

F. DIX.
PLATFORM GATE FOR CARS.
APPLICATION FILED NOV. 18, 1902.

NO MODEL.

Fig. 1.

Fig. 3

Fig. 4

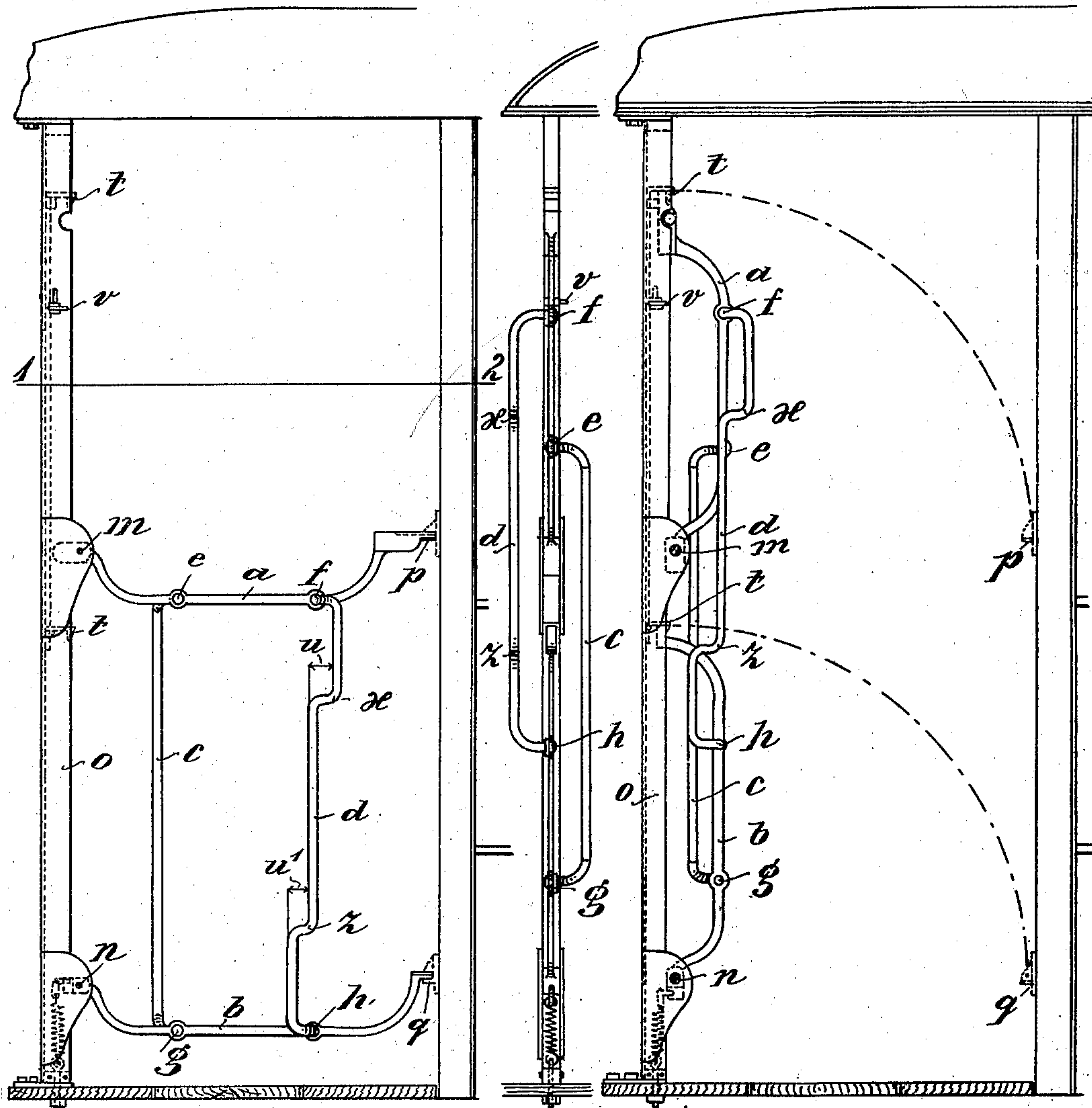
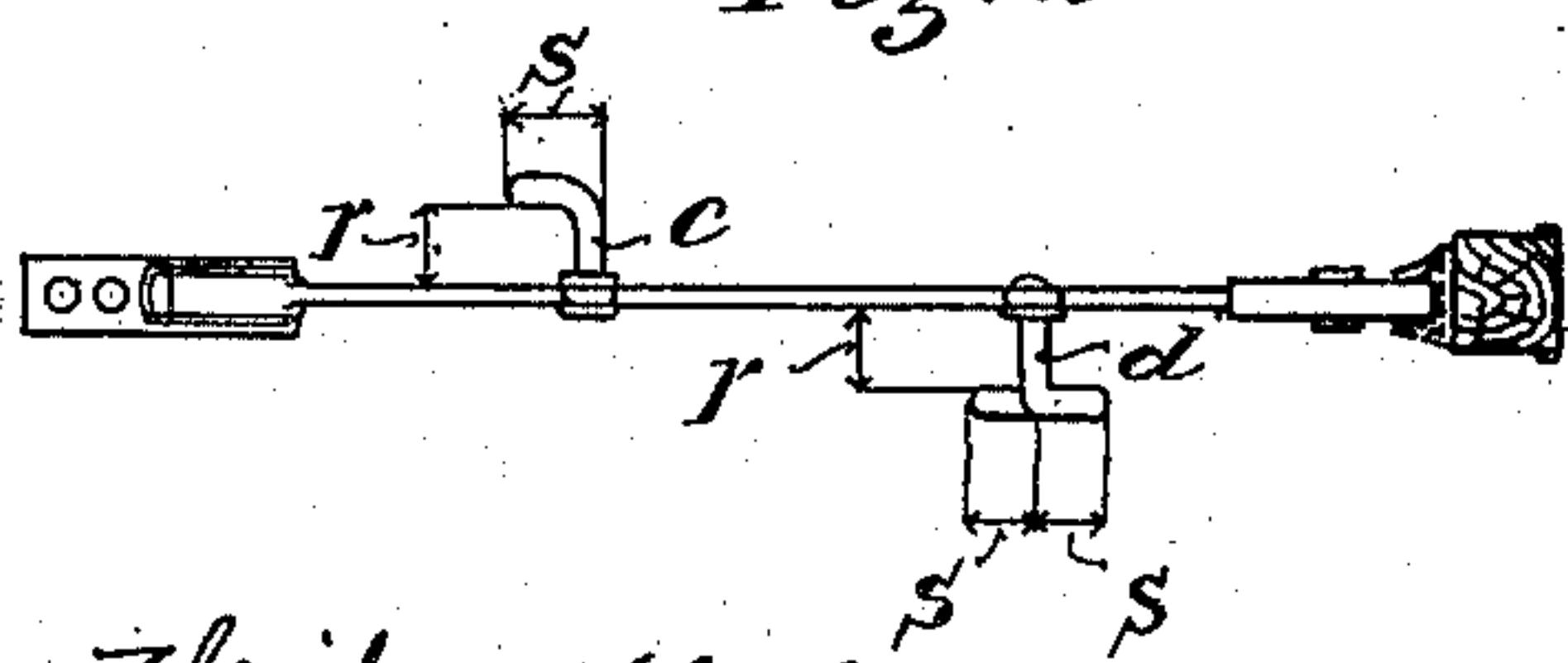


Fig. 2



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UNITED STATES PATENT OFFICE.

FERDINAND DIX, OF MUNICH, GERMANY.

PLATFORM-GATE FOR CARS.

SPECIFICATION forming part of Letters Patent No. 741,774, dated October 20, 1903.

Application filed November 18, 1902. Serial No. 131,869. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND DIX, a citizen of Germany, residing at Änssere Wienerstrasse 28, Munich, Bavaria, Germany, have
5 invented certain new and useful Improvements in Platform-Gates for Cars and Similar Vehicles; and I do hereby 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
10 make and use the same.

My invention relates to platform-gates for railway-cars and the like, and has for its object the provision of an efficient safety device
15 to prevent the ingress or egress of persons when the gate is closed, which gate when not needed for use will be readily withdrawn and occupy a position such as to form no obstruction in the line of travel.

A further object of my invention is a construction that will effectually preclude the possibility of injury to persons opening and closing the same by reason of catching the hands or clothing between the movable parts
25 of the gate. Moreover, a gate formed according to my invention possesses the further advantage that it is adapted for use as a hand rail or support to persons entering and leaving the car.

Having these objects in view my invention consists in the peculiarities of construction and arrangement of parts hereinafter more particularly set out and claimed, and illustrated in the accompanying drawings, in
35 which—

Figure 1 is a side elevation with the gate in a closed position. Fig. 2 is a horizontal section on the line 1 2 of Fig. 1. Fig. 3 is an end elevation with the gate in the open position, and Fig. 4 is a side elevation with the gate open.
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Referring to the figures of the drawings more in detail, the gate consists, preferably, of two substantially horizontal bars *a* and *b*, pivoted at *m* and *n*, respectively, to the body of the car or to the frame *o*. In its closed position, as shown in Fig. 1, the free ends of these horizontal bars rest in recessed catches *p* and *q* on the opposite side of the doorway.
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Two other bars are pivotally connected at each end to the bars *a* and *b* at points inter-
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mediate the length thereof, the bar *c* being pivotally connected at the points *e* and *g* and the bar *d* connected at the points *f* and *h*. The bars *a* and *b* do not extend in a straight line across the door-opening, but are bent downwardly to form a substantially U-shaped outline. The bars *c* and *d* lie in different vertical planes, one on each side of the plane occupied by the bars *a* and *b* and a sufficient distance therefrom to readily accommodate the human hand. These bars *c* and *d* from the point of connection with the bars *a* and *b* are first bent outwardly to form the interval *r*, Fig. 2, and then in a plane perpendicular thereto to form the interval *s*. In addition to the bending already described, the bar *d* contains two other bends, *x* and *z*, perpendicular to its length and in the same vertical plane. The object in bending the bars *c* and *d* in this manner is that as the gate is swung upward in opening the same by a person grasping the bar *c* or *d* the hand will not be caught between these two bars, or if the gate be grasped by the bar *a* between the points *e* and *f* the two bars *c* and *d* will not coincide in such manner as to injure the hand.
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It will be observed that as the gate is swung upwardly to open the same the vertical bars *c* and *d* retain their vertical position, while the bars *a* and *b* assume a like position, the whole gate being compactly assembled to one side of the doorway. The free end of the bar *a*, which in a closed position rested in the catch *p*, now enters a recess in the frame-work and is secured therein by means of a bolt *t* and can only be released to close the gate when the bolt *t* is lifted by means of the push-button *v*. In its open position, as seen by Figs. 3 and 4, the bars *c* and *d* form convenient and firm hand-rails for use in alighting from or entering the car, while in opening or closing the gate the respective portions of the gate do not pass in such close proximity as to result in a shearing action liable to injure the hands or catch the clothing.
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Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A platform-gate for cars and the like, comprising pivotally-connected intersecting bars so bent downwardly and outwardly as to
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serve interchangeably as a gate and as a hand-rail or support in entering and leaving the car.

2. A platform-gate for cars and the like, comprising pivotally-connected intersecting bars so arranged in different planes that in the opening and closing of the gate a shearing action between the respective bars will be avoided.

3. A platform-gate for cars and the like, comprising a plurality of bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, and other bars extending transversely of the first-named bars and pivotally connected thereto at points intermediate the length thereof whereby the U-shaped bars will constitute a hand-rail when the gate is in its open position.

4. A platform-gate for cars and the like, comprising a plurality of bars pivoted at one end to the car and adapted to extend across the door-opening, and other bars extending transversely of the first-named bars and pivotally connected thereto at points intermediate the length thereof, said second bars lying in different planes separated by a distance sufficient to accommodate the human hand.

5. A platform-gate for cars and the like, comprising a plurality of bars pivoted at one end to the car and adapted to extend across the door-opening, and other bars extending transversely of the first-named bars and pivotally connected thereto at points intermediate the length thereof, said second bars lying in different planes on opposite sides of the plane of the first bars and the planes of the respective bars being separated by a space sufficient to receive the human hand.

6. A platform-gate for cars and the like, comprising a plurality of bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, and other bars extending transversely of the first-named bars and pivoted thereto, said second bars lying on opposite sides of the plane of the first bars and the three planes being separated by a space at least equal to the thickness of the human hand.

7. A platform-gate for cars and the like, comprising a plurality of bars pivoted at one end to the car and adapted to extend across the door-opening, and other bars extending transversely of the first-named bars and pivotally connected thereto, said second bars lying in different planes on opposite sides of the plane of the first bars, and one of the second bars having a succession of bends at an angle to its length and in substantially the same vertical plane.

8. A platform-gate for cars and the like, comprising a plurality of horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, vertical bars intersecting and pivotally connected to the horizontal bars, said vertical bars lying in

different planes on opposite sides of the plane of the horizontal bars and the planes of the respective bars being separated by a space sufficient to receive the human hand.

9. A platform-gate for cars and the like, comprising a plurality of horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, a catch arranged at the opposite side of the door-opening and adapted to receive and retain the free end of one of the said bars, and a plurality of vertical bars intersecting and pivotally connected to the horizontal bars, said vertical bars lying on opposite sides of and at a substantial distance from the plane of the horizontal bars.

10. A platform-gate for cars and the like, comprising a plurality of horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, a catch arranged at the opposite side of the door-opening and adapted to receive and retain the free end of one of the said bars, a plurality of vertical bars intersecting and pivotally connected to the horizontal bars, said vertical bars lying on opposite sides of and at a substantial distance from the plane of the horizontal bars, a bolt so arranged as to engage and retain the gate in its open position, and means for releasing said bolt.

11. A platform-gate for cars and the like, comprising a plurality of horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, a plurality of vertical bars extending transversely of the horizontal bars and pivotally connected thereto at points intermediate the length thereof, said vertical bars lying in planes on opposite sides of the plane of the horizontal bars, and one of the vertical bars having a succession of bends at an angle to its length and in substantially the same vertical plane.

12. A platform-gate for cars and the like, comprising a plurality of horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, a plurality of vertical bars extending transversely of the horizontal bars and pivotally connected thereto at points intermediate the length thereof, said vertical bars lying in planes on opposite sides of the plane of the horizontal bars and one of the vertical bars having a succession of bends at an angle to its length and in substantially the same vertical plane, a bolt so arranged as to engage and retain the gate in its open position, and means for releasing said bolt.

13. A platform-gate for cars and the like, comprising two horizontal bars pivoted at one end to the car and adapted to extend across the door-opening, a catch on the opposite side of the door-opening adapted to receive and

retain the free end of one of the bars, and two vertical bars extending transversely of the horizontal bars and pivotally connected thereto, said vertical bars lying on opposite sides of the horizontal bars in different planes and the planes of the respective bars separated by a space sufficient to receive the human hand.

14. A platform-gate for cars and the like, comprising two horizontal bars pivotally connected at one end to the car and adapted to extend across the door-opening, said bars bent downwardly to form a substantially U-shaped outline, catches on the opposite side of the door-opening adapted to receive and retain the free ends of said bars, two vertical

bars extending transversely of the horizontal bars and pivotally connected thereto at points intermediate the length thereof, said vertical bars lying in different planes on opposite sides of the plane of the horizontal bars, one of the vertical bars having a succession of bends at an angle to its length and in a plane parallel to the horizontal bars, a bolt adapted to retain the gate in its open position, and means for releasing said bolt.

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

FERDINAND DIX.

Witnesses:

FERDINAND PÜRNER,
GUBBIER.