

No. 868,035.

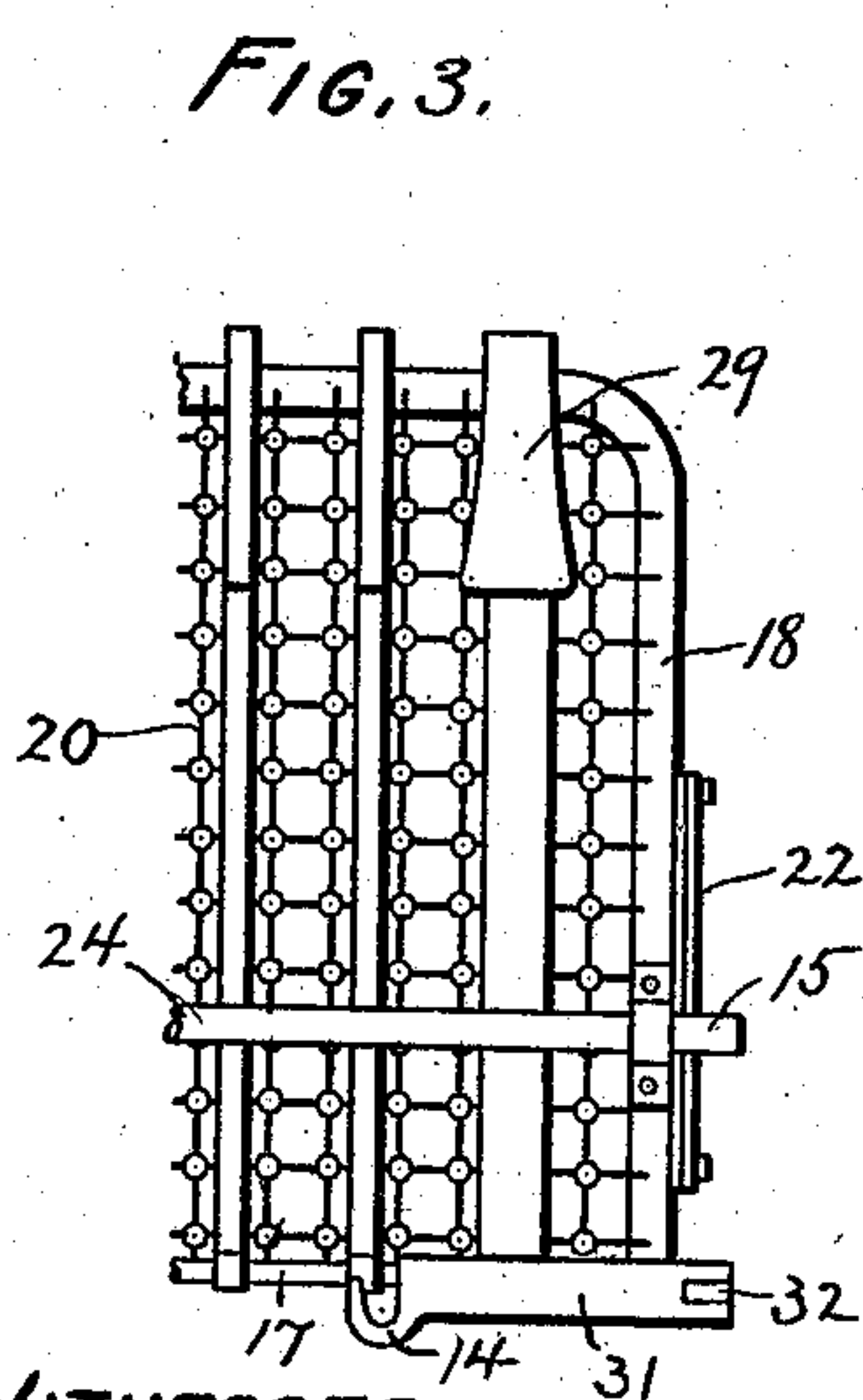
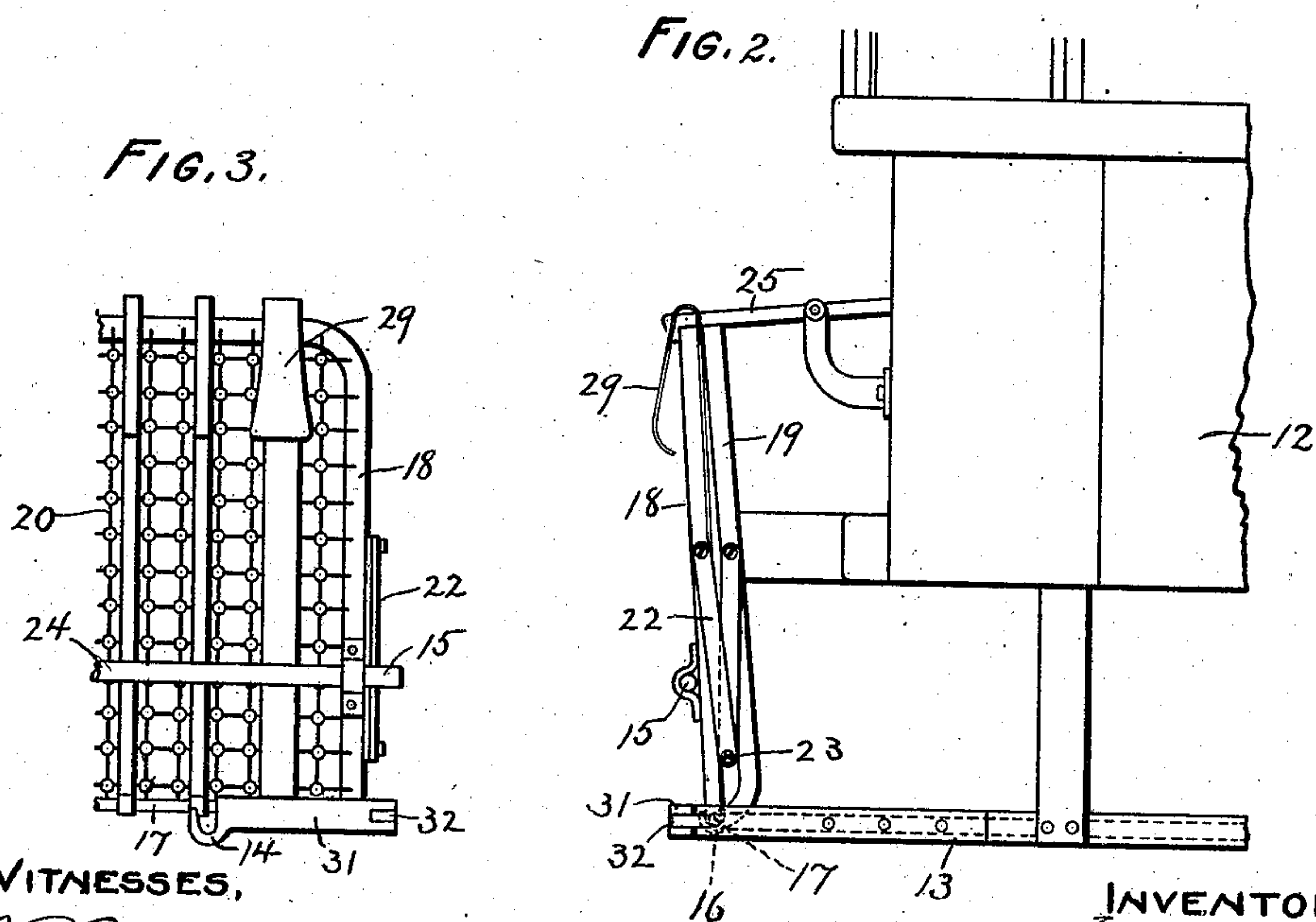
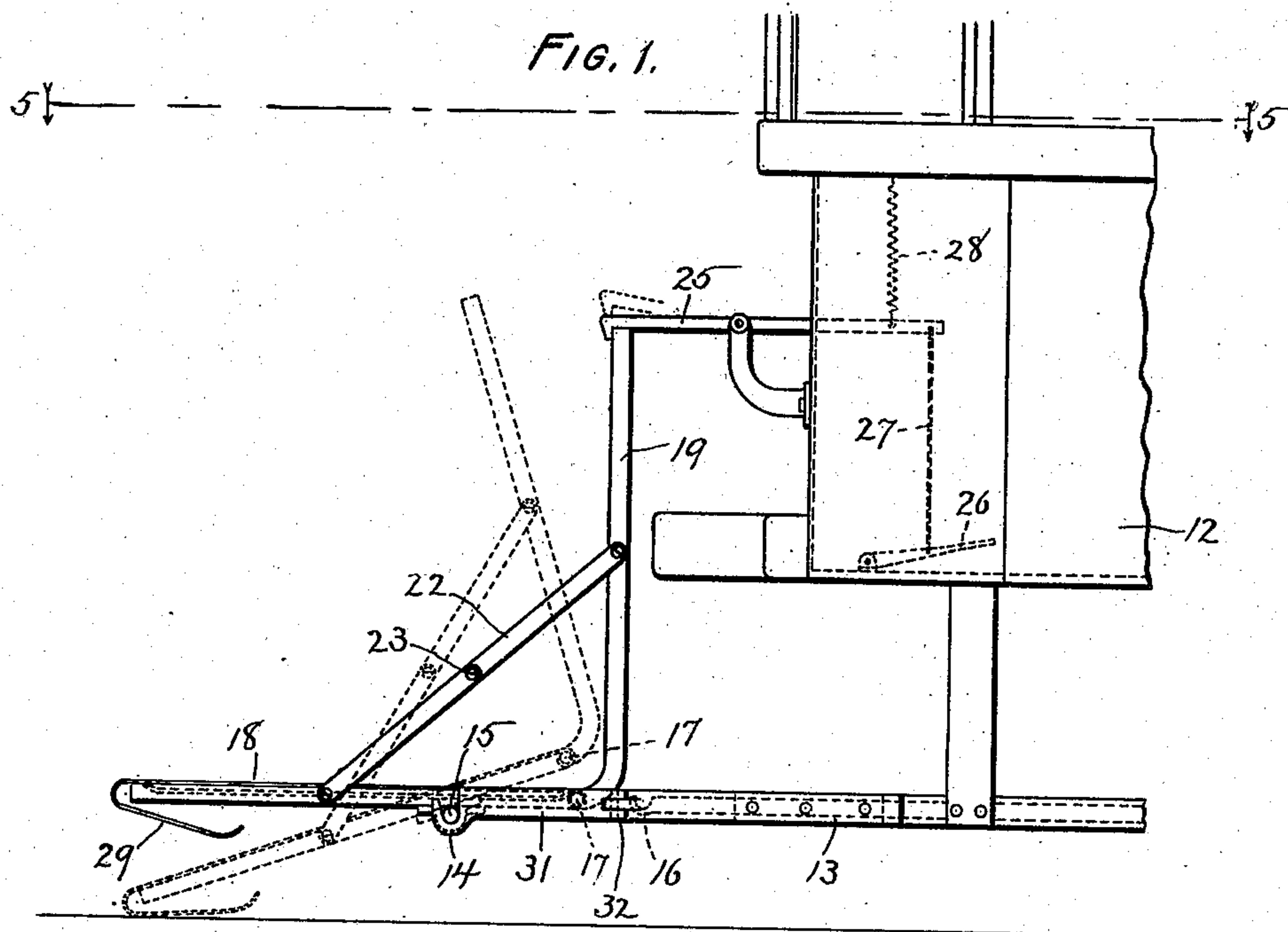
PATENTED OCT. 15, 1907.

J. T. TIGHE.

CAR FENDER.

APPLICATION FILED FEB. 14, 1907.

2 SHEETS—SHEET 1.



WITNESSES,

J. F. Richardson.
A. L. Folsom.

INVENTOR

INVENTOR,
James T. Tighe
by Wm. Brown Limby May-
Atty's.

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2 SHEETS—SHEET 2.

FIG. 4.

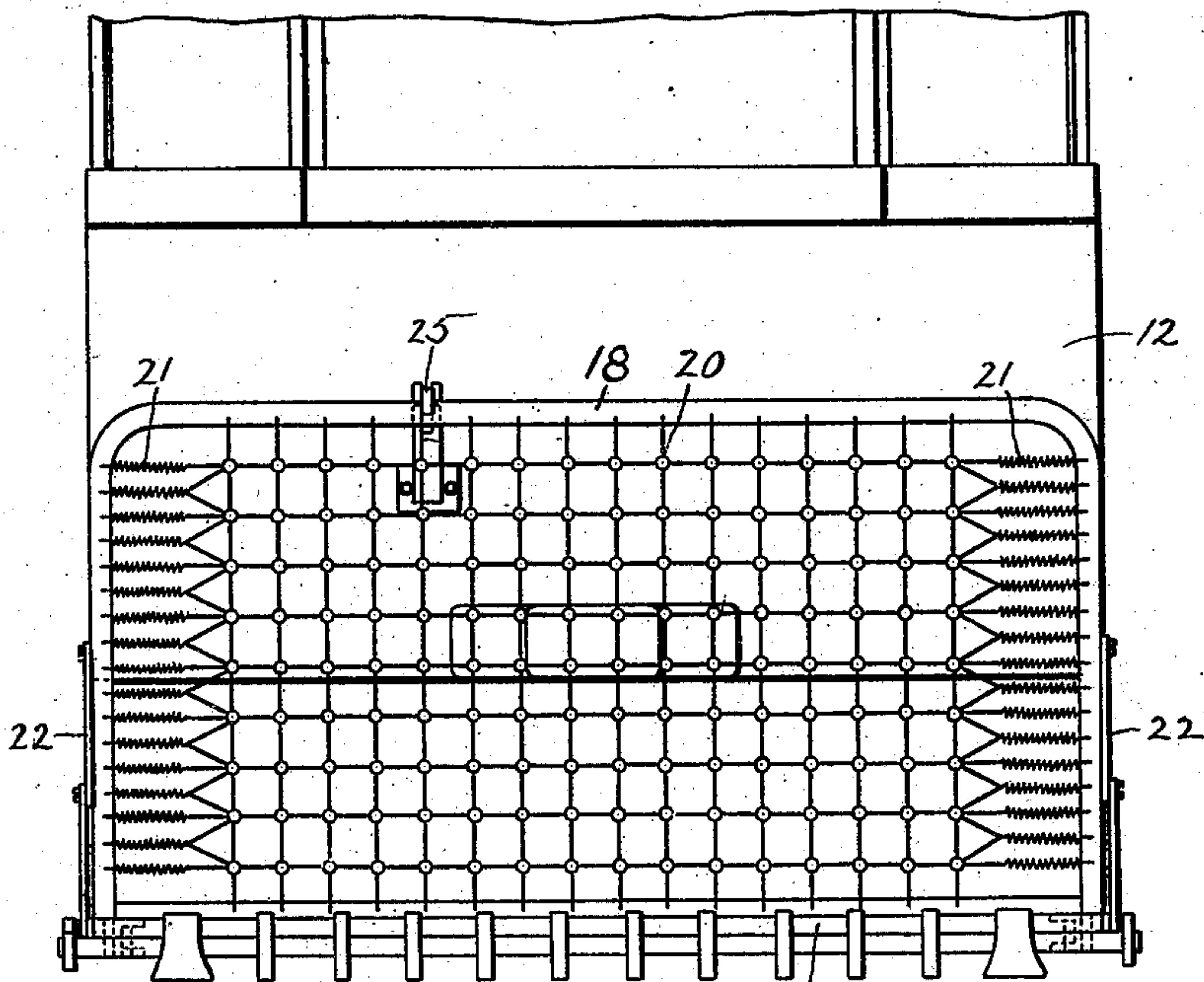
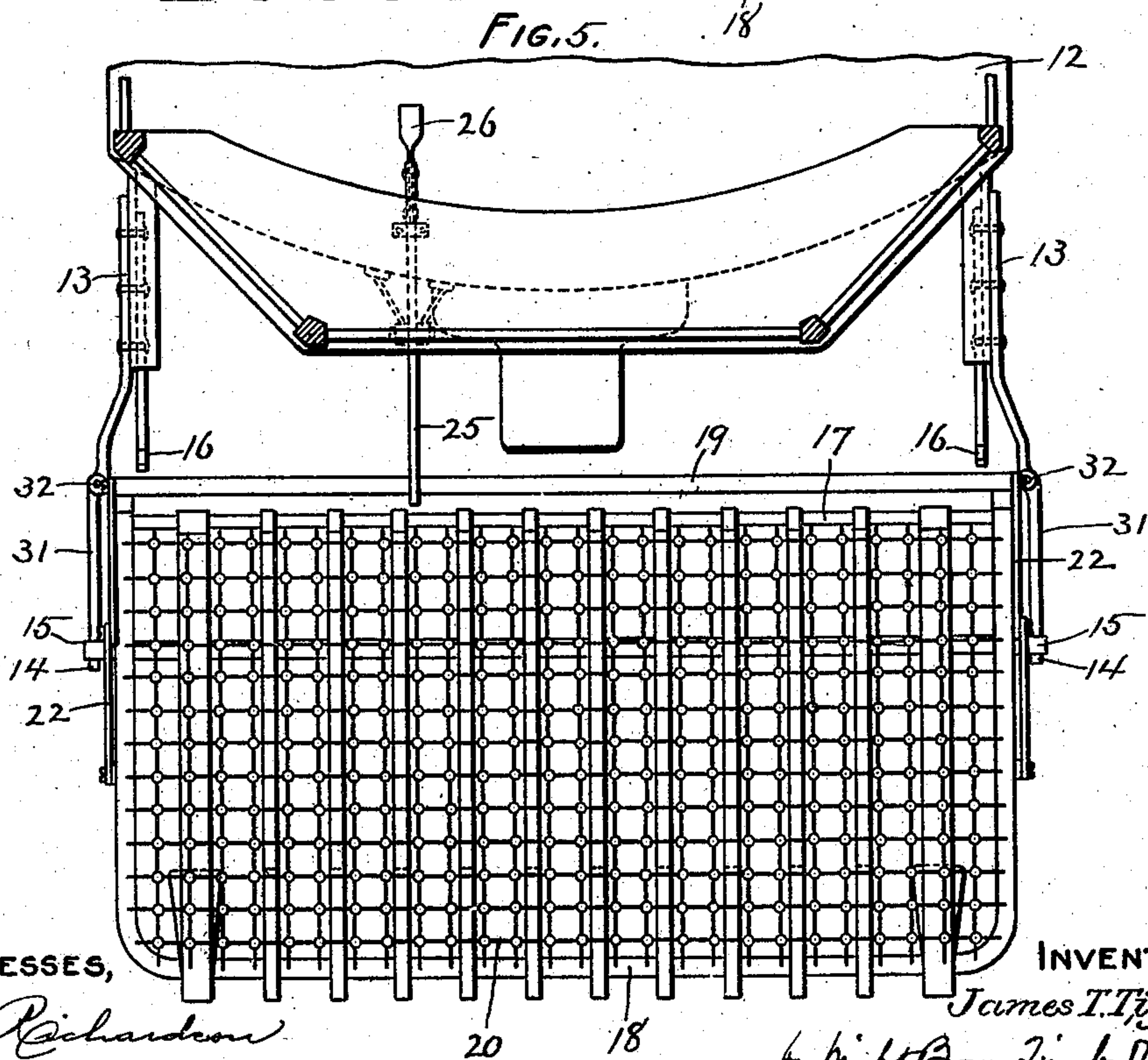


FIG. 5.



WITNESSES,

J. P. Richardson
A. L. Folsom.

INVENTOR,

James T. Tighe
by Knight Brown Limby May
Atty's.

UNITED STATES PATENT OFFICE.

JAMES T. TIGHE, OF BOSTON, MASSACHUSETTS.

CAR-FENDER.

No. 868,035.

Specification of Letters Patent.

Patented Oct. 15, 1907.

Application filed February 14, 1907. Serial No. 357,331.

To all whom it may concern:

Be it known that I, JAMES T. TIGHE, a citizen of the United States, residing at Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to a car fender in which a frame is mounted on suitable supports at the front end of the car, said frame having a suitable yielding net or filling and being arranged so that it will catch a person in front of the car and, under proper conditions, prevent serious injury to the person.

The invention has for its object to provide a simple and convenient construction in a fender of this class whereby the frame is adapted to be readily folded for compact storage on the car when not in use, and unfolded or extended and thus adapted for operation, means being provided for holding the frame at different distances from the track when in its operative adjustment and for holding it in its folded adjustment.

The invention consists in the improvements which I will now proceed to describe and claim.

Of the accompanying drawings,—Figure 1 represents a side elevation of a portion of one end of a street car equipped with a fender embodying my invention, the fender being extended in position for use. Fig. 2 represents a view similar to Fig. 1 showing the fender folded and inoperative. Fig. 3 represents a front elevation of a portion of the fender showing the adjustment represented in Fig. 2. Fig. 4 represents an end elevation of the portion of the car shown in Fig. 1, the fender being in its extended position as shown in full lines in Fig. 1. Fig. 5 represents a section on line 5—5 of Fig. 1 and a plan view of the parts below said line.

The same letters of reference indicate the same parts in all the figures.

In the drawings, 12 represents the front end of the body of a street car, and 13 13 represent supports connected rigidly to the body 12 and projecting forward from below said body to engage and support the folding net-supporting frame hereinafter described. The supports 13 are provided with two pairs of frame-supporting members, the members of one pair being hinge sockets 14 open at their upper sides and adapted to receive hinge pintles or trunnions 15 on the said frame, and seats 16 located behind the hinge members 14 and adapted to engage a rod or cross-bar 17 forming a part of the net-carrying frame. The said frame is composed of a platform member 18 and a back member 19, said members being connected by hinges which preferably include the cross-bar 17 above mentioned. The frame members 18 and 19 are provided with a suitable yielding filling which is preferably a net 20 composed of wire members suitably connected to the frame members, the portion of the net connected with the back member 19 being preferably connected at its ends with the back

member by springs 21, as shown in Fig. 4. It is obvious, however, that any other suitably constructed net or filling may be employed, adapted to cushion the blow or shock attending the impact of a human body with the fender.

The frame members 18 and 19 are connected by folding braces 22, which are adapted to be folded like the braces in a folding carriage top, each brace being composed of two links jointed at their outer ends to the frame members 18 and 19 and connected at their meeting ends by pivots 23. When the braces 22 are extended, as shown in Fig. 1, they rigidly connect the frame members 18 and 19 and prevent the frame from folding.

The platform member 18 of the frame is here shown as provided on its under side with a cross-bar 24, the ends of which form the trunnions or hinge pintle members 15. Said members are adapted to be seated in the open socket members 14, the frame being thus pivotally connected with its supports so that it may stand either in the position shown in full lines or that shown in dotted lines in Fig. 1. When the frame is in its full line position, it is supported by means of a detent 25, connected with the car and adapted to be raised to release the frame by suitable means controlled by the motorman, said means, as here shown, comprising a treadle 26 within the car vestibule, and a connection 27 between the treadle and the lever 25. A spring 28 is preferably employed to hold the detent in yielding engagement with the frame. When the frame-engaging end of the lever 25 is raised, the frame is adapted to swing forward by gravity to the position shown in dotted lines, its forward edge being dropped toward the track and supported by shoes or runners 29 adapted to slide on the track.

When the fender is not required for use, it may be folded, and its engagement with the car transferred to the seats 16, the pintles 15 being lifted out of the sockets 14 and the bar 17 moved into engagement with the seats 16 as shown in Fig. 2. When the frame is folded, the detent 25 is adapted to engage with the edge of the platform member 18 and thus support the frame in its folded position.

It will be seen that the above-described construction makes provision for detachably supporting the frame, either in its extended or its folded position, and also enables the frame to be readily lifted from either of its supports at one end of the car and transferred to corresponding supports at the opposite end of the car.

To prevent objectionable projection of the supports from the car when the fender is not in use, I form the hinge socket members 14 on arms 31 which constitute parts of the supports 13 and are connected to the main portions of said supports by hinges 32, which permit the arms 31 and socket members 14 to swing inwardly and extend crosswise of the car when the fender is folded as shown in Figs. 2 and 3.

Having thus explained the nature of my said invention, and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, what I claim is:—

1. A car fender comprising a folding frame carrying a yielding filling, and composed of a platform member and a back member hinged to the platform member, folding braces connecting said members, frame supporting bars attached to the car and projecting forwardly therefrom at opposite edges of the frame, complementary hinge members on the bars and on the platform member whereby the frame is adapted to swing, said hinge members being separable to permit the removal of the frame from its supports, and a detent controllable by an operator on the car and adapted to engage the back member to hold the frame with its platform member in a substantially horizontal position, the frame being adapted to swing toward the track when released from the detent.
2. A car fender comprising a folding frame carrying a yielding filling, and composed of a platform member and a back member hinged together, folding braces connecting said members, frame supports attached to the car and projecting forwardly therefrom at opposite edges of the frame, open hinge sockets carried by said supports, hinge pintles or trunnions affixed to the platform member and adapted to detachably engage said sockets, and a detent controllable by an operator on the car and adapted to engage the back member.
3. A car fender comprising a folding frame carrying a yielding filling, and composed of a platform member and a back member hinged together, folding braces connecting said members, frame supports attached to the car and projecting forwardly therefrom at opposite edges of the frame, open hinge sockets carried by said supports, frame seats also carried by the supports behind the sockets, the platform member being provided with hinge pintles or trunnions adapted to detachably engage said sockets, and means for securing the platform member to the car to hold the frame in a folded position, the frame being provided with members adapted to engage said seats when the frame is folded.
4. A car fender comprising a folding frame carrying a yielding filling, and composed of a platform member and a back member hinged together, folding braces connecting said members, frame supports attached to the car and projecting forwardly therefrom at opposite edges of the frame, said supports being provided with hinged arms adapted to swing inwardly and carrying open hinge

sockets at their outer ends, and with fixed arms carrying frame seats located behind the said sockets, hinge pintles or trunnions on the platform member adapted to detachably engage said sockets, and means for securing the platform member to the car to hold the frame in a folded position, the frame being provided with members adapted to engage said seats when the frame is folded.

5. A car fender comprising supports affixed to the car body, said supports having hinge sockets and seats behind said sockets, a folding frame having folding braces, a yielding filling, and hinge pintles or trunnions adapted to engage said sockets when the frame is extended, the frame being constructed to engage said seats when the frame is folded, and means for holding the frame either in an extended position or a folded position.

6. A car fender comprising a folding frame having a yielding filling, two pairs of frame-supporting members supported by and projecting forward from the car body, the members of one pair being hinge parts adapted to engage complementary hinge parts on the frame when the latter is extended, while the members of the other pair are seats adapted to engage parts of the frame when the latter is folded, and frame-retaining means on the car adapted to hold the frame in its extended position.

7. A car fender comprising a folding frame having a yielding filling, two pairs of frame-supporting members supported by and projecting forward from the car body, the members of one pair being hinge parts adapted to engage complementary hinge parts on the frame when the latter is extended, while the members of the other pair are seats adapted to engage parts of the frame when the latter is folded, and frame-retaining means on the car adapted to hold the frame in its folded position.

8. A car fender comprising a folding frame having a yielding filling, two pairs of frame-supporting members supported by and projecting forward from the car body, the members of one pair being hinge parts adapted to engage complementary hinge parts on the frame when the latter is extended, while the members of the other pair are seats adapted to engage parts of the frame when the latter is folded, and a detent on the car adapted to hold the frame in its extended position, the frame being adapted to swing downwardly toward the track when released by said detent.

In testimony whereof I have affixed my signature, in presence of two witnesses.

JAMES T. TIGHE.

Witnesses:

C. F. BROWN,
A. L. FOLSOM.