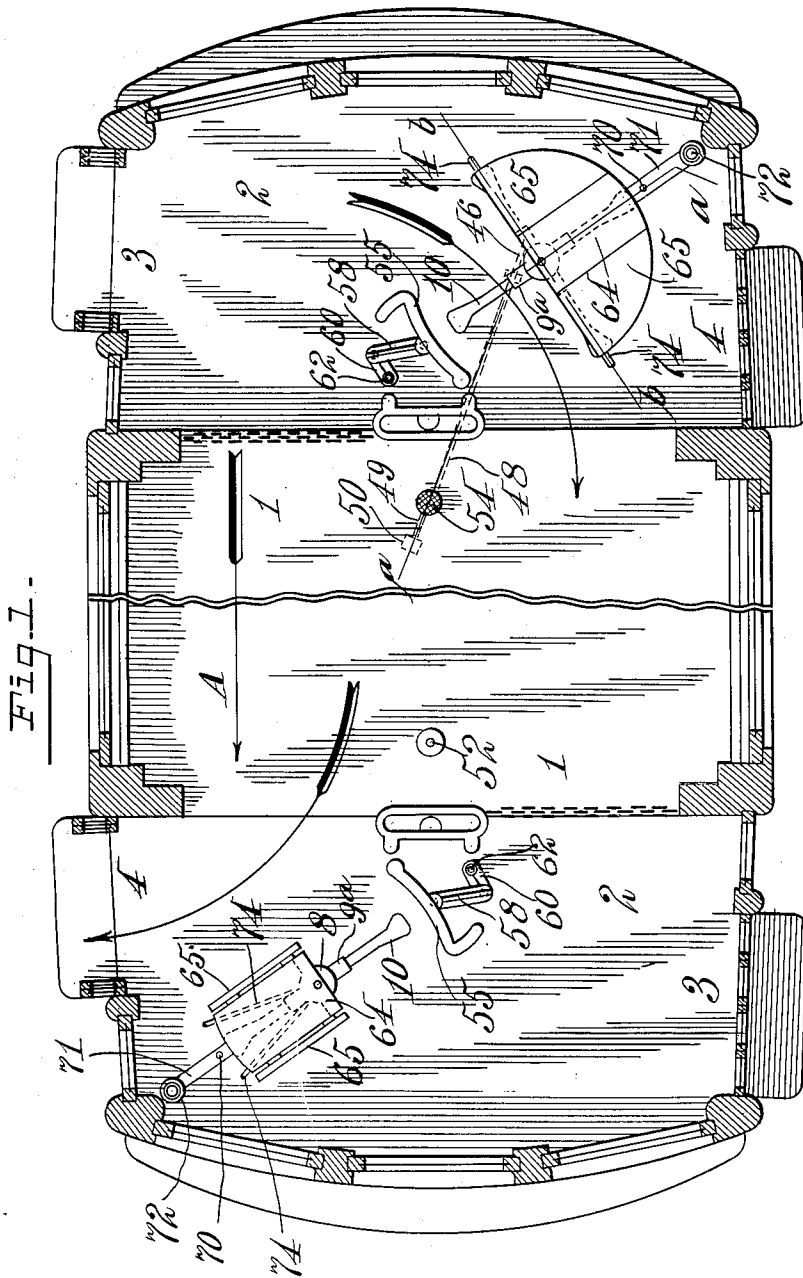
TURNSTILE.

APPLICATION FILED MAY 8, 1911.

1,050,070.

Patented Jan. 7, 1913.

5 SHEETS-SHEET 1.



Witnesses
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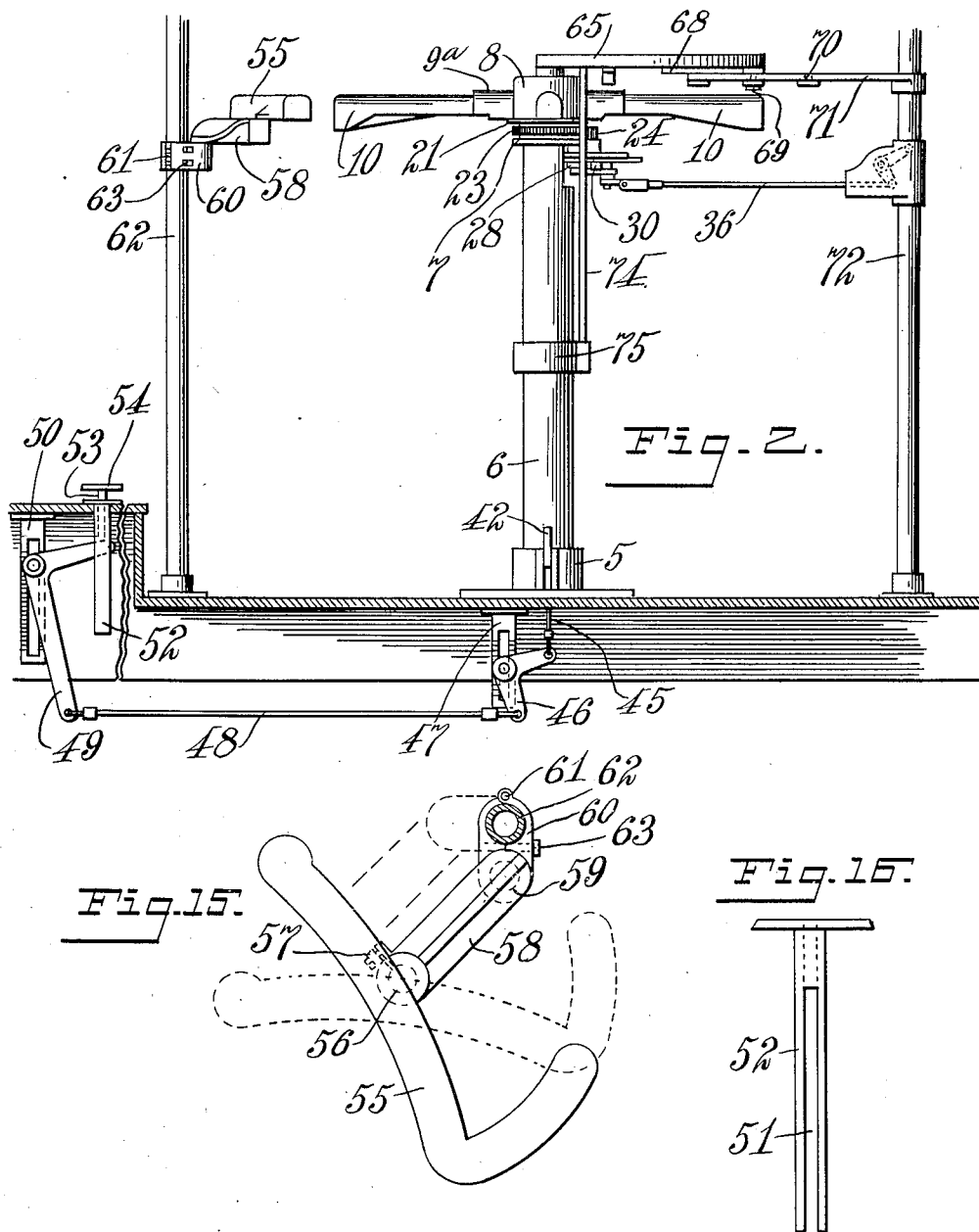
TURNSTILE.

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5 SHEETS—SHEET 2.

1,050,070.



Witnesses

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TURNSTILE.

Patented Jan. 7, 1913.

5 SHEETS—SHEET 3.

Fig. 3.

Fig. 4.

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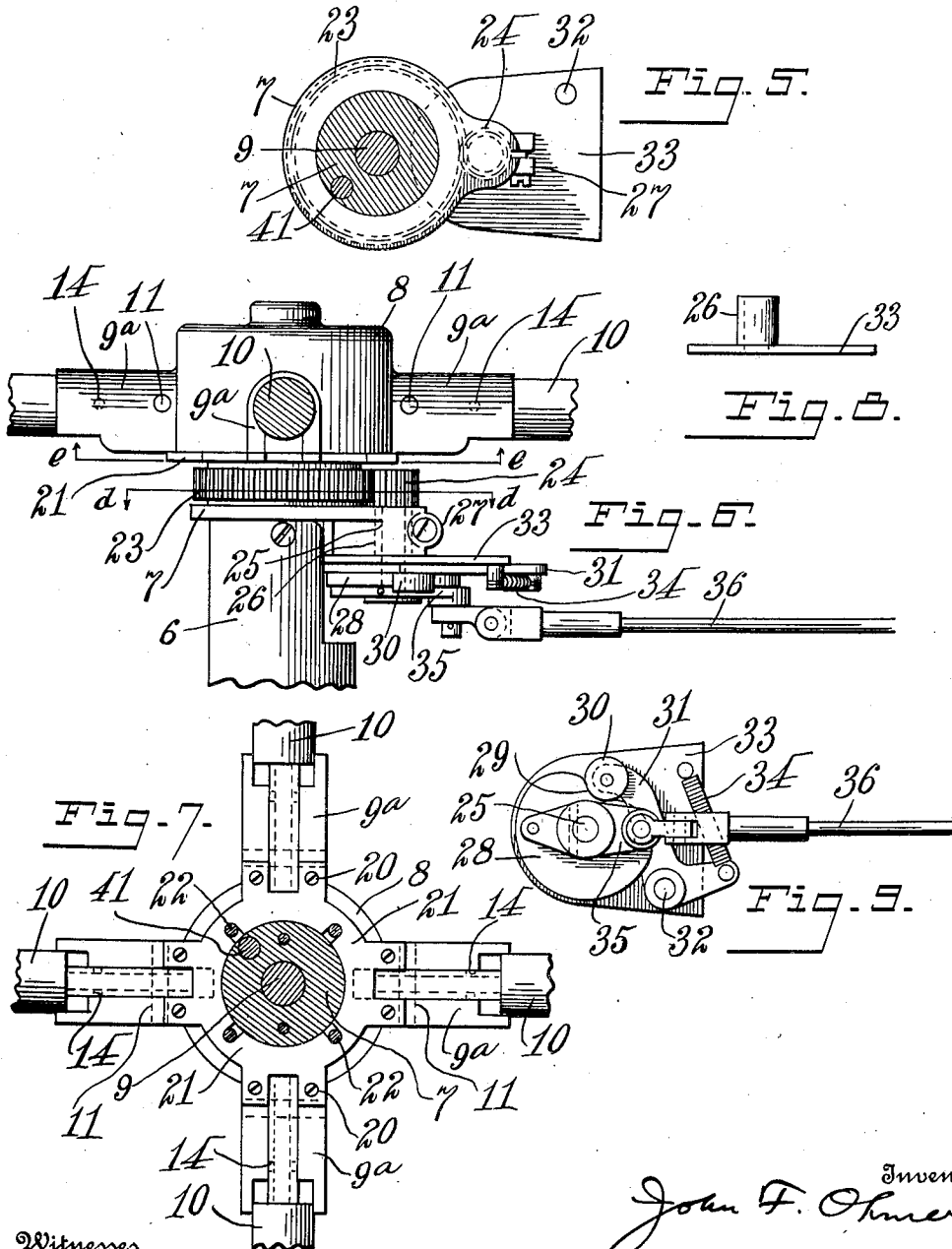
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1,050,070.

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5 SHEETS—SHEET 4.



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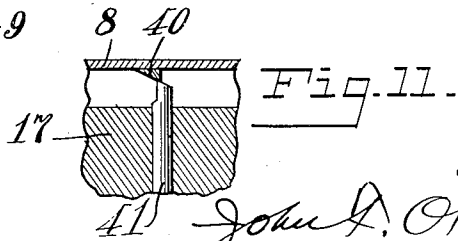
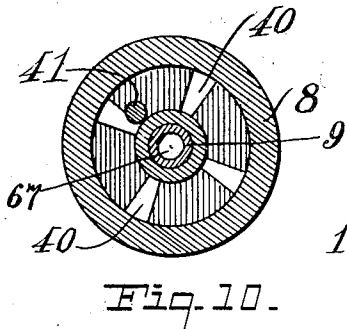
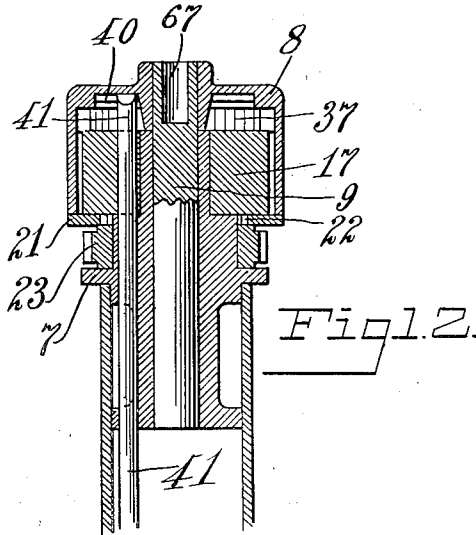
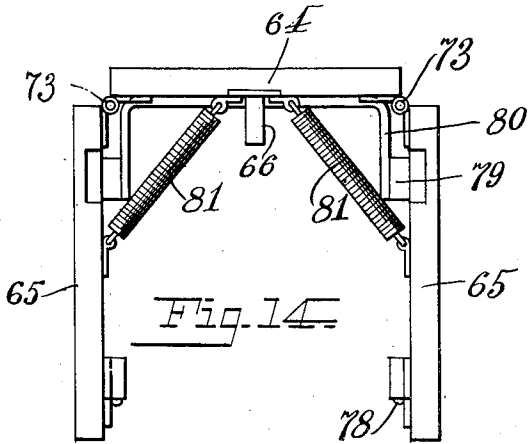
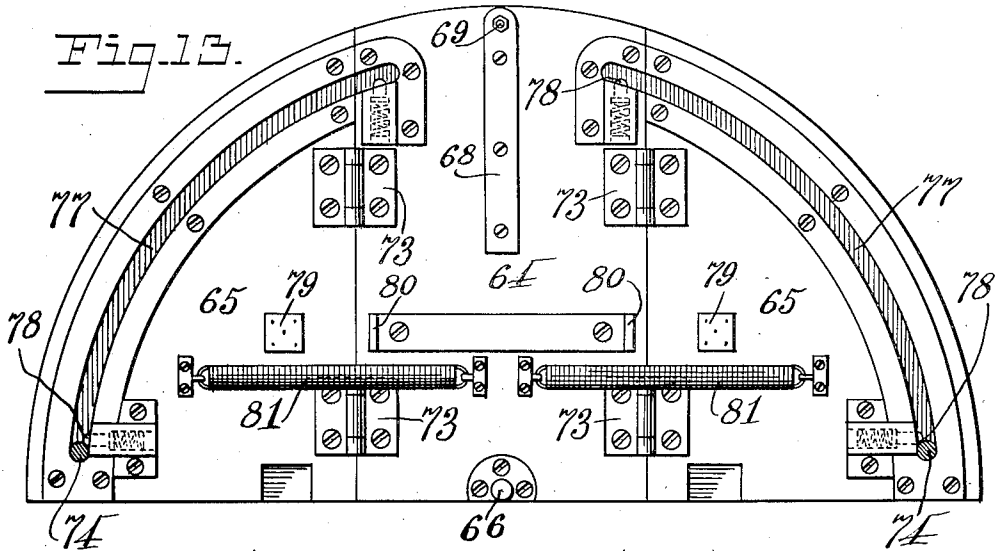
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TURNSTILE.

APPLICATION FILED MAY 8, 1911.

Patented Jan. 7, 1913.

5 SHEETS—SHEET 5.

1,050,070.



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UNITED STATES PATENT OFFICE.

JOHN F. OHMER, OF DAYTON, OHIO, ASSIGNOR TO OHMER FARE REGISTER COMPANY,
OF DAYTON, OHIO, A CORPORATION OF NEW YORK, (INCORPORATED IN 1902.)

TURNSTILE.

1,050,070.

Specification of Letters Patent.

Patented Jan. 7, 1913.

Application filed May 8, 1911. Serial No. 625,710.

To all whom it may concern:

Be it known that I, JOHN F. OHMER, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Turnstiles; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to new and useful improvements in turnstiles of the type utilized in connection with the collection of fares in pay-as-you-enter cars.

The invention comprises certain improvements of the devices shown and described in my pending applications Serial Numbers 601,246 and 601,247, filed Jan. 7, 1911.

The objects of the invention are several: first, to provide means whereby the collapsible arms may be conveniently lowered out of the way, to prevent the turnstile forming an obstruction to the outgoing passengers; second, to provide means for automatically completing each partial rotation of the turnstile, and to hold the rotating arms in their normal position; third, to provide means for preventing a retrograde movement of the turnstile, and which will allow the arms to be reset to their normal position when overthrown; fourth, to provide an improved form of guard rail; fifth, to provide an improved form of table; and sixth, to provide an improved form of locking device by means of which the turnstile is controlled by the conductor.

Other objects and features of the invention will appear in the specification and be particularly pointed out in the claims.

Referring to the accompanying drawings, Figure 1 is a longitudinal horizontal sectional plan of a street car equipped with my improved turnstile; Fig. 2 is a side elevation of one of the turnstiles on the line *a a* of Fig. 1; Fig. 3 is a section on the line *b b* of Fig. 1, showing one of the arms collapsed;

Fig. 4 is a section on the line *c c* of Fig. 3; Fig. 5 is a section on the line *d d* of Fig. 6; Fig. 6 is a side elevation of the top or head of the turnstile; Fig. 7 is a section on the line *e e* of Fig. 6; Fig. 8 is a detail view of the plate which supports the locking lever; Fig. 9 is a bottom plan view of the locking mechanism which holds the turnstile arms in their normal position; Fig. 10 is a section on the line *f f* of Fig. 3; Fig. 11 is a detailed view of the locking means controlled by the conductor; Fig. 12 is a section on the line *g g* of Fig. 4; Fig. 13 is a bottom plan view of the table; Fig. 14 is an end elevation of the table in a collapsed position; Fig. 15 is a top plan view of the guard rail; Fig. 16 is a detail view of the guide for the stem of the pedal mechanism.

Throughout the specification and drawings, similar reference characters indicate corresponding parts.

Referring more particularly to the drawings, 1 represents a car provided with end platforms 2 having entrance doors 3 and exit doors 4 which may be controlled by the conductor and motorman by any well known means. When the car is traveling in the direction of the arrow A, shown in Fig. 1, the rear platform 2 to the right is the entrance platform, and the front platform to the left is the exit platform. Mounted on each of the platforms 2 is a turnstile which is adapted to actuate the counting and indicating mechanism of a fare register. Owing to a turnstile being mounted on both platforms, the car may be operated in either direction or reversed in its travel. The passengers when boarding the car, alight on the rear platform; and when passing through the turnstile, register the fare paid. When the passengers alight from the car, they leave by the front platform.

To prevent the turnstile on the front platform forming an obstruction to the outgoing passengers and to provide various agencies which are instrumental in the proper registering of the fares, each turnstile is constructed as follows:

Referring particularly to Figs. 2 and 3, 5 represents a base member to which is attached

5 attached a vertical standard 6. Mounted on
 the upper end of the standard 6 is a head 7
 which supports a rotating head 8. The head
 8 is provided with a pin 9 which has a bearing
 10 in the head 7, thereby forming a pivot
 for said head 8. The said head 8 is provided
 with a plurality of extended portions
 9^a which receive the arms 10 of the turn-
 stile. The said arms 10 are each pivoted to
 the portions 9 by means of pins 11 which
 pass through slots 12 in said arms, thereby
 allowing the said arms to have a slight inward
 radially horizontal movement before they
 can be lowered on their pivots 11.
 15 Within the slots 12 are springs 13 which
 are instrumental in maintaining the arms in
 an outer position when said arms are raised
 or placed horizontally. The said arms 10
 are held in their raised or horizontal positions
 20 by means of pins 14 which rest in recesses
 15 in the arms. When it is desired to lower
 any particular one of the arms, it may be
 pressed inwardly against the tension of its
 spring 13, thereby releasing the pins
 25 14 from the recess 15 and thus permitting
 the arm to be lowered. Each arm is provided
 with a cam portion 16 adjacent to the notch
 15, adapted to engage the pins 14 when an
 arm is elevated, thereby moving the
 30 said arm inwardly and allowing the pins 14
 to enter the recess 15. Only oppositely
 disposed arms are adapted to be lowered or
 depressed when they are in a proper position
 relative to the supporting member 6. The
 35 arm on one side is lowered to provide a
 passageway for the passengers. On the other
 side an arm is lowered or depressed to provide
 a space for the motorman. The arms which
 are not depressed, form a barrier and
 40 prevent the passengers entering the space
 occupied by the motorman. One set of
 opposite arms are locked in their upper
 position, while the other set may be lowered
 by the following devices: Mounted on the head
 45 7 is a cap 17 rigidly attached thereto by any
 well known means and which is provided
 with oppositely arranged vertical grooves
 18. The inner ends of the arms 10 may be
 provided with extensions 19 which engage
 50 the periphery of the cap 17, thereby preventing
 the said arms being moved inwardly. Thus
 said arms cannot be lowered. When the
 extensions 19 lie opposite the grooves 18,
 the respective arms 10 may be moved
 55 inwardly to depress or lower the same;
 the extensions will enter the grooves 18 at
 such time. When an arm is depressed,
 the inner end thereof will lie in one of the
 grooves 18; and owing to the cap 17 being
 60 rigidly attached to the head 7, said depressed
 arm will lock the head 8 and thus prevent
 the turnstile being rotated. The turnstile
 which actuates the fare register being on the
 rear platform, the turnstile on the front

platform which will have some of its arms
 depressed, will be prevented from actuating
 said register.

Each turnstile, it will be observed, is provided
 with four arms 10 and is, therefore, necessarily
 given a quarter of a revolution 70 upon each
 actuation by a passenger in going through. To
 insure said turnstile making a full quarter
 revolution and to return the same to a normal
 position in the event it should be overthrown,
 means are provided as follows: 75 Attached to the
 lower side of the rotated head 8 by means of
 screws 20, is a plate 21 provided with notches
 which receive pins 22. See Figs. 6 and 7. The
 pins 22 are mounted on an annular gear 23
 80 journaled on the head 7. The gear 23 is in
 mesh with a pinion 24 attached to a shaft 25
 journaled in a sleeve 26 mounted in a clamp
 member 27, which extends from the head 7.
 On the lower end of the shaft 25 is a cam
 85 28 having a depression 29 which receives a
 roller 30 when the turnstile is in a normal
 position. The roller 30 is mounted on one end
 of a bell-crank lever 31 pivoted at 32 to a
 plate 33 which is attached to the sleeve 26.
 90 The lever 31 is controlled by a spring 34, and
 it will be seen that, when the arms 10 are
 on either side of their normal position, the
 influence of said spring on the roller 30 will
 tend to rotate the cam 28 and the arms 95
 10 until the roller lies within the depression
 29, when the arms will be in their normal
 position. The ratio of the gears 23 and 24 is
 four to one, corresponding to the number of
 arms of the turnstile. The cam 28 there-
 100 fore makes one revolution upon each actuation
 of the turnstile. As the spring 34 holds the
 roller 30 in the depression 29, the cam 28,
 roller 30 and spring 34 form a resilient lock
 for the turnstile and prevents it being 105
 unintentionally actuated. The cam 28 is
 provided with a crank 35 which may be
 connected to a fare register through members
 36, but which forms no part of the present
 invention. 110

To prevent the turnstile being given a
 retrograde movement, the rotating head 8 is
 provided with an intermittent retarding
 means consisting of an internal mutilated
 ratchet 37 engaged by a spring-controlled
 115 pawl 38 pivotally attached to the cap 17.
 When the turnstile is in a normal position,
 the pawl 38 lies adjacent to a space 39
 provided by eliminating some of the teeth
 of the ratchet. There are four of these spaces
 120 39 corresponding to the number of arms of
 the turnstile, and it will be seen from Fig.
 4, that, if the arms 10 are given a movement
 past their normal position, the pawl 38 will
 not be engaged by the ratchet, which allows
 125 the cam 28 and lever 31 to return said arms
 to their normal position.

To allow the turnstile to be locked and

controlled by the conductor so as to prevent a passenger entering the car before he has paid a fare, the following device is provided: The rotating head 8 is provided with a plurality of stop members 40 corresponding in number to the arms of the turnstile. These stops 40 are adapted to be engaged by the extreme upper end of a vertically slidable rod 41 having a bearing at its upper end in the head 7 and cap 17; its lower end being attached to a lever 42 pivoted at 43. Attached to the lever 42 is a spring 44 which exerts an upward thrust upon the rod 41 to place the extreme upper end of the rod 41 in the path of the stop members 40, thereby preventing the rotation of the turnstile. The end of the lever 42 opposite the pivot 43 is connected to an adjustable rod 45, the lower end of which is attached to one arm of a bell-crank lever 46. The lever 46 is adjustably mounted beneath the platform 2 of the car on a bracket 47. The other end of said lever 46 is attached to one end of a connecting rod 48, the other end of which is attached to one arm of a bell-crank lever 49. The lever 49 is adjustably mounted on a bracket 50 beneath the floor of the car. The other end of the lever 49 lies within a slot 51 in a stem 52, which extends to the upper side of the floor of the car. The stem 52 is provided with a longitudinal opening which receives a pin 53 having a cap 54. The cap 54 is placed in a position to be engaged by the foot of the conductor; and when said cap 54 is depressed, the turnstile will be unlocked, owing to the extreme upper end of the rod 41 being lowered out of the path of the stops 40. During the ordinary operation of the device, the conductor stands with his foot on the cap 54, thereby holding the turnstile unlocked. By adjustably mounting the bell-crank levers 46 and 49, and by providing the stem 52 with the slot 51, the connecting mechanism between the cap 54 and the lever 42 may be easily adjusted to different types of cars.

To direct the passengers to the turnstile, there is provided a guard rail 55. This rail 55 is provided with a pivot stem 56 adapted to be received by a clamp 57 on one end of an arm 58. The other end of the arm 58 is provided with a pivot stem 59 adapted to be received by one end of a clamp 60. The clamp 60 consists of two portions hinged at 61 and adapted to clamp a vertical standard 62 in addition to the pivot stem 59. The two members of said clamp 60 may be tightened by any suitable means such as cap screws 63. The guard rail 55 is thus supported from the standard 62 through the clamp 60 and the arm 58, and as three pivot points are provided, the rail 55 may be adjusted to a multiplicity of positions. As the

guard rail is supported by an arm, thereby providing a vacant space beneath the same, a passenger carrying a basket or package may easily pass though the turnstile without obstruction.

To provide a shelf upon which passengers may deposit packages, etc., which they may be carrying, thereby allowing their hands to be free to make change when paying fares, a table is mounted above the turnstile. This table consists of an intermediate portion 64 and side hinged portion 65. One side of the table is supported by the turnstile and is attached thereto by means of a stem 66 which enters an opening 67 in the rotating head 8. The opposite side of the table is provided with a strap 68 having a lug 69 thereon. The lug 69 is adapted to enter any one of a plurality of openings 70 in a bracket 71. The bracket 71 is attached to a standard 72, which supports a portion of the fare register actuating mechanism 36. The standard 72 may, therefore, be adjustably mounted in relation to the turnstile, which allows the device as a whole to be adapted to different sizes of car platforms. To prevent the table forming an obstruction when some of the arms 10 are depressed, the hinged portions 65 are also depressed. The hinged portions 65 are attached to the intermediate portion 64 by hinges 73 and are held in their upper position by braces 74. The braces 74 are pivoted at their lower ends in a collar 75 on the standard 6, while their upper ends are provided with heads 76 which lie in T-slots 77 on the under side of the table. When it is desired to lower the hinged portions 65, the braces 74 are swung on their pivots beneath the intermediate portions 64 of the table, which allows the portions 65 to be depressed. The slots 77 act as guides for the upper ends of the braces 74 and spring-controlled locking pins 78 may be provided at each end of the slots 77 to hold the braces 74 in their set position. The hinged portions 65 are provided with elastic bumpers 79 which rest against projections 80 extending from the intermediate portion 64. To hold the bumpers against the projection 80, springs 81 are provided. By this construction the hinged portions 65 are prevented from rattling when in their depressed position.

While I have described in detail the various improvements involving and cooperating with my improved turnstile, it is possible that some of these details may be changed or modified to a greater or less extent without in any degree departing from the spirit of the invention, which may be varied within the scope of the claims.

Having described my invention, I claim:

1. In a device of the type specified, a standard, a rotating head mounted on said

standard, a plurality of vertically, horizontally and radially movable arms mounted on said head and provided with recesses, and pins mounted on said head and adapted to be received by said recesses when said arms are in an elevated position.

2. In a device of the type specified, a standard, a rotating head mounted on said standard, a plurality of vertically, horizontally and radially movable arms mounted on said head and provided with recesses, and with slots by means of which said arms are pivotally attached to the head, pins mounted on said head and adapted to be received by said recesses when said arms are in an elevated position, and means controlling the radial and horizontal movements of said arms.

3. In a device of the type specified, a standard, a rotating head mounted on said standard, a plurality of vertically and horizontally inwardly movable arms mounted on said head and being provided with recesses, said arms also provided with slots by means of which the arms are pivotally attached to the head, pins mounted on said head and adapted to be received by said recesses when said arms are in an elevated position, and springs mounted in said slots and controlling the inward horizontal movement of said arms.

4. In a device of the type specified, a standard, a rotating head mounted on said standard, a plurality of vertically and horizontally inwardly movable arms mounted on said head, said arms being provided with recesses and cam portions adjacent thereto, and pins mounted on said head and adapted to be engaged by said cams and to be received by said recesses when said arms are elevated.

5. In a device of the type specified, a standard, a rotating head mounted on said standard, a plurality of vertically and horizontally inwardly movable arms mounted on said head, said arms being provided with slots by means of which the arms are pivotally attached to said head, springs mounted in said slots and controlling the inward horizontal movement of said arms, said arms also provided with recesses and cam portions adjacent thereto, and pins mounted on said head and adapted to be engaged by said cam portions and to be received by said recesses when said arms are elevated.

6. In a device of the type specified, a standard the upper end of which is provided with a vertical groove, a rotating head mounted on said standard, a plurality of vertically and radially movable arms mounted on said head, means for locking said arms in a horizontal position, said groove being adapted to receive the inner end of one of said arms to permit said arm

to be unlocked, and to receive said arm to lock the turnstile when said arm is in a depressed position.

7. In a device of the type specified, a standard, the upper end of which is provided with a vertical groove, a revolving head mounted on said standard, a plurality of vertically and inwardly horizontally movable arms mounted on said head, the inner ends of said arms being adapted to engage the upper end of the standard when said arms are in a horizontal position, thereby locking said arms, and said groove being adapted to receive the inner ends of said arms when one of said arms is depressed, thereby locking the turnstile against rotation.

8. In a device of the type specified, a standard, the upper end of which is provided with a vertical groove, a revolving head mounted on said standard, a plurality of vertically and inwardly horizontally movable arms mounted on said head, said arms being provided with slots by means of which said arms are pivotally attached to said head, springs mounted in said slots and controlling the inward horizontal movement of said arms, and said groove being adapted to receive the inner end of one of the arms when said arm is depressed, thereby locking the turnstile.

9. In a device of the type specified, a standard, a turnstile mounted on said standard, a cam having a depression therein actuated by said turnstile, said cam adapted to make a complete revolution upon each actuation of the turnstile, and a resilient member adapted to engage said cam.

10. In a device of the type specified, a standard, a turnstile mounted on said standard, a cam having a depression therein actuated by said turnstile, gears having a ratio corresponding to the number of arms of the turnstile mounted between said head and said cam, and a resilient member adapted to engage said cam.

11. In a device of the type specified, a standard, a turnstile mounted on said standard, a mutilated ratchet mounted on said turnstile, a pawl engaging said ratchet, and resilient means adapted to partially rotate said turnstile to a normal position.

12. In a device of the type specified, a standard, a turnstile mounted on said standard, a mutilated ratchet mounted on said turnstile, a pawl engaging said ratchet, a cam having a depression therein and operatively connected to said turnstile, and resilient means engaging said cam and adapted to partially rotate said turnstile to a normal position.

13. In a device of the type specified, a standard, a turnstile mounted on said standard, a mutilated ratchet mounted on said

turnstile, a pawl engaging said ratchet, a cam having a depression therein operatively connected to said turnstile, gears having a ratio corresponding to the arms of the turnstile, connecting said turnstile and said cam, and resilient means engaging said cam and adapted to partially rotate said turnstile to a normal position.

14. In a device of the type specified, a standard, a turnstile mounted on said standard, a mutilated ratchet mounted on said turnstile, a pawl mounted in operative relation to said ratchet and adapted to be relieved from engagement with said ratchet when said turnstile is in a normal position, and resilient means adapted to partially rotate said turnstile.

15. In a device of the type specified, a standard, a pawl, a turnstile mounted on said standard, a ratchet mounted on said turnstile in operative relation with said pawl and adapted to be relieved from engagement with said pawl when said turnstile is in a normal position, and resilient means for partially rotating said turnstile.

16. In a device of the type specified, a turnstile, means for locking said turnstile, an operating member and a bell-crank lever, a slotted stem adapted to receive said operating member and said bell-crank lever, and connections between said bell-crank lever and said locking means.

17. In a device of the type specified, a turnstile, a supporting member, a guard mounted adjacent to said turnstile, an arm to which said guard is attached, and a clamp connecting said arm and said supporting member.

18. In a device of the type specified, a turnstile, a supporting member, a guard mounted adjacent to said turnstile, an arm to which said guard is attached, and a hinged clamp connecting said arm and said supporting member.

19. In a device of the type specified, a first supporting member, and a second supporting member, a table one end of which is connected to said first supporting member, a bracket having a plurality of apertures attached to said second supporting member, and a lug attached to said table and adapted to be received by one of said apertures.

20. In a device of the type specified, an intermediate portion of a table, side portions hinged to said intermediate portion, projections extending from said table, rubber bumpers interposed between said projections and said side portions when said side portions are in a depressed position, springs attached to said intermediate and side portions and adapted to prevent the side portions from rattling, and means for supporting said table.

21. In a device of the type specified, a

supporting member, a stationary portion of a table attached to said member, a side portion hinged to said stationary portion, a swinging bracket pivoted at its lower end to the supporting member and its upper end removably attached to said hinged portion, thereby allowing said hinged portion to be depressed.

22. In a device of the type specified, a supporting member, a stationary portion of a table attached to said member, a side portion hinged to said stationary portion and provided with a circumferential slot on its under side, a swinging bracket pivoted at its lower end to the supporting member, and its upper end lying within said slot, whereby said bracket supports said hinged portion in an elevated position and whereby said hinged portion may be depressed when said bracket is swung on its pivot.

23. A turnstile comprising a standard, a rotating head mounted on said standard, a plurality of arms mounted in said head and adapted to occupy horizontal positions or positions parallel with the standard, the inner ends of said arms having each an enclosed longitudinal slot and a recess extending into said arm from the side of the arm, and a cam surface above said recess, a pintle extending from said head and penetrating said longitudinal slot and forming the pivot of the arm, a spring within said longitudinal slot engaging the arm and said pintle and exerting a force to maintain the arm in its outermost position, a pin in advance of the pivot pin cooperating with the recess in said arm to maintain it in its horizontal position, the cam portion of said arm serving to engage said pin when elevating said arm, whereby the spring is compressed to allow the arm to move inwardly upon its pivot until said supporting pin enters the said recess, thereby locking said arm in its horizontal position.

24. In a turnstile having collapsible arms, the combination with a stationary head, a standard supporting said head, and a rotating head supported on said stationary head, of a folding table consisting of hinged sections having arc guide-ways in their lower surfaces, said table being supported on said rotating head by a stationary connection, an oscillating brace mounted on said standard, and supporting the outer sections of said table, said brace having its upper end projected into and controlled by said guide-ways, and means for locking the upper end of said brace in either extreme end of the guide-way.

25. A turnstile comprising a standard having a head 17, a rotating head 8 mounted on the head of said standard having a series of radial sockets 9^a, a pintle 11 lying within each socket, a series of arms 10, one for each

socket, each of said arms having a longitudinal elongated pivot slot 12 receiving one of said pintles which forms a pivot for the arm, and a recess 15, means engaging said recess 15, said arm also having an extension 19 adapted to engage the periphery of the head 17, said recess 15 and the means cooperating therewith, and the extension 19 cooperating with the head 17, combining to maintain said arm in a horizontal position.

26. A turnstile comprising a standard having a head 17 provided with oppositely disposed peripheral recesses 18, a rotating head 8 mounted on the head of said standard and having a series of radial sockets 9^a, a pintle 11 lying within each socket, a series of arms 10, one for each socket, each of said arms having an extension 19 adapted to enter a recess 18 in lowering said arm from its horizontal position, a longitudinal elongated pivot slot 12 receiving one of said pintles, said slot permitting the arm to be moved to a position in which the projection 19 enters said recess, whereby said movable head 8 is prevented from rotating.

27. A turnstile comprising a standard, a rotating head 8 mounted on said standard, said rotating head having internal ratchets 37 which are interrupted by recesses 39, a pawl engaging said ratchets and normally preventing retrograde movement of the turnstile, said turnstile being permitted to have a limited retrograde movement when either of the recesses 39 is adjacent to said pawl.

28. A turnstile comprising a standard, a rotating head 8 mounted on said standard and supporting a series of arms 10, a gear 23 attached to said head 8, a pinion 24 in mesh with said gear 23, a cam 28 provided with a depression 29 attached to said pinion 24, a roller 30 engaging said cam and lying within said depression when the turnstile is in a normal position, and a spring-controlled arm supporting said roller, whereby said turnstile is controlled and placed in a normal position when said turnstile is overthrown.

29. A turnstile comprising a standard, a rotating head 8 mounted on said standard, said rotating head having internal ratchets 37 which are interrupted by recesses 39, a pawl engaging said ratchets and normally preventing retrograde movement of the turnstile, said turnstile being permitted to have a limited retrograde movement when either of the recesses 39 is adjacent to said pawl, a gear 23 attached to said head 8, a pinion 24 in mesh with said gear 23, a cam 28 provided with a depression 29 attached to said pinion 24, a roller 30 engaging said cam and lying within said depression when the turnstile is in a normal position, and a spring-controlled arm supporting said roller,

whereby said turnstile is controlled and placed in a normal position when it is overthrown.

30. The combination with a turnstile, of a guard rail 55 forming the outer inclosure of the passageway through the turnstile, said guard rail provided with a pivot pin 56, an arm 58 provided with a clamp 57 which receives said pivot pin 56, said arm 58 being also provided with a pivot pin 59, a hinged clamp consisting of members 60 hinged at 61 and engaging said pivot pin 59, and a standard 62 also received by said hinged clamp, whereby the width of the passageway between the turnstile and the guard rail 55 may be varied.

31. The combination with a turnstile, of a guard rail mounted on a swinging support and adapted to vary the width of the passageway between said guard rail and turnstile, and means for locking said guard rail in any position.

32. In a device of the type specified, a standard, a turnstile mounted on said standard, intermittent retarding means mounted on said turnstile, and means adapted to automatically complete each movement of the turnstile and to return to a normal position when overthrown, and to hold said turnstile in a normal position.

33. In a device of the type specified, a standard, a turnstile mounted on said standard, intermittent retarding means mounted on said turnstile, and rotating resilient means adapted to automatically complete each movement of the turnstile and to return to a normal position when overthrown, and to hold said turnstile in a normal position.

34. A turnstile comprising a standard, a rotating head mounted on said standard, a plurality of pivotal arms mounted on said head and all of which are adapted to be depressed, and means adapted to permit opposite arms to be depressed and to lock the remaining arms in an elevated position whereby said remaining arms may form a barrier.

35. A turnstile comprising a standard, a rotating head mounted on said standard, a plurality of pivoted arms mounted on said head and all of which are adapted to be depressed, and a stationary cap provided with grooves mounted on said standard, said cap adapted to permit opposite arms to be depressed and to lock the remaining arms in an elevated position whereby said remaining arms may form a barrier.

36. A turnstile comprising a standard, a rotating head mounted on said standard, a plurality of pivoted arms mounted on said head and all of which are adapted to be depressed, and means adapted to permit opposite arms to be depressed to lock the head

against rotation, said means also adapted to lock the remaining arms in an elevated position, whereby said remaining arms may form a barrier.

- 5 37. A turnstile comprising a standard, a rotating head mounted on said standard, a plurality of pivoted arms mounted on said head and all of which are adapted to be depressed, and a stationary cap provided with
10 grooves mounted on said standard, said cap adapted to permit opposite arms to be de-

pressed to lock the head against rotation, said means also adapted to lock the remaining arms in an elevated position whereby said remaining arms may form a barrier. 15

In testimony whereof I affix my signature, in presence of two witnesses.

JOHN F. OHMER.

Witnesses:

MATTHEW SIEBLER,
G. B. GRIMES.