

(No Model.)

2 Sheets—Sheet 1.

E. PECKHAM.

ADJUSTABLE LIFE AND WHEEL GUARD.

No. 555,528.

Patented Mar. 3, 1896.



Witnesses:
W.E. Cooke
A.W. Field

Inventor
Edgar Peckham

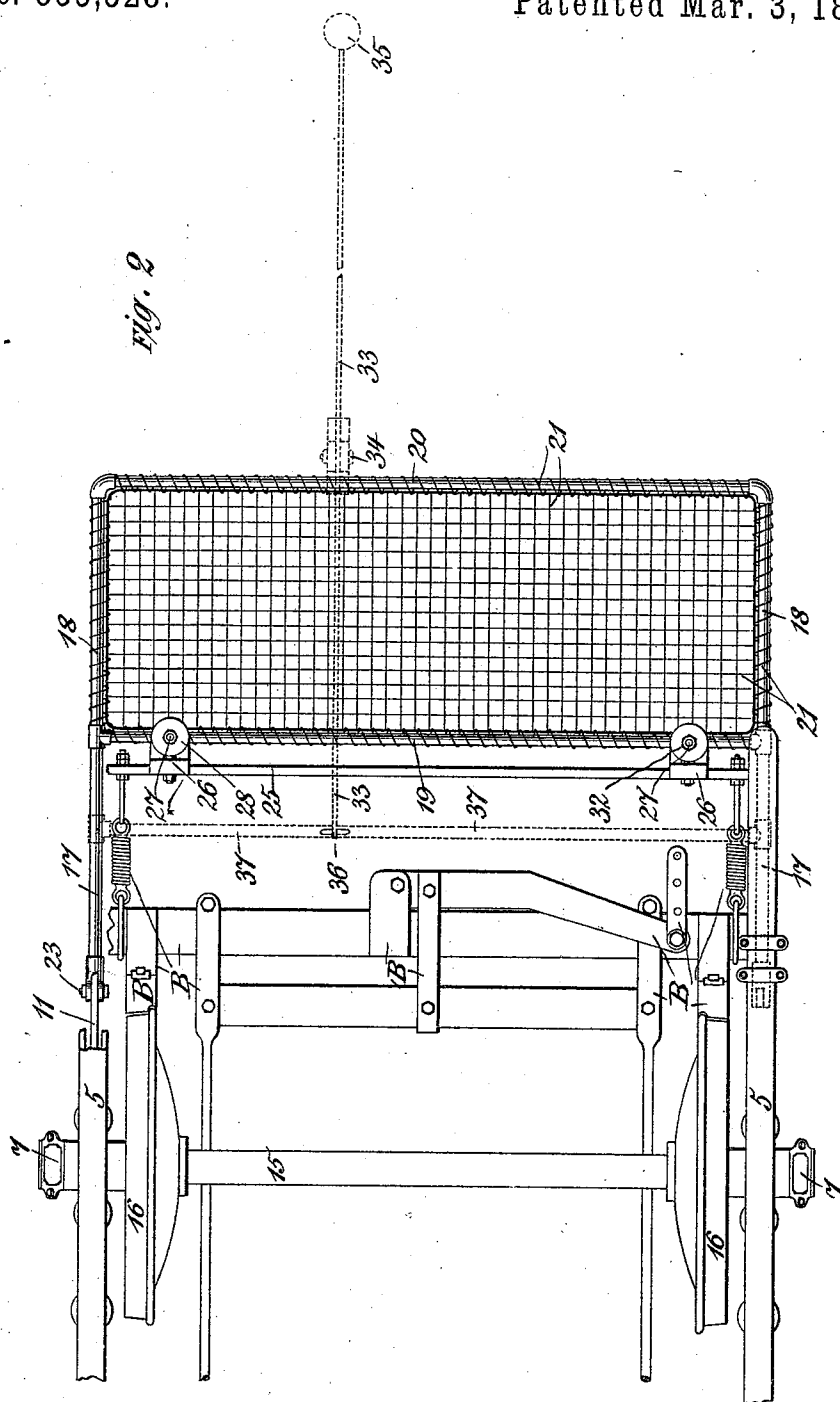
(No Model.)

2 Sheets—Sheet 2.

E. PECKHAM.
ADJUSTABLE LIFE AND WHEEL GUARD.

No. 555,528.

Patented Mar. 3, 1896.



Witnesses:
N. C. Cooke
A. W. Field

Inventor
Edgar Peckham

UNITED STATES PATENT OFFICE.

EDGAR PECKHAM, OF KINGSTON, NEW YORK.

ADJUSTABLE LIFE AND WHEEL GUARD.

SPECIFICATION forming part of Letters Patent No. 555,528, dated March 3, 1896.

Application filed December 24, 1894. Serial No. 532,901. (No model.)

To all whom it may concern:

Be it known that I, EDGAR PECKHAM, a citizen of the United States, and a resident of Kingston, in the county of Ulster and State of New York, have invented a certain new and useful Adjustable Life and Wheel Guard, of which the following is a specification.

My invention relates to guards or fenders to be employed at and in connection with the end portions of street-cars and similar vehicles, and particularly such as are propelled by endless cables or electricity, and are thus apt to acquire too great a momentum in their movement to permit the driver or motorman to stop the same promptly in case he should suddenly discover an obstruction in front of the car or a person should cross in the path of the car and in close proximity to the same, so as to endanger such person's life. Such guards or fenders are adapted to be operated to prevent obstruction of the car and injury to the persons.

The purpose of my invention is to so construct such a safety appliance or life-guard as to make it capable of readily and automatically accommodating itself to a desired elevation of its forward end above the track. Further purposes are to also make such appliance capable of being depressed by the driver or motorman from his position on the platform, to make the cushioned or elastic platform forming part of such device, and which is to pick up and retain large obstructions which may be met with and which is to pass over smaller ones, adjustable as far as its angle with the track-surface is concerned, and to also so locate and adjust the safety or fender appliance with reference to the car-body and its supporting truss-frames as to place the same entirely rearward from the front end of the car-platform, so as to guard against such elastic platform interfering with and tripping persons who might otherwise cross the track in safety. I accomplish these and other useful purposes by means of the construction hereinafter described and specified and more particularly set forth in the claims.

In the accompanying drawings, forming part of this specification, and wherein like numerals of reference indicate corresponding parts in both views, Figure 1 represents a

side elevation of my safety appliance or life-guard as attached to the end portion of a car, and Fig. 2 a ground plan of one end of the car and truck-frame with my improvements attached thereto. A lever mechanism with suitable foot-piece for operating the device by the foot of the driver or motorman is shown in dotted lines in both figures.

The numeral 3 indicates the body of the car, and 4 its front platform.

5 is a sill on which the body of the car rests. (Shown here to be constructed of a flat metallic bar.)

6 is the yoke resting on the axle-box 7.

8 and 9 are horizontal beams secured to the central part of the yoke.

10 is a horizontal beam attached to the lower end of the yoke and extending toward the central part of the car, and 11 a sloping or inclined truss-beam attached to the lower outer extremity of the yoke, and also to the outer end of beam 8.

11' is an elliptic spring, and 12 and 13 are spiral springs, all interposed between the upper car-sill and beams 8 and 9, respectively. Said spiral springs are provided with suitable stay or guide bolts, and the guide-bolt of spring 12 is extended downward through and underneath beam 8 and there provided with a suitable counter-spring 14.

15 is the wheel-axle supported in axle-boxes 7, and 16 16 are the wheels on said axle.

Parts indicated by B B in Fig. 2 are parts of a brake mechanism not further described herein, as not related to the subject of this invention.

The parts 3 to 16 inclusive being either of known construction, or particularly in their combinations described and claimed by me in other applications now pending before the Patent Office, I do not deem it necessary to describe the same more fully here.

The numerals 17 and 18 indicate longitudinal and 19 and 20 transverse bars, made preferably round and tubular, and joined together by suitable fittings so as to form a rigid frame.

Bars 18, 19 and 20 jointly form a rectangular parallelogram of a length corresponding substantially to the width of the car.

21 21 represent elastic metallic strips, or other suitable elastic material, stretched between said bars, so as to convert said paral-

lelogram into an elastic platform capable of receiving and supporting heavy and bulky articles that may be located in the path of the car and be thrown onto said platform.

22 is a forked angular attachment at the rear end of bar 17. The same is provided with a series of holes 23 capable of receiving a bolt 24, whereby said forked attachment is connected to truss-beam 11 and whereby the rear ends of the frame supporting the elastic platform may be raised and lowered with reference to the truck-frame.

The numeral 25 indicates a transverse beam forming part of or connected to the truck-frame. To said beam there are bolted T-shaped brackets 26, and through the horizontal members of such brackets vertical bolts 27 are allowed to play freely. The lower ends of said bolts are connected by suitable fittings with the frame carrying the elastic platform, such fittings being shown to be attached to transverse bar 19 near its outer ends.

28 28 are washers between which a spiral spring 29 is inserted, and 30 30 are washers for receiving the ends of a counter spiral spring 31. Said washers and springs are placed around bolt 27. The upper end of bolt 27 is screw-threaded and provided with a suitable nut 32, whereby desired tension may be imparted to said springs and the central part of the elastic-platform frame may be slightly raised and lowered. While the preferred slope of the elastic platform is, as shown in Fig. 1, approximately horizontal but slightly sloping downward and toward the end of the car, it will be seen that such slope may, as circumstances require, be materially modified by means of the adjusting devices near the central and near the rear end of the frame supporting the elastic platform. It will also be seen that in case a comparatively small obstruction, such as a stone, should have been placed on the track, the rounding forward end of the elastic platform will be apt to be guided over the same and the spring 29 and counter-spring 31 will permit said platform to rise and clear the obstacle, while a larger object, such as a child, will be tripped by such front end and thrown rearward upon said platform, where it may remain in comparative safety until the car can be stopped.

33 is a lever fulcrumed underneath the car-platform at 34 and connected with a spring-seated foot-pin 35 near the front end of the car-platform, and 36 a vertical bar having its upper end hinged to the rear end of said lever and its lower end to a transverse bar 37, the outer ends of which are jointed to bars 17 between the central and the rear supports of the frame carrying the elastic platform.

It will readily be seen that if the driver or motorman should discover an object on the

track which he desires the fender to clear, he can by a slight pressure of his foot upon the foot-pin elevate said fender accordingly.

My safety appliances can, of course, be applied to any suitable form of car and car-truck, and the details of my device may be modified in accordance with the conditions so presented and without departing from the spirit of my invention.

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

1. In an adjustable life and wheel guard, the combination with an elastic platform provided with rearwardly-extended horizontal bars, as 17, having at their ends attachments for connecting said bars to a truck-frame to permit of vertical adjustment of the ends of said bars, of a transverse beam, as 25, provided with brackets near its ends, vertical bolts playing through said brackets and having their lower ends connected to transverse bar 19 of the frame of the elastic platform, spiral springs surrounding said bolts and means for exerting tension on said springs, substantially as set forth.

2. The combination with the truss-beams 11 of the truck, of an elastic platform provided with horizontally-extended rear bars, as 17, forked angular attachments at the ends of said bars provided with holes whereby the same may be adjustably connected to said truss-beams, brackets for receiving yielding and adjustable supporting devices for the central part of the elastic platform, a transverse bar, as 37, connected to said horizontal bars 17 of the elastic platform at the rear of the yield-supports of said platform, and lever mechanism connected to the transverse bar 37 and extending to the car-platform, substantially as set forth.

3. The combination with the truck-frame and the transverse beam 25 connected to the same and provided with T-shaped brackets 26, of an elastic platform having rearwardly-extending horizontal bars which are adjustably connected at their ends to the truck-frame, vertical bolts playing through the horizontal members of said brackets with their lower ends connected by suitable fittings to the elastic platform, spiral springs surrounding said bolts and means for adjusting the tension of said springs, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 14th day of December, A. D. 1894.

EDGAR PECKHAM.

Witnesses:

J. E. M. BOWEN,
M. C. PINCKNEY.