

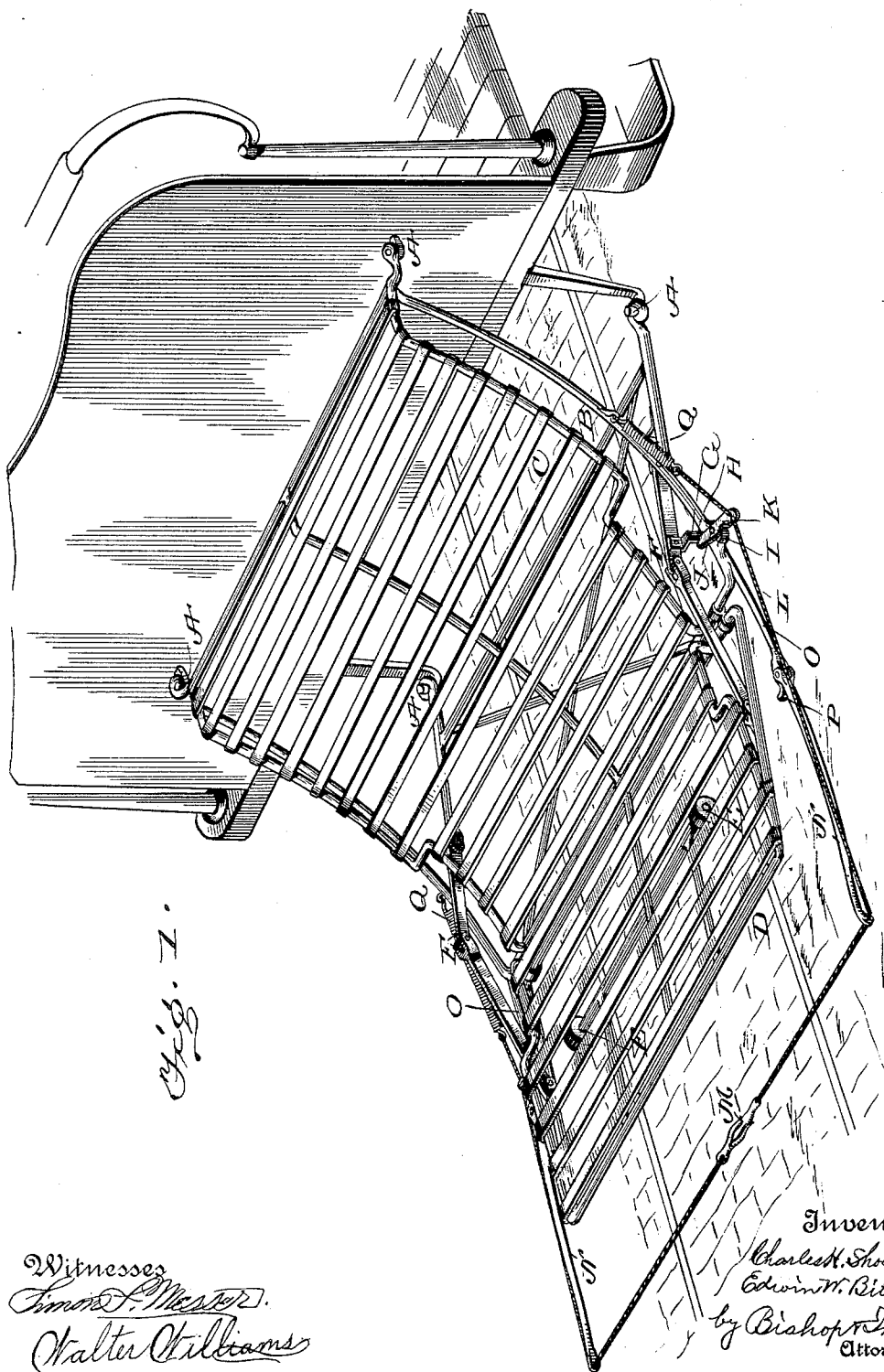
(No Model.)

2 Sheets—Sheet 1.

C. H. SHOEMAKER & E. W. BITTNER.
CAR FENDER.

No. 581,624.

Patented Apr. 27, 1897.



Witnesses
Simon F. Master
Walter Williams

Inventors
Charles H. Shoemaker
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Attorneys

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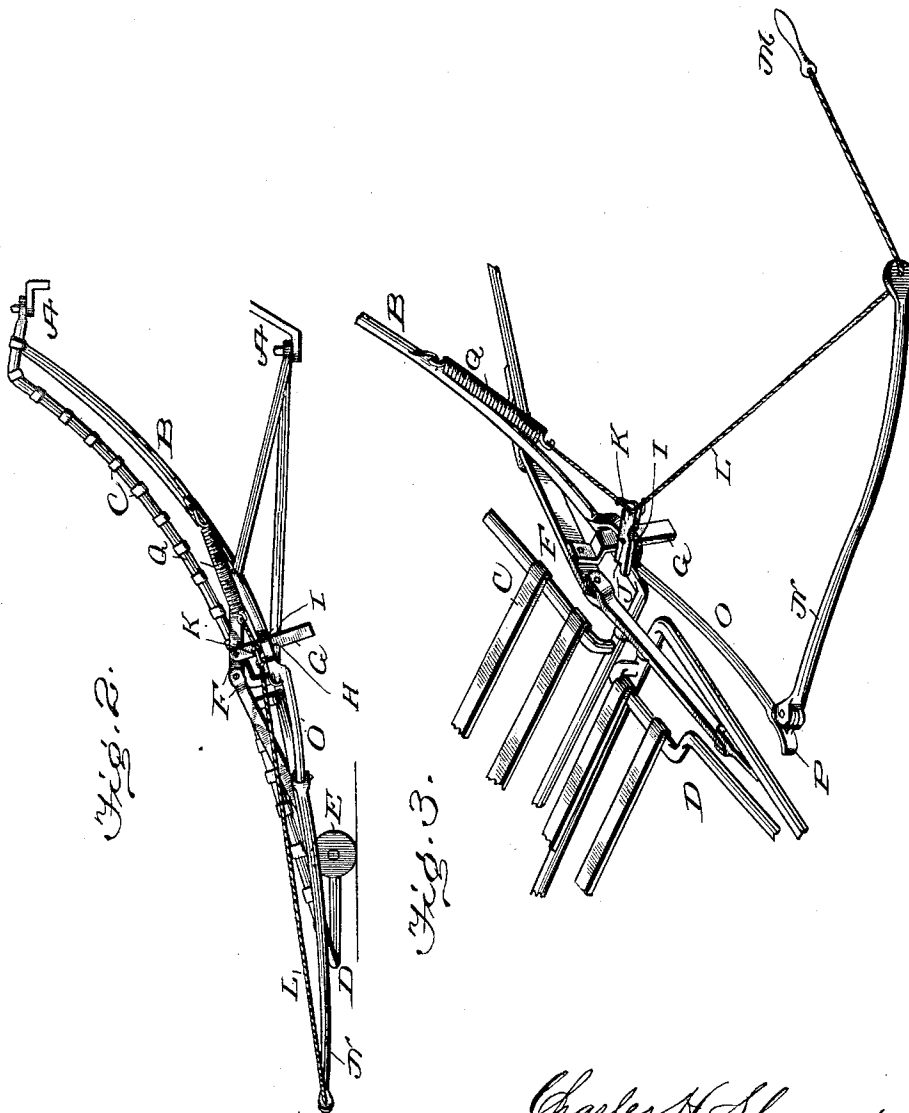
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UNITED STATES PATENT OFFICE.

CHARLES H. SHOEMAKER AND EDWIN W. BITTNER, OF LOCK HAVEN,
PENNSYLVANIA.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 581,624, dated April 27, 1897.

Application filed February 16, 1897. Serial No. 623,606. (No model.)

To all whom it may concern:

Be it known that we, CHARLES H. SHOEMAKER and EDWIN W. BITTNER, citizens of the United States, residing at Lock Haven, in the county of Clinton and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders; and we do 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 make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

Our invention relates to improvements in car-fenders; and it consists in certain novel features hereinafter described and claimed.

In the annexed drawings, which fully illustrate our invention, Figure 1 is a perspective view of our improved fender in operative position. Fig. 2 is a side elevation showing the scoop or drop in its lowered position, and Fig. 3 is a detail perspective view.

In carrying out our invention we provide on the dashboard and the front end of the car truck or platform hooks or arms A, on which we suspend the supporting-frame B. This frame consists of suitably-braced side arms and a screen C, secured upon the same and extending downward from the upper rear end to the lower front end thereof. To the front end of this frame we hinge the drop or scoop D, having the rollers E on its bottom, so that it may move readily over the ground when in operation, and having a slatted or otherwise screened upper portion. The drop is connected with the supporting-frame by links F, having their inner ends pivoted together and their outer ends pivoted, respectively, to the side bars of the drop and the supporting-frame, as clearly shown. Depending from one (or both, if preferred) of the inner links is a pivoted catch G, having a notch or shoulder H on its front edge and having its lower end playing in and guided by an eye or guide I on the lower side bar of the supporting-frame. This guide I has a stud or pin J on its upper side on which is pivoted a trigger K, having its inner end normally in engagement with the notch or should-

der in the catch, so as to hold the same normally raised, and consequently maintain the drop or scoop normally in an elevated position. The trip or trigger is held in engagement with the catch by a cable L, which extends out around the front end of the drop or scoop, where it is detachably joined to the end of a similar cable coming from the opposite side of the fender. The ends of the cable are joined by a spring-clasp M, which will permit them to readily separate when struck by an object in the path of the fender. The tension necessary to keep the cables taut and thereby maintain the trigger in engagement with the catch is supplied by tension-arms N, which are pivoted to the ends of arms O, projecting from the front edge of the supporting-frame. Springs P, secured to the arms O, bear against the inner sides of the tension-arms and tend to force them outward, so as to maintain the proper tension on the cables, the clasp, and the trigger. Springs Q, secured to the supporting-frame in rear of the trigger, have their front ends secured to the cables and the trigger, so that when the clasp is opened the trigger will be immediately released and the drop or scoop permitted to fall.

The operation of the fender will, it is thought, be readily understood. The car runs over the track with the drop normally elevated. When the cable strikes a person or other obstruction, the increased tension on the cable causes the clasp to open, when the tension-arms will spring outward and throw the cables off the track, so that they will not be damaged by the fender or any part of the same, while the springs Q at once release the trigger and permit the scoop to fall, so that as the car continues its onward movement the person or object will be picked up by the same. When the momentum of the car has been overcome, the object is removed and the fender again set in its normal position.

The device is extremely simple in its construction and operates automatically and efficiently.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

1. In a car-fender, the combination with

the supporting-frame, of a scoop hinged thereto, a trigger normally holding the scoop elevated, a spring secured to the supporting-frame and the trigger to release the same, 5 and a cable attached to said trigger and holding the same normally against said spring.

2. In a car-fender, the combination with the supporting-frame, of a scoop hinged thereto, a trigger holding the scoop normally elevated, a spring adapted to release the trigger, cables extending around the scoop and secured to the trigger and having their front ends detachably connected, and tension-arms pivotally mounted on the supporting-frame 15 and bearing on the cables.

3. In a car-fender, the combination with the supporting-frame, of a scoop hinged thereto, links pivoted together and having their

outer ends pivoted respectively to the frame and the scoop, a catch depending from the inner link and playing in a guide on the frame, a trigger pivoted on the frame and engaging the catch, a spring secured to the frame and connected with the trigger, tension-arms pivotally mounted on the frame, springs secured 25 on the frame and bearing against the said arms, and cables running from the trigger over the ends of the tension-arms and detachably connected in front of the scoop.

In testimony whereof we affix our signatures in presence of two witnesses. 30

CHARLES H. SHOEMAKER.

EDWIN W. BITTNER.

Witnesses:

DAVID L. WILSON,

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