(No Model.)

B. TRANTER.

CAR FENDER.

No. 518,126. Patented Apr. 10, 1894.

Fig 1

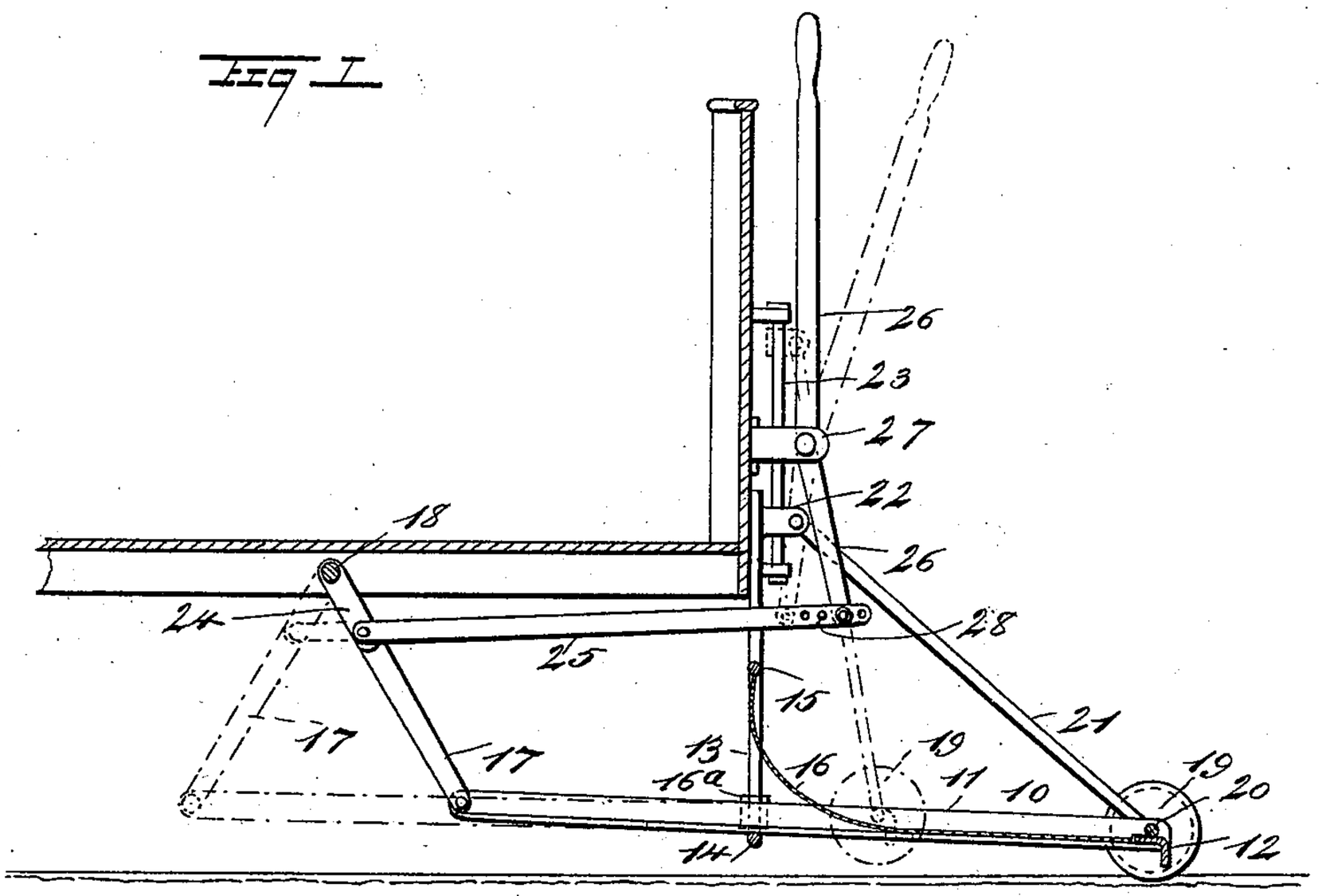
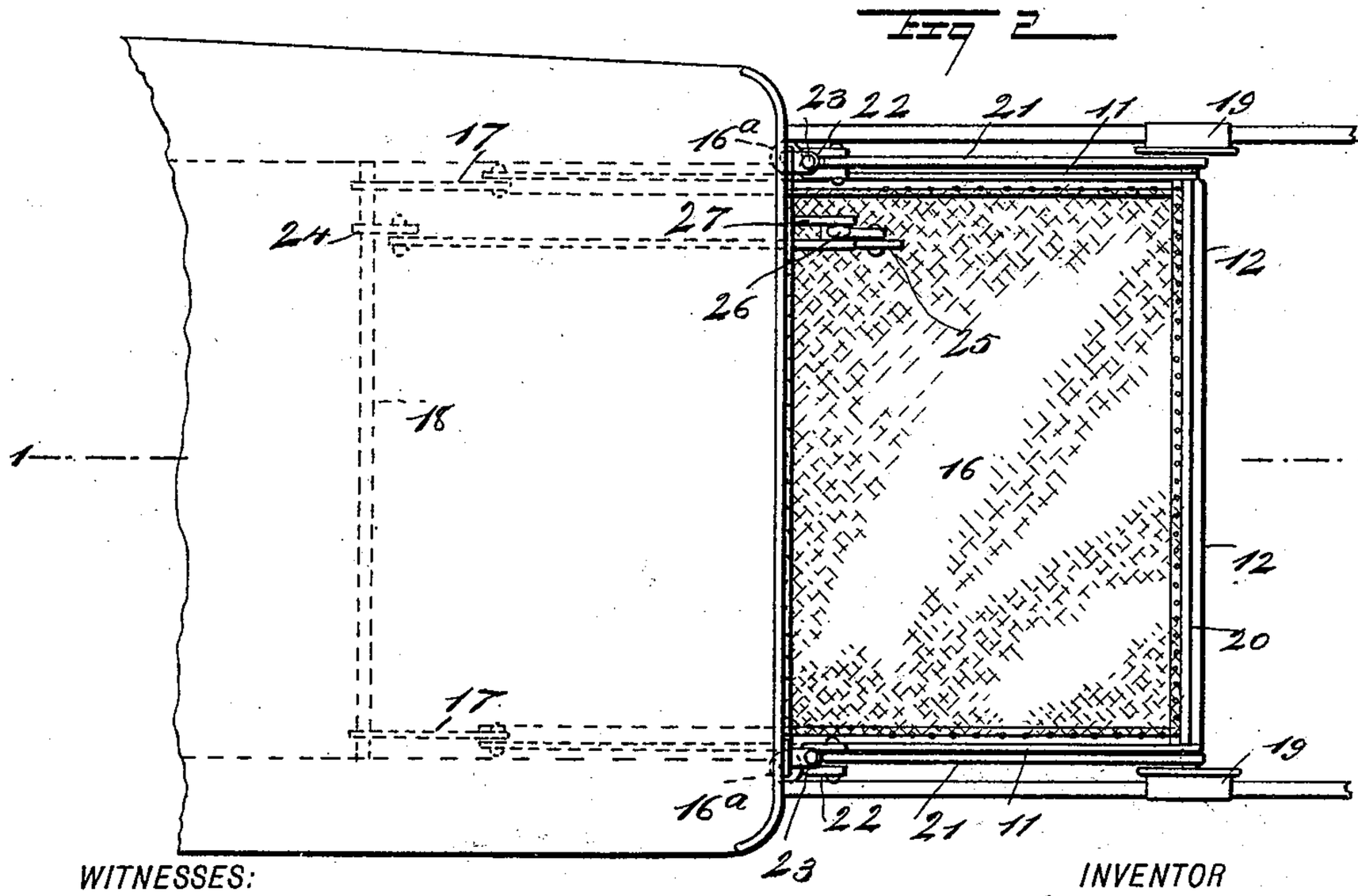


Fig 2



WITNESSES:

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BENJAMIN TRANTER, OF BROOKLYN, NEW YORK, ASSIGNOR OF ONE-HALF TO WILLIAM BURTON, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 518,126, dated April 10, 1894.

Application filed December 13, 1893. Serial No. 493,583. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN TRANTER, of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Car-Fender, of which the following is a full, clear, and exact description.

My invention is an improvement in the class of fenders, which are used at the front ends of cars, to prevent persons being run over by the latter.

The construction and operation of the invention are as hereinafter described.

To these ends, my invention consists of certain features of construction and combinations of parts, which will be hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures of reference indicate corresponding parts in both the views.

Figure 1 is a longitudinal section on the line 1—1 of Fig. 2, of my improved apparatus as applied to a car; and Fig. 2 is a plan view of the same.

The fender 10 is provided with a suitable frame which is preferably of a rectangular shape and should be made of angle iron, the sides 11 being parallel with each other and the front end 12 being twisted so that the flange of the iron stands below the body portion of the fender, as shown clearly in Fig. 1. The frame of the fender is adapted to move longitudinally through a guide frame 13 which is of a general U-shape, being fastened to the end of the car so as to hang beneath it to a point near the track, the lower end 14 of the frame extending transversely, as shown in Fig. 1, and serving as a support for the fender, while the vertical sides of the frame act as guides to prevent the fender from moving too much laterally. The guide frame is braced by a cross bar 15, which is arranged a little below the car floor, and to this is secured the rear end of the netting 16 which forms the body of the fender, the other edges of the netting being secured to the frame of the fender, as illustrated in Fig. 2.

To enable the fender to be moved longitudinally without too much friction, rollers 16ª are arranged on the sides of the guide frame, and against these the sides 11 of the fender frame run. The rear ends of the side pieces 11 of the fender frame are pivoted to swinging arms or hangers 17, which are carried on a transverse shaft 18 beneath the car floor, as shown in Fig. 1, but the arms may be pivoted in any convenient manner and hung to any suitable support. The front end of the fender is supported on wheels or rollers 19 which are adapted to run on the rails of the track, as illustrated in Fig. 2, and they are journaled on the shaft 20 extending across the fender end. The front end of the fender is braced by diagonally-arranged braces 21, which extend from opposite sides of the fender, upward, to the end of the car, and at their upper ends the braces are pivoted in slide boxes 22 which are held to slide and turn on vertical rods 23, these being arranged on opposite sides of the car end, as shown in the drawings, and this arrangement permits the braces to slide upward when the fender is thrown rearwardly, as described presently, and it also permits the fender to have the necessary lateral movement. The fender is moved by a lever mechanism to be described below, and to this end the shaft 18 is provided with a crank 24 to which is secured a pitman 25, although this may be attached to one of the arms or hangers 17 if desired. The pitman extends forward beneath the car and is, at its front end, pivoted to the lower end of a bent lever 26 which is fulcrumed in lugs 27 on the front end of the car and extends upward to a point where it can be conveniently grasped by a person standing upon the car platform. The front end of the pitman is provided with several holes 28 so that it may be easily adjusted in relation to the lever 26.

When the fender is not in use as a safety fender, the upper end of the lever 26 is thrown forward into the position shown by dotted lines in Fig. 1, and this throws back the pitman 25, tilts the shaft 18, and swings back the hangers or arms 17, thus drawing the fender beneath the car, as shown by dotted lines in Fig. 1; and the swinging backward of the fender causes the front portion to be drawn up on the guide frame 13 and raised slightly, so that the rollers or wheels 19 are lifted off the track. In this position the fender is usually carried, and if a person is likely to be run down, the operator pulls the upper end of the lever 26 rearward, thus throwing for-

ward the car fender into the position shown in Fig. 1, the rollers 19 running on the track and steadying the fender, and if a person is struck by the front edge of the fender, he falls upon the netting 16 and is saved from injury.

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

1. The combination, with a car, of a movable fender carrying frame arranged horizontally at the front of the same, swinging hangers which pivotally connect its rear end with the bottom of the car, a pitman pivoted to said hanger, and a lever pivoted vertically at the front of the car and connected with said pitman, as shown and described to operate as specified.

2. The combination, with a car, of a fender arranged beneath the car and having its rear end pivotally connected therewith, rollers on the front end of the fender, braces pivoted to the front end of the fender and adapted to slide vertically on the car, and a lever mechanism for moving the fender forward and backward, substantially as described.

3. The combination, with the car and the guide frame hung beneath it, of the fender held to move longitudinally in the guide frame and provided on the front end with trucks, hangers suspended beneath the car and pivoted to the rear end of the fender, braces pivoted to the front end of the fender and arranged to slide vertically on the end of the car, a forwardly-extending pitman operatively connected with the hangers, and a lever fulcrumed on the end of the car and connected with the pitman, substantially as described.

BENJAMIN TRANTER.

Witnesses:
WILLIAM WICKENHAVER,
WILLIAM BURTON.