

No. 743,699.

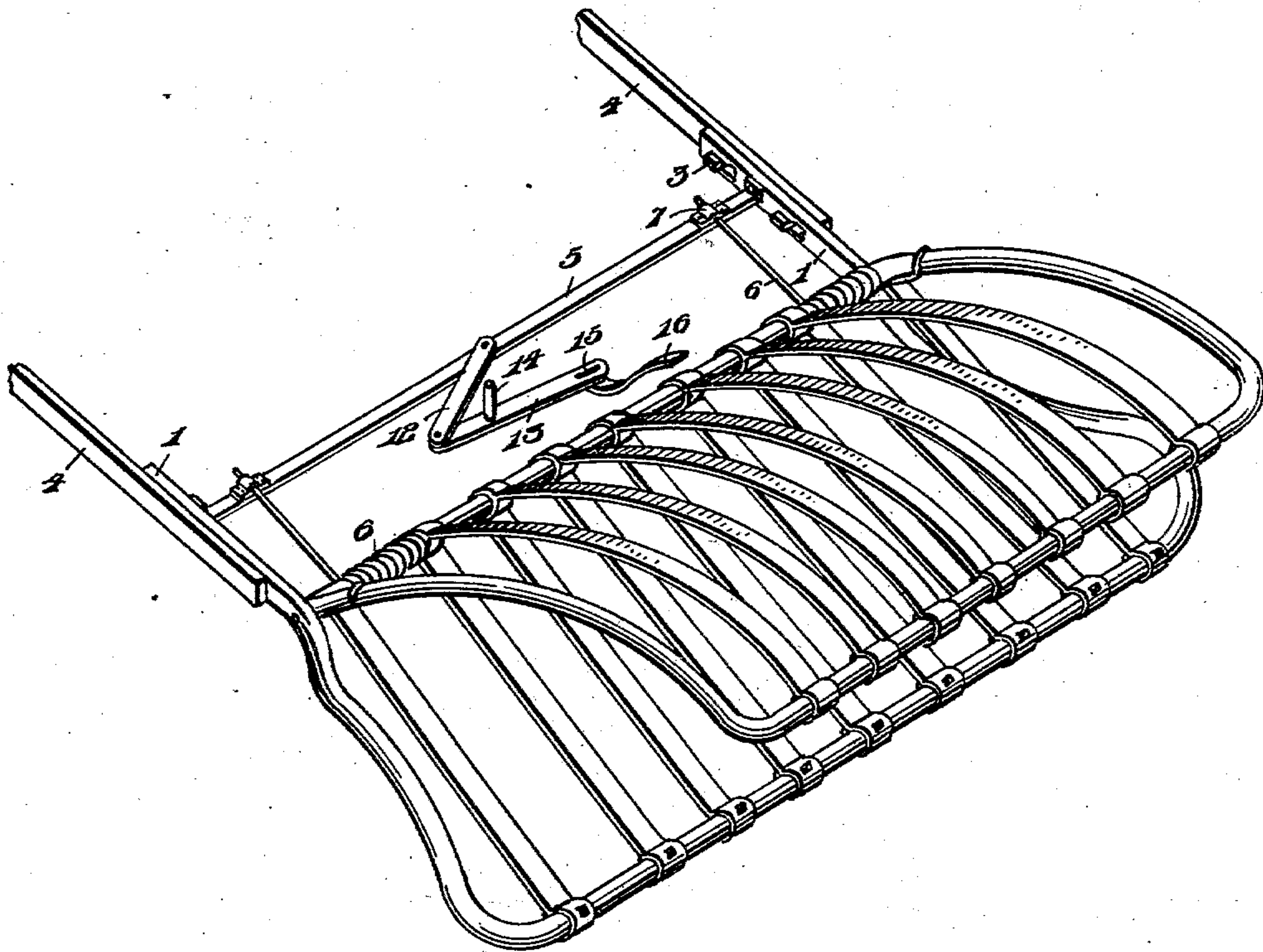
PATENTED NOV. 10, 1903.

M. DUFFNER.
STREET CAR FENDER.
APPLICATION FILED MAR. 30, 1903.

2 SHEETS—SHEET 1.

NO MODEL.

Fig. 1.



Witnesses:

*J. C. Appleman,
A. M. Heine.*

Inventor

M. Duffner

By John Roland

Atty.

No. 743,699.

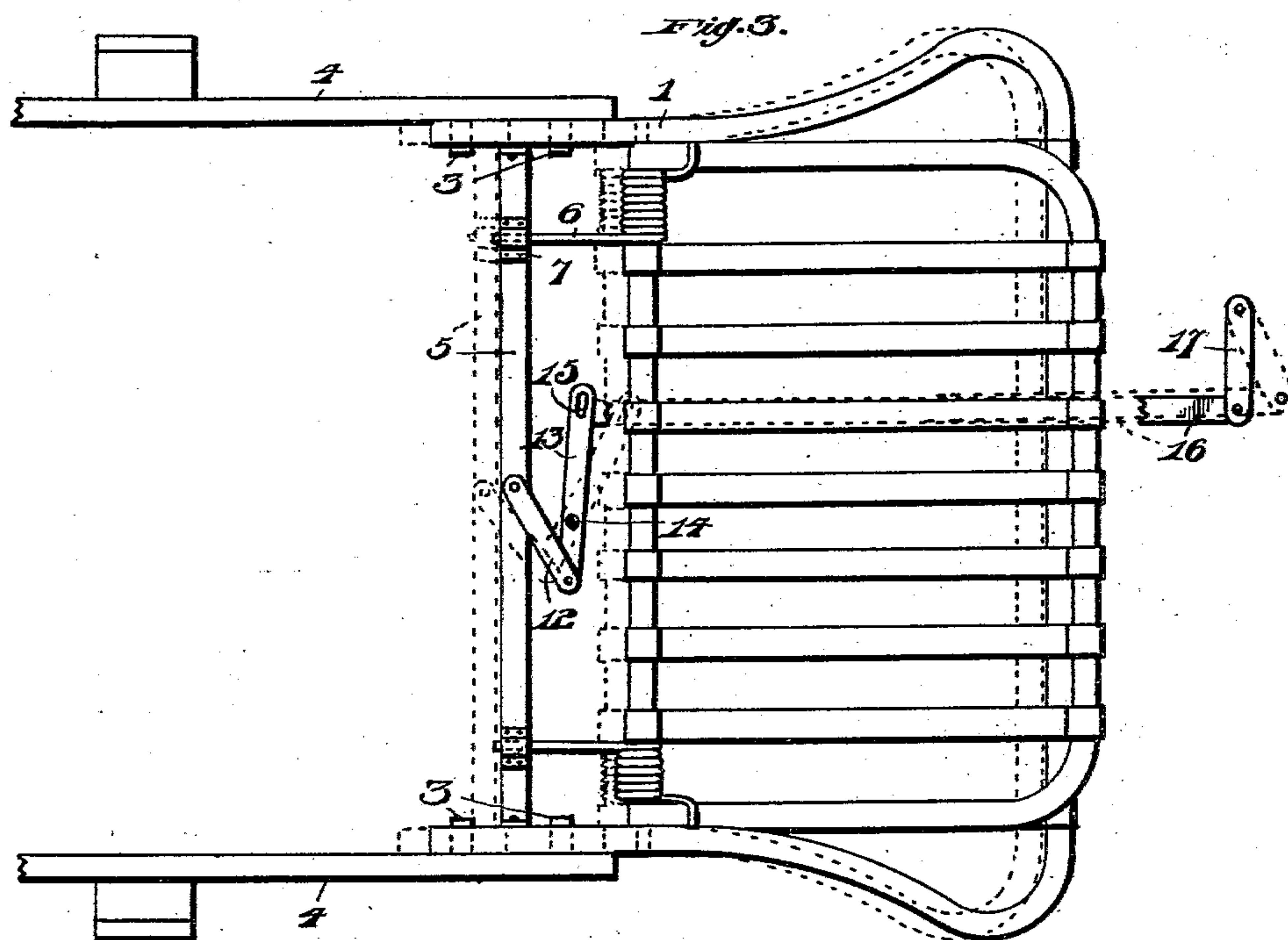
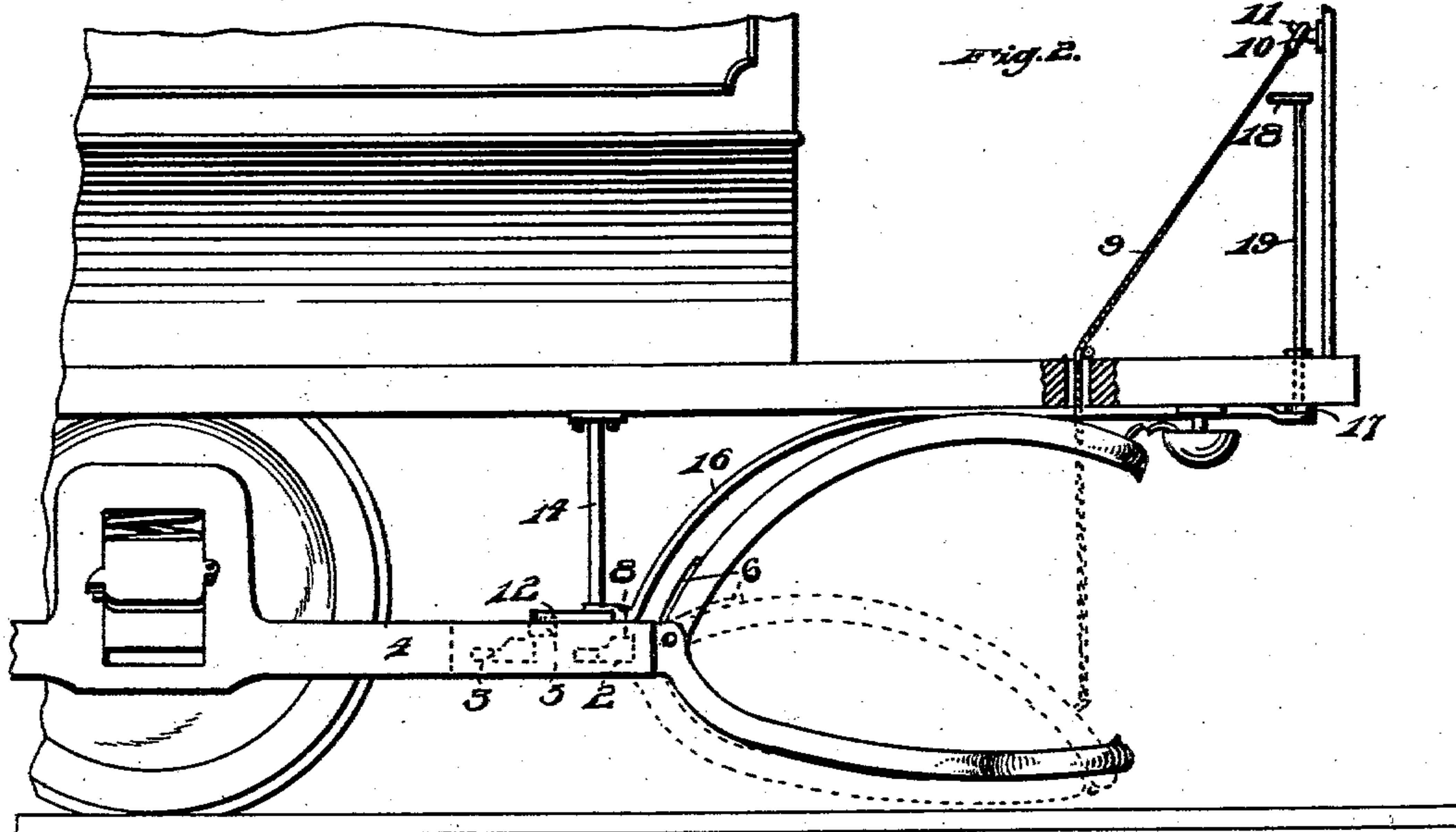
PATENTED NOV. 10, 1903.

M. DUFFNER.
STREET CAR FENDER.

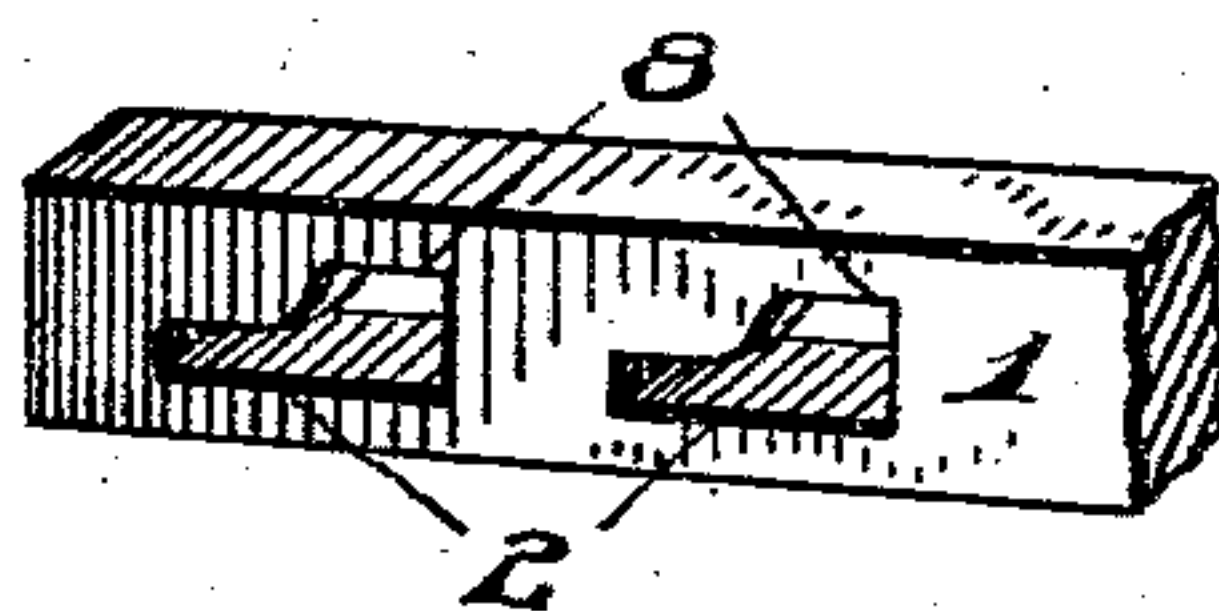
APPLICATION FILED MAR. 30, 1903.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:
J. C. Hoffman,
A. W. Heinke,



Inventor
M. Duffner

By *John Roland*
Att'y.

UNITED STATES PATENT OFFICE.

MATTHEW DUFFNER, OF ALLEGHENY, PENNSYLVANIA.

STREET-CAR FENDER.

SPECIFICATION forming part of Letters Patent No. 743,699, dated November 10, 1903.

Application filed March 30, 1903. Serial No. 150,206. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW DUFFNER, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Street-Car Fenders, of which the following is a specification.

My invention relates to certain new and useful improvements in car-fenders, and more particularly to that form that will automatically drop when it comes in contact with an object, and at the same time an upper shield will close and prevent the same from rolling off.

In describing my invention it comprises a lower fender that is supported from the guard-board of car-trucks, and pivoted to said fender is an upper shield that is under tension of springs, and when the ring that is attached to the cable which holds the upper shield is released from the hook on the dashboard of the car the tension-springs will force the two members together and grasp the object until released. The lower fender will drop near the surface of the ground when struck. This will prevent the object from being forced under the fender, which is of common occurrence with the fenders now on the market.

It has often happened that a person has been struck and forced under a car and the motorman was not aware of the fact. To overcome this bad feature, I have provided an alarm under the car, and immediately upon releasing of the upper shield an alarm will be set off, thus notifying him that an object has been encountered.

A further object of the invention is to produce a car-fender which by reason of its form of construction will prove efficient in use, strong, durable, and comparatively inexpensive to manufacture.

With the foregoing and other objects in view the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail reference will be had to the accompanying drawings, forming part of this specification, wherein like characters denote corresponding parts in the several views, and in which—

Figure 1 is a perspective view of my improved car-fender. Fig. 2 is a side view of same, showing it applied to a car. Fig. 3 is a top plan view of the fender. Fig. 4 is a partial perspective view of the side arm of the lower member.

My invention consists of two members. The side bars 1 of the lower member are provided with apertures 2, and entering these apertures are lugs 3, made integral with the guard-board 4 of the car. This arrangement supports the fender. The two side bars are connected by a flat stringer 5, and to this I fasten one end of tension-springs 6 by means of a strap 7, and the free end of the spring overlaps the side rail of the upper shield.

When the fender comes in contact with an object, the lower member will be forced back and the lugs that support the same will ride into the wide cut-away portion 8 of the side bar. This will cause the same to drop nearer the surface of the ground, as shown in the dotted lines of Fig. 2, and tension being exerted thereon by the wound springs will cause it to close, as illustrated in the dotted lines of Fig. 2. The ring 10, which is attached to the flexible connection 9, may be detached from the hook 11 by an operator or in any suitable manner.

To raise the upper shield and support it in its normal position, as shown in full lines, I pivot to a stringer 5 a link 12, which is pivoted to the link 13 and is held in position by a hanger 14, fastened to the bottom of the car, and connecting the link 13, as at 15, is a rod 16, which is pivoted to the link 17, and when the lower fender is shoved back the different levers will assume positions as shown in dotted lines of Fig. 3 and in order to set it in its normal position to operate the handle 18 on upright rod 19. This actuates the link 17 and in order operates the other links, drawing the fender forward, as shown in full lines of the different views.

I do not care to limit myself to the exact details of construction herein set forth, as I may make various changes in the same without departing from the spirit of my invention.

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

1. In a car-fender, two members hinged to—

gether, means for supporting the lower section on a guard-board of a car, means for automatically swinging the members on their hinges, means for holding the members apart
5 and means for causing one member to approach the other member.

2. In a car-fender, two members, a guard-board having lugs, one of the members having graduated apertures to receive the lugs
10 of the guard-board, means for holding one member elevated, and means for causing one member to approach the other member.

3. In a car-fender, a lower member adapted to slide rearward and drop, and means for attaching it to a car, an upper member hinged
15 to the lower member, and springs for forcing the upper member toward the lower member.

In testimony whereof I affix my signature, in the presence of two witnesses, this 27th day of March, 1903.

MATTHEW DUFFNER.

Witnesses:

JOHN NOLAND,
J. P. APPLEMAN.