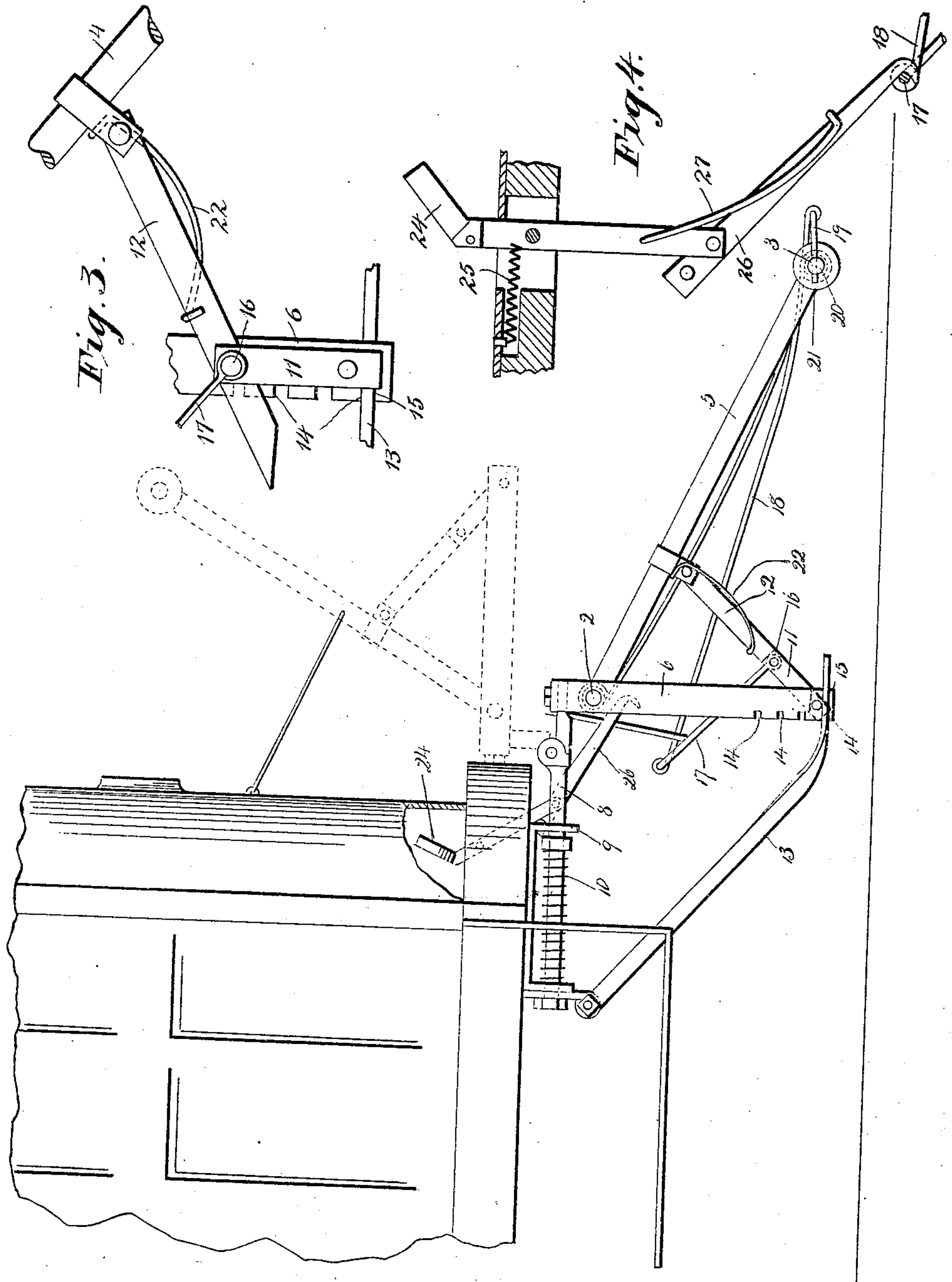


B. MURPHY.
 FENDER FOR STREET RAILWAY CARS.
 APPLICATION FILED JAN. 18, 1909. RENEWED JAN. 4, 1910.
 954,874. Patented Apr. 12, 1910.
 2 SHEETS—SHEET 1.



Witnesses
 C. J. Reed.
 C. L. Reed

Fig. 1.

Barney Murphy
 Inventor
 by Seymour & Carter
 atty

B. MURPHY.

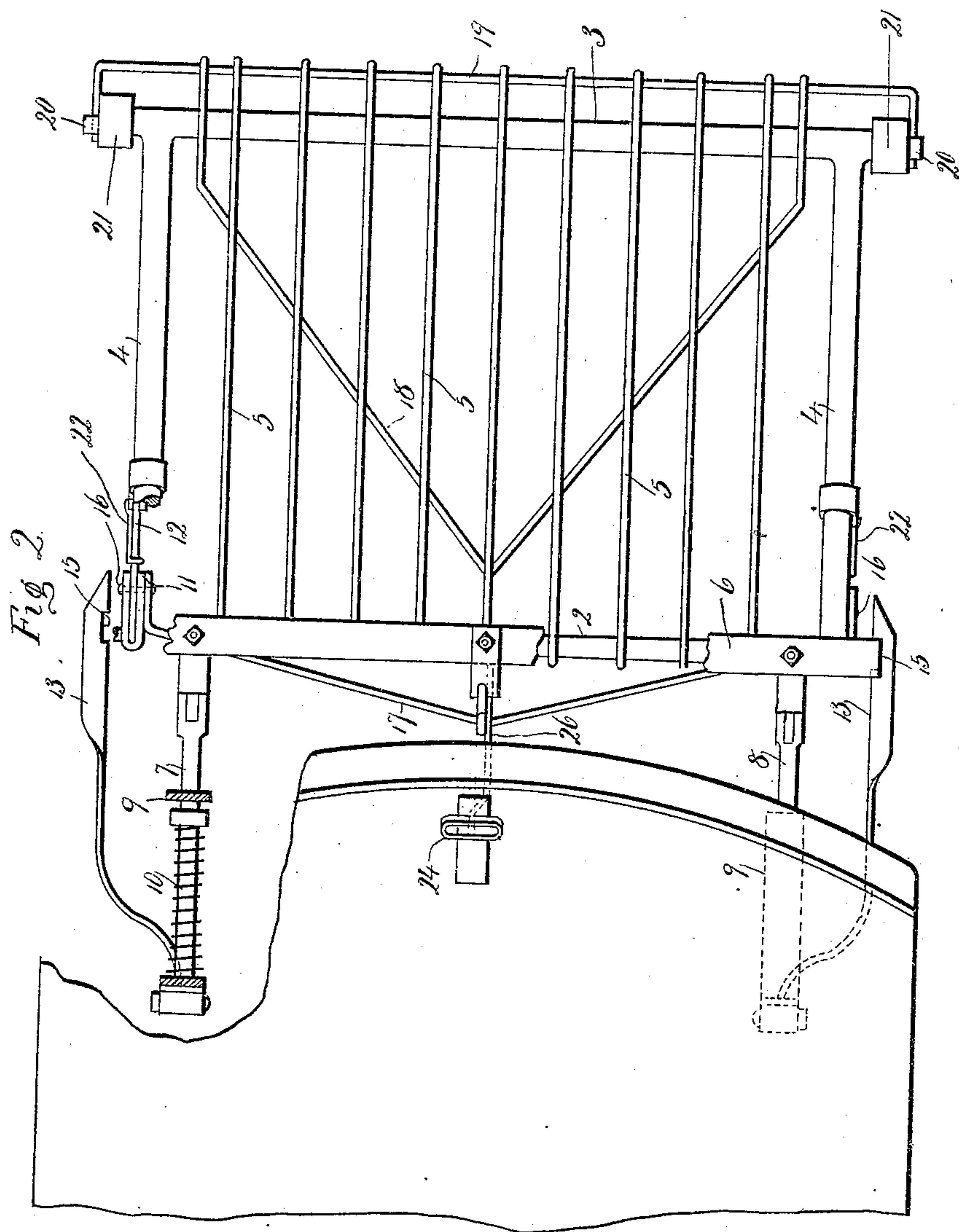
FENDER FOR STREET RAILWAY CARS.

APPLICATION FILED JAN. 18, 1909. RENEWED JAN. 4, 1910.

954,874.

Patented Apr. 12, 1910.

2 SHEETS—SHEET 2.



Witnesses
C. J. Reed.
C. L. Weed

Barnes Murphy
by Seymour T. Carey
attor

UNITED STATES PATENT OFFICE.

BARNEY MURPHY, OF NEW HAVEN, CONNECTICUT, ASSIGNOR OF ONE-HALF TO
PETER N. LANDINE, OF NEW HAVEN, CONNECTICUT.

FENDER FOR STREET-RAILWAY CARS.

954,874.

Specification of Letters Patent.

Patented Apr. 12, 1910.

Application filed January 18, 1909, Serial No. 472,873. Renewed January 4, 1910. Serial No. 536,405.

To all whom it may concern:

Be it known that I, BARNEY MURPHY, a citizen of the United States, residing at New Haven, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Fenders for Street-Railway Cars; and I do hereby declare the following, when taken in connection with the accompanying drawings and the numerals of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1 a side view of a fender constructed in accordance with my invention and shown as applied to the end of a car. Fig. 2 a top or plan view partially in section of the fender with a portion of the car structure broken away. Fig. 3 a side view showing one of the links and braces in the broken down position. Fig. 4 a side view illustrating the connection of the foot-lever with the breakdown rod.

This invention relates to an improvement in fenders for street railway cars, and particularly to that class which is arranged forward of the dash-board and which may be folded up against it.

The object of the invention is to provide means which will cause the fender to drop close to the track when an obstruction is encountered, and which will also yield under rearward pressure, which may also be dropped by the motorman and which may be folded up against the end of the car; and the invention consists in the construction hereinafter described and particularly recited in the claims.

The fender proper consists of a top bar 2, front bar 3, and side bars 4, and parallel straps 5. The top bar is pivotally mounted at its ends in a yoke 6 which is hinged to the outer ends of longitudinally movable rods 7, 8, mounted in brackets 9 secured to the underside of the platform. These rods slide in the brackets and upon them between the ends of the brackets are coil springs 10 which allow the fender to move rearward in case an obstruction is met. Pivoted to the ends of the yoke are short links 11, and these links are pivoted to braces 12 which in turn are pivotally connected with the side bars 4, 5 of the fender frame, and so that when these links are brought into line,

as shown in Fig. 1 of the drawings, the fender will be held in an extended position with its outer end raised above the track, and they will be held in this position by stays 13 which may be pivotally connected to the brackets 9, or to any other convenient point. These stays spring laterally and each is formed with a notch 15 to engage with one of a series of notches 14 in the rear edge of the yoke 6 and so as to hold the yoke in a stationary position. These stays may be swung clear from the yoke so as to allow the yoke to be raised when it is desired to fold the fender. If the stays 13 engage with the lowermost notches in the yoke, the outer end of the fender will stand nearer the track, and as the stays engage with the notches higher up the outer end of the fender will be correspondingly lifted.

The pivots 16, which connect the links 11 with the braces 12, are coupled together by a breakdown rod 17 and connected with this rod 17 is a fork 18, the ends of which extend beyond the front bar 3 of the fender and into engagement with a contact bar 19, the ends of which pass through bearings 20 in the ends of the bar 3, which bar also carries rollers 21 at its ends to ride upon the track when the fender is lowered. Springs 22 are arranged tending to throw the braces 12 and links 11 into alinement. With the fender supported as above, if an obstruction is met the contact bar 19 will first strike the obstruction and force this bar rearward, which, through the fork 18, will rock the rod 17 and turn the link 11 and brace 12 out of alinement so as to allow the outer end of the fender to drop upon the track, thus positively preventing the outer end of the fender from riding over any obstruction upon the track.

To enable the motorman to drop the fender, a foot lever 24 is pivoted in the platform to extend above and below the same, and is held in an operative position by a coil spring 25. The lower end of the lever has a hook 26 pivoted to it and adapted to engage with the rod 17, so that pressure upon the lever 24 will draw the rod 17 rearward, breaking down the brace for the fender and allowing it to drop in the same manner as it would by the rearward movement of the contact bar. The hook is normally held in position by a wire spring 27.

In winter, when there is snow upon the

ground, it is desirable that the outer end of the fender should be raised at some distance above the track, and this is accomplished by having the ends of the stays 13 engaged
 5 with the uppermost notches of the yoke. It is immaterial how far the outer end of the fender is raised above the track. When the braces are broken down, it will drop onto the track.

10 When the fender is not in use the stay 13 is disengaged from the yoke and the fender may be turned upward, and held in any desired manner. It will thus be seen that if an obstruction is met, the outer end of the fender is immediately dropped, and if a person
 15 is struck by the fender, the fender owing to the springs, will move rearward so that the blow is a yielding one.

I claim:—

20 1. A fender for street cars comprising a yoke, a frame pivotally mounted in said yoke, links and braces connecting the frame with said yoke, a breakdown rod connecting said links, a contact bar mounted at the
 25 outer edge of said fender and a fork connecting said contact bar with said breakdown rod, substantially as described.

30 2. A fender comprising a yoke, a frame pivotally connected with said yoke, links and braces coupling the lower end of said yoke with the sides of the frame, a breakdown rod connecting said links, a contact bar mounted at the outer edge of said frame and adapted to be moved toward it, a fork

connecting said contact bar and breakdown 35 rod, a lever and a hook connected with said lever and adapted to engage with said breakdown rod, substantially as described.

3. A car fender comprising a yoke mounted at the outer ends of two longitudinally 40 movable spring-actuated rods, a frame pivotally mounted in said yoke, links and braces connecting the lower ends of said yoke, and the sides of the frame, a breakdown rod connecting said links and braces, a contact bar 45 arranged parallel with the forward edge of the fender and a fork connecting said contact bar and breakdown rod, substantially as described.

4. A car fender comprising a hinged yoke, 50 a frame pivotally mounted in said yoke, links and braces connecting the lower ends of said yoke with the sides of the frame, a breakdown rod connecting the links and braces at opposite sides, a contact bar ar- 55 ranged at the forward edge of said frame and movable toward and from it, a fork connecting said contact bar, a breakdown rod, and stays adapted to engage with and support said yoke, substantially as described. 60

In testimony whereof, I have signed this specification in the presence of two subscribing witnesses.

BARNEY MURPHY.

Witnesses:

FREDERIC C. EARLE,
 CLARA L. WEED.