

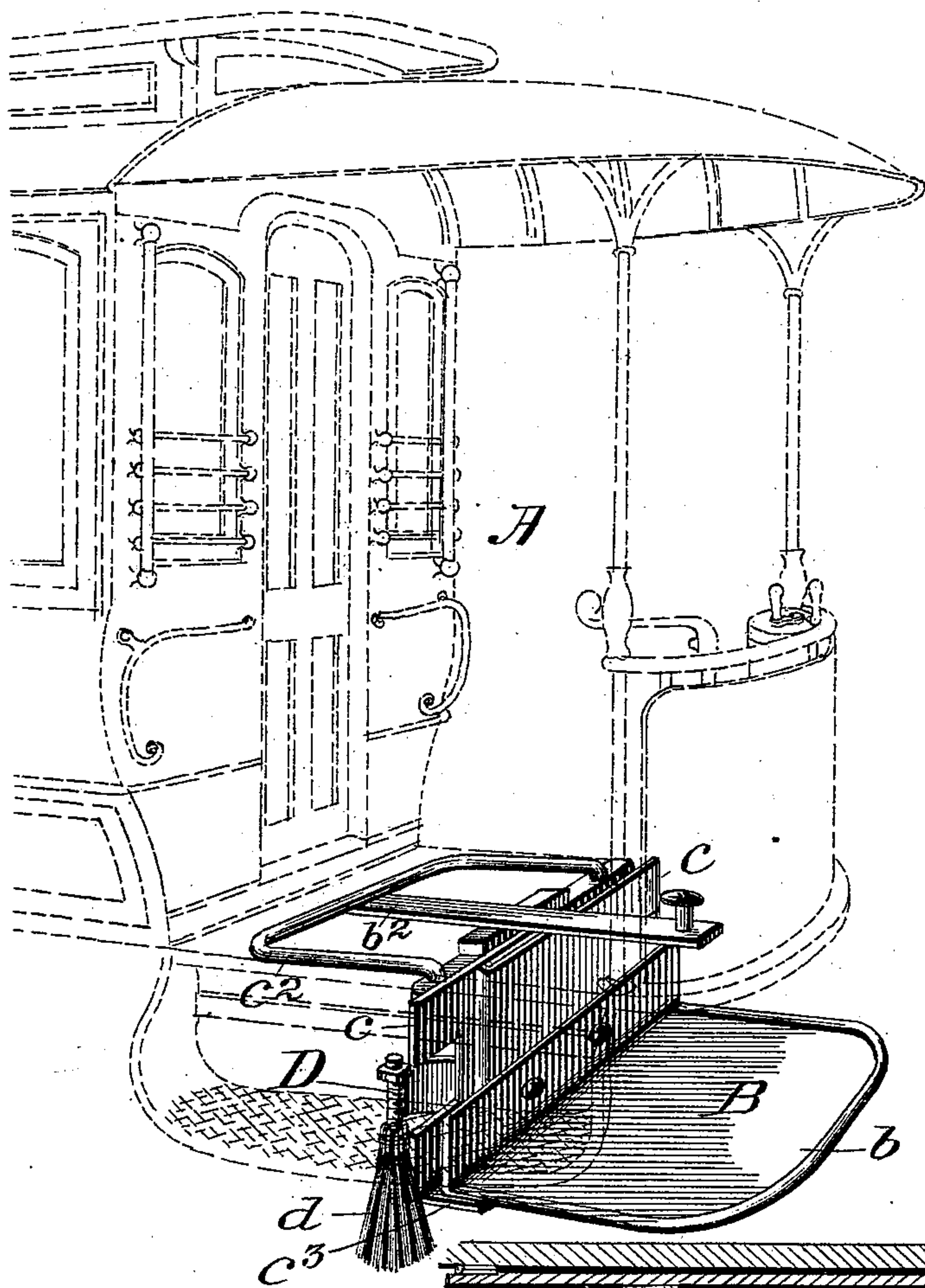
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2 Sheets—Sheet 1.

C. A. SMITH.  
CAR FENDER AND SNOW CLEANER.

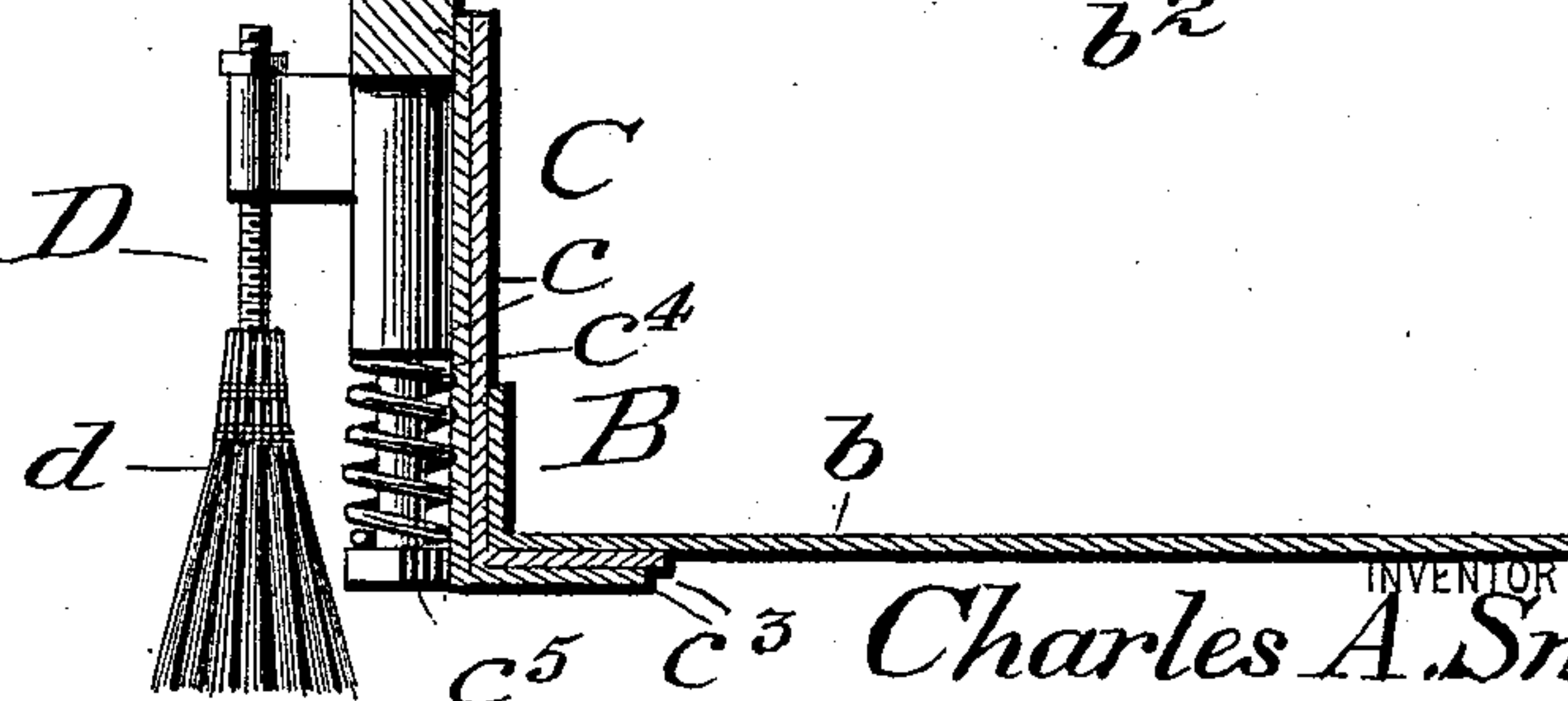
No. 541,577.

Patented June 25, 1895.



*Fig. 1.*

*Fig. 2.*



WITNESSES:

*W. Hoyer*

*J. Minster*

INVENTOR

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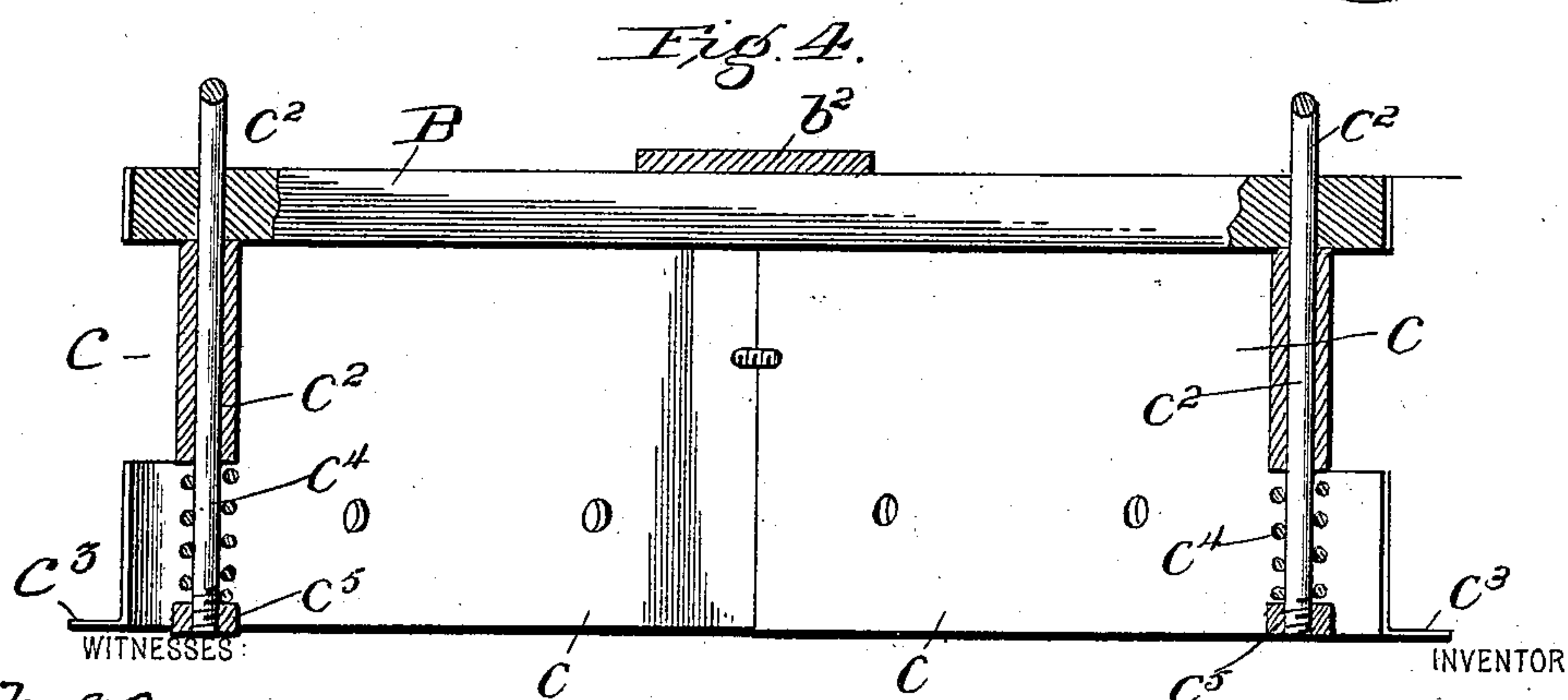
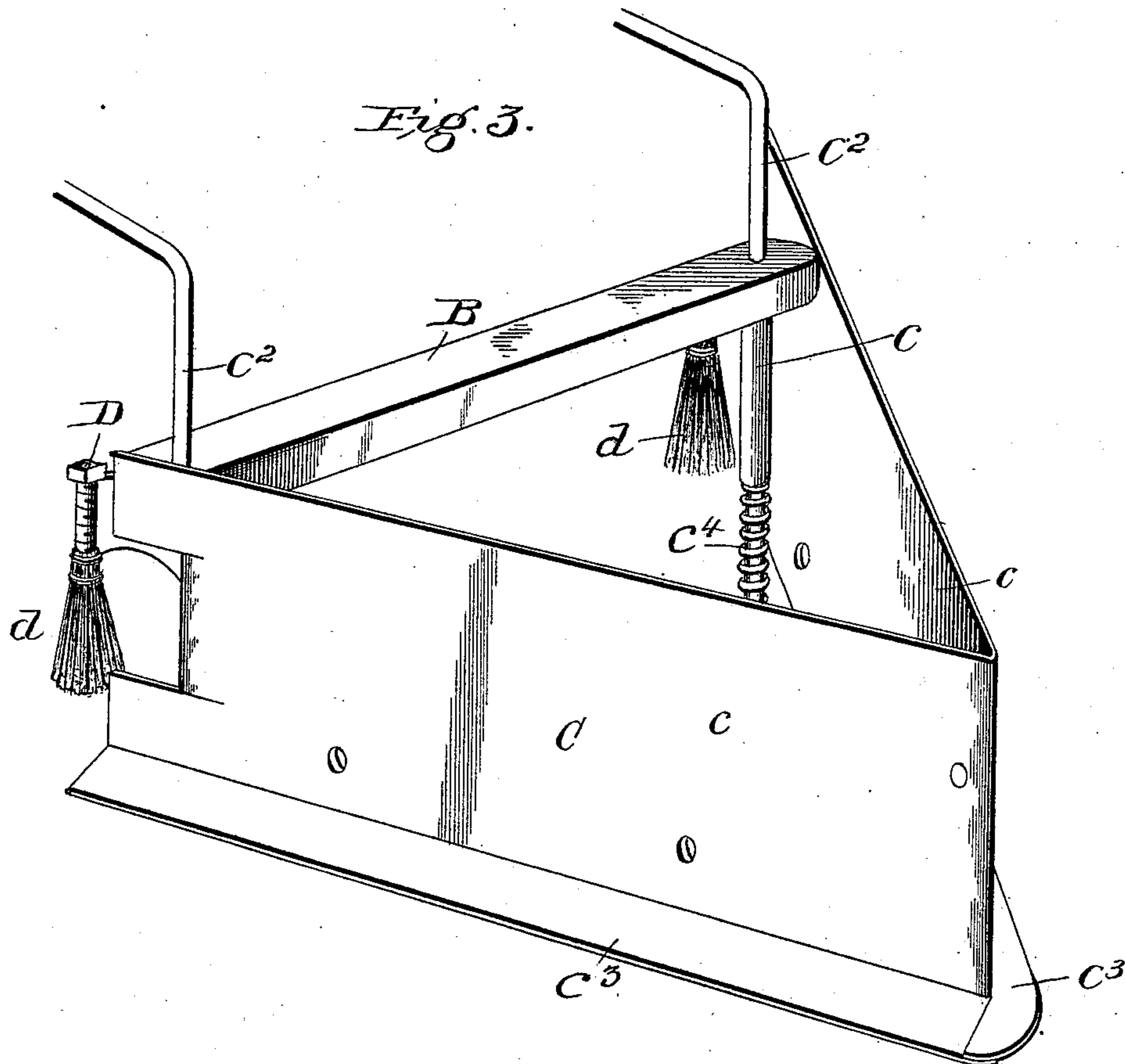
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# UNITED STATES PATENT OFFICE.

CHARLES A. SMITH, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO BENJAMIN W. GRIST AND WM. K. SCHODERER, OF SAME PLACE.

## CAR-FENDER AND SNOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 541,577, dated June 25, 1895.

Application filed November 21, 1894. Serial No. 529,491. (No model.)

*To all whom it may concern:*

Be it known that I, CHARLES A. SMITH, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders and Snow-Cleaners, of which the following is a specification.

The invention relates to a combined car fender, snow plow and track cleaner.

The object is to produce a device adapted to serve ordinarily as a wheel guard and fender in safely removing obstructions, such as man or beast from the track, and which, when properly adjusted may be used as a snow plow and track cleaner.

In the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in the several views, Figure 1 is a view in perspective of one embodiment of the invention applied, showing it adjusted to serve as a fender. Fig. 2 is a longitudinal section of the same. Fig. 3 is a view in perspective of the invention, showing it adjusted to serve as a snow-plow and track-cleaner. Fig. 4 is a cross-sectional view taken through the cross-beam and supporting-springs.

In the drawings, A, designates a portion of a car such as is now in common use.

B, designates the fender, which in the present embodiment, comprises a suitable supporting frame and a shelf-like extension *b*, which in itself constitutes the fender proper. This shelf is sustained at a suitable height above the track by being removably supported upon the flanges of the overlapping ends of vertically disposed plates, which latter are mounted upon the supporting frame so as to yield vertically against the action of springs, upon pressure being applied to a hinged foot lever *b*<sup>3</sup>, whereby the shelf-like fender moving therewith may be depressed, when desired, so as to just clear the track and thereby insure the safe removal of obstructions and particularly man or beast by picking up and carrying the same without inflicting injury. When used as a fender, the plates are swung around until they lie parallel with their ends overlapping and in this position serve as a wheel

guard, forming a wall or backing and thereby preventing a body picked up by the horizontally extended shelf portion, from passing beneath the wheels.

C, designates a snow plow and track cleaner, which comprises two members *c, c*, consisting respectively of a vertically disposed plate, pivotally mounted to swing about a standard *c*<sup>2</sup>, as a center and having the lower edge thereof turned outward or flanged at *c*<sup>3</sup>, to serve as a support for the fender as above described, said fender being held in position by bolts or catches of any of the well known forms. Encircling each of these standards near its lower ends, is a spiral spring *c*<sup>4</sup>, by which the members *c, c*, are yieldingly seated at a determined distance above the track; the tension of these springs being readily varied by running the nuts *c*<sup>5</sup>, up or down upon the threaded extremities of the standards, as is clearly shown in Fig. 4.

In adjusting the device to serve as a snow plow, the shelf-like extension is removed and the plates are swung outward forming a V—or until their adjacent ends meet, as shown in Fig. 3—when they are secured. To avoid sharp edges at the joint, the end of one of the plates is grooved to receive the end of the other plate and suitably rounded, or it may be bent around as illustrated.

D, designates the rail cleaners, which are here illustrated as brooms *d, d*, supported upon bent out portions of the plates *c, c*, so as to stand vertically above and in contact with the rails of the track, when the device is used as a snow plow. Heretofore in sweeping the tracks, snow and ice became hard packed in the grooves of the rails, and often resulted in the car running off the track, but by means of the brooms, these grooves will be kept free and clear of all such accumulations.

It is obvious that with this construction, a desirable fender will be formed, which will, at all times, be under the control of the operator's foot, thereby leaving his hands free to attend to the brake and other mechanism forming the motive part of the car, which is very advantageous, inasmuch as it allows the operator to devote both hands to the braking of the car.



Among the many advantages may be mentioned, the ready adaptation of the device to serve either as a fender and wheel guard or snow plow and track cleaner; its simplicity  
5 of construction and efficiency in operation, together with its low cost of manufacture.

Having thus described my invention, what I claim as new is—

1. A car provided with depending supports,  
10 two spring mounted plates pivoted upon the supports in a manner to be swung forward at an angle to each other and secured, and means for depressing the plates, for the purpose described.

15 2. A device of the class described, comprising supports depending from the body of a car, vertically disposed plates adjustably pivoted on the frame in a manner to be swung forward at an angle to each other and secured  
20 at their adjacent ends, springs by which the plates are normally held clear of the track, a cross-beam loosely mounted on the supports, and a lever engaging the cross beam and having at its forward end a foot piece or depressor  
25 extending upward through the opening formed in the car platform, for the purpose described.

3. The combination with the car provided with depending supports, of flanged plates  
30 pivotally mounted upon the supports and being adapted to fold against the standards, means for raising and lowering the plates, and a removably secured shelf-like extension, for the purpose described.

4. The combination with a car provided 35 with depending supports, of two vertically disposed spring mounted plates pivoted upon the supports and adapted to fold against the supports, a shelf-like extension removably secured to the plates, and means for depressing 40 the plates and the attached extension, for the purpose described.

5. The combination with a car, having attached depending supports, of two vertically disposed plates pivotally mounted on and 45 adapted to fold against the standards, an angular shelf-like extension removably secured to the plates, springs for retaining the vertical plates and angular extension normally elevated, a cross-beam mounted on the stand- 50 ards, and a lever hinged to the body of the car and resting on the cross beam and having at its forward end a foot-piece extending upwardly through an opening formed in the car platform, as described. 55

6. The combination with the car provided with depending supports, of spring mounted vertically disposed plates pivoted upon the supports in a manner to be swung forward at an angle to each other and secured, and means 60 for depressing the plates and the attached rail cleaners, for the purpose described.

In testimony whereof I have affixed my signature in the presence of two witnesses.

CHARLES A. SMITH.

Witnesses:

W. H. PUMPHREY,  
H. G. SEITZ.