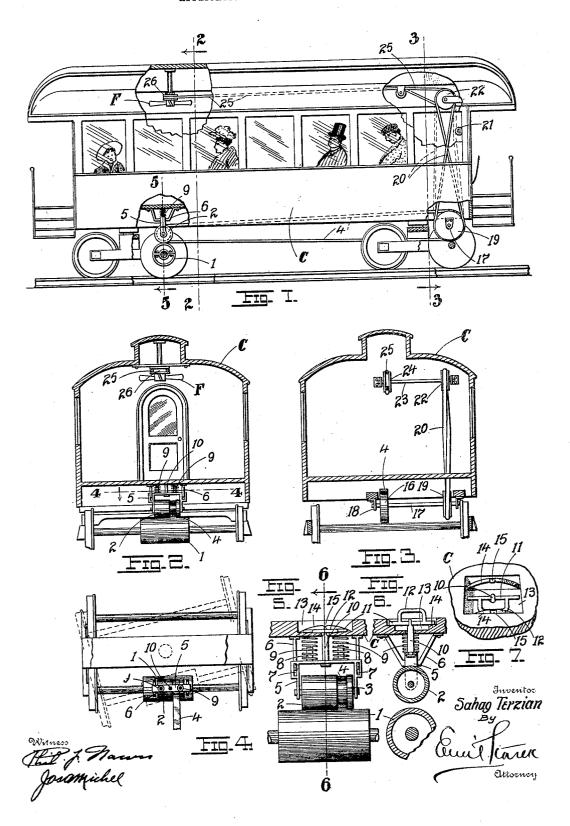
S. TERZIAN
FAN DRIVING MECHANISM FOR RAILWAY CARS.
APPLICATION FILED MAR. 31, 1906.



## UNITED STATES PATENT OFFICE.

SAHAG TERZIAN, OF ST. LOUIS, MISSOURI.

## FAN-DRIVING MECHANISM FOR RAILWAY-CARS.

No. 798,230.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Sahag Terzian, a citizen of the United States, residing at St. Louis, State of Missouri, have invented certain new and useful Improvements in Fan-Driving Mechanism for Railway-Cars, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention has relation to improvements in fan-driving mechanism for railway-cars; and it consists in the novel construction and arrangement of parts more fully set forth in the specification, and pointed out in the claim.

In the drawings, Figure 1 is a side elevation of a car with parts broken away, showing my invention applied thereto. Fig. 2 is a vertical transverse section on line 2 2 of Fig. 1. Fig. 3 is a vertical transverse section on line 2 of Fig. 1. Fig. 3 is a vertical transverse section on line 2 of Fig. 1. Fig. 4 is a horizontal section on line 4 of Fig. 2. Fig. 5 is a vertical section on line 5 5 of Fig. 1. Fig. 6 is a vertical section on line 6 6 of Fig. 5, showing the belt-pulley, however, in its disengaged position; and Fig. 7 is a perspective showing the pocket or cavity for the reception of the locking-bar and its handle.

The object of my invention is to provide a railway-car with suitable gearing which may 3° be coupled to the axle of the car-truck for the purpose of driving a fan or fans within the car, thereby dispensing with the use of electricity, steam, air, or other expensive means for the purpose.

In detail the invention may be described as follows:

Referring to the drawings, C represents a conventional railway-car. Mounted on the axle of one pair of wheels of preferably the 40 front truck is a cylinder or pulley 1, with which frictionally engages a belt-pulley 2, provided at one end with a peripheral groove 3 for the reception of the main belt 4. The axis of the pulley 2 is mounted on a yoke 5, sus-45 pended from brackets 6, secured to the floor of the car, said yoke being susceptible of a slight vertical movement on said brackets, said movement being permitted by the elongation of the slots 7, formed in the yoke, 50 through which the bases of the brackets pass. The top of the yoke is provided with projecting stems 8, over which are coiled the springs 9, the latter being interposed between the yoke and car-bottom and by their resiliency 55 normally forcing the pulley 2 into frictional engagement with the axle-pulley 1. Project-

ing from and swiveled to the yoke 5 between the stems 8 is a rotatable stem 10, which passes through the floor of the car, the upper end of the stem having passed loosely there-60 through the locking-bar 11, which latter is provided with a handle 12, which may be folded or tilted against the bottom of the pocket or cavity 13, cut in the floor of the car for its reception. On each side of the cavity 65 13 are located the arched blocks 14, the ridges of which are provided with depressions 15.

When the pulley 2 is in engagement with the pulley 1, the bar 11 rests at the bottom of the cavity 13, parallel to the blocks 14, and 70 the handle 12 is folded down between the said blocks. To disengage the pulleys, the porter or brakeman picks up the handle, and by giving it a turn at right angles to its original position the ends of the bar 11 ride up the in- 75 clined opposite ends of the blocks, thus raising the yoke and compressing the springs 9, and when the bar 11 is at right angles to the blocks 14 the ends thereof will rest in the depressions 15 of said blocks, thus holding the 80 pulley 2 permanently out of engagement, Fig. 6. When thus disengaged, of course no rotation is imparted to the belt-pulley 2 by any rotation on the part of the axle-pulley 1.

The belt 4 leads rearwardly over a pulley 85 16, mounted on a shaft 17, mounted in brackets 18 at the bottom of the car, said shaft being provided with a grooved pulley 19, from which leads through the floor of the car a belt 20, which is crossed when the car is running 90 in one direction and which is open when the car is running in the opposite direction, so as to always impart rotation in the same direction to the fan F in the car. When the belt is open, one of the laps passes over an idler- 95 pulley 21. The top of the belt 20 passes over a pulley 22 at the end of a parallel shaft 23, near the roof of the car, the opposite end of the shaft carrying a pulley 24, from which passes forwardly a belt 25, properly guided 100 to the pulley 26 of the fan-shaft, wherever the latter may be located. I do not, of course, wish to limit myself to the precise location of the fan nor to the number of them.

As seen from the dotted position of the 105 parts in Fig. 4, the trucks in passing over a curve do not materially affect the engagement between the pulleys 1 and 2. Of course the fans can only operate while the car is in motion or during the trip. At the end of the 110 trip there is no occasion to have the fans in operation, and if during the journey it be-

comes desirable to stop the fans a disengagement between the pulleys 1 and 2 may be effected in the manner above described.

Having described my invention, what I

5 claim is—

In a car, a pulley mounted on the axle of the car-truck, a spring-controlled reciprocating yoke depending from the bottom of the car, a belt-pulley carried by the yoke and normally forced into engagement with the axle-pulley, a stem swiveled to the yoke and projecting through the floor of the car, a locking-bar rotatably mounted at the upper end of the

stem, arched blocks disposed on each side of the stem on the floor of the car, the rotation 15 of the stem causing the ends of the bar to ride up the inclines of the blocks and disengage the pulleys, the blocks having depressions formed at their ridges for receiving the ends of the locking-bar, substantially as set forth. 20

In testimony whereof I affix my signature in

presence of two witnesses.

SAHAG TERZIAN.

Witnesses:

EMIL STAREK, Jos. A. MICHEL.