

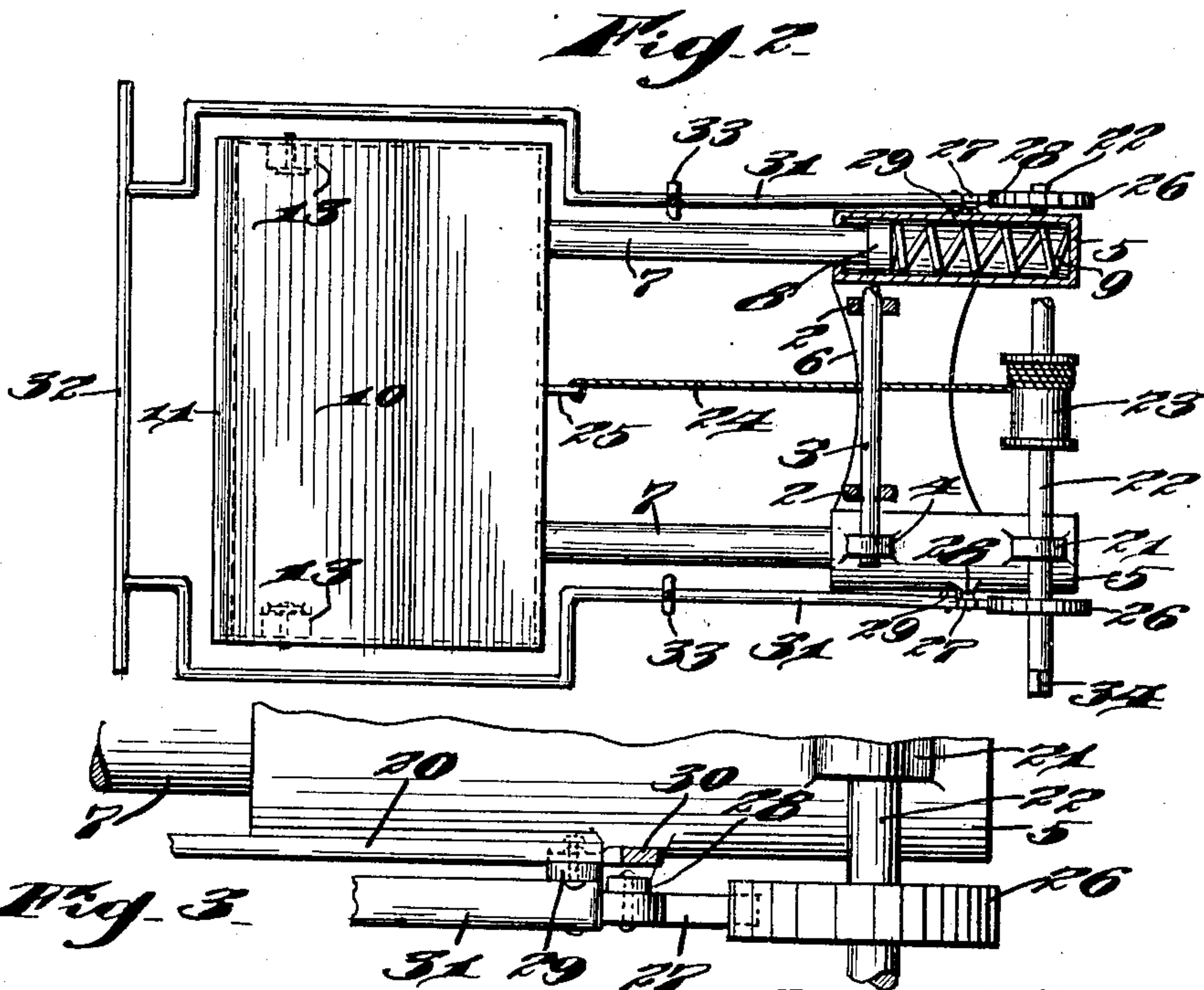
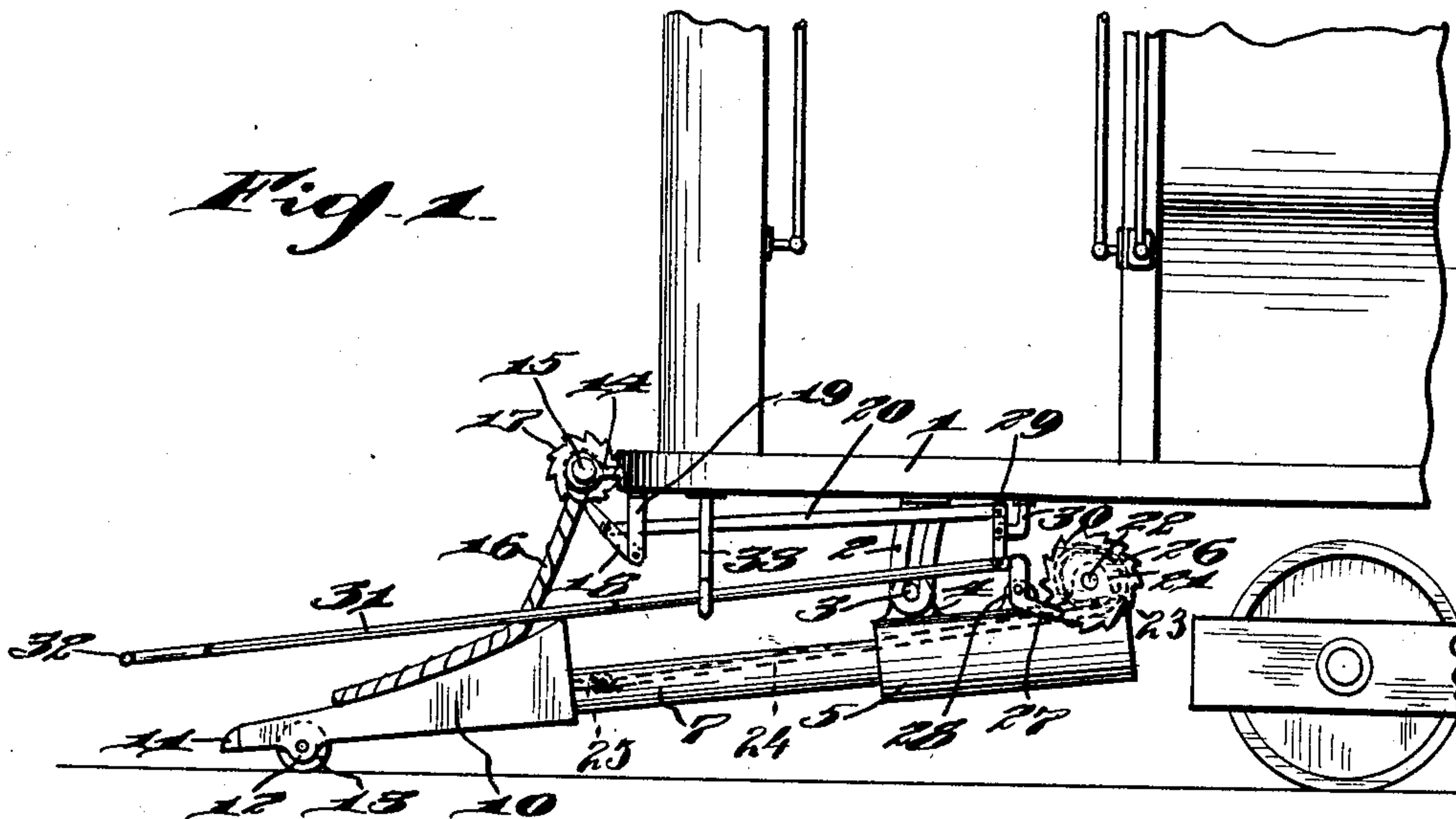
J. A. ANDERSON & C. E. McELWEE.
CAR FENDER.

APPLICATION FILED OCT. 18, 1910.

998,224.

Patented July 18, 1911.

2 SHEETS—SHEET 1.



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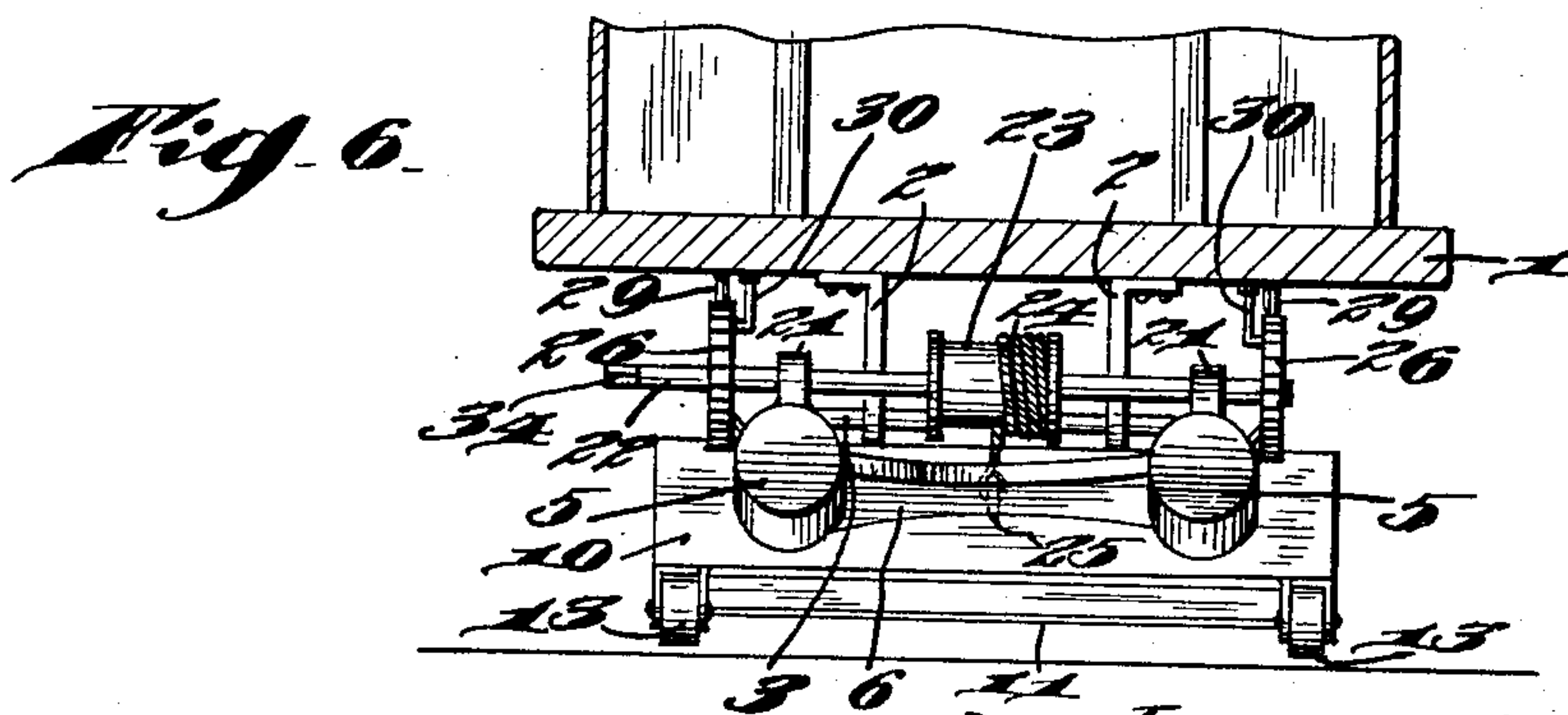
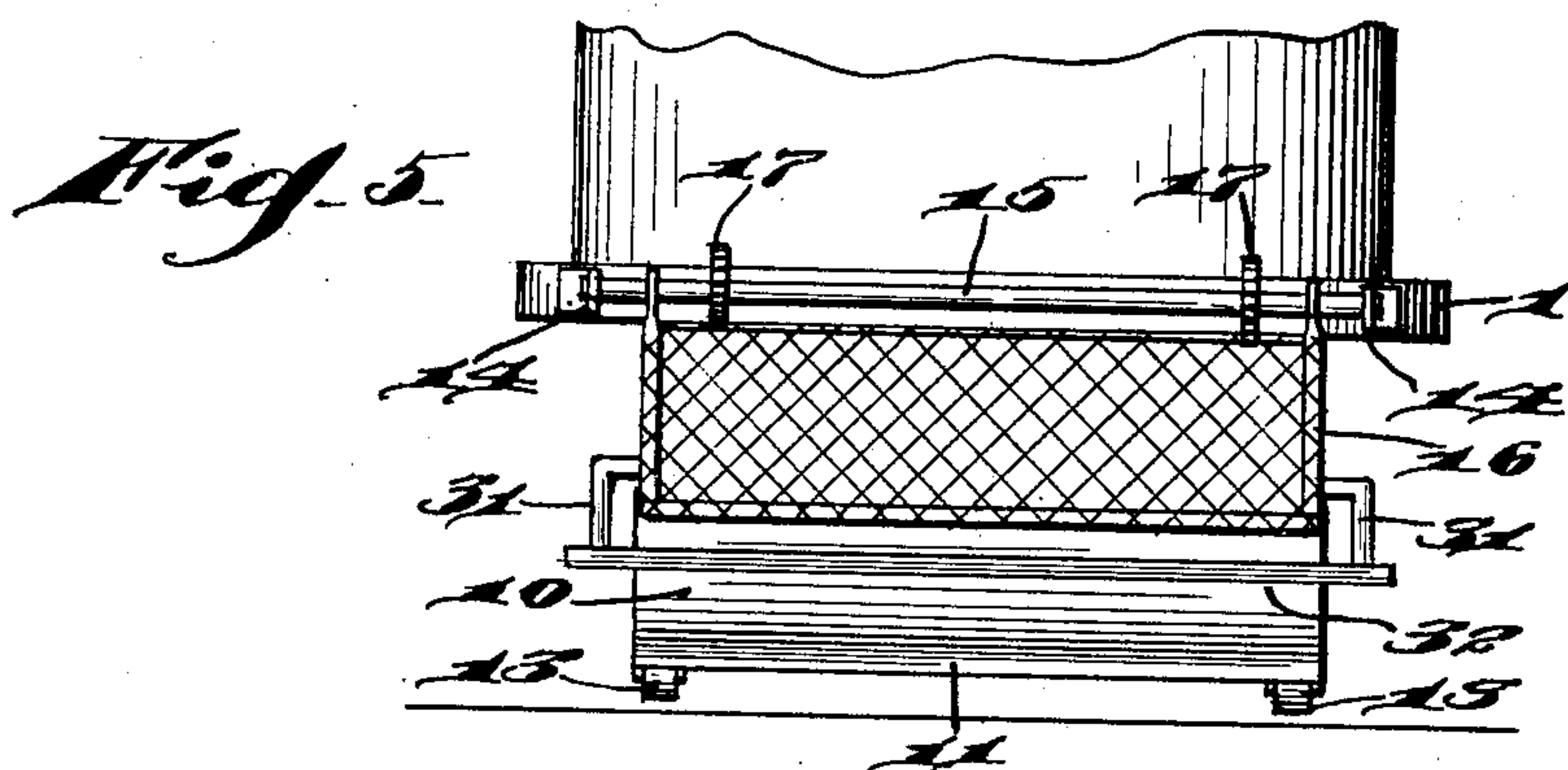
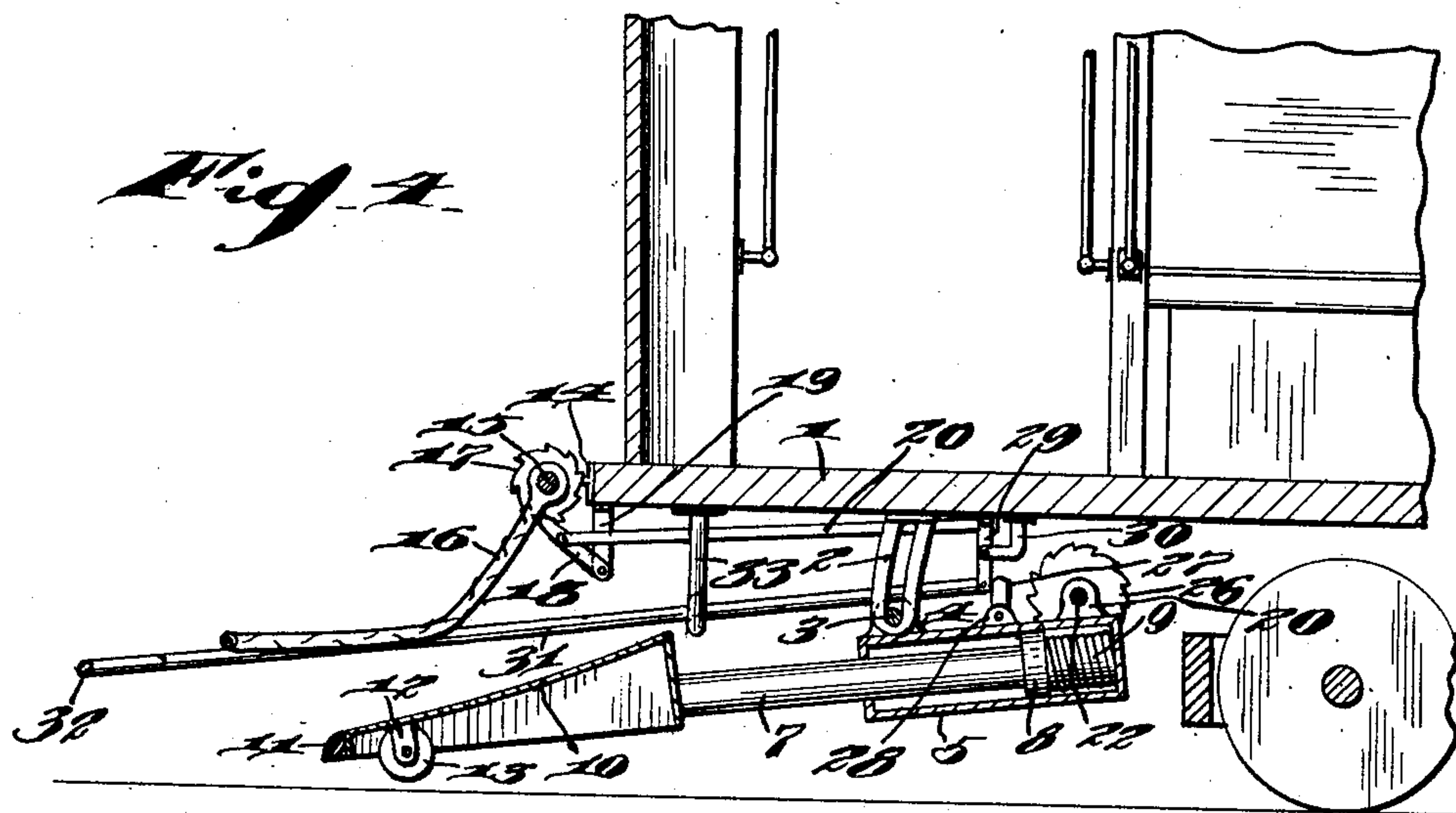
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2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

JOHN A. ANDERSON AND CLARENCE E. McELWEE, OF PHILADELPHIA, PENNSYLVANIA.

CAR-FENDER.

998,224.

Specification of Letters Patent.

Patented July 18, 1911.

Application filed October 18, 1910. Serial No. 587,671.

To all whom it may concern:

Be it known that we, JOHN A. ANDERSON, a subject of the King of Great Britain, and CLARENCE E. McELWEE, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

Our invention relates to improvements in car fenders, and more particularly to fenders of the trip and shoot forward type, the object of the invention being to provide an improvement of this character which comprises two fenders normally in set position, together with a tripping frame which projects forwardly beyond the fenders, and so that when the tripping frame is engaged by a person or object, the said fenders will be released by it, one fender shooting forwardly and the other dropping downwardly upon the first-mentioned fender, so as to effectually pick up the person or object on the track.

A further object is to provide a car fender of this character which is well adapted for ordinary street car use, which is comparatively simple in construction, and which will most effectually perform the functions for which a device of this character is intended, reducing to a minimum the danger of serious accidents due to the contact of street cars and pedestrians.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a fragmentary view in side elevation illustrating our improved fender in position to pick up the person or object on the track. Fig. 2, is a plan view partly in section illustrating the fenders in the position shown in Fig. 1, but detached from the car. Fig. 3, is an enlarged fragmentary plan view illustrating one of the cylinders and the ratchet mechanism thereon. Fig. 4, is a view in longitudinal section taken through the right hand cylinder shown in Fig. 2, illustrating the fender in retracted or set position. Fig. 5, is a view in front

elevation of Fig. 4, and Fig. 6, is a rear end view of the fender showing the car in section.

1, represents a car platform to the under face of which slotted brackets 2 are secured, and through these slotted brackets 2 a rod 3 projects. This rod also projects through perforated ears 4 on cylinders 5, the said cylinders being connected by an integral bar or web 6. The cylinders 5 are closed at their rear ends, and open at their forward ends through which latter plunger rods 7 project, and said rods are provided on their inner ends with plungers 8 normally pressed outward by means of coiled springs 9 in the rear ends of the cylinders.

A box-like scoop fender 10 is secured to the forward ends of the plunger rods 7, and at its forward ends is provided with a cushion or buffer 11 of rubber or other suitable material. The box-like scoop fender 10 is provided with rollers 13 which are supported in brackets 12, and said rollers 13 are mounted to run on the track or ground and support the fender when a person or object is on the same, or when the fender shoots forwardly.

Brackets 14 are secured to the forward end of the platform 1, and support a shaft 15. On this shaft 15 an ordinary fender 16 is secured and is provided with a rope netting secured in a metal frame.

Ratchet wheels 17 are secured on the ends of shaft 15, so that when the fender is elevated and the ratchet wheels are engaged by pawls 18, this fender 16 will be maintained in its elevated position as shown in Fig. 4. Pawls 18 are pivotally connected to brackets 19 depending from platform 1, and are operated by means of links 20 as will be hereinafter explained.

The cylinders 5 above referred to are provided at their rear ends with bearing brackets 21, in which a transverse shaft 22 is mounted. On this shaft 22 a drum 23 is secured, and is connected by a cable 24 with an eye 25 on the rear end of the box-like scoop fender 10, so that when the shaft 22 is turned in one direction to wind the cable 24 on drum 23, fender 10 will be drawn rearwardly against the pressure of the springs 9. To hold the fender in this rearward position, ratchet wheels 26 are secured on the

shaft, and are engaged by pawls 27 pivoted between its ends in brackets 28 on the cylinders 5.

The links 20 above referred to are connected at their rear ends to the upper ends of levers 29, and the latter are fulcrumed between their ends on brackets 30 depending from platform 1. To the lower ends of these levers 29, the rear ends of the side rods 31 of a tripping frame are pivotally connected, the forward ends of said side rods 31 being connected by a transverse contact rod 32, and said side rods being supported in brackets 33 depending from the car platform 1.

The pawls 27 are located in the path of movement of the rods 31, so that when the tripping frame is moved rearwardly, it will move the pawls 27 to release the ratchet wheels 26, and allow the springs 9 to force the scoop fender 10 forwardly as well as downwardly. At the same time this rearward movement of the tripping frame will swing levers 29 to push the links 20 forwardly, and move the pawls 18 out of engagement with the ratchet wheels 17, allowing the fender 16 to fall upon the scoop fender 10, thus rendering it impossible for a person or object to pass under the car platform, but effectually picking up the person or object and preventing any contact with the wheels of the car.

A great many different means may be provided for returning the scoop fender 10 to its rearward position, and the fender 16 to its elevated position, and we do not limit ourselves in this particular. A simple means would be to make one end of shaft 22 angular, as shown at 34, for the reception of a crank arm wrench, and to lift the fender 16 by hand. The present invention is therefore not limited to any particular means or method of placing the fenders in their set or retracted position.

Various slight changes might be made in the general form and arrangement of the parts described without departing from our invention, and hence we do not limit ourselves to the precise details set forth, but consider ourselves at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is:

1. In a car fender, the combination with a support, cylinders on said support, plungers in said cylinders, springs in said cylinders back of said plungers, and rods secured to said plungers and projected forwardly through the forward ends of the cylinders, of a scoop fender secured to the forward ends of said rods, a vertically movable pivoted fender above said scoop fender,

means for holding said scoop fender in its retracted position, and said pivoted fender in its elevated position, and means for releasing said fenders from said set positions, substantially as described.

2. In a car fender, the combination with a support, cylinders on said support, plungers in said cylinders, springs in said cylinders back of said plungers, and rods secured to said plungers and projected forwardly through the forward ends of the cylinders, of a scoop fender secured to the forward ends of said rods, a vertically movable pivoted fender above said scoop fender, means for holding said scoop fender in its retracted position, means for holding said pivoted fender in its elevated position, and a tripping frame projecting forwardly beyond both of said fenders and adapted when engaged by a person or object to release both of said holding means, substantially as described.

3. In a car fender, the combination with a support, cylinders on said support, plungers in said cylinders, springs in said cylinders back of said plungers, and rods secured to said plungers and projected forwardly through the forward ends of the cylinders, of a scoop fender secured to the forward ends of said rods, a vertically movable pivoted fender above said scoop fender, a shaft, a drum on said shaft, a flexible connecting device connecting said drum with said scoop fender, a ratchet wheel on said shaft, a pawl engaging said ratchet wheel, and a forwardly projecting tripping frame adapted to move said pawl, substantially as described.

4. In a car fender, the combination with a support, cylinders on said support, plungers in said cylinders, springs in said cylinders back of said plungers, and rods secured to said plungers and projected forwardly through the forward ends of the cylinders, of a scoop fender secured to the forward ends of said rods, a vertically movable pivoted fender above said scoop fender, a shaft, a drum on said shaft, a flexible connecting device connecting said drum with said scoop fender, a ratchet wheel on said shaft, a pawl engaging said ratchet wheel, a forwardly projecting tripping frame adapted to move said pawl, a ratchet wheel secured to the pivotal support of said pivoted fender, a pawl engaging said ratchet wheel, and means connecting said pawl with said tripping frame whereby said pawl is released from engagement by the rearward movement of the tripping frame, substantially as described.

5. In a car fender, the combination with cylinders, spring pressed plungers in said cylinders, and forwardly projecting rods secured to said plungers, of a box-like scoop fender secured to the forward ends of said rods, roll-

ers located in said fender and adapted to contact with the rails, a cushioning buffer on the forward end of said scoop fender, means for holding said fender in its retracted position, and means for releasing said fender from the said position, substantially as described.

6. In a car fender, the combination with cylinders, spring pressed plungers in said cylinders, and forwardly projecting rods secured to said plungers, of a box-like scoop fender secured to the forward ends of said rods, rollers located in said fender and adapted to contact with the rails, a cushioning buffer on the forward end of said scoop fender, means for holding said fender in its retracted position, a vertically movable

pivoted fender above the scoop fender, means for normally holding said pivoted fender in elevated set position, and a tripping frame projecting forwardly beyond both of said fenders and adapted when moved rearwardly to simultaneously release both of said fenders from their set positions, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

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CLARENCE E. McELWEE.

Witnesses:

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W. M. HART.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."