No. 675,523.

Patented June 4, 1901.

G. A. PARMENTER.

STREET CAR FENDER.

(Application filed Aug. 22, 1900.)

(No Model.)

Fig. 1.

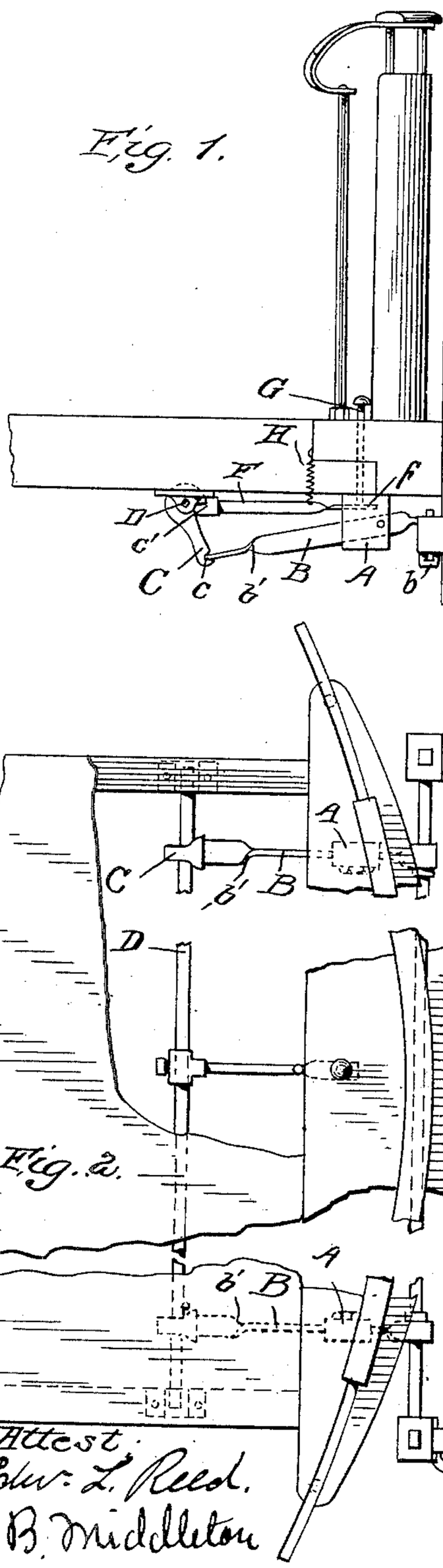
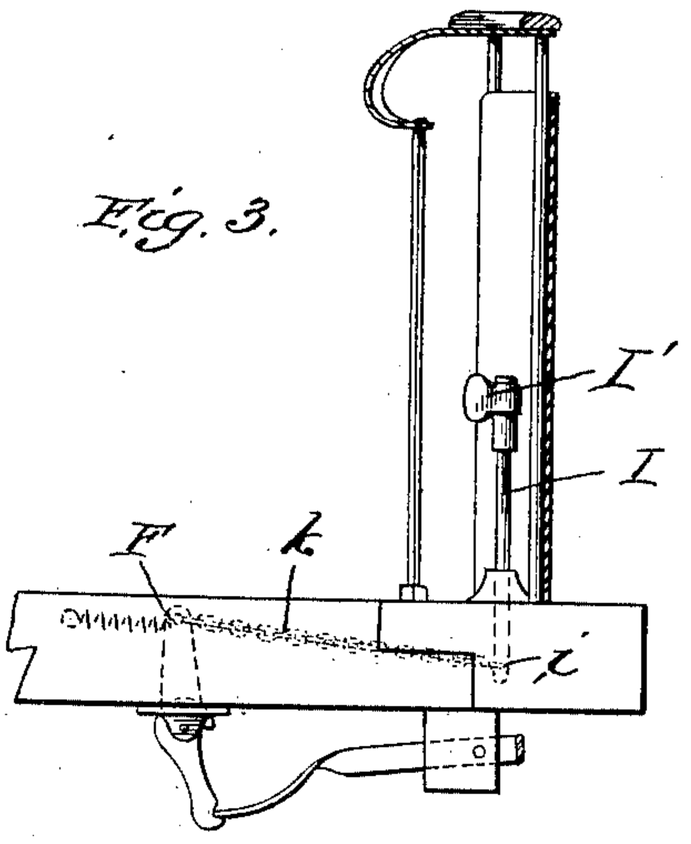


Fig. 3.



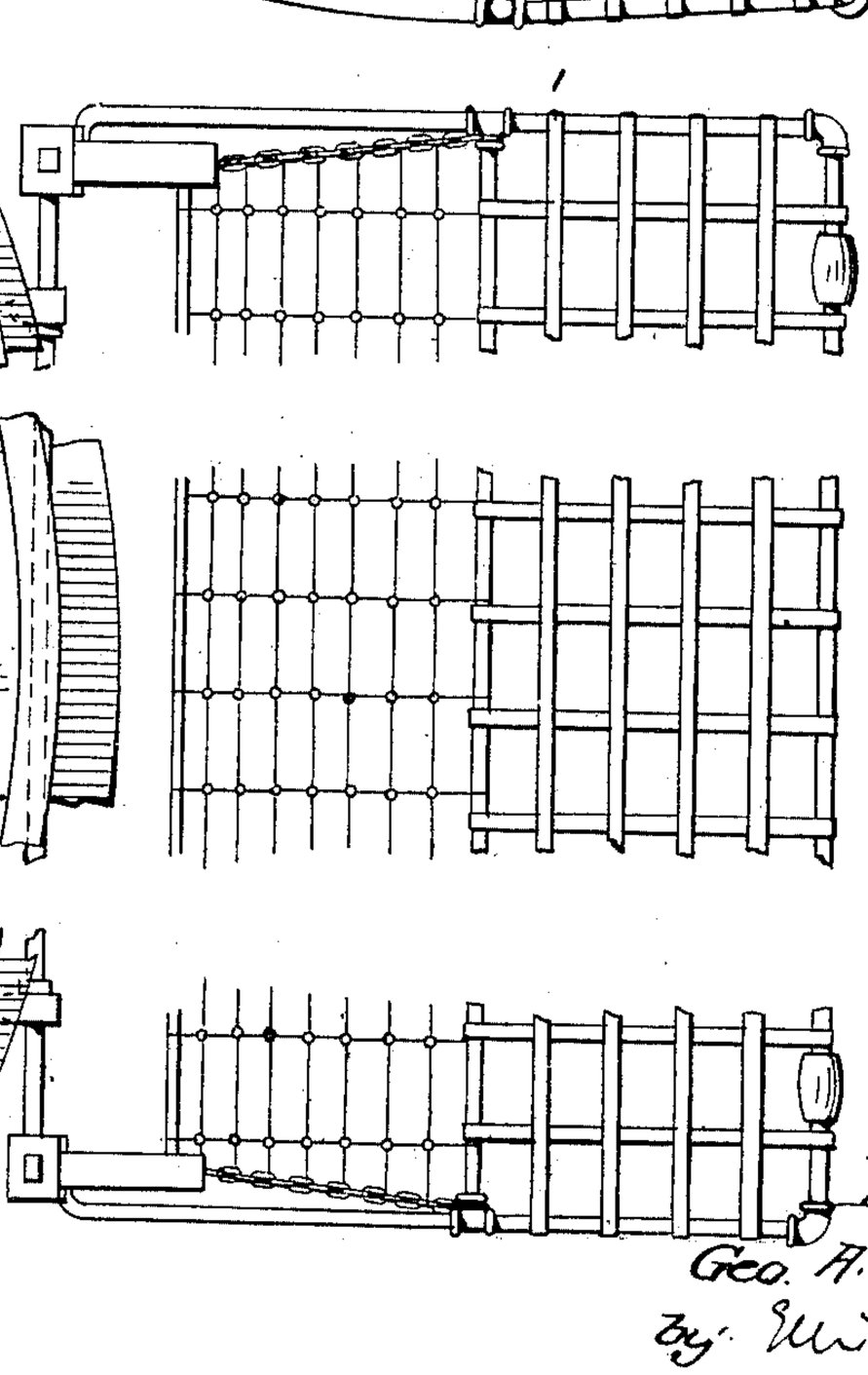


Fig. 2.

Attest:
Edw. L. Reed.
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UNITED STATES PATENT OFFICE.

GEORGE A. PARMENTER, OF CAMBRIDGEPORT, MASSACHUSETTS.

STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 675,523, dated June 4, 1901.

Application filed August 22, 1900. Serial No. 27,714. (No model.)

To all whom it may concern:

Be it known that I, GEORGE A. PARMENTER, a citizen of the United States, residing at Cambridgeport, Massachusetts, have invented certain new and useful Improvements in Street-Car Fenders, of which the following is a specification.

My invention relates to improvements in street-car fenders of that class in which a hinged fender or scoop is provided projecting beyond the front of the car, which is adapted to be lowered by the motorman, so as to pass under an object lying upon the track, and is an improvement upon the form of fender patented by me October 18, 1898, No. 612,785.

The object of the invention is to provide a simpler form of fender which may be produced and maintained at less cost, which will carry steadier, and can be more easily adjusted to all positions.

I have illustrated the invention in the accompanying drawings, in which—

Figure 1 is a side elevation showing sufficient of a car to illustrate the application of the fender thereto. Fig. 2 is a plan view, and Fig. 3 is a detail, of a modified form of operating mechanism.

Referring by letter to the figures, A represents brackets secured to the sills of the car-body, to which are pivoted hanger-irons B, in which the fender proper or scoop is removably supported, preferably in the manner shown in my aforesaid patent, which, briefly stated, consists in providing the hanger-irons with hooked forward portions *b*, which engage the fender and hold it rigidly in the desired position. The hanger-irons are formed of flat metal pieces having the central portion arranged edgewise and having the front and rear portions given a quarter-twist, as shown at *b'*. The rear ends of the hanger-irons are engaged by arms C, carried by a rock-shaft D, suitably supported from the car-body, the lower ends of the arms being notched, as at *c*, to engage the ends of the hanger-irons. The arm F is secured to the rock-shaft and extends forward to a suitable point, where it is provided with a flattened end *f*, which receives the pressure from a treadle-pin G, guided in a vertical opening in the car-platform in a position convenient for operation by the foot of the motorman. A spring H exerts an upward tension on the arm F and tends to hold the arms C in engagement with the rear ends of the crank-irons.

It will thus be seen that when the motorman presses upon the treadle G the arms C are swung rearward, thereby disengaging the rear ends of the hanger-irons and allowing the fender or scoop to drop. As the rear ends of the hanger-irons rise under the weight of the fender they engage with projections *c'* on the upper portions of the arms C, which limit the upward movement.

Instead of using a treadle-iron for operating the rock-shaft, as shown in Figs. 1 and 2, I have provided a vertical spindle I, having a crank or arm *i* on its lower end, connected by a link or chain *k* with a spring-pressed arm F' on the rock-shaft. A knee lever or arm I' is detachably connected with the upper end of the spindle, so that by pressing forward with the knee upon this arm the spindle will be rotated, thereby rocking the shaft and releasing the fender.

Having thus described my invention, what I claim is—

1. In combination with a car, brackets carried thereby, hanger-irons pivoted to said brackets, an independent fender or scoop removably carried by said hanger-irons, a rock-shaft in rear of said hanger-irons having arms adapted to engage the rear portions of said hanger-irons, and means for operating said rock-shaft, substantially as described.

2. In combination with a car, brackets carried thereby, hanger-irons pivoted to said brackets, an independent fender or scoop removably carried by said hanger-irons, a rock-shaft in rear of said hanger-irons having arms adapted to engage the rear portions of said hanger-irons, an arm extending forward from said rock-shaft, and a treadle-pin engaging the end of said arm, substantially as described.

3. In combination with a car, brackets carried thereby, hanger-irons comprising flat pieces having central portions arranged edge-

wise and pivoted to said brackets, the forward ends of said irons being twisted and having hook-shaped ends, a fender or scoop held in said hook-shaped ends, the rear portions of said hanger-irons being also twisted a quarter-turn, and means for engaging said rear ends, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE A. PARMENTER.

Witnesses:
FRANCIS J. MURPHY,
PATRICK J. MADDEN.