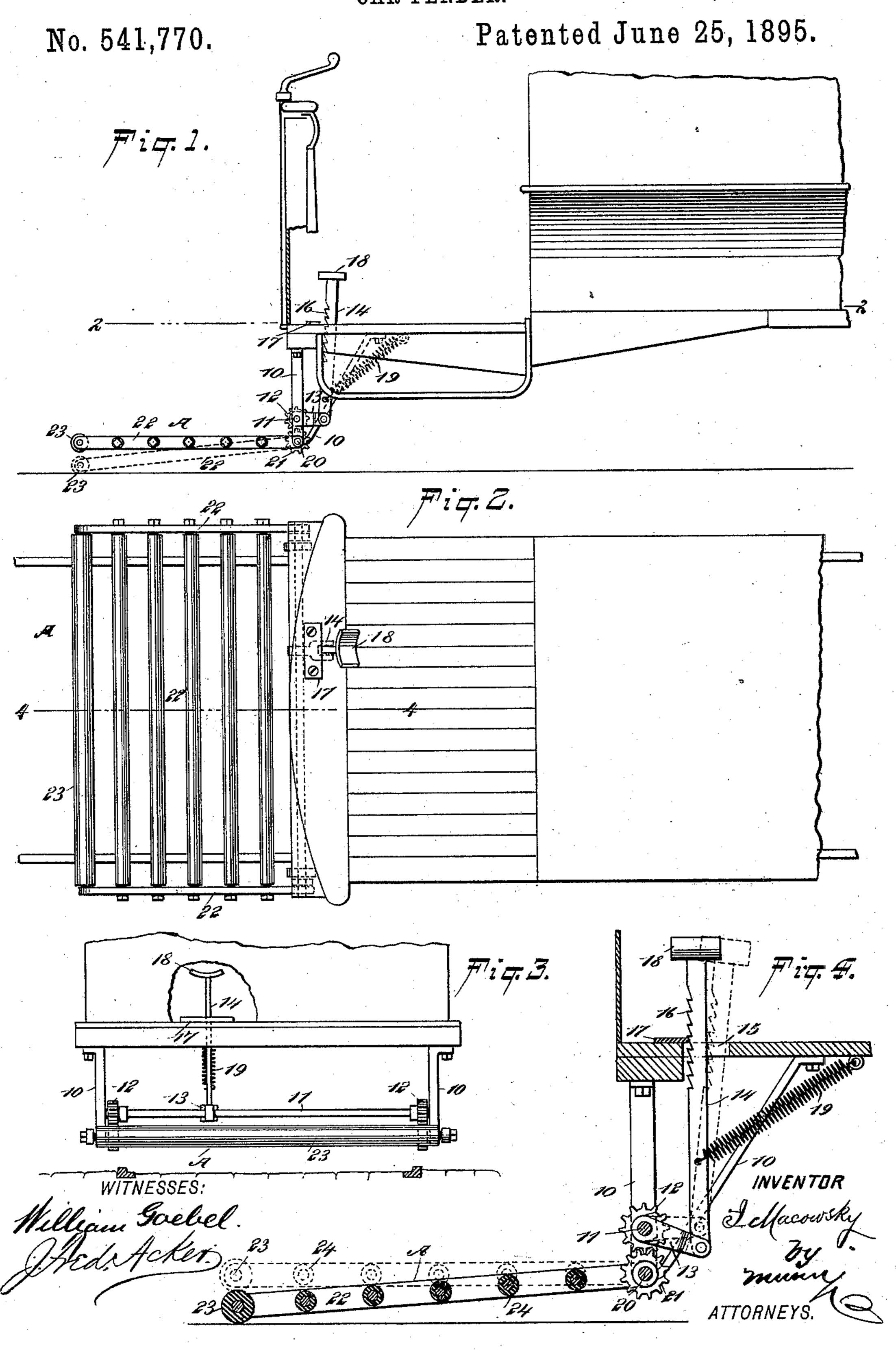
I. MACOWSKY. CAR FENDER.



United States Patent Office.

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CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 541,770, dated June 25, 1895.

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To all whom it may concern:

Be it known that I, Isaac Macowsky, of New York city, in the county and State of New York, have invented a new and Improved 5 Car-Fender, of which the following is a full,

clear, and exact description.

My invention relates to an improvement in car fenders, and it has for its object to provide a fender of simple and durable construc-10 tion, capable of application to any form of car without interfering with the brake mechanism or mechanism for controlling the cable grip, or one electrically operating the car.

Another object of the invention is to pro-15 vide means whereby the fender will normally stand in a horizontal position a predetermined distance above the ground, and whereby it may be drawn downward to a contact with the ground at its free end, this result being 20 accomplished by the motorman or gripman through the medium of a hand or foot lever located conveniently on the platform, and whereby upon the release of the lever the fender will be restored to its normal horizon-25 tal position.

The invention consists in the novel construction and combination of the several parts, as will be hereinafter fully set forth,

and pointed out in the claims.

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

Figure 1 is a side elevation of a portion of a car having the improved fender applied thereto. Fig. 2 is a plan view of the car at one end and of the fender, the body of the car being broken away on the line 22 of Fig. 40 1. Fig. 3 is a front elevation of the fender,

and Fig. 4 is a vertical section taken sub-

stantially on the line 4 4 of Fig. 2.

In carrying out the invention a pedestal or bracket 10, shown in the drawings, of angu-45 lar construction is secured to the bottom of the car at each side of the front portion of the platform thereof. In the upper portion of the forward limb of the said pedestals a rock shaft 11 is journaled. A gear 12 is se-50 cured upon said shaft 11 adjacent to the inner face of each pedestal, and at a predetermined point between these gears a crank arm I

13 is secured upon the rock shaft. This crank arm extends in a rearwardly direction and is pivotally connected at its rear end with 55 the lower portion of the lever 14. This lever is made to extend upward through an opening 15 in the platform of the car and is preferably provided with teeth 16 upon its forward face, adapted for engagement with a 60 plate 17 secured to the platform and extending over the forward edge of the opening, as shown in Fig. 4. The lever 14 is preferably operated by foot power, being provided to that end with a curved shoe 18 at its outer 65 extremity, but it may be operated by hand if desired.

A spring 19 is attached to the lower portion of the lever 14 and to the car body at the rear of the lever, the spring serving to hold the 70 lever out of engagement with the locking plate 17 and so that the crank arm 13 will be

normally in a horizontal position.

A second shaft 20 is journaled in the lower portions of the pedestals, and this shaft is 75 likewise provided with two gears 21 meshing with the gears 12 on the rock shaft 11. The shaft 20 serves as a support for the fender A. This fender may be of any desired shape, but it is preferably made rectangular, com- 80 prising two side bars 22, which at their rear ends are secured to the extremities of the lower shaft 20, which may be termed the fender shaft; and the construction of the fender is preferably completed by journaling in the 85 forward ends of the side bars 22 a large roller 23, a series of smaller rollers 24 being journaled in the said side pieces back of the forward roller 23; or the rollers 24 may be omitted and a bed of woven wire or other material 90 substituted.

The strength of the spring 19 is such that while holding the crank arm 13 in a horizontal position it will through the means of the gearing above described normally maintain 95 the fender in a like position, as shown in dot-

ted lines in Fig. 4.

When the fender is to be used the motorman or gripman will simply press downward upon the lever 14, thereby exerting tension roo upon the spring 19 and depressing the crank arm 13. By so doing the rock shaft will be rotated in a rearwardly direction, and through the medium of the gears 21 and 12 movement

in an opposite direction will be instantly communicated to the shaft 20, and the free end of the fender will be depressed until the forward roller 23 will engage with the rails of the track, as is shown in dotted lines in Fig. 4 and in dotted lines in Fig. 1. After pressing the lever 14 downward the operator will carry the toothed portion of the lever in engagement with the lock plate 17 and the fender will be held in its depressed position; and upon releasing the lever from the said plate the spring will act to restore the lever to its normal position, bringing the fender to a corresponding position.

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

Patent—

1. In a car fender, pedestals adapted to be secured to a car, shafts held to turn in the 20 said pedestals, provided with meshing gears, a fender secured to one of the shafts, a lever attached to the other shaft, and a spring serving to hold the shafts in a manner to support the fender in a normal position, as and for the purpose specified.

2. In a car fender, pedestals adapted for

attachment to a car, shafts journaled in the said pedestals, gears connecting the shafts, a fender secured to one shaft, a lever connected with the other shaft, a spring holding 30 the fender in its normal position, and means substantially as described for locking the lever, as and for the purpose set forth

3. In a car fender, the combination, of pedestals adapted for attachment to the bottom 35 of a car, shafts journaled in the said pedestals, gears connecting the shafts a fender secured to one shaft, a crank arm attached to the other shaft, an operating lever secured to the said crank arm and adapted to extend 40 upward through the platform of the car, means for locking the lever in position, and a spring attached to a support at the rear of the lever and to the said lever, and adapted to support the fender in its normal position 45 and also to hold the lever out of engagement with the locking device, as and for the purpose specified.

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Witnesses:

C. SEDGWICK, F. W. HANAFORD.