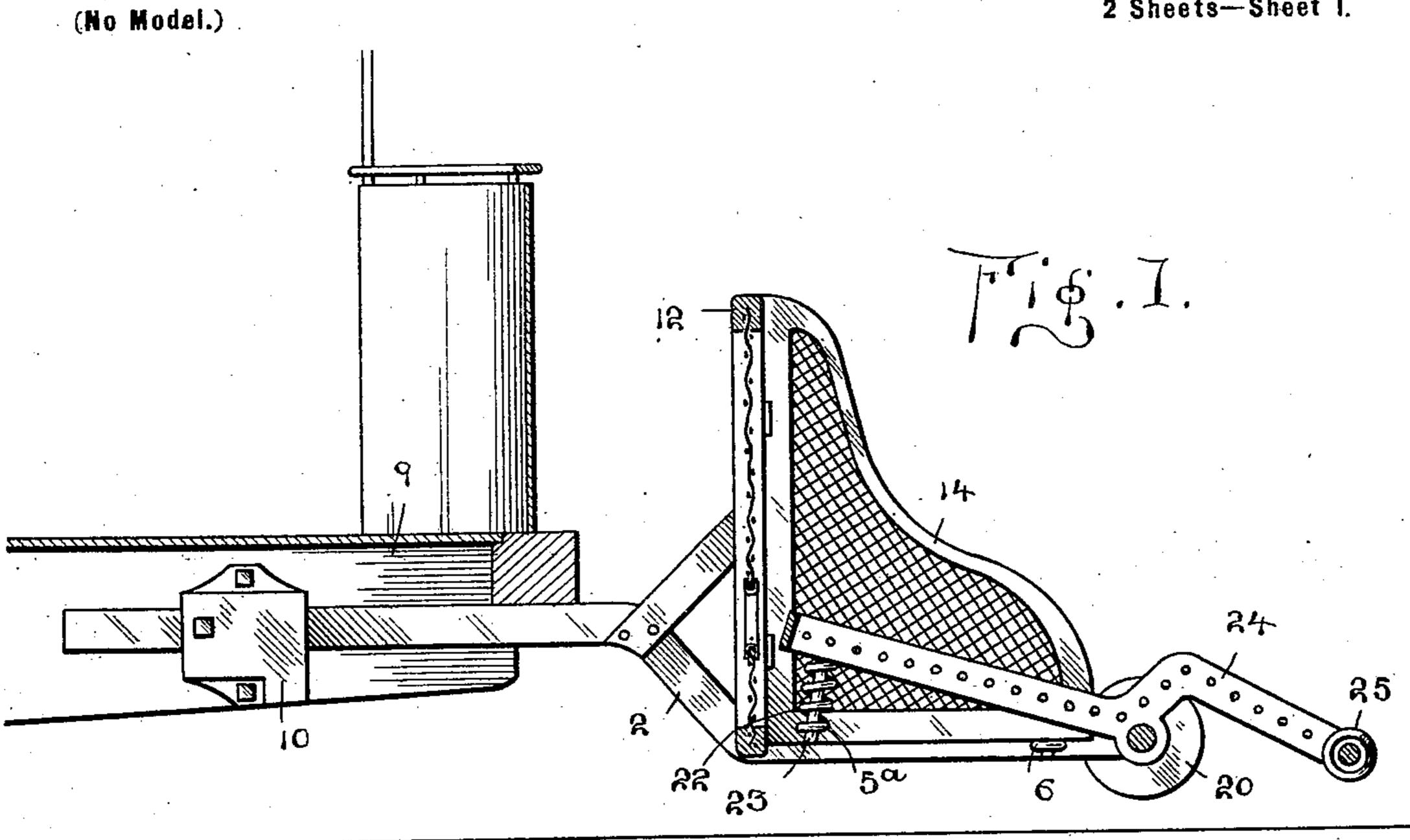
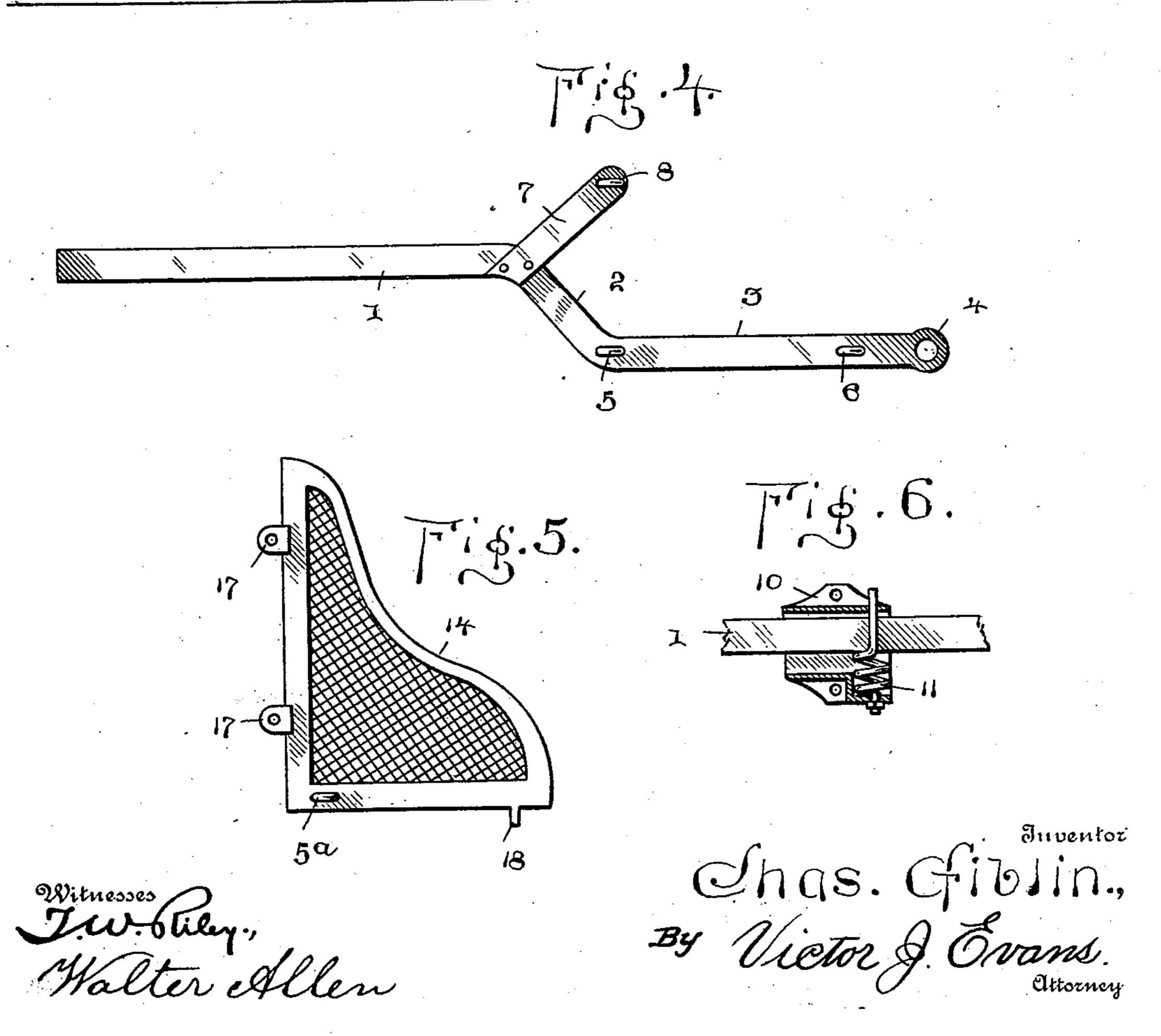
C. GIBLIN. CAR FENDER.

(Application filed Aug. 12, 1901.)

2 Sheets—Sheet I.





No. 705,918.

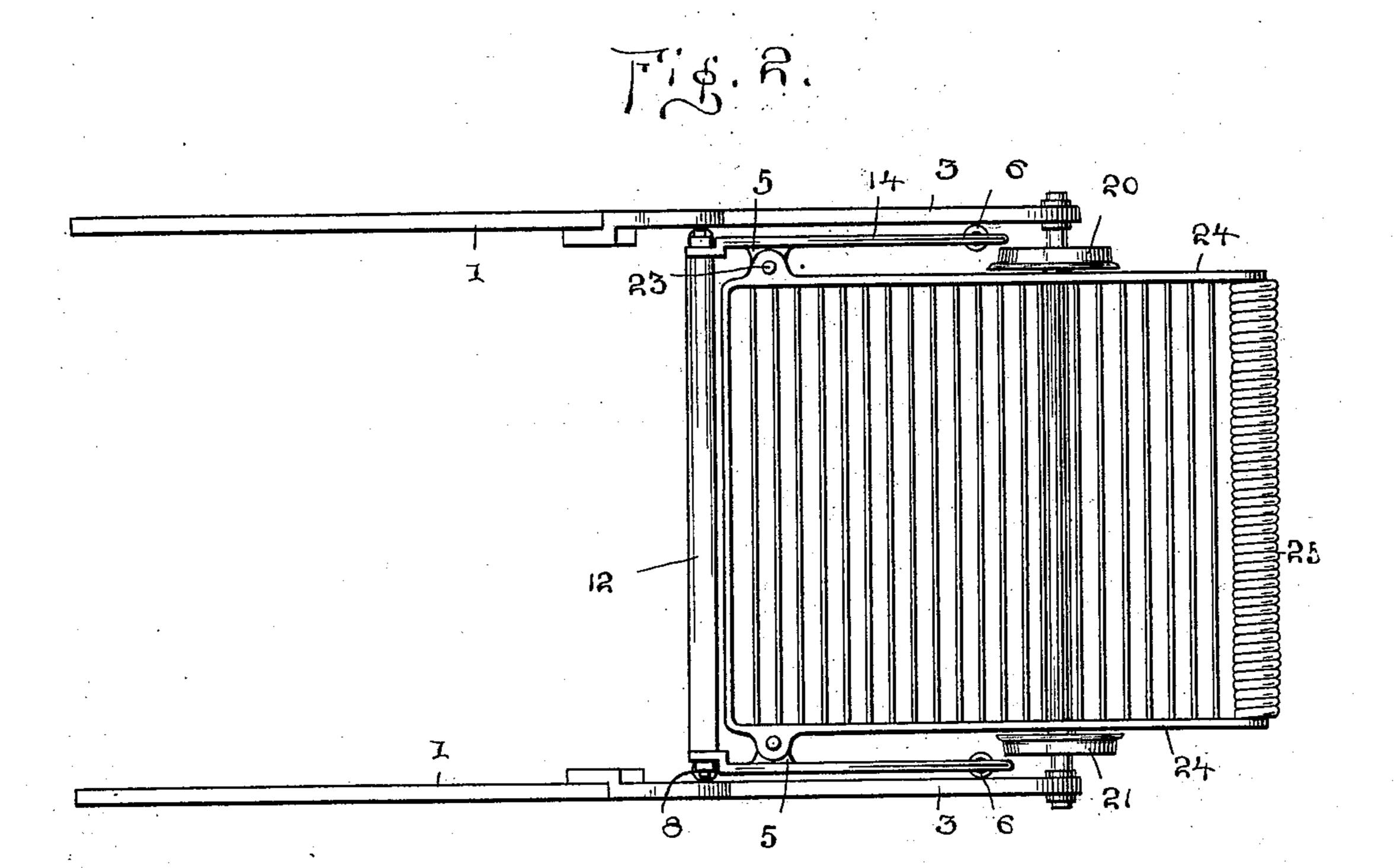
Patented July 29, 1902.

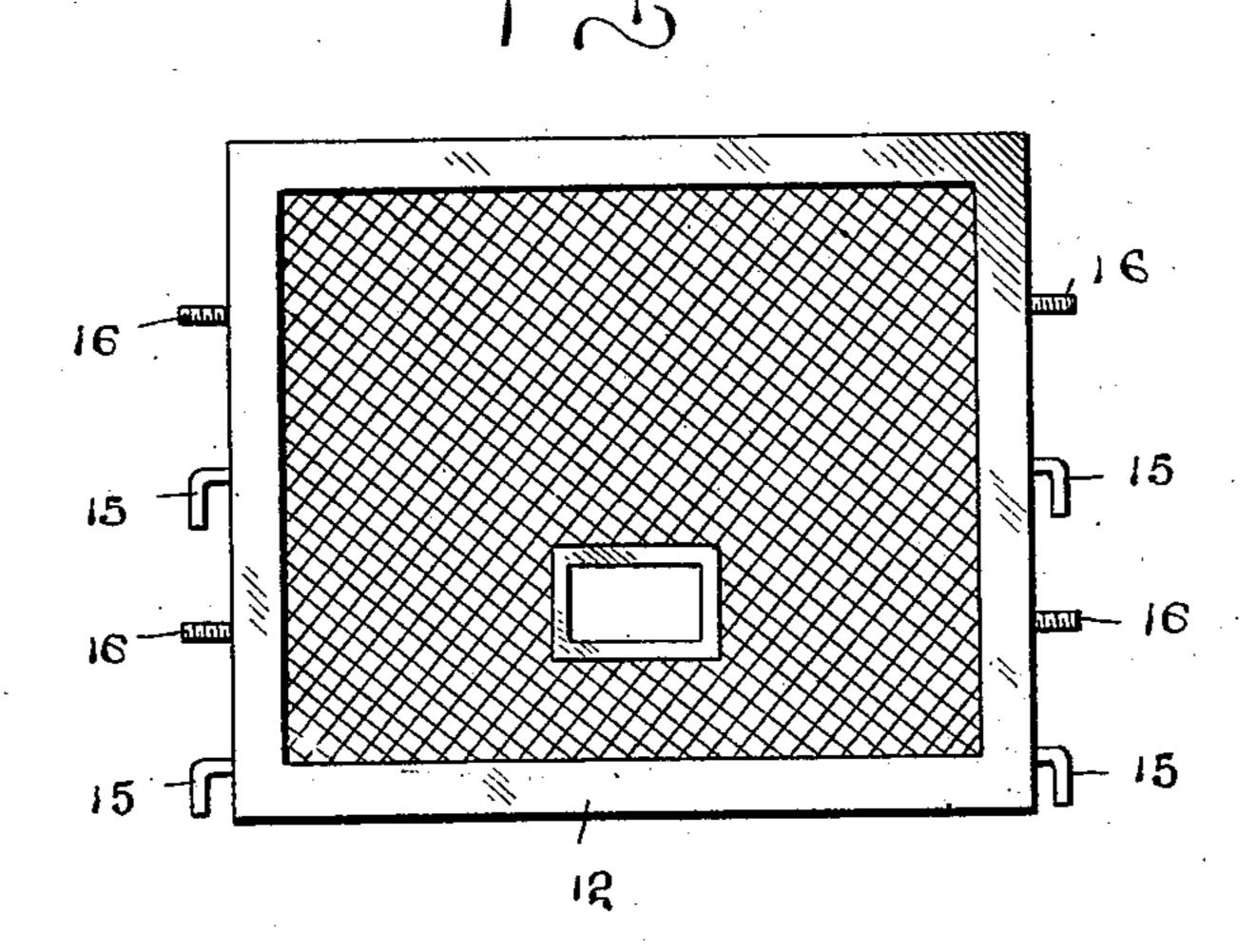
## C. GIBLIN. CAR FENDER.

(Application filed Aug. 12, 1901.)

(No Model.)

2 Sheets—Sheet 2.





Witnesses Tw. Piley., Walter Allen Chas. Giblin.,
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## United States Patent Office.

## CHARLES GIBLIN, OF CLEVELAND, OHIO.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 705,918, dated July 29, 1902.

Application filed August 12, 1901. Serial No. 71,863. (No model.)

To all whom it may concern:

Be it known that I, CHARLES GIBLIN, a citizen of the United States, residing at Cleveland, in the county of Cuyahoga and State of Ohio, 5 have invented new and useful Improvements in Car-Fenders, of which the following is a specification.

This invention relates to car-fenders, and the primary object thereof is to provide a de-10 vice which will automatically pick up the person or obstruction on the track in front of a car without the necessity of being manipulated by the motorman.

A further object is to provide a cleat or at-15 taching means for the fender which will be sufficient to normally retain the same above the track, so that the weight within the cage will permit the same to drop to a level with the road-bed or the rails, so as to obviate the 20 liability of the person or obstruction becoming mangled beneath the car.

With these and other objects in view the invention consists in the novel construction, combination, and arrangement of parts, which 25 will be hereinafter more fully described and claimed, and illustrated in the accompanying drawings, showing the preferred form of my

invention, and in which— Figure 1 designates a vertical sectional view 30 through the cage of the fender, parts being in elevation to show the means of applying the fender to the car. Fig. 2 is a top plan view of the fender detached. Fig. 3 is a rear view of the cage. Fig. 4 is a side elevation 35 of one of the supports for the fender. Fig. 5 is a side elevation of the cage. Fig. 6 is a vertical longitudinal sectional view through

the securing-cleat. The reference-numeral 1 designates one of 40 the supports of the fender, which comprises a bar bent or cast downwardly, as at 2, and provided at its forward end with an exten-

sion or arm 3 on the same parallel plane with the bar 1. The arm 3 terminates at its for-45 ward end in a bearing 4, and intermediate the ends of said arm are cast or otherwise secured suitable eyes 5 and 6 at right angles to the same. An inclined upwardly-extending arm or support 7 projects from the support 1 50 at the juncture of said support with the down-

is also provided with a right-angularly disposed eye 8.

It will be noticed that there are two of the supporting-arms designated by the reference- 55 numeral 1 and that they are secured to the respective sides of the car by means of hollow cleats 10. Each cleat is provided with flanges to form a box-like structure, so that an oscillatory play will be permitted by the support 60 1, said support resting within said cleat upon a coil-spring 11, which is secured within the cleat, and the torsional strength thereof is sufficient to raise the arm to a horizontal plane, as will be explained hereinafter.

The cage, which is carried by the supports 1, comprises a back and two side pieces numbered 12, 13, and 14, respectively. The back 12 is provided with a plurality of right-angularly-disposed hooks 15, which engage in 70 the eyes 5 and 8, and these hooks alternate with bolts or projecting pins 16, which pass through the eyes 17 at the rear edge of the sides 13 and 14, respectively. Suitable nuts are then secured upon said bolts to fasten the 75 sides to the back. The forward portions of the sides are supported by means of downwardly-projecting pins 18, which engage the eyes 8 on the forward extension 2 of the support.

The structure just described is primarily rigid with relation to the car except for the spring action which may result by reason of the fact that the supports 1 rest upon the spring 11.

A transverse shaft or axle 19 is journaled in the bearings 4 of the supports 1 and carries on its respective ends wheels 20, which are spaced apart a sufficient distance to coincide with the gage of the track. A pivoted 90 bottom 21 for the cage is journaled upon this shaft and is supported at its rearward end by coil-springs 22, which encircle downwardly-projecting pins 23, working in the eyes 5<sup>a</sup>. Normally this pivoted bottom will 95 rest on an inclined plane and at its forward end is provided with an inclined extension 24, which projects beyond the front end of the cage. An antifriction-roller 25 is provided at the extreme forward end of the ex- 100 tension 24 and is constructed of a resilient ward extension 2, and this supporting-arm 7 | coil, so that a person will not be injured if

struck thereby. Said roller is designed also to rest upon the track when the fender strikes an obstruction. For instance, if the person was on the track he would be struck 5 by the roller first, and his weight would be sufficient to cause the cage to drop, so as to permit the wheel 20 to engage the rails. As he passed onto the pivoted bottom 21 his weight would be sufficient to cause said bot-10 tom to assume an approximately horizontal plane, and this bottom would remain in this position until the car was stopped and the person removed from the cage.

From the foregoing description it will be 15 apparent that this device will be entirely automatic in its operation, and the simplicity embodied in its construction is such that it should at all times be operative, and the liability of its getting out of order will be di-

20 minished.

While I have specifically described what to me at this time appears to be the very bestmeans of accomplishing the desired result, I would have it understood that I do not limit 25 myself to the exact construction shown and described, and I therefore reserve to myself the right to make such changes in the minor details of construction as fairly fall within the scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by

Letters Patent, is—

1. The combination with a car, of bars secured thereto, supporting-arms carried by the 35 bars, the sides and back of a cage detachably secured to the arms and bars, and a bottom pivotally mounted between the sides.

2. The combination with a car, of bars secured thereto, supporting-arms carried by the 40 bars, the sides and back of a cage detachably secured to the arms and bars, a shaft carried by the bars, and a bottom pivotally mounted

upon the shaft.

3. The combination with a car, of brackets 45 secured thereto, bars secured to said brackets, and each having a downwardly-bent portion and a forwardly-extending arm, springs carried by said brackets to normally keep said arms elevated, the sides and back of a 50 cage carried by said arms, a shaft carried by the forward ends of said arms, wheels carried by said shaft, and a bottom pivotally secured to said shaft.

4. The combination with a car, of brackets 55 secured thereto, bars secured to said brackets to have a limited vertical movement, springs carried by said brackets to normally hold said bars elevated, the sides and back of a cage carried by said bars, a shaft journaled on said 60 bars, wheels carried by said shaft, and a bot-

tom pivoted upon said shaft.

5. The combination with a car, of bars secured thereto, supporting-arms carried by the bars, the sides and back of a cage detachably secured to the arms and bars, a shaft carried 65 by the bars, a bottom pivotally mounted upon the shaft, and means carried by the sides and bottom to normally retain the bottom in an inclined plane.

6. The combination with a car, of brackets 70 secured thereto, bars secured to said brackets, and having downwardly-curved portions and forwardly-extending arms, supportingarms secured to said downwardly-curved portions, sides and back of a cage, means for se- 75 curing said sides and back together, means for securing said sides and back to the supporting and forwardly-extending arms respectively, eyes carried by said sides, a shaft journaled in said forwardly-extending arms, 80 wheels carried by said shaft, a bottom pivotally mounted on said shaft, pins secured to said bottom to engage said eyes, springs interposed between said eyes and said bottom to hold said bottom normally inclined and an 85 antifriction-roller secured to the front of said bottom.

7. The combination with a car, of bars secured thereto, supporting-arms carried by the bars, the sides and back of a cage detachably 90 secured to the arms and bars, a shaft carried by the bars, a bottom pivotally mounted upon the shaft, eyes carried by the sides, means carried by the bottom and adapted to engage the eyes, and springs interposed between the 95 eyes and bottom to normally retain the bot-

tom in an inclined plane.

8. The combination with a car, of brackets secured thereto, springs carried by the brackets, bars secured to the brackets, supporting- 100 arms carried by the bars, the sides and back of a cage detachably secured to the arms and bars, a shaft carried by the bars, wheels journaled upon the shaft, a bottom pivotally mounted upon the shaft, and means carried 105 by the sides and bottom to normally retain the bottom inclined.

9. The combination with a car, of bars secured thereto, and having downwardly-bent portions and forwardly-extending arms, sup- 110 porting-arms secured to the downwardly-bent portions, the sides and back of a cage detachably secured to the supporting and forwardlyextending arms, a shaft carried by the forwardly-extending arms, and a bottom pivot- 115 ally mounted upon the shaft.

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

CHARLES GIBLIN.

Witnesses:

C. DILLEY, ELLA GIBLIN.