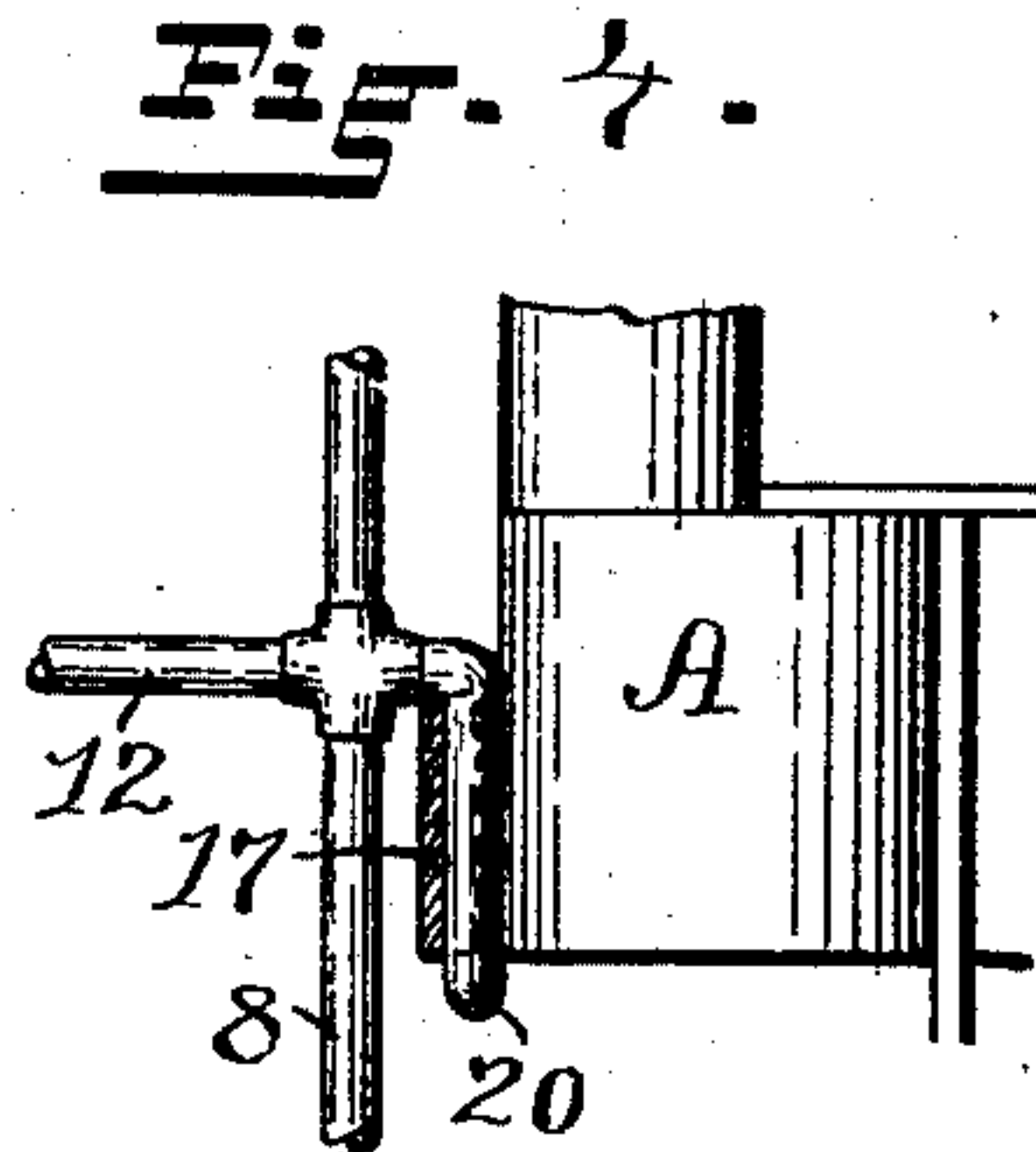
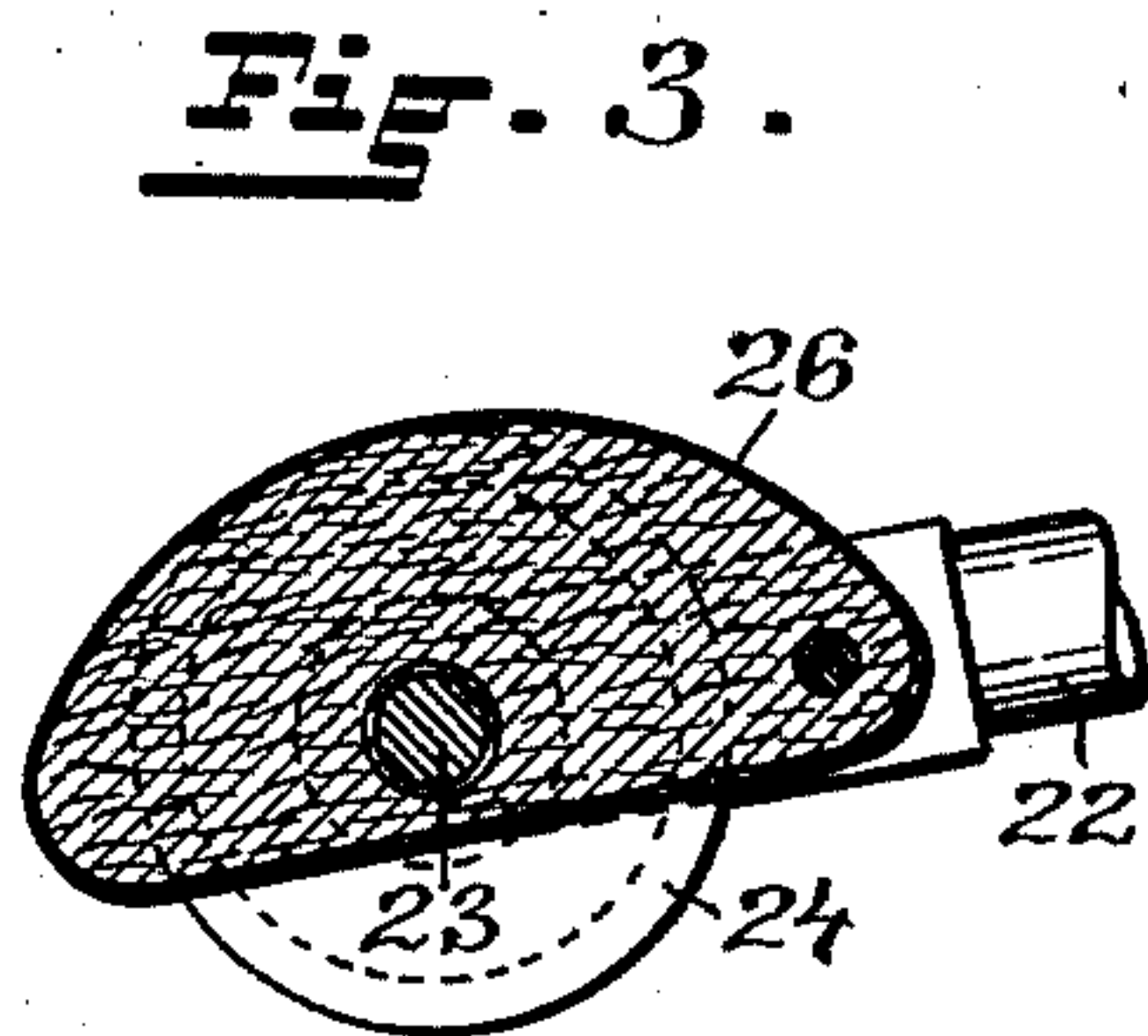
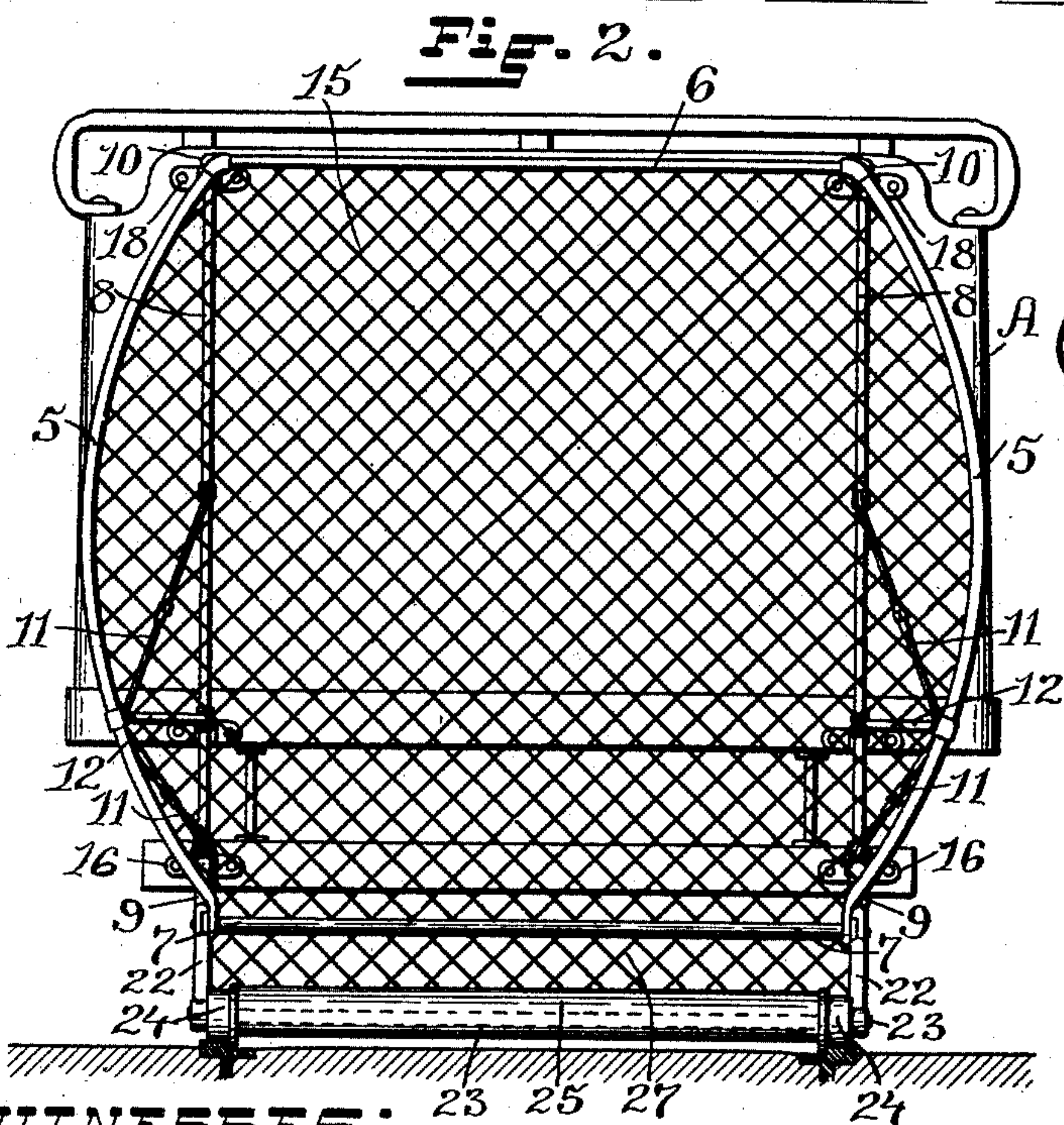
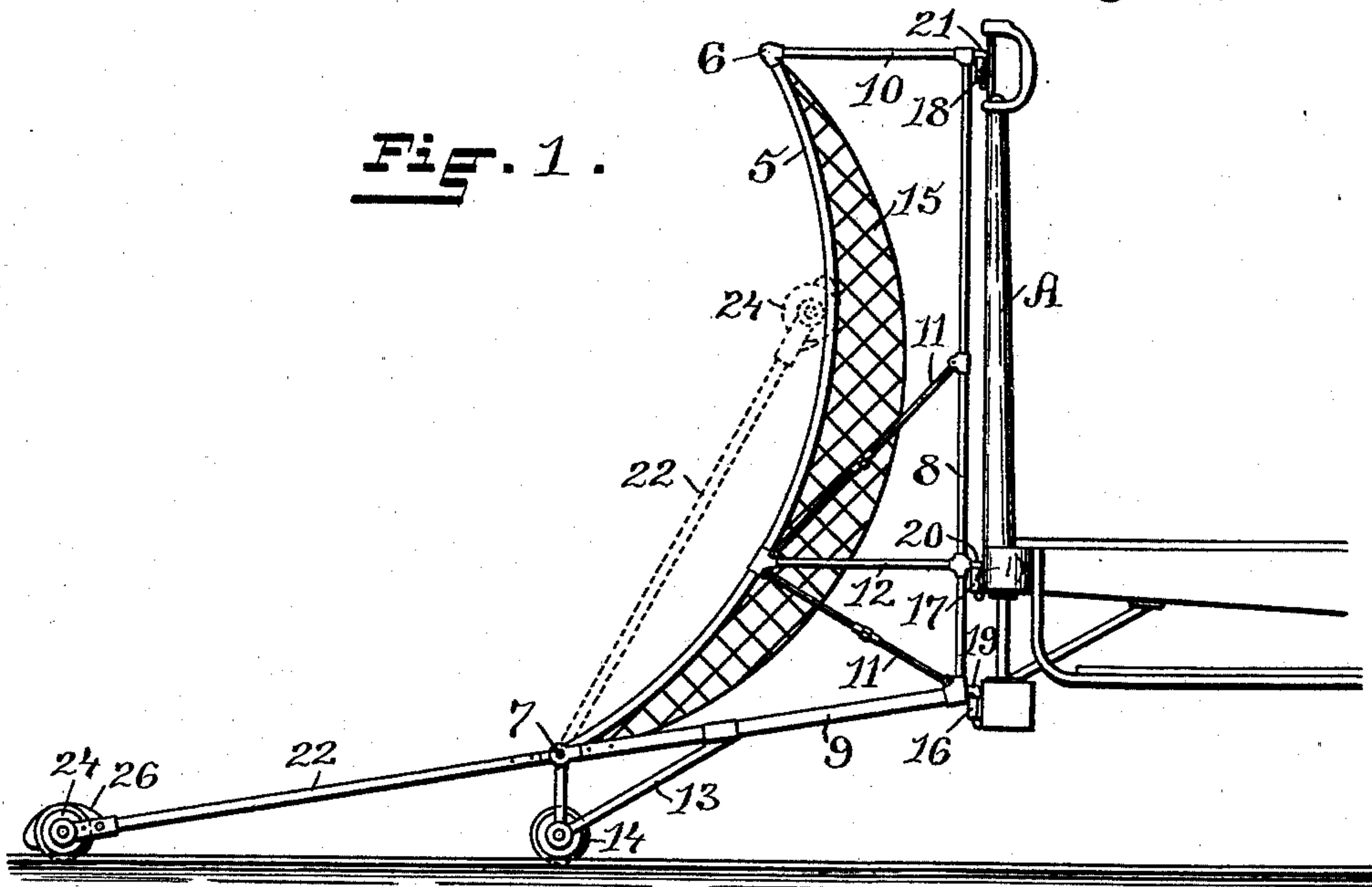


(No Model.)

J. F. McDONOUGH.  
CAR FENDER.

No. 524,503.

Patented Aug. 14, 1894.



WITNESSES:

Henry J. Miller  
Chas. H. Luther Jr.

INVENTOR:

Joseph Francis McDonough,  
by Joseph A. Miller & Co.,  
Attys.



# UNITED STATES PATENT OFFICE.

JOSEPH FRANCIS McDONOUGH, OF PROVIDENCE, RHODE ISLAND.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 524,503, dated August 14, 1894.

Application filed May 28, 1894. Serial No. 512,784. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH FRANCIS McDONOUGH, of Providence, in the county of Providence and State of Rhode Island, have  
5 invented certain new and useful Improvements in Car-Fenders; and I hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part  
10 of this specification.

This invention relates to improvements in car-fenders which are adapted to be removably secured to the ends of cars.

The object of the invention is to provide a  
15 simple and effective car-fender adapted to be removably secured to the end of a car.

Another object is to provide a car-fender with a novel pivoted apron adapted to be  
20 not in use.

The invention consists in the peculiar construction of the car-fender and its novel combination with the car.

The invention also consists in such other  
25 novel features of construction and combination of parts as may hereinafter be more fully described and pointed out in the claims.

Figure 1 represents a side elevation of the improved fender secured to the forward end  
30 of a car. Fig. 2 represents a front view of the same. Fig. 3 represents an enlarged detail view of one of the wheels for supporting the forward end of the apron. Fig. 4 represents a detail view of one of the devices by  
35 the use of a member of which the fender is removably secured to the end of the car.

Similar numbers and letters of reference designate corresponding parts throughout.

In carrying my invention into practice I  
40 construct a fender having the curved side-bars 5—5 connected at the upper and lower ends by the cross-bars 6 and 7, these cross-bars are in turn connected with the vertical members 8—8 by the upwardly-inclined arms  
45 9—9 at the lower end portions and at the upper ends by means of the arms 10—10, while the side arms are also braced to the vertical members by the braces 11—11 and 12, and extending from the inclined arms 9—9 are  
50 the frames 13—13 in which the wheels 14 are

journaled, these wheels being mounted on the rails and serving to partially support the forward end of the fender proper. To the side-bars 5—5 and to the upper and lower cross-bars 6 and 7 is secured a netting 15 being sufficiently loose in the center to form a  
55 pocket which will tend to hold a body falling therein and prevent its being thrown out from the sides.

To the end of the car A are secured vertical sockets 16, 17 and 18 in which engage the depending-bolts 19, 20 and 21 extending from the vertical members 8—8 at the points of  
60 juncture with the arms 9—9 and 10—10 and the braces 12.

The folding-apron is formed by side-bars 22—22, pivoted to the ends of the lower cross-bar 7, and a cross-shaft 23 on which are journaled the wheels 24—24, which, when the  
65 apron is in operation, travel on the rails and support the forward end thereof. Between the wheels 24 extends the buffer 25 having cushioned-hoods 26—26 extending over the wheels 24 and preventing contact therewith when this end strikes an object on the track,—  
70 between the sides 22—22 and the buffer 25 is tightly stretched the netting 27 to receive a person or body which is struck by the buffer 25. The apron being supported at its forward end very slightly above the track will  
80 readily receive a person or object struck by the buffer 25, the slight inclination of this apron presenting but slight obstruction to the passage of the person or article toward the pocket formed by the netting 15 which  
85 will receive and retain the person or object until the car can be stopped. By the pivoting of the apron it can be folded up against the main portion of the fender so that the roadway need not unnecessarily be ob-  
90 structed, while, when desired, the whole fender may be lifted out of connection with the car by removing the bolts 19, 20 and 21 from their sockets.

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

1. In a car-fender, the combination with the vertical members 8—8 provided with means for securing the fender to a car, the  
100

frames formed by the side-bars 5—5 and cross-bars 6 and 7, and the netting 15 secured to the frame, of the arms 9 and 10 and braces 11 and 12 for securing the frame to the vertical members, as described.

2. The combination with a car having the sockets 16, 17 and 18, of a fender having the vertical members 8—8, the bolts 19, 20 and 21 extending from said members for engaging said sockets, the frame formed of the side-bars 5—5 and cross-bars 6 and 7, the arms 9 and 10 and the braces 11—11 and 12 for connecting the side-bars 5—5 and the vertical members, the netting 15 secured to the side and cross-bars, the frames 13 depending

from the arms 9, the wheels 14 journaled in said frames, the side-bars 22—22 pivoted to the bar 6, the shaft 23 at the outer ends of these arms, the wheels 24—24 journaled on the shaft, the buffer 25 having the hoods 26 carried by said shaft, and the netting 27 secured to the side-arms 22 and to the buffer, as and for the purpose described.

In witness whereof I have hereunto set my hand.

JOSEPH FRANCIS McDONOUGH.

Witnesses:

HENRY J. MILLER,  
M. F. BLIGH.