

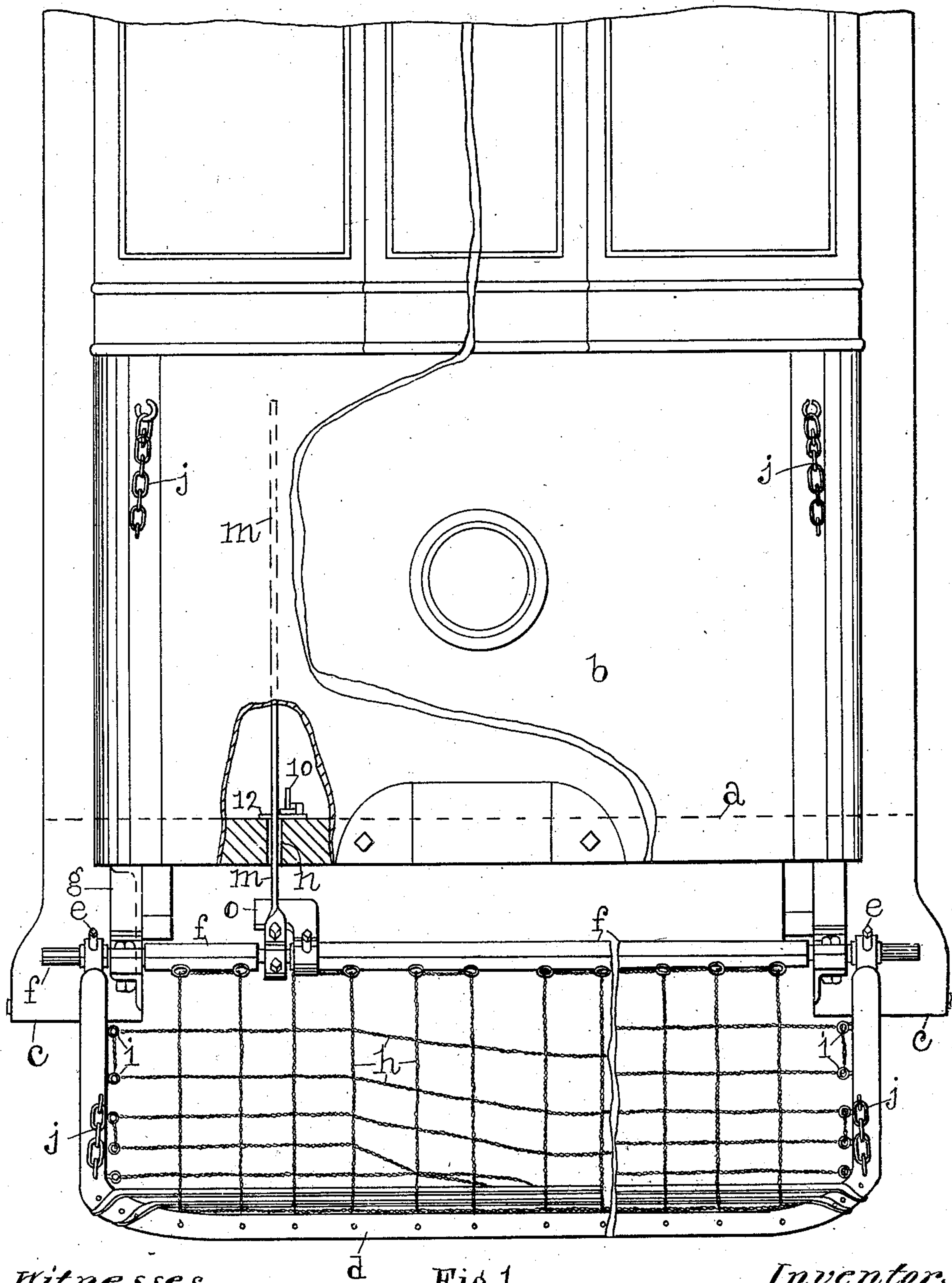
No. 891,270.

PATENTED JUNE 23, 1908.

H. L. LIBBY.
CAR FENDER.

APPLICATION FILED SEPT. 18, 1907.

3 SHEETS—SHEET 1.



Witnesses.

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J. Murphy

Inventor.

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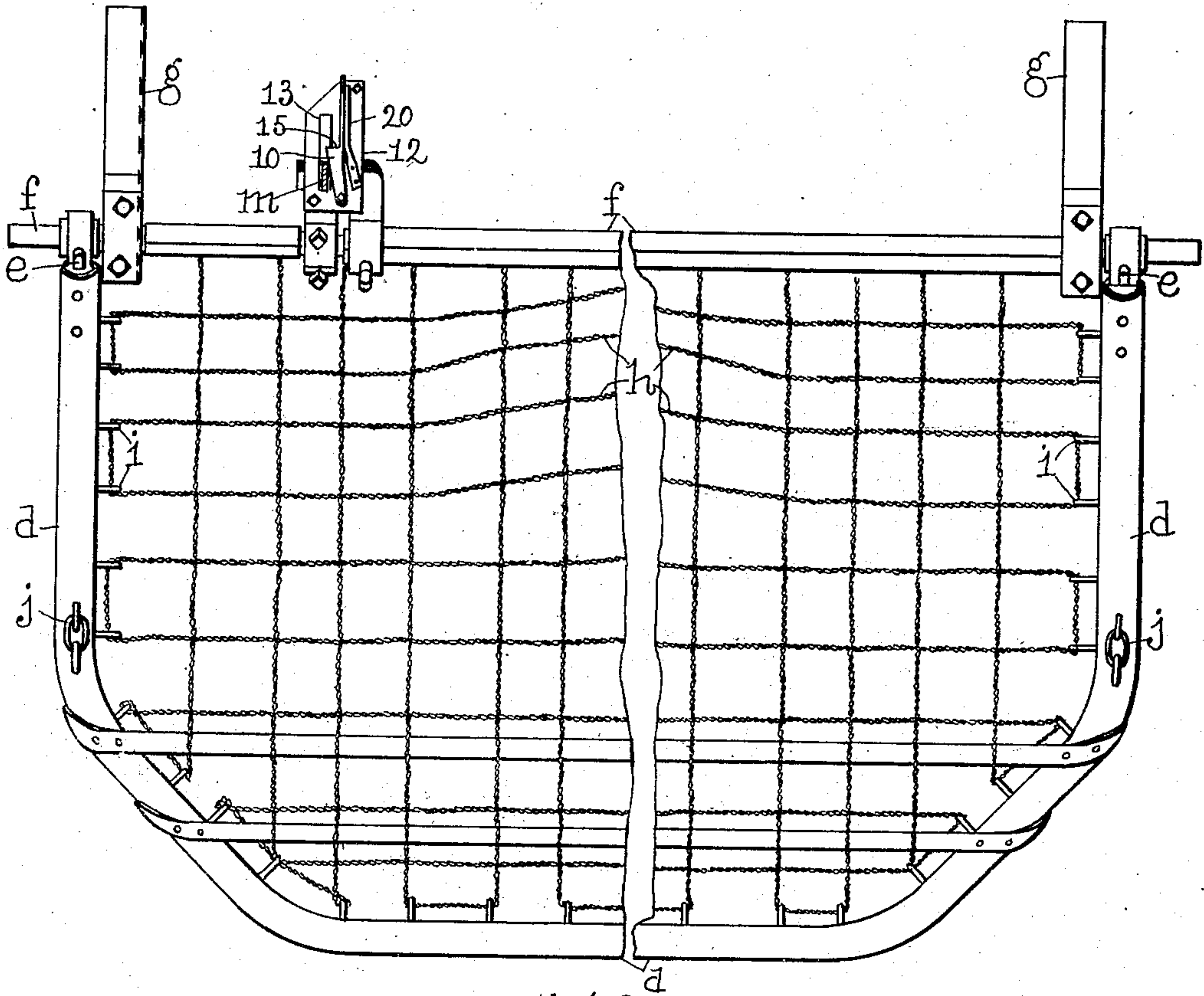


Fig. 2.

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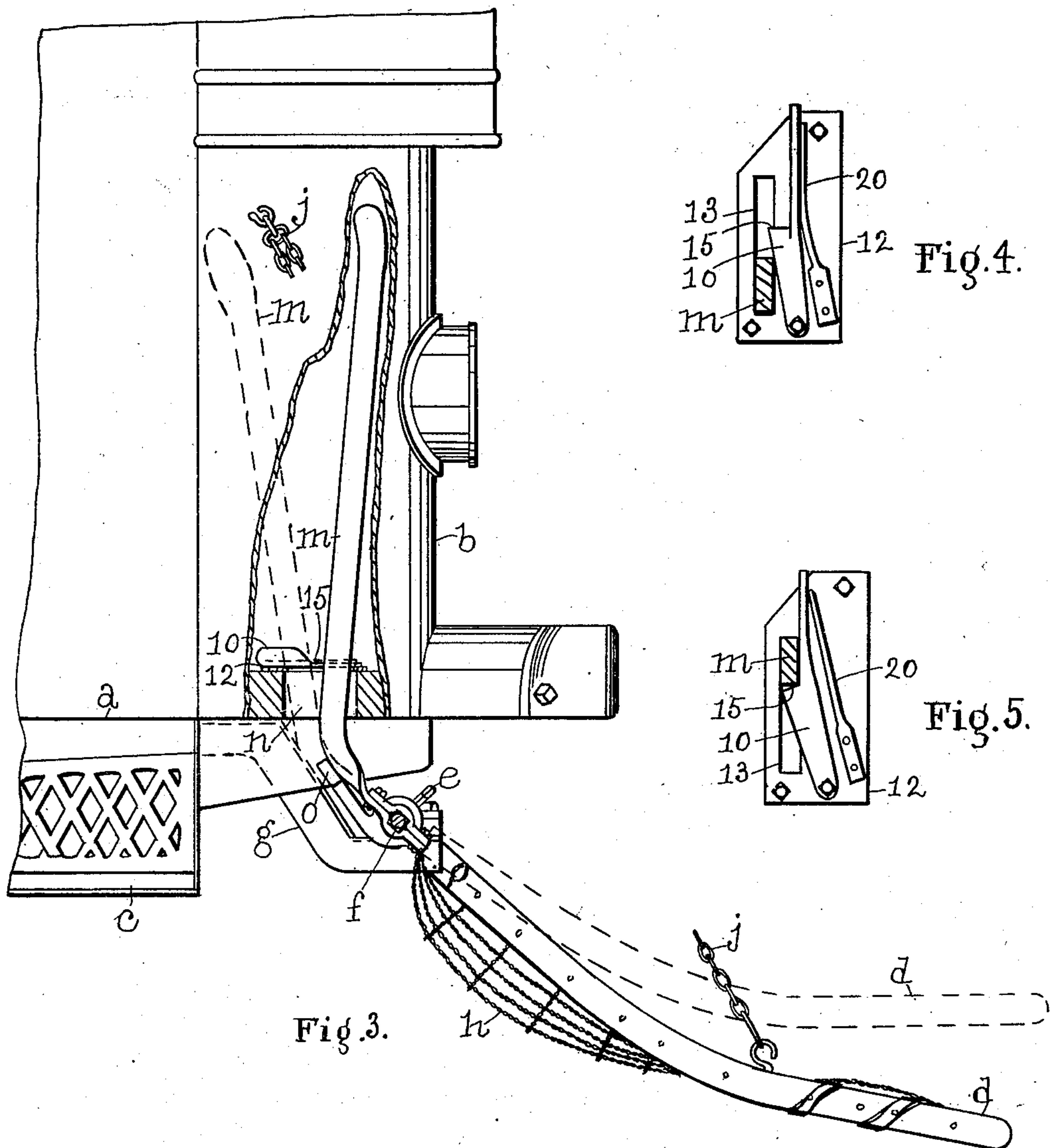
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3 SHEETS—SHEET 3.



UNITED STATES PATENT OFFICE.

HARRY L. LIBBY, OF BOSTON, MASSACHUSETTS.

CAR-FENDER.

No. 891,270.

Specification of Letters Patent.

Patented June 23, 1908.

Application filed September 18, 1907. Serial No. 393,499.

To all whom it may concern:

Be it known that I, HARRY L. LIBBY, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Car-Fenders, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

This invention relates to a guard or fender for railway cars and especially surface railway cars operated by electricity.

The present invention has for its object to provide a simple, inexpensive and efficient fender, which is normally in its lowered or operative position, in close proximity to the track, but which is capable of being elevated by the motorman or other operator to clear an inanimate obstruction on the track.

Figure 1 is a front elevation of a sufficient portion of a street railway car provided with a fender embodying this invention, to enable it to be understood. Fig. 2, a plan of the fender shown in Fig. 1. Fig. 3, a side elevation of the car and fender shown in Fig. 1, and Figs. 4 and 5, details to be referred to.

Referring to the drawings, *a* represents the platform, *b* the dasher and *c* the steps of a street railway car of any suitable or usual construction, which is provided with a fender embodying this invention.

The fender referred to may be made as herein shown and consists of a metal frame, preferably made as herein shown and consisting of a substantially U-shaped rod or bar *d*, which is fastened at its ends as by bolts *e* or otherwise to a rock-shaft *f*, journaled in brackets or hangers *g*, which may be attached to the platform *a* and form a support for the fender.

The metal frame of the fender may be provided with a net, which may be of any suitable construction and which is shown as composed of cords *h* extended transversely and longitudinally of the frame and attached to the latter by suitable eyes *i*.

Provision is made for holding the fender in its lowered or operative position with its front end in close proximity to the track and at such distance therefrom as to prevent the passage of a person under the fender. This result may be accomplished as herein represented by means of chains, cords, or other flexible connections *j*, which are attached at their lower ends to the sides of the U-shaped

bar or rod *d* and at their upper ends to the dasher *b*.

Provision is made for elevating the front end of the fender so as to permit it to pass over large stones or any other inanimate object between the rails of the track, which it is not desired to pick up and which might injure the fender if allowed to strike the same. This result may be accomplished as herein shown and for this purpose, the rock-shaft *f* has loosely mounted on it a lever *m*, which is extended up through a slot *n* in the platform *a* and into position to be readily operated by the motorman. The lever *m* coöperates with a dog or arm *o* fast on the rock-shaft and extended into the path of backward movement of the said lever, so as to be engaged thereby and rock the shaft *f* in such direction as to lift the front end of the fender from its operative position, shown by full lines, into its dotted line position, shown in Fig. 3, in which latter position, the fender is sufficiently elevated to clear any ordinary obstruction.

The fender may be held in its elevated position indicated by dotted lines in Fig. 3, by the motorman retaining the lever *m* in its backward position, but it is preferred to provide means independent of the motorman for retaining the fender in its elevated position. To this end a locking device is provided which is shown as a lever 10, pivoted to a plate 12, which is secured to the platform *a* and is provided with a slot 13, which registers with the slot *n* in the platform and through which the lever *m* is extended as represented in Figs. 3 to 5.

The locking lever 10 is provided with a shoulder 15, which is adapted to be projected across the slot 13 and form a latch to engage the lever *m* when the latter is in its backward position, and thus prevent the lever *m* and the fender from being moved into their normal positions until released by the operator, which may be effected by the foot of the motorman acting against the rear portion of the lever 10 to turn it on its pivot so as to disengage the latch 15 from the lever *m* and permit the fender to drop into its normal or operative position indicated by full lines, Fig. 3. The lever 10 may be automatically moved by a spring 20 into its engaging position shown in Fig. 5 as soon as the lever *m* has been moved past the latch 15.

By mounting the lever *m* loose on the rock-shaft *f* and providing the dog or arm *o* to be

engaged by said lever, the fender can be raised into its dotted line position by means of the lever, and when not in use can be turned up against the dasher.

5 From the above description, it will be seen that the fender in its lowered position indicated by full lines in Fig. 3, is in its normal working position in close proximity to the track and ready to perform its function in-
10 dependently of the motorman or other operator, thereby increasing the efficiency of the device as a life saver, as it is always in its operative position under normal conditions. Furthermore the fender can be placed in
15 such close proximity to the track as to prevent a person or child from passing under the same, while at the same time, it is prevented from being injured by stones or other inanimate objects, by the motorman lifting
20 it from its normal position sufficiently to enable it to pass over the said objects.

I have herein shown one construction of fender which I may prefer, but I do not desire to limit my invention in this respect.

25 Claims.

1. The combination with a railway car, of a fender carried thereby and comprising a frame pivoted at its rear end and having its front end normally in its lowered position in
30 close proximity to the track, a lever loosely connected with said fender, means attached to the fender and cooperating with said lever to be engaged thereby and lift the front end of the fender up from the track and to per-
35 mit the fender to be turned upward independently of said lever, and a locking device cooperating with said lever to retain the fender in its lifted position, substantially as described.

40 2. The combination with a railway car, of a fender carried thereby and comprising a frame pivoted at its rear end and having its front end normally in its lowered position in close proximity to the track, means to sup-
45 port the front end of the fender in its lowered position, and means under control of the operator to turn the fender on its pivot and elevate its front end, said means being sepa-

rate from said fender to permit the latter to be turned on its pivot independently of said 50 means, for the purpose specified.

3. The combination with a railway car, of a fender carried thereby and comprising a frame, a rock-shaft to which said frame is se-
cured at its rear end, means to support the 55 front end of the said frame in close proximity to the track under normal conditions, and means under control of the operator on the car and movable independently of the rock-shaft but cooperating therewith for rocking 60 said shaft and elevating the front end of the said frame from its lowered position, substantially as described.

4. The combination with a railway car, of a fender carried thereby and comprising a 65 frame, a rock-shaft to which said frame is secured at its rear end, means to support the front end of the said frame in close proximity to the track under normal conditions, means under control of the operator on the car and 70 movable independently of the rock shaft but cooperating therewith for rocking said shaft and elevating the front end of the said frame from its lowered position, and a locking device cooperating with the means for rocking 75 said fender to retain the latter in its elevated position, substantially as described.

5. The combination with a railway car provided with a platform, of a fender there-
for pivoted at its rear end and having its 80 front end normally in its lowered position in close proximity to but above the track, means for sustaining the front end of the fender above the track in the lowered posi-
tion, and means extended up through the 85 said platform and under the control of the operator while on the car for elevating the fender from its operative position, substantially as described.

In testimony whereof, I have signed my 90 name to this specification in the presence of two subscribing witnesses.

HARRY L. LIBBY.

Witnesses:

JOHN R. MOULTON,
JOHN J. KELLEY.