

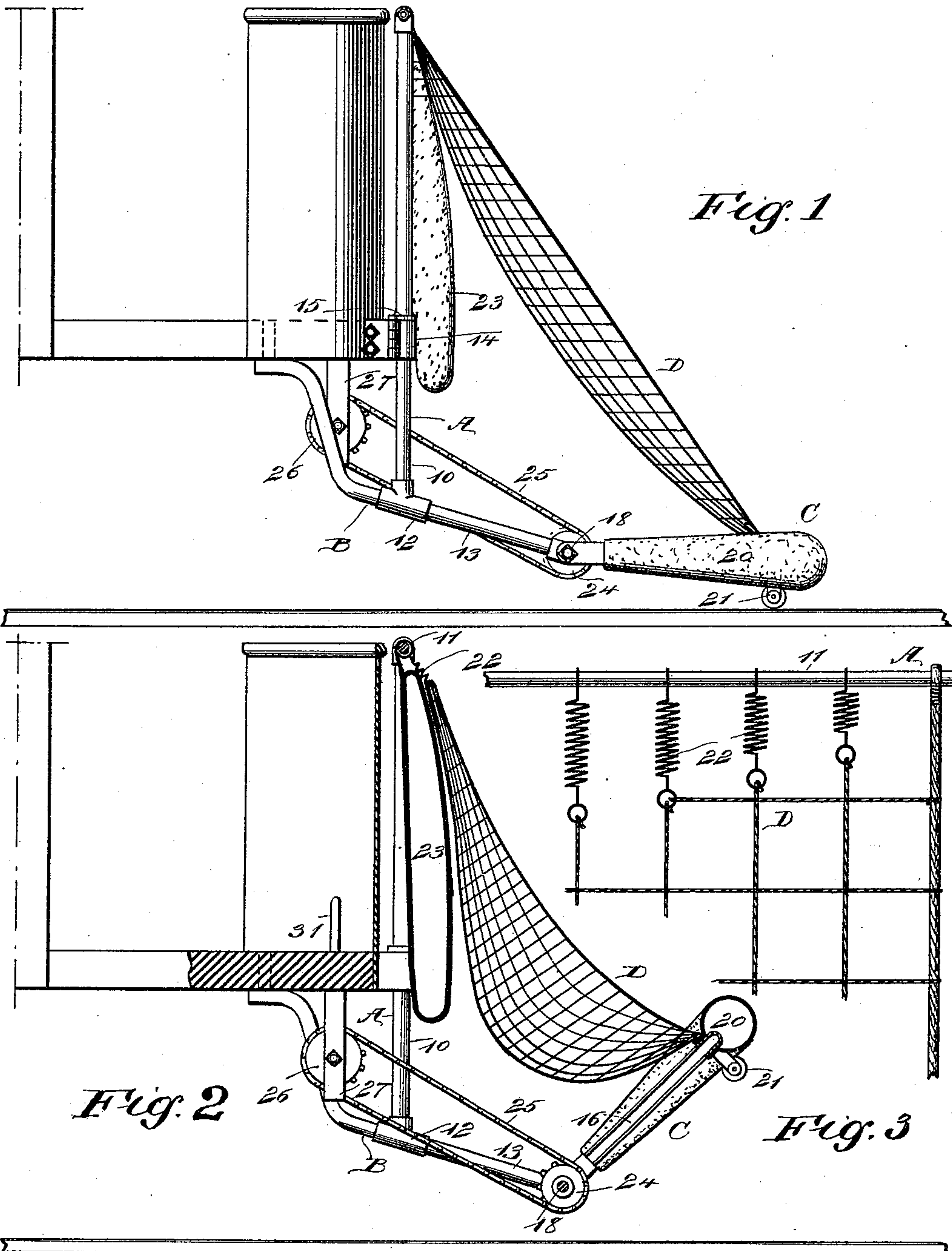
(No Model.)

2 Sheets—Sheet 1.

C. E. MONTELL.
CAR FENDER.

No. 538,456.

Patented Apr. 30, 1895.



WITNESSES:

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INVENTOR

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BY

Munn & Co.
ATTORNEYS.

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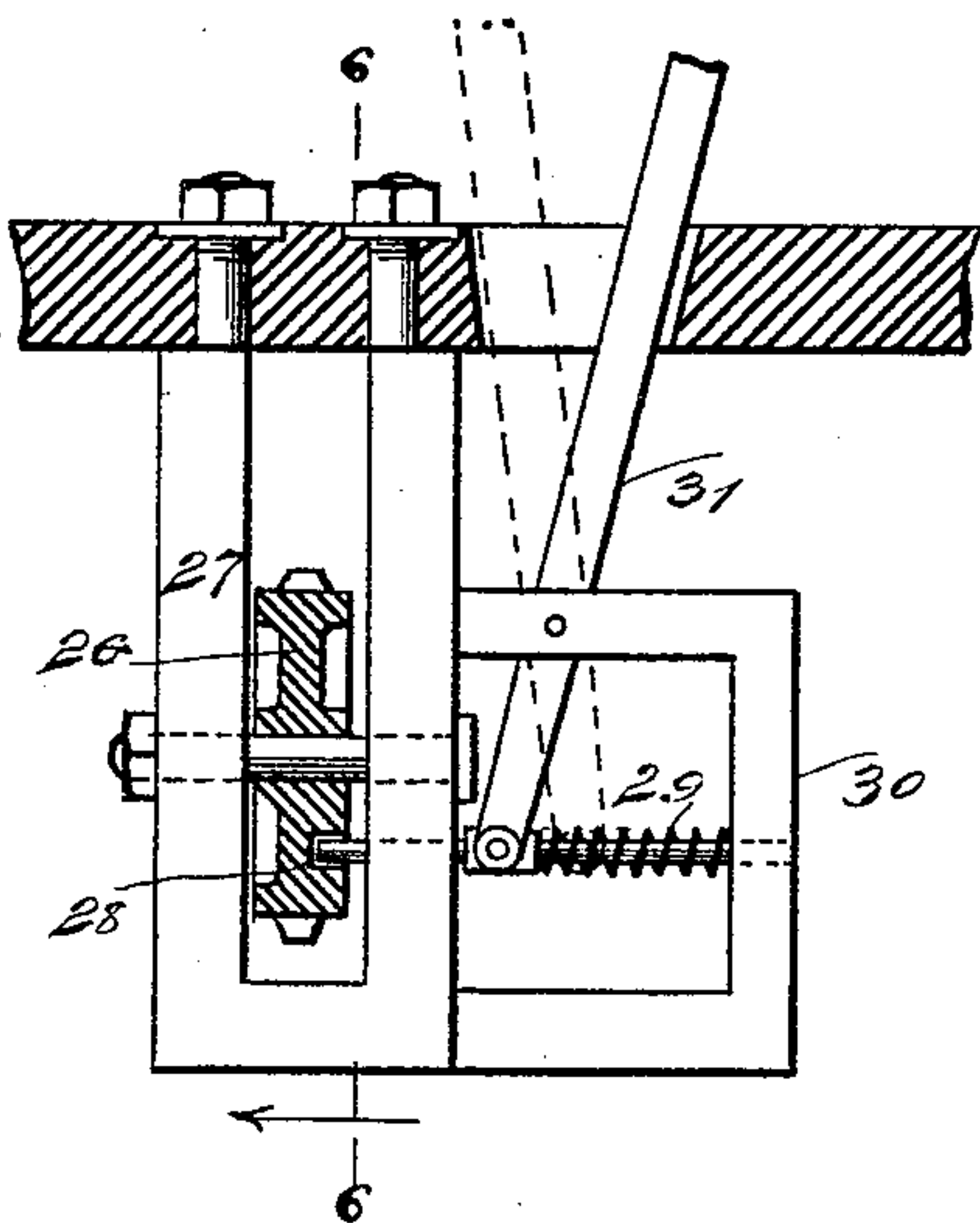
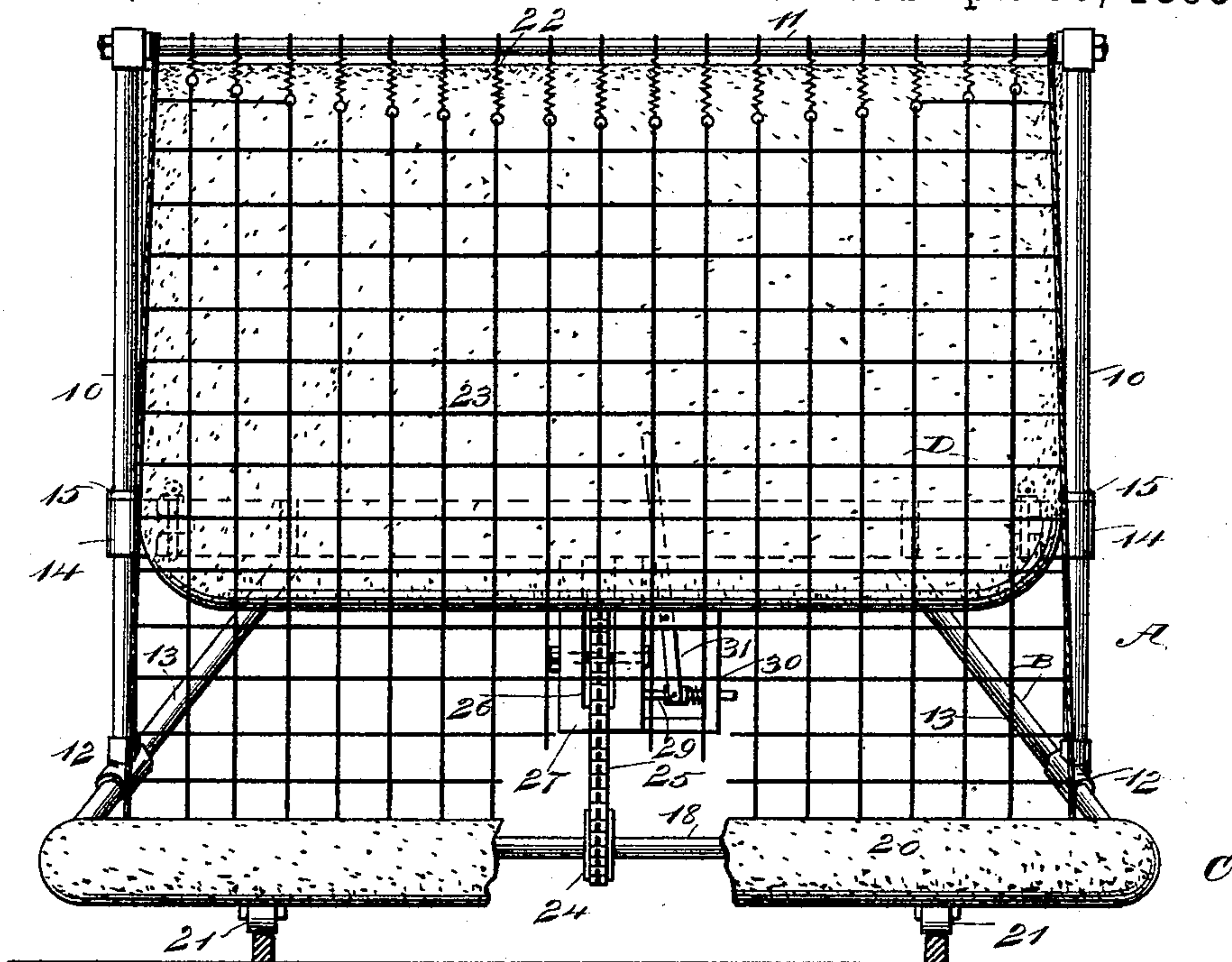


Fig. 5

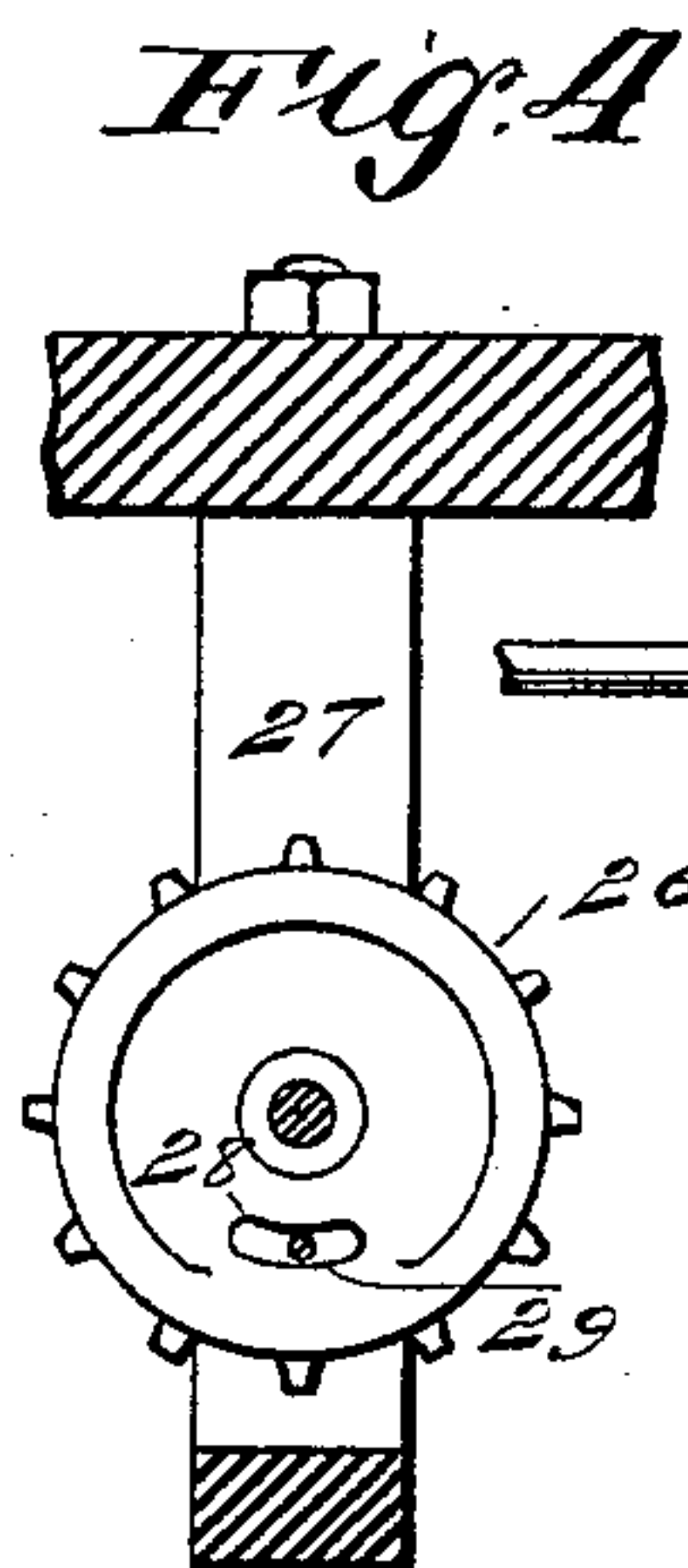


Fig. 6

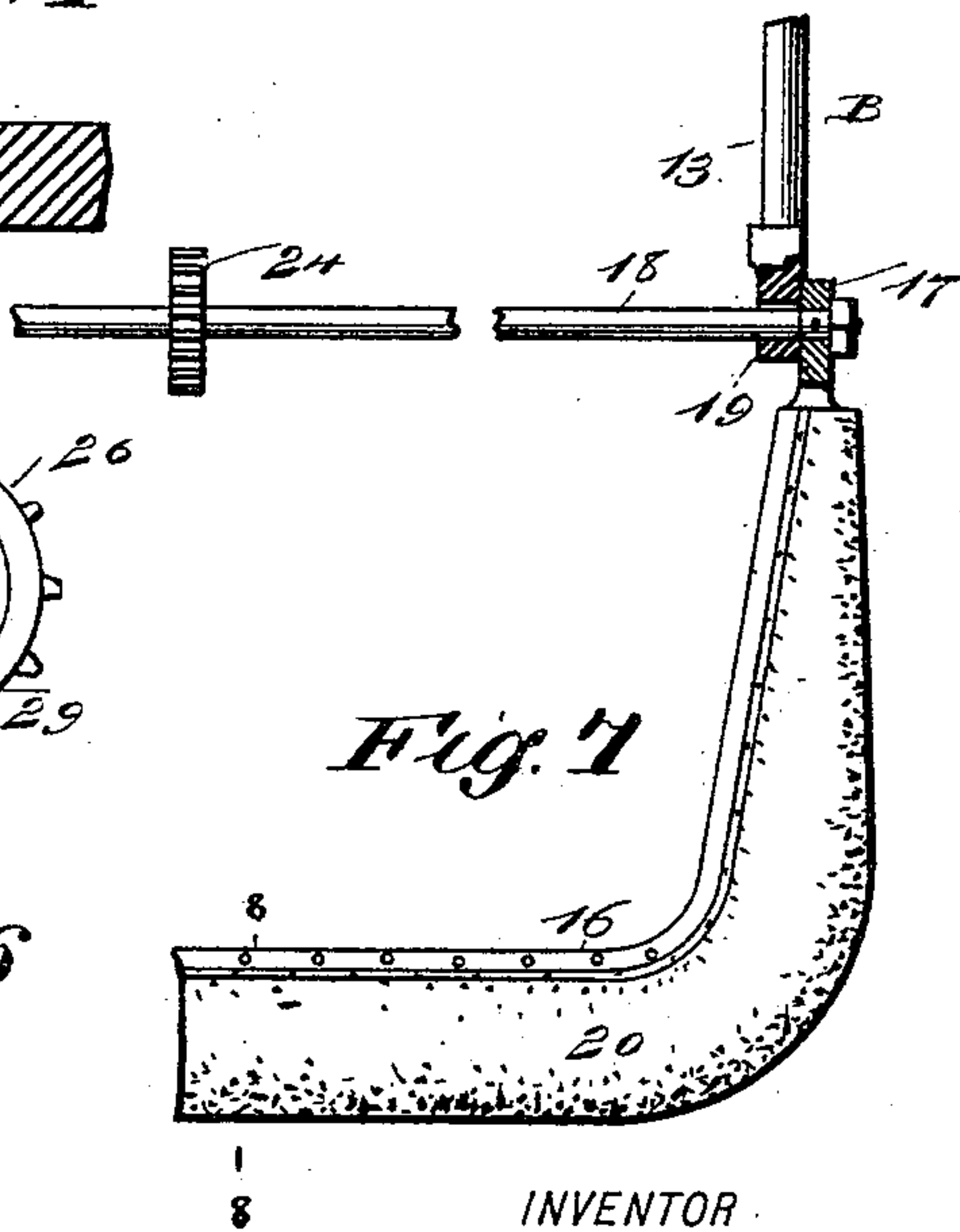


Fig. 7

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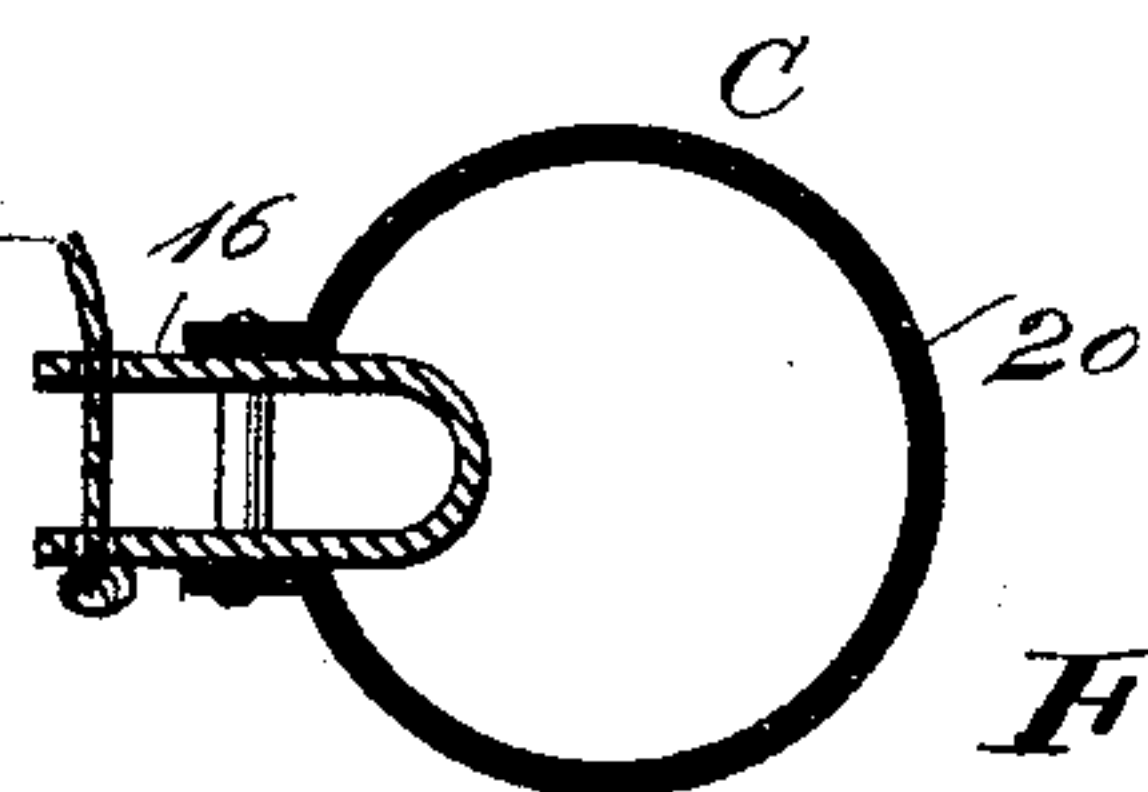


Fig. 8

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UNITED STATES PATENT OFFICE.

CHARLES EMIL MONTELL, OF WHITE PLAINS, NEW YORK, ASSIGNOR TO
JESSE F. GRIFFEN AND GEORGE W. COVENTRY, OF SAME PLACE.

CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 538,456, dated April 30, 1895.

Application filed June 9, 1894. Serial No. 513,983. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EMIL MONTELL, of White Plains, in the county of Westchester and State of New York, have invented a new and useful Improvement in Car-Fenders, of which the following is a full, clear, and exact description.

My invention relates to an improvement in car fenders, and it has for its object to provide a fender of simple and durable construction, capable of convenient and expeditious application to either end of a car, or the fender, if desired, may be a fixture upon the car.

A further object of the invention is to provide a cushioned receiver for the fender, capable of limited upward movement, and a receiving net attached to an upper and stationary portion of the fender, and to the movable cushioned section, together with a means for automatically locking the cushioned front of the fender in an upright, or substantially upright, position, thus forming a cradle in which the object struck by the fender will be safely held, it being within the power of the motor-man, gripman or conductor to drop the cushioned front of the fender to its normal or receiving position whenever such action may be necessary.

My invention consists of the novel construction and combination of the several parts, as will be hereinafter fully set forth, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar figures and letters of reference indicate corresponding parts in all the views.

Figure 1 is a side elevation of the improved fender applied to the platform of a car, the fender being in its normal or receiving position. Fig. 2 is a vertical section through the fender, taken near the center, the fender being in the position it assumes after having received an object. Fig. 3 is a partial front elevation of the net-section of the fender. Fig. 4 is a front elevation of the fender, a portion thereof being broken away. Fig. 5 is a section through a portion of the platform, illustrating the locking device for the fender. Fig. 6 is a vertical section taken essentially on the line 6 6 of Fig. 5. Fig. 7 is a plan view of a

portion of the front framing of the fender, and Fig. 8 is a section taken transversely on the line 8 8 of Fig. 7.

In carrying out the invention the fixed section of the fender consists of a front vertical frame A, and a lower supporting frame B. The front frame consists of two uprights 10, and an upper cross bar 11 connecting the uprights, each upright being preferably made to terminate at its lower end in a socket 12. The lower frame B of the stationary section consists of two side bars 13, which are secured to the under portion of the platform of a car, and are made to extend downwardly and then forwardly in an inclined position as shown in Fig. 1. The forward ends of the said side bars are some distance in front of the platform, and the said side bars 13, in addition to their forward inclination, are given an outer or lateral inclination in opposite directions, whereby, as shown in Fig. 4 these side bars have somewhat of the arrangement of the members of the letter V.

The upright stems of the stationary frame A are attached, through the medium of a socket 12, upon the side bars of the lower or supporting frame, the attachment being rigid, and it is made in any suitable or approved manner. Preferably the vertical frame A of the stationary section of the fender, is attached to the platform of the car in a removable manner, as illustrated in Fig. 1; and this is usually accomplished by securing upon opposite sides of the platform, in front of the dash board, a hinged socket 14 which socket is adapted for clamping engagement with the upright stem, the uprights being provided with a collar or flange 15 to rest upon these sockets.

The movable or front section C of the fender, or that which is to be brought into direct contact with the object in the path of the car, comprises a substantially U-frame 16 illustrated in Figs. 7 and 8, which frame preferably consists of a bar bent to a substantially yoke shape in direction of its length, and the said frame is provided at each end with an eye 17 or its equivalent, and a shaft 18 is passed through the said eyes, being attached to them in any approved manner, as shown in Fig. 7, the shaft 18 being made likewise to pass

through eyes 19 formed in the outer ends of the side members 13 of the lower or supporting frame B, whereby the shaft is free to turn in the supporting frame, but the frame of the receiving section of the fender is compelled to move with the shaft.

The bar 16, constituting the frame of the receiving member of the fender, is provided with a cushion 20 of rubber or other approved material, secured to the frame 16, as illustrated in Figs. 1 and 6. This cushion may be an air cushion, and is preferably somewhat circular in cross section, being made to embrace the major portion of the top and bottom of the said bar 16, and the entire front thereof. The front or receiving section of the fender normally stands substantially horizontally over the track, it being provided with wheels 21 adapted to travel either upon the tread of the rails, or on the surface between the rails. This receiving section of the fender is carried to an upper position, as shown in Fig. 2, by the weight of the object struck when said object is thrown into the net D, forming the front upper portion of the fender. This net may be of any approved construction and may be made of any desired material, and it is secured at its lower end to the inner edge of the front portion of the U receiving frame or bar 16, the apertures by means of which this attachment is effected being shown in Fig. 7, and one means of attaching the net is illustrated in Fig. 8, while the upper edge of the net is connected through the medium of springs 22 with the upper cross bar of the back frame A or the stationary section of the fender; and in order that a person when falling into or being thrown upon the said net, shall not be injured, a cushion 23 is located at the back of the upper portion of the net, the cushion extending likewise over the upper portion of the frame A. It is obvious that when an object falls into the net, the receiving-section C of the fender will be drawn upward, but it is not desirable that the said receiving section should be carried inward to too great an extent, since it would be liable to injure a person when in the net. The upward movement of the receiving section of the fender, is therefore automatically limited and said section is locked in predetermined position. This is preferably accomplished by locating a sprocket wheel 24 upon the shaft 18 and connecting it by a chain belt 25 with a similar wheel 26 which is journaled in a hanger 27, secured to the bottom of the platform and pendent therefrom, the attachment being made preferably to a point at or near the center of the platform, as is illustrated in Fig. 4. The rear sprocket wheel 26 is provided with a recess 28 in one of its faces adapted to receive a spring controlled bolt 29, held to slide in suitable bearings 30 located at one side of the hanger 27, as illustrated in Fig. 5. The bolt may be carried out of engagement with the recess in the sprocket wheel 26 through the medium of a lever 31, which is carried up-

ward through the platform, and may be manipulated by the gripman, motorman or driver of the car.

When the bolt is out of engagement with the locking recess in the wheel 26, the front or receiving portion of the fender will, through gravity, drop to its receiving position, with its wheels 21 upon the track, stretching the net D in a manner to cause it to assume a downward forward inclination. The moment, however, the receiving portion of the fender strikes an object in the path of the car, the object will be thrown by the cushioned portion 20 of the receiving section upon the net D, and the net will give under the influence of the weight thrown upon it, sagging to an extent to form a pocket for the object, and prevent said object from falling out from the fender, but at the same time the receiving section C will be carried upward, and when it has arrived at the proper inclination the bolt 29, will enter the recess 28 in the sprocket wheel, the sprocket wheel having been revolved a suitable distance to accomplish this result; and it is therefore evident that the receiving section of the fender will be held rigidly and prevented from injuring the object in the net.

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

1. In a car fender, a frame adapted to be attached to the platform of a car, an auxiliary frame pivoted to the fixed frame, a wheel carried by the fixed frame and geared with the pivoted frame, and means for locking the said wheel, substantially as described.

2. In a car fender, a frame adapted to be secured to the platform of a car, an auxiliary or receiving frame pivoted to the fixed frame, a bed of yielding material secured to the fixed frame and to the receiving frame, a wheel carried by the fixed frame and geared with the pivoted frame, and means for locking the said wheel, substantially as described.

3. In a fender for cars, a frame adapted to be attached to the platform of a car, an auxiliary or receiving frame pivotally connected with the fixed frame, a bed of yielding material attached to the upper portion of the fixed frame and the outer front portion of the receiving frame, a sprocket wheel located upon the receiving frame, a second sprocket wheel located upon the car, a chain belt connection between the two sprocket wheels, and a bolt adapted for automatic engagement with one of the said sprocket wheels, substantially as shown and described.

4. In a car fender, the combination, with a frame adapted for attachment to the platform of a car, a cushioned receiving frame pivotally connected with the stationary frame, a yielding bed connected at its upper end with the upper portion of the stationary frame and at its lower end with the forward portion of the receiving frame, wheels carried by the receiving frame, whereby it is supported a predetermined distance from the track, a shaft

secured to the receiving frame, a sprocket wheel secured upon said shaft, a second sprocket wheel adapted to be supported adjacent to the fixed frame, said sprocket wheel being provided with a recess therein, a chain belt connecting the two sprocket wheels, and a spring-controlled bolt adapted to enter the recess in the said inner sprocket wheel, substantially as shown and described, whereby when the bed is depressed the receiving frame will be carried upward at a predetermined angle to the stationary frame and held at said angle by the said bolt, as and for the purpose specified.

5. In a car fender, a frame adapted for attachment to a car platform, comprising a lower supporting section and a vertical section supported thereby, a receiving frame held to turn upon the supporting section of the stationary frame and having an attached shaft, a spring-controlled bed attached to the upper portion of the stationary frame and the forward portion of the receiving frame, a sprocket wheel secured upon the shaft of the receiving frame, a second sprocket wheel journaled in a fixed support adjacent to the stationary frame, said latter sprocket wheel being provided with a keeper, a chain belt connection between the

two sprocket wheels, a spring-controlled bolt adapted to automatically enter the said keeper, and a releasing lever connected with the said bolt, as and for the purpose specified.

6. In a car fender, the combination, with a stationary frame comprising a vertical section and a lower supporting section, a sprocket wheel located adjacent to the said fixed frame, having a keeper, and a locking device adapted to automatically enter the keeper, of a cushioned receiving frame pivotally connected with the lower portion of the stationary frame, wheels carried by the said receiving frame and adapted to travel upon the rails of the track, a yielding bed attached at its upper end to the vertical section of the stationary frame and at its lower end to the receiving frame, a shaft secured to the receiving frame, a sprocket wheel located upon said shaft, and a chain belt connection between said sprocket wheel and the pulley operating the keeper, all operating in the manner herein set forth.

CHARLES EMIL MONTELL.

Witnesses:

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ROBERT E. FARLEY.