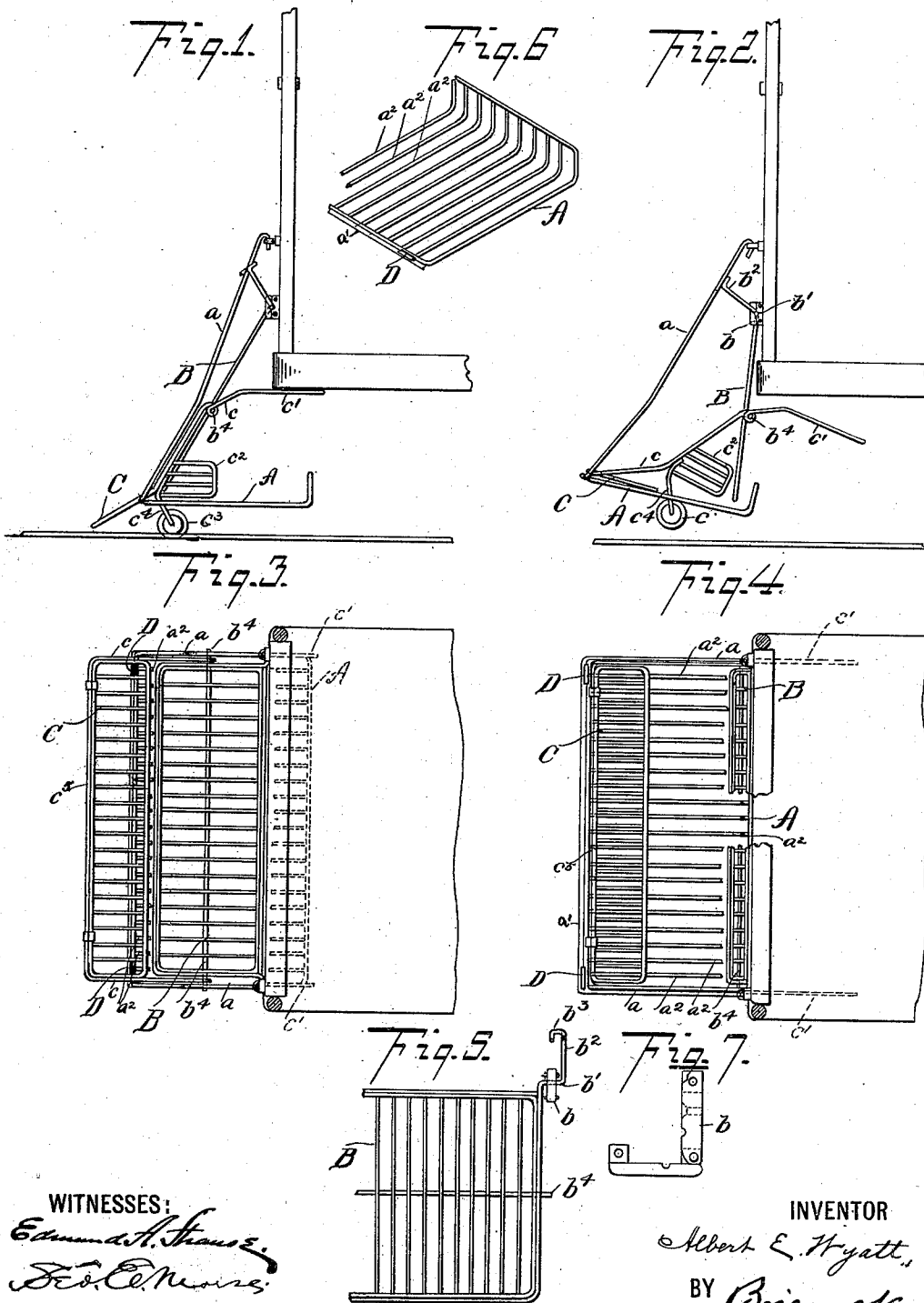


(No Model.)

A. E. WYATT.
LIFE GUARD FOR CARS.

No. 535,436.

Patented Mar. 12, 1895.



WITNESSES:

Edmund A. Thomas
Geo. C. Moore

INVENTOR

Albert E. Wyatt

BY *Briesen Knauth*
his ATTORNEYS.

UNITED STATES PATENT OFFICE.

ALBERT EDWARD WYATT, OF JERSEY CITY, NEW JERSEY.

LIFE-GUARD FOR CARS.

SPECIFICATION forming part of Letters Patent No. 535,436, dated March 12, 1895.

Application filed December 17, 1894. Serial No. 532,024. (No model.)

To all whom it may concern:

Be it known that I, ALBERT EDWARD WYATT, a resident of Jersey City, Hudson county, State of New Jersey, have invented certain new and useful Improvements in Life-Guards for Cars, of which the following is a specification.

My invention relates to life guards for cars, and has for its object to produce a device which will operate efficiently to pick up a person or other obstruction from in front of an advancing car and prevent injury to the person or to the car by reason of such obstruction.

To this end my invention consists in the construction hereinafter set forth and claimed.

My invention will be understood by reference to the accompanying drawings, forming part hereof, in which—

Figure 1 is a side elevation of a car platform having attached thereto a life guard or fender embodying my invention, the same being shown as in position to pick up an object from in front of the car. Fig. 2 is a similar side view showing the fender in its raised position, that is to say, the position which it assumes when it has picked up an object. Fig. 3 is a plan view of Fig. 1, the bottom rods of the cradle being shown as broken away for the sake of clearer illustration. Fig. 4 is a plan view of Fig. 2, some of the bottom rods of the cradle being shown broken away as before for the purpose of clearer illustration. Fig. 5 is a detail view of a portion of the swinging apron. Fig. 6 is a broken away detail view of the cradle; and Fig. 7 is a detail view of the clip which serves to hold the swinging apron to the car.

In the drawings, A designates a swinging cradle provided with bottom rods a^2 . Rigidly connected to this cradle or integral therewith are hangers a . These hangers are engaged with the car by their upper ends and serve to suspend the cradle. The cradle is shown in its two positions in Figs. 1 and 2, whence it will be observed that on account of the rigid connection between the cradle and its hangers, the upper ends of the hangers which form the points of support for the cradle will constitute the center of rotation or swing of the cradle.

B is an apron which is suspended from the car by the clips b in which the axis b' of the

apron works freely in order that the apron may swing freely. Connected rigidly to the swinging apron B and moving therewith are arms b^2 which terminate in hooks b^3 which engage with the hangers a , which suspend the swinging cradle. The apron B is provided with a cross-bar b^4 or with pivots.

C is a hinged scoop which normally extends from the front cross-bar a' of the swinging cradle and serves to pick up an object from the track.

c c are the hangers for the scoop. These hangers suspend the scoop from the cross-bar b^4 of the swinging apron and are each provided with an extension c' which, in the normal position of the fender, as shown in Fig. 1, rest against the bottom of the car platform and serve to steady the scoop.

The hangers c c are joined by a front cross-bar c^5 upon which the scoop C swings. Each hanger of the scoop is provided with a wing c^2 and with an arm c^4 upon which is hung a roller c^3 which runs in the rails of the track and supports the fender when in its dropped position. (See Fig. 1.)

D are suitable catches or abutments carried upon the swinging cradle, preferably upon the front cross-bar thereof, which serve to hold the parts in their raised position, as shown in Fig. 2. These catches may be of various forms, but in the present instance are shown as simple lugs or projections made integral with such cross-bar. (See Fig. 6.)

The operation of my device is as follows: Supposing the parts to be in the position shown in Fig. 1; the cradle A is in its retracted or horizontal position, the swinging apron B is in its upward position, and the upward edge or front cross-bar of the swinging scoop C is in close proximity to the ground, and the rear edge of the scoop is in close proximity to the forward edge of the swinging apron. In this position the weight of the fender is partially supported by the rollers c^3 which rest upon the track. We will suppose some bulky object to be in the way of the car and the car to be in motion. As the car comes up to the object which is in the way, the scoop C will strike the object, will shove its forward end under the object, which object will roll up the inclined face of the scoop and will impinge against the forward edge of the swinging apron. The im-

pact of the object against the swinging apron
 will cause the lower or forward edge of this
 apron to swing backward into a vertical po-
 sition, and the body will fall into the cradle,
 5 and the momentum of the body will depress
 the rear portion of the cradle, causing the
 same to swing upon its hangers to lift the front
 portion, such action being facilitated by the
 pressure of the object against the swinging
 10 apron, which, being swung on its pivot b' ,
 causes the arms b^2 to bear against the hangers.
 Thus the cradle is tilted both by the impact
 of the body and by the weight of the body
 when it rests upon the cradle. As the apron
 15 B is swung backward, it serves to draw the
 pivoted scoop on to the cradle to lift the
 wheels c^3 from the track, and to bring the
 wings c^2 back into position to prevent the ob-
 ject from falling out of the cradle to one side
 20 or the other of the car. When the scoop has
 been fully drawn back by the swinging apron,
 the front cross-bar c^5 of the scoop frame ($c c$
 c^5) will drop over the catches or abutments D
 which will securely lock the parts in their new
 25 position. This position is shown in side view
 in Fig. 2 and in plan in Fig. 4. It will thus
 be quite obvious that bodies will be effect-
 ively removed from the path of the car, as the
 swinging scoop C hangs close enough to the
 30 track to be thrust under any ordinary object.

Now while I have specifically described one
 form of my invention, I would have it under-
 stood that I do not mean to thereby limit my-
 self to the form thus shown and described, as
 35 my device may be greatly varied without de-
 parting from the spirit of my invention.

What I claim, and desire to secure by Let-
 ters Patent, is—

1. In a life guard for cars, the combination
 40 of a swinging cradle adapted to be swung by
 the weight of the body, a swinging apron
 adapted to be swung by the impingement of
 the body thereon, the said apron co-operat-
 ing with the cradle to assist in swinging the
 same, and a scoop for guiding and conducting
 45 the body into the cradle, substantially as de-
 scribed.

2. In a life guard for cars, the combination
 of a swinging cradle adapted to be swung by
 the weight of the body, a swinging apron 50
 adapted to be swung by the impingement of
 the body thereon, the said apron being pro-
 vided with arms engaging with the supports
 of the cradle, whereby the movement of the
 apron will be utilized to assist in swinging the 55
 cradle, together with a swinging scoop as C
 adapted to guide and conduct the body into
 the cradle, substantially as described.

3. In a life guard for cars, the combination
 of a swinging cradle adapted to be swung by 60
 the weight of the body, a swinging apron
 adapted to be swung by the impingement of
 the body thereon, the said apron being pro-
 vided with arms engaging with the supports
 of the cradle, whereby the movement of the 65
 apron will be utilized to assist in swinging the
 cradle, with a swinging scoop as C adapted to
 guide and conduct the body into the cradle,
 together with means for locking the parts in
 the positions into which they are swung, sub- 70
 stantially as described.

4. In a life guard for cars, the combination
 of a swinging cradle adapted to be swung by
 the weight of the body, a swinging apron 75
 adapted to be swung by the impingement of
 the body thereon, a swinging scoop carried in
 advance of the cradle and connected to the
 swinging apron so as to move therewith, sub-
 stantially as described.

5. In a life guard for cars, the combination 80
 of a swinging cradle adapted to be swung by
 the weight of the body, a swinging apron
 adapted to be swung by the impingement of
 the body thereon, a swinging scoop carried in
 advance of the cradle and connected to the 85
 swinging apron so as to move therewith, to-
 gether with catches or abutments as D D car-
 ried upon the cradle and adapted to engage
 with the front cross-bar of the scoop frame,
 substantially as described.

ALBERT EDWARD WYATT.

Witnesses:

GEO. E. MORSE,
 HERMAN GUSTOW.