

WILLIAM G. CREAMER.

Improvement in Railroad Car Ventilators.

No. 123,770.

Patented Feb. 20, 1872.

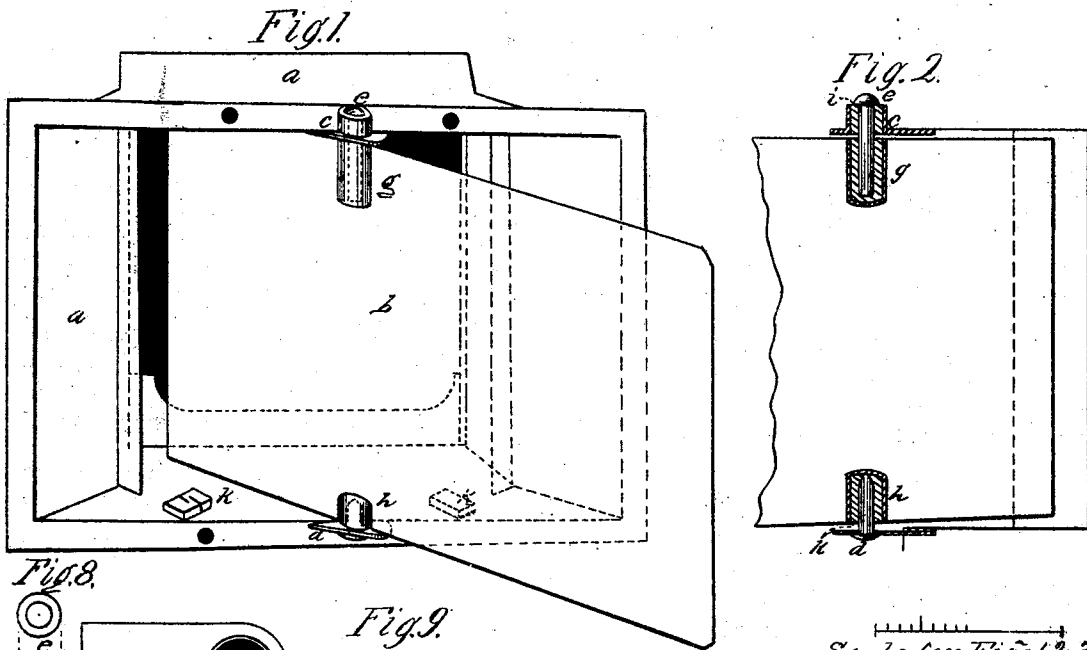


Fig. 8.

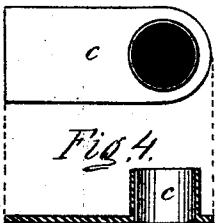


Fig. 9.



Fig. 6.

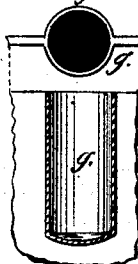


Fig. 5.

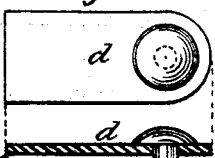


Fig. 10.



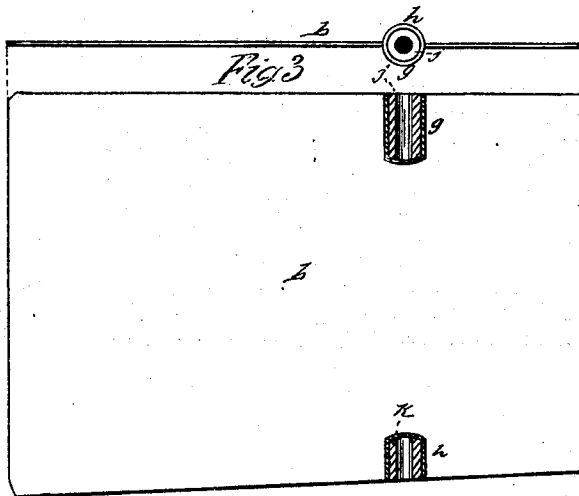
Fig. 11.



Fig. 7.



Scale for Figs. 1, 2 & 3.



Scale for Figs. 4 to 11.

Witnesses
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WILLIAM G. CREAMER, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN RAILROAD-CAR VENTILATORS.

Specification forming part of Letters Patent No. 123,770, dated February 20, 1872.

Specification describing certain Improvements in Automatic Ventilators, invented by WILLIAM G. CREAMER, of Brooklyn, county of Kings, State of New York.

My invention consists in arranging the pivots of automatic ventilators in such a way that, in shifting back and forth by changing or baffling currents of wind, the movement of the deflectors shall be noiseless.

I am the inventor of a system of automatic ventilation adapted for railway cars; and it consists in providing an opening in the side of the car near the top, in which is placed a movable deflector, projecting outward about three inches, and capable of assuming an angle of forty-five degrees to the side of the car. When the car is in motion, the opposing current of air affixes it in position to exhaust the air from the inside of the car outward. The difficulty I have experienced in the use of these ventilators has been that, when the cars were standing at a station and the wind blowing strong at right angles with the course of the train, or in eddies or currents around the station, buildings, or sheds, the blinds are shifted back and forth rapidly, and make a very disagreeable noise. So much has this been an objection that in many cases the use of my ventilators has been abandoned on sleeping-cars.

Figure 1 represents one of my ventilators complete. *b* is the movable deflector. *aaa* is the tin box or frame that is inserted in the wall of the car, and at the top *e* and bottom *h* is placed a pivot. At the top of the blind, at

g, is attached a small tube; at the bottom, at *h*, a similar tube. In this tube, at top and bottom, is inserted a bushing of India rubber, cloth, cork, or other elastic substance. At the bottom of the tin box, at *k*, is also attached a piece of rubber or other elastic substance, against which the blind strikes.

Fig. 2 is a cross-section of the blind, and shows the bearings.

Fig. 3 is the blind or deflector alone, showing the tubes *jg* and *kh*.

Fig. 4 is the top bearing that attaches to the frame, which also has a bushing of rubber, shown at *ii*, Fig. 9.

Fig. 5 shows the bottom pivot *d* that is attached to the frame. This pivot is fixed, and the tube inserted in the bottom of the blind containing the rubber slips over it. The rubber bushing for this is shown at Fig. 11, *kk*.

Fig. 8 is the top pivot, which is loose, to remove the deflector, if required.

Fig. 10 shows the bushing for this.

Figs. 6 and 7 show the openings (full size) that are cut into the deflector.

What I claim as my invention is—

The insertion of elastic substances around the pivots and in the bearings of automatic ventilators, to render the movement of the deflectors noiseless.

WILLIAM G. CREAMER.

Witnesses:

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