

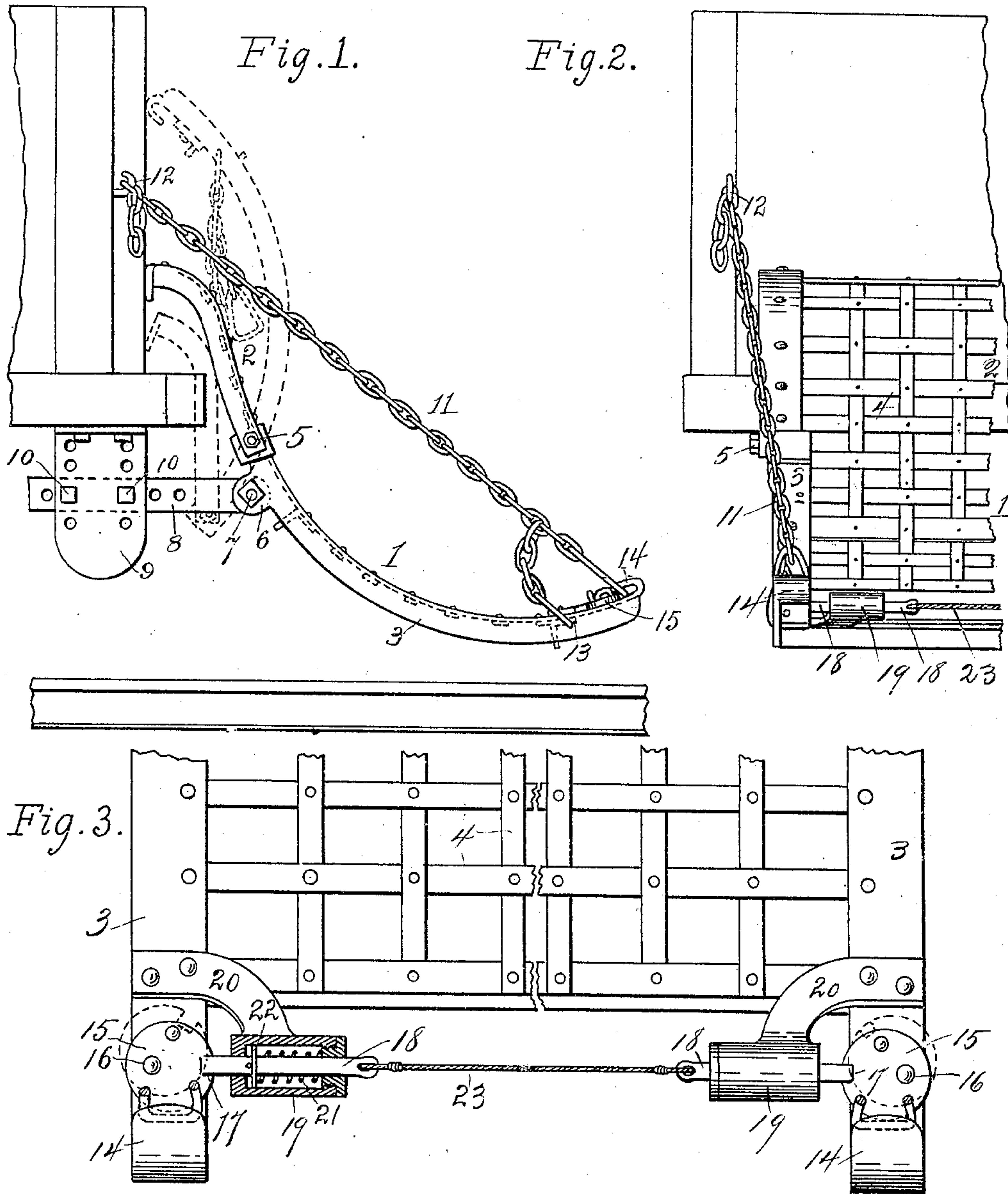
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PATENTED NOV. 1, 1904.

F. J. FAIRCHILD.  
STREET CAR FENDER.

APPLICATION FILED FEB. 1, 1904.

NO MODEL.



WITNESSES:

David C. Walter  
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INVENTOR:

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# UNITED STATES PATENT OFFICE.

FRANK J. FAIRCHILD, OF TOLEDO, OHIO, ASSIGNOR OF ONE-HALF TO  
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## STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 773,932, dated November 1, 1904.

Application filed February 1, 1904. Serial No. 191,433. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK J. FAIRCHILD, a citizen of the United States, residing at Toledo, in the county of Lucas and State of Ohio, have  
5 invented certain new and useful Improvements in Street-Car Fenders; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable  
10 others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

A familiar difficulty encountered in the use  
15 of street-car fenders arises from the fact that if the front of the fender be low enough to be effective it is apt to strike stones or other obstructions on the track. On the other hand, if the fender be secured in position high  
20 enough to clear obstructions it will be too high to be entirely effective in all cases.

My invention relates to and has for its object a means for overcoming the difficulties here indicated—to provide a mechanism whereby  
25 the fender is normally held at sufficient height to escape obstructions on the track and which when the front of the fender comes in contact with an object will cause the fender to instantly drop to a point just above the  
30 level of the rails.

The further object of my invention is to provide in a car-fender a construction which will permit the fender to be readily folded up against the front of the car in small compass  
35 when necessary.

I attain these objects by means of the devices and arrangement of parts hereinafter shown and described, and illustrated in the accompanying drawings, in which—

40 Figure 1 is a side elevation of my fender, the dotted lines showing the parts in folded position; Fig. 2, a front elevation of one side of my fender; and Fig. 3, a top plan view of the same, on an enlarged scale, partly in horizontal section.

Like numerals of reference indicate like parts throughout the drawings.

In the drawings, 1 is the forward section, and 2 the rear section, of my folding fender.

The former section consists of light angle-  
bars 3, curved as shown in Fig. 1, the netting  
or gridwork consisting of interwoven strips  
4 of thin sheet metal, interwoven as illustrated  
in Fig. 3. The frame of this section, consisting  
of light angle-bars having the ends of the in-  
terwoven strips of sheet metal riveted thereto,  
forms a strong light durable structure. The  
other section of my fender is also formed of  
an angle-bar frame having interwoven sheet-  
metal strips riveted thereto. The bottom of  
section 2 is pivotally connected, as at 5, with  
the rear margin of section 1. (See Fig. 1.)  
Projecting rearwardly from the side bars of  
section 1 and near their rear ends are lugs 6,  
which lugs are pivotally connected, as at 7,  
with the forward ends of horizontal bars 8.  
These bars are at intervals pierced transversely  
with bolt-holes, as shown. 9 is a bracket,  
of which there are two, secured at opposite  
sides of the front platform to the under  
side thereof. At the front and rear margins  
of the downwardly-projecting brackets 9 are  
rows of holes. By means of bolts 10 passing  
through the holes in the bars 8 and through  
the brackets 9 the bars and the fender, which  
is supported by the bars, may within certain  
limits be readily adjusted vertically and horizontally  
in any desired position.

The forward end of the front section of my  
fender is supported at each side by a chain or  
rope 11, secured at one end by a hook 12, secured  
to the front of the platform. At its other  
extremity each of the chains terminates in two  
ends or branches, one of which is longer than  
the other. The longer ends of the chains  
are secured, as at 13, by engagement of the  
end link with the angle-bar of the frame.  
The terminal link of the shorter end of the  
chain is adapted to engage a hook 14 by means  
of a detent now to be described.

15 is a disk pivoted eccentrically, as at 16,  
upon the top of side angle-bars of section 1  
near the hook 14. The disk when turned upon  
its pivot partly enters the jaw of hook 14.  
In the margin of each of the disks is a  
notch 17, which may be engaged by the ends  
of bolts 18, which slide transversely to the line  
of the track in boxes 19 on the ends of brack-



ets 20, secured to the side angle-bars of the frame 1. The bars or bolts 18 are held normally projected outwardly by the thrust of springs 21, coiled around the bolts and interposed between the inner end of the case 19 and shoulder 22 on the sliding bolts. The two adjacent ends of these bolts are connected by means of a stout cord 23, which when the bars are projected outwardly is drawn taut.

10 The link at the end of the short branch of the chain being engaged with the hook 14, the disk 15 is swung on its pivot so that the margin of the disk slightly enters the jaw of the hook and so that the link is prevented from slipping out of the hook. At this instant the ends of the bolts or bars 18 slip into the notches 17, where they are held by the springs 21.

Assuming that the parts are assembled in the manner shown in the drawings, that the front end of the fender is supported by the short branch of the chain, and that the end link of the chain is engaged with the hook and prevented from slipping out, as above described, now if an object, such as the legs of a person, be struck by the fender the cord 23 being in advance will strike first. The stress on the cord will withdraw the bolts from the notches 17, and the pull of the link against the side of the disk will cause the disk to swing on its eccentric pivot into the position indicated by the dotted line in Fig. 3. The links at the ends of the short branches of the chains are now released and the front of the fender instantly drops from its higher position almost to the level of the tops of the rails, where the fender is caught and securely held by the longer branch of the chain.

When the fender is to be thrown out of service temporarily, the front section is swung on its pivot, with its front end turned up against the end of the car. This movement swings the rear end of the front section downwardly, carrying with it the pivotal supports of the rear section of the fender, so that the two sections of the fender will now occupy the position shown by the dotted lines in Fig. 1. If the fender is to be bodily raised or low-

ered or set forward or backward, this will be readily accomplished by means already described and by merely changing the bolts 10 to the proper holes in the brackets and adjusting-bars 8.

By removing the bolts 10 and unhooking the chains from hooks 12 the entire fender may be readily removed from the car.

Having described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a car-fender, a pivotal support which permits the fender to swing into either of two positions, one above the other, means for supporting the fender in the lower position and out of contact with the track, a detent for the support of the fender in the upper position, and a cord extending across and in front of the fender and connected with said detent.

2. In a fender, a chain secured at one of its ends to the front of the car and having at its other end two branches, one longer than the other, means for securing the longer of said branches to the fender, a detent for securing the shorter of said branches to the fender, and means extending in front of the fender and adapted to actuate said detent.

3. In a fender, a supporting-chain, a hook on the fender to engage the chain, a pivotally-supported member adapted to swing into the opening of the hook to retain the chain, a detent adapted to engage and secure said pivoted member, and means extending in front of the fender and adapted to actuate said detent.

4. In a fender, two sections of network having suitable frames, a pivot which supports one of said sections near its rear margin, and pivotal connections between the front margin of the last-mentioned section and the rear margin of the other section.

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

FRANK J. FAIRCHILD.

Witnesses:

M. D. MERRICK,

M. MARKS.