(No Model.)

# W. A. & H. W. BLAKENEY.

## SAFETY CAR FENDER.

No. 565,256. Patented Aug. 4, 1896.

Fig. 1.

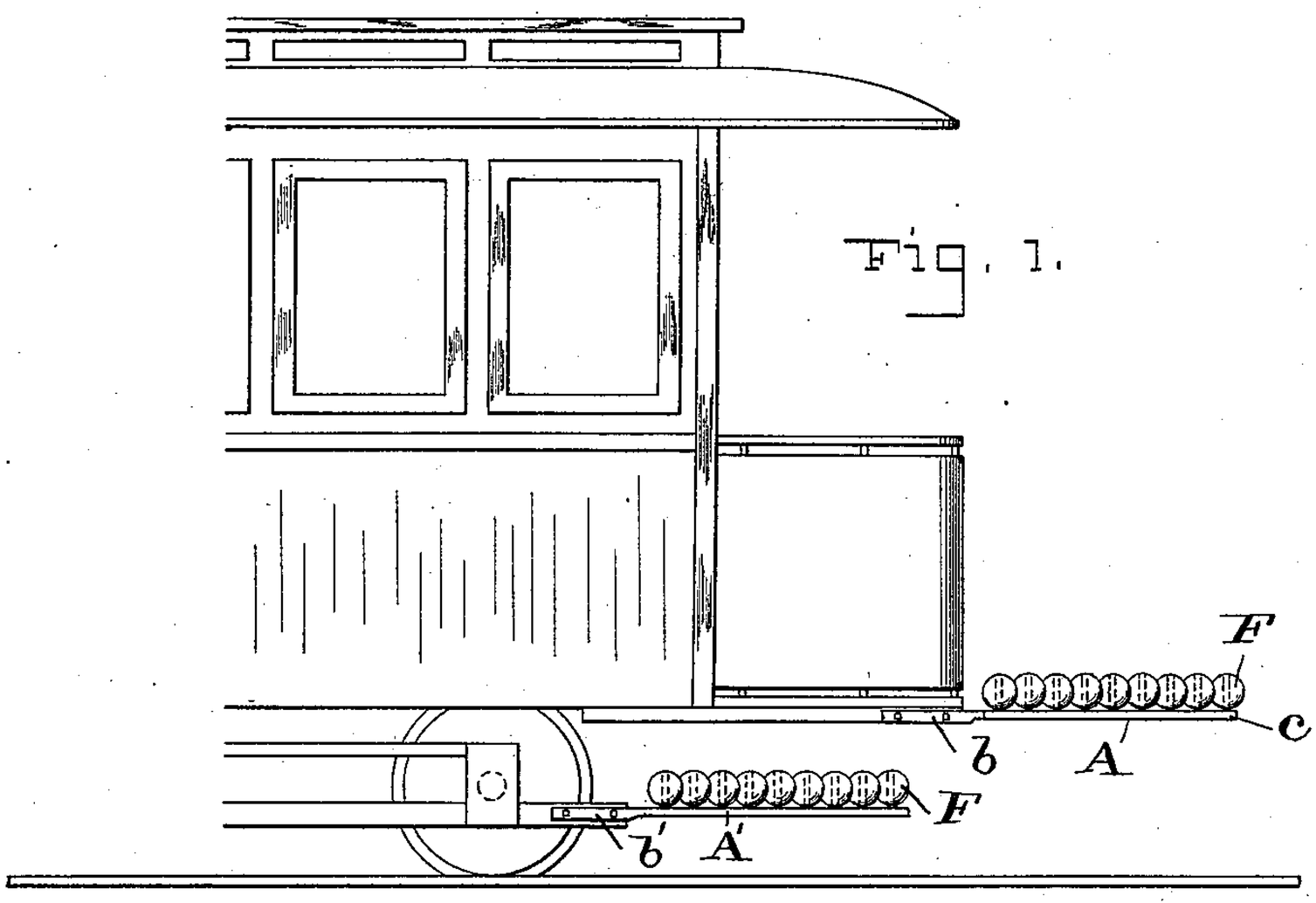


Fig. 2.

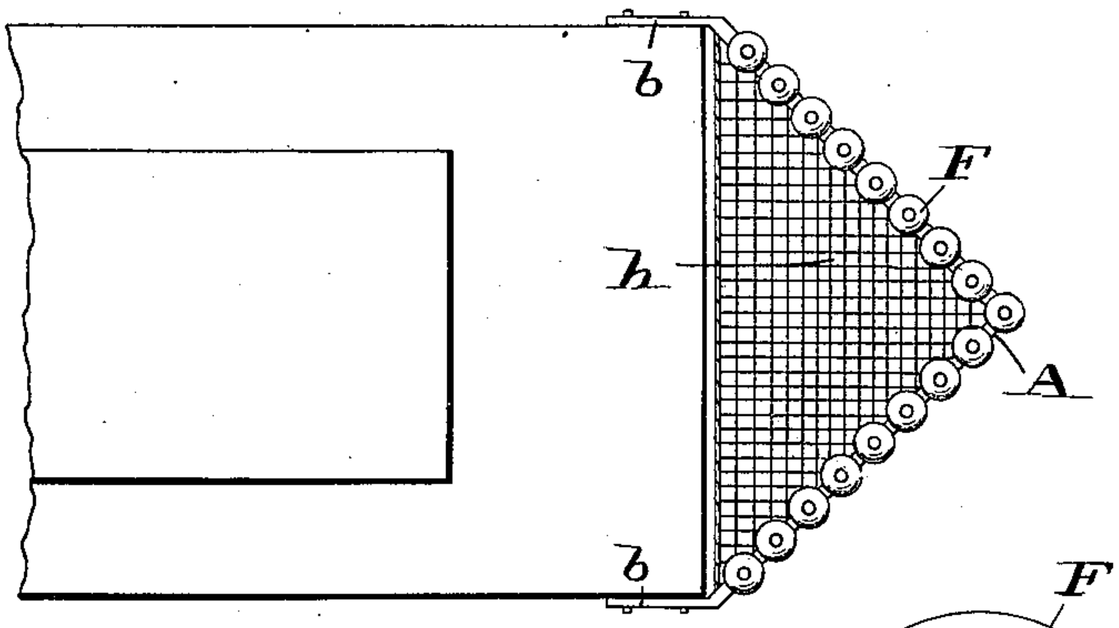


Fig. 3

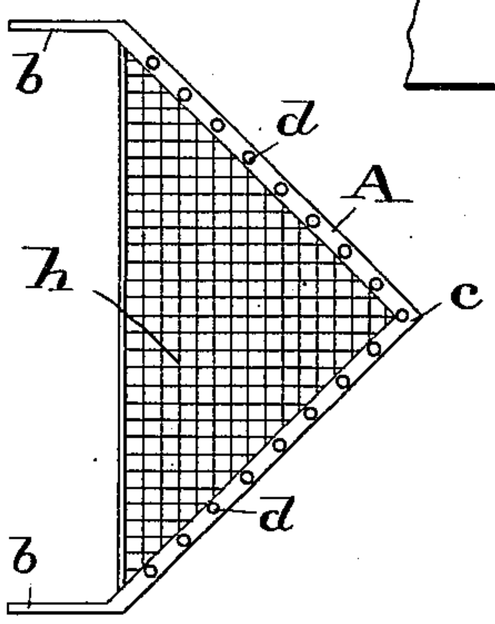


Fig. 4

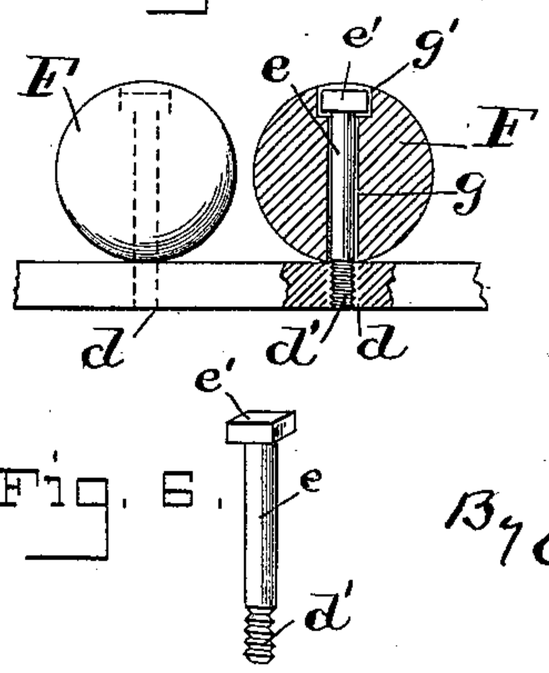


Fig. 5.

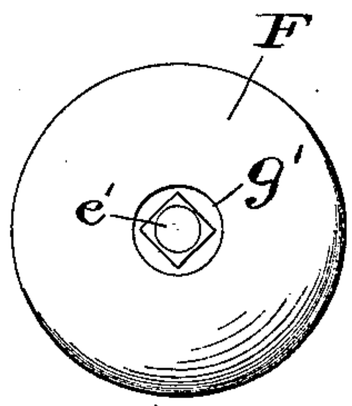


Fig. 6.




WITNESSES:

L. I. Van Horn.

Charles B. Mann Jr.

INVENTORS:

W. A. Blakeney
H. W. Blakeney

By Chas B. Mann

ATTORNEY.

# UNITED STATES PATENT OFFICE.

WILLIAM A. BLAKENEY AND HARRY W. BLAKENEY, OF CHESTERTOWN, MARYLAND.

## SAFETY CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 565,256, dated August 4, 1896.

Application filed February 9, 1894. Serial No. 499,576. (No model.)

*To all whom it may concern:*

Be it known that we, WILLIAM A. BLAKENEY and HARRY W. BLAKENEY, citizens of the United States, residing at Chestertown, in the county of Kent and State of Maryland, have invented certain new and useful Improvements in Safety Car-Fenders, of which the following is a specification.

Our invention relates to a safety-fender for cars.

The object of the invention is to provide means for the front of a car which will prevent injury to a person who may be struck or run down by the car.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 is a side view of the end part of a car and showing our fender. Fig. 2 is a plan view of same. Fig. 3 is a view of the fender-frame. Fig. 4 shows a detail of the construction of the cushion-balls. Fig. 5 is a top view of a ball. Fig. 6 shows one of the studs or pins separate, on which a cushion-ball revolves.

Two fender-frames of V shape are used, and these are mounted on the car one above and in advance or forward of the other, as shown in Fig. 1, an advantage resulting therefrom which will be hereinafter explained. The upper V-shaped frame A has its two ends *b* suitably secured to the front end of a car (one end at each side of the car) on a horizontal line even with the car-floor, and its apex or point *c* projects forward. The other V-shaped frame A′ has its two ends *b′* suitably secured to the car-front or to the truck of the car so as to be both below the first frame and also backward therefrom. This lower frame is supported at an elevation above the street-surface merely sufficient to avoid the higher stones or such slight obstructions that may be in or part of the street-surface.

Each V-shaped frame has screw-threaded holes *d* in it, and studs or pins *e* have a screw end *d′* to enter said holes and stand upright or vertical. The studs are round or cylindric, except at the top end, where each is suitably squared or has a head, as at *e′*, to be adapted for the grip of a wrench, so as to enable a wrench to turn it, and also to hold the ball from coming off. The balls or globular cushions F are made of rubber or similar elastic material. They may be stuffed and covered to produce the desired elastic effect. Each cushion-ball has a central hole *g* for the stud or pin *e*, and each ball also has at the top end of the hole an enlargement thereof or a recess *g′* to receive the squared head *e′* on the stud.

In securing the cushion-balls to the fender-frame a ball is placed in position with the lower end of the hole *g* in coincidence with one of the screw-holes *d* in said frame, and a stud *e* is placed at the top of and passed vertically through the hole in the ball, and its screw end *d′* is tightly screwed into said hole *d*, so as to hold the ball securely from detachment, while allowing it to revolve freely. The head *e′* of the stud occupies the recess *g′*, which covers the hard stud and prevents it from destroying the cushioning effect of the ball.

When a person in a standing position is run down by the car and is struck by the upper V-frame A, the force of the collision will cause the balls to revolve and thus brush said person to one side from one ball to the other on the inclined side until he reaches the last ball at the side of the car, which projects beyond the track-rails, where he will be safe. If, however, the person is knocked down by the upper V-frame, or if he was lying upon the car-track, he will be prevented by the lower V-frame A′ from getting under the car-wheels, and also by the lower balls will be rolled or brushed to one side out of the way of the car in the same manner as in the former case.

If a person should be struck and fall over

the cushion-balls, he will be supported in a safe position by the netting *h*, attached to the fender-frame.

Having thus described our invention, what we claim is—

The combination of a fender-frame provided with screw-threaded holes, *d*; studs, *e*, each having a screw end, *d'*, which enters said screw-holes and provided at its top end with a head; and cushion-balls, F, made of an elastic material each having a central hole and a recess, *g'*, at the top end of the hole.

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

WILLIAM A. BLAKENEY.
HARRY W. BLAKENEY.

Witnesses as to signature of William A. Blakeney:

CHARLES B. MANN, Jr.,
C. CALVERT HINES.

Witnesses as to signature of Harry W. Blakeney:

WM. H. FITTON,
C. M. LUCAS.