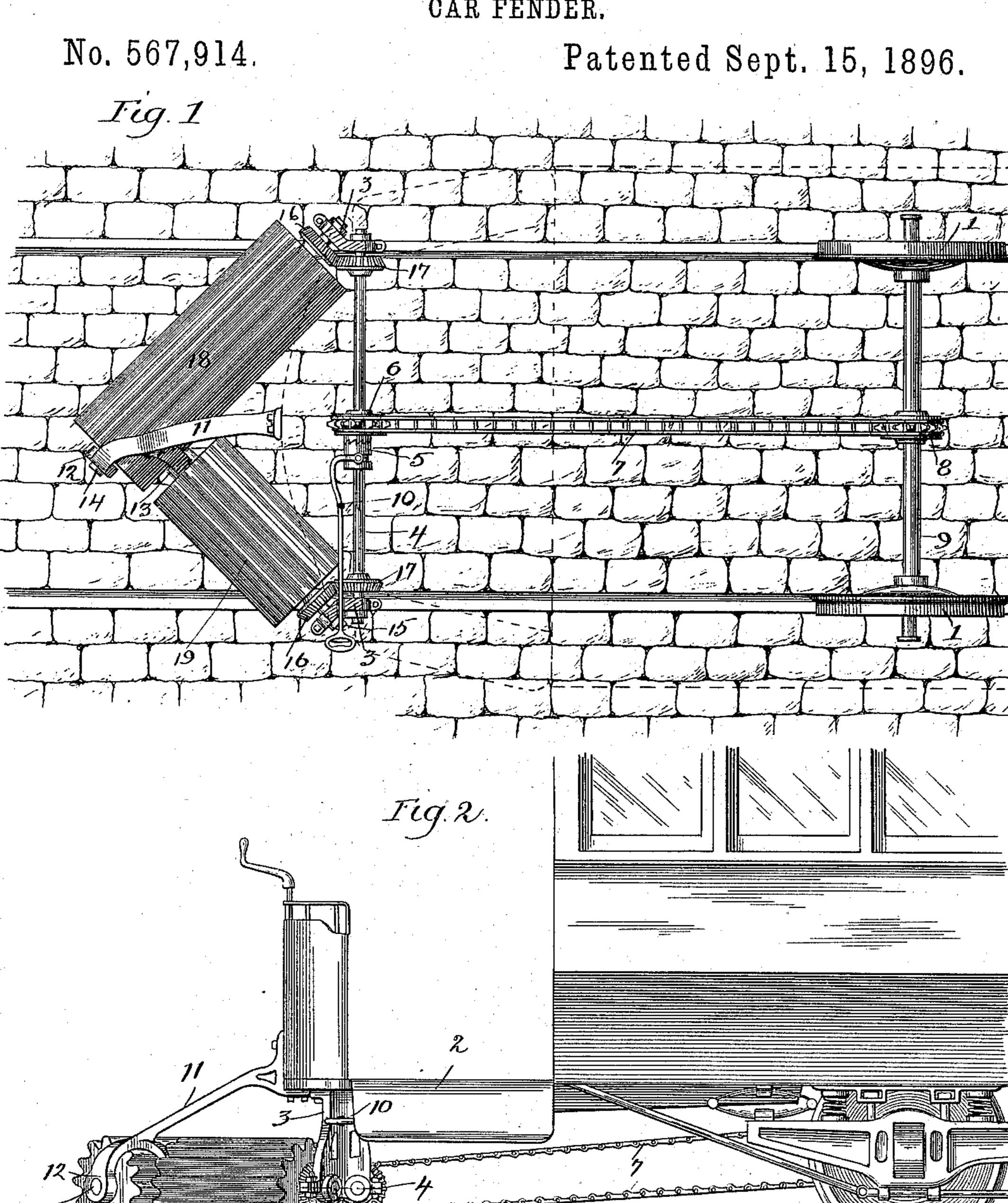
## W. J. McCLENAHAN. CAR FENDER.



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## UNITED STATES PATENT OFFICE.

WILLIAM J. MCCLENAHAN, OF PHILADELPHIA, PENNSYLVANIA.

## CAR-FENDER.

SPECIFICATION forming part of Letters Patent No. 567,914, dated September 15, 1896.

Application filed March 27, 1896. Serial No. 585,073. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. McClena-HAN, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and 5 State of Pennsylvania, have invented certain new and useful Improvements in Car-Fenders, of which the following is a specification.

My invention relates to a new and useful improvement in car-fenders, and has for its object to provide such a device which when placed upon a car will preclude the possibility of a person being run over by said car; and with these ends in view my invention consists in the details of construction and combination of elements hereinafter set forth, and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, I will describe its construction and operation in detail, referring by number to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 is a plan view of my improvement, the body of the car being shown in dotted lines; and Fig. 2, a side elevation of one end of a car having my improvement applied thereto.

Referring to the drawings, 1 represents a pair of wheels of a car, and 2 the platform of said car, depending from the under side of which are the hangers 3, and in these hangers is journaled a cross-shaft 4, having a 35 clutch 5 splined thereon. 6 is a sprocketwheel, which is loosely journaled upon this shaft and provided with teeth upon one side of its hub adapted to be engaged by the teeth of the clutch. This sprocket-wheel is con-40 nected by means of the link belt 7 to a similar wheel 8, rigidly secured upon the axle 9 of the pair of wheels 1, so that when said wheels revolve the sprocket 6 is also caused to revolve in unison therewith, and by en-45 gaging the teeth of the clutch with the teeth of the sprocket 6 this rotary motion is imparted to the shaft 4. A rod 10, having its fork end in engagement with a groove in the clutch, serves the purpose of throwing said 50 clutch into or out of engagement with the teeth of the sprocket-wheel. A bracket 11 is secured to the front end of the platform by

suitable bolts and projects forward and downward, terminating in the bearings 12 and 13, in which the outer ends of the shafts 14 and 55 15 are journaled, their inner ends being journaled in the hangers 3. These shafts carry beveled gears 16, which mesh with corresponding gears 17, secured upon the shaft 4, so that the rotations of the latter are trans-60 mitted to the shafts 14 and 15, but in a reverse direction, as is well understood in gearing.

18 and 19 are corrugated rolls secured upon the shafts 14 and 15, respectively, the former being of a length to project past the longitu- 65 dinal center of the car and the latter terminating back of the former, as clearly shown in Fig. 1. From this description it will be seen that a car equipped with my improvement will be prevented from running over a 70 person or other prominent object lying upon the road-bed by the action of the rolls, which revolve in the direction of the arrows. In operation, should the rolls come in contact with a person the tendency would be to push 75 them forward and at the same time sidewise, finally shedding them to one side or the other of the car, it being impossible for the rolls to pass over the person on account of their outward rotation and the corrugated surfaces. 80

It will be understood that when my improvement is applied to the ordinary trolleycar, which is adapted to run in either direction, the above-described mechanism will be applied to both ends of such a car, and when 85 running in one direction the rear set of rolls will be permitted to rest by the disengagement of the clutch 5 from the teeth upon the hub of the sprocket-wheel 6, or if found desirable the hangers and bracket may be sequed to a frame, which may be detachably secured to the under side of the car, so that when the car is run in a reverse direction the fender mechanism may be changed from one end to the other thereof.

While I have shown my improvement as applied to the extreme front of the platform, it is obvious that the device might be placed beneath said platform and secured to the truck of the car, and in this case it would serve better as a protection against the wheels coming in contact with a person, as the ends of the rolls might be made to protrude beyond said wheels.

Having thus fully described my invention, what I claim as new and useful is—

In combination with the axle of a car, a sprocket-wheel fixed thereto a sprocket and a section of a clutch formed integral and fixed on a shaft journaled in the front frame, a section of a clutch slidable on the shaft, an operating-rod for the movable section, hangers depending from the platform of the car and having bearings for the transverse shaft 4 and the shafts 14 and 15, a central hanger having bearings formed in its ends, said ends

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extending down from the main portion at an angle to each other one of said ends being curved to conform to the periphery of the roll 15 18 and means for driving the rolls, as and for the purpose described.

In testimony whereof I have hereunto affixed my signature in the presence of two sub-

scribing witnesses.

WILLIAM J. MCCLENAHAN.

Witnesses:

S. S. WILLIAMSON, MARK BUFORD.