

J. H. WICKES.

MECHANISM FOR DRIVING FAN BLOWERS IN CARS.

No. 177,907.

Patented May 23, 1876.

Fig. 1.

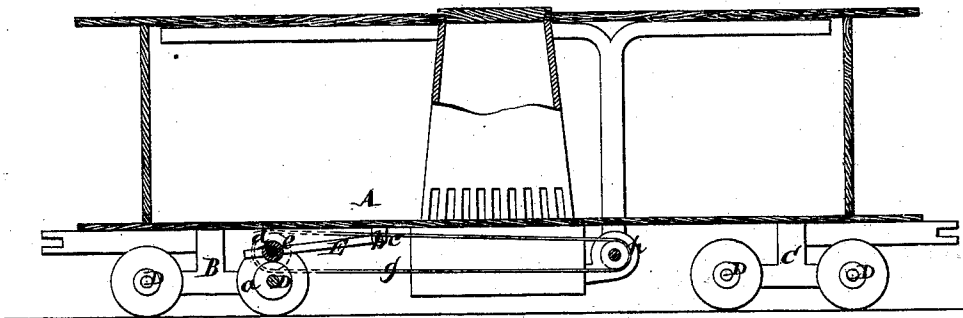
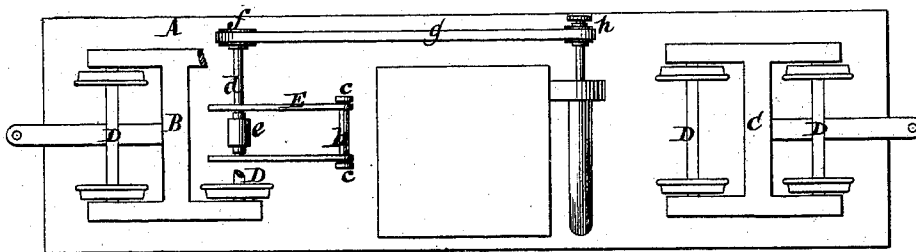


Fig. 2.



Witnesses.

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IMPROVEMENT IN MECHANISMS FOR DRIVING FAN-BLOWERS IN CARS.

Specification forming part of Letters Patent No. **177,907**, dated May 23, 1876; application filed April 21, 1876.

To all whom it may concern:

Be it known that I, JAMES H. WICKES, of the city, county, and State of New York, have invented a new and Improved Mechanism for Driving Fan-Blowers in Railroad-Cars, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a longitudinal vertical section of my mechanism. Fig. 2 is an inverted plan of the same.

Similar letters indicate corresponding parts.

This invention consists of a gravitating frame, which forms the bearing for a shaft, on which are mounted two pulleys, one of which, by its own weight, and by the weight of the gravitating frame, bears down upon the circumference of a pulley mounted on the axle of a railroad-car, while the other pulley serves to transmit motion to the blower-shaft situated beneath the platform of the car, so that, by raising the gravitating frame, the motion of the blower can be stopped, and when the frame is lowered the motion of the blower is rendered independent of the rising and falling motion of the car-body, and, furthermore, the driving mechanism is so arranged that it can be readily protected against dust or against meddling persons.

In the drawing, the letter A designates the body of a railroad-car, which is supported by trucks B C, each containing two or more pairs of wheels, secured to the axles D. On one of these axles is mounted a pulley, *a*, and to the bottom of the car is secured a gravitating frame, E, which swings on a rod, *b*, having its bearings in lugs *c*. The free end of this gravitating frame forms the bearing for a shaft, *d*, on which are mounted two pulleys, *e* *f*. The pulley *e* is so situated that when the frame E

is left to follow its inherent gravity said pulley bears down upon the pulley *a*, mounted on the car-axle, and if this axle revolves, its motion is transmitted by friction to the pulley *e* and to the shaft *d*. The pulley *f* connects by a belt, *g*, with the pulley *h* on the blower-shaft, which is also situated below the bottom of the car, and which serves to inject air into the car.

It will be readily seen from this description that, by means of the gravitating-frame E and friction-pulley *e*, the motion of the fan-blower is rendered entirely independent of the rising and falling motion of the car-body, and if it is desired to stop the blower the frame E can be readily raised and the friction-pulley thrown out of contact with the pulley *a*. For raising the frame, I propose to attach to it a chain or rope, or any other suitable device may be used for this purpose. The whole driving mechanism can also be readily inclosed in a box, so that it is protected against dust, and the belts and other parts cannot be injured by boys or other meddling persons.

What I claim as new, and desire to secure by Letters Patent, is—

The combination, with a pulley, *a*, mounted on a car-axle, D, of a gravitating frame, E, attached to the bottom of the car, and carrying a shaft, with a friction-pulley, *e*, and with a pulley, *f*, from which motion is transmitted to the blower-shaft, the whole being constructed and operating substantially as shown and described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 10th day of April, 1876.

JAMES HENRY WICKES. [L. s.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.