D. W. SNOW.

CAR WINDOW VENTILATOR.

APPLICATION FILED APR. 26, 1909.

940,946. Patented Nov. 23, 1909.

Fig. 1.

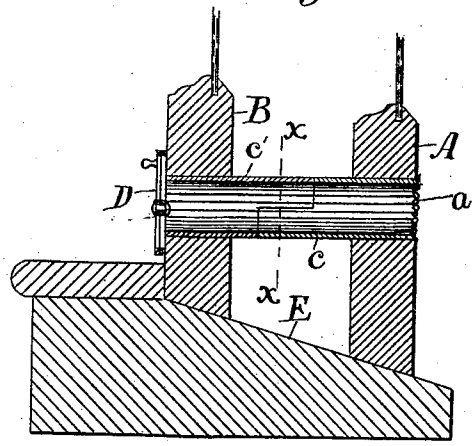

Fig. 2.

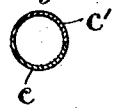

Fig. 3.

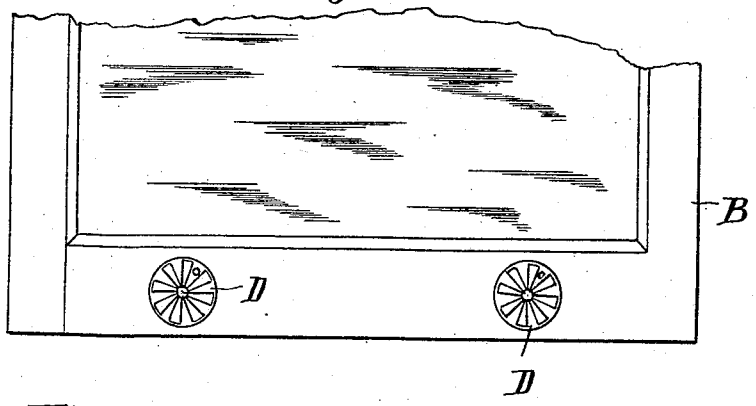

Fig. 4.

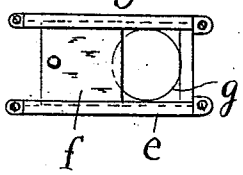

Fig. 5.

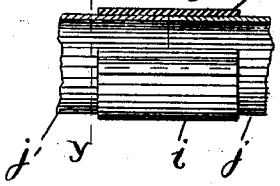

Fig. 6.

Witnesses:
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UNITED STATES PATENT OFFICE.

DAVID W. SNOW, OF PORTLAND, MAINE.

CAR-WINDOW VENTILATOR.

940,946. Specification of Letters Patent. **Patented Nov. 23, 1909.**

Application filed April 26, 1909. Serial No. 492,340.

To all whom it may concern:

Be it known that I, DAVID W. SNOW, a citizen of the United States of America, and a resident of Portland, in the county of Cumberland, State of Maine, have invented certain new and useful Improvements in Car-Window Ventilators, of which the following is a specification.

My invention relates to a ventilator for double windows such as are used in passenger cars and it is particularly applicable for use in sleeping cars.

It is a well known fact that there are no practical means now in use whereby a small amount of air may be admitted through the double windows into the lower berth of a sleeping car and the absence of such a device is the cause of much discomfort to travelers.

As sleeping cars are now generally constructed, the only means of ventilation is to open both the inner and outer windows, the latter being provided with a folding screen which may be put in and taken out. This can only be done with the assistance of some railroad employee. The inner window is not provided with any means of being opened and held open except it be raised a considerable distance.

According to my invention I provide a ventilating tube which can be used by the passenger and which extends through the inner and outer windows connecting the interior of the car with the external air, the tube being made in two separable parts capable of separation as the inner window is raised.

I illustrate my invention by means of the accompanying drawing in which—

Figure 1 is a transverse section through the double window of a car showing the two sashes closed and the ventilating tube in place, Fig. 2 is a section on the line x x of Fig. 1, Fig. 3 is an elevation of the inner window, Fig. 4 is an elevation of an alternate form of shutter, Fig. 5 is a part longitudinal section and part elevation showing a special form of joint and Fig. 6 is a section on the line y y of Fig. 5.

In the drawing, E represents the window sill of the car, A the outer and B the inner window sash. A ventilating tube is provided which extends through both windows admitting the external air into the car. The tube may be placed in any portion of the window but I prefer to locate it in the lower sash rail. As here shown, the tube extends through the lower rails of both the inner and outer sashes and it is formed in two sections, one attached to each sash and separable when the inner section is lifted vertically. The outer section c extends through the outer sash A and the inner section c' extends through the inner sash B and they form a joint where they come together which allows the inner section to be lifted vertically without disturbing the outer section. This joint may be formed in any suitable manner so that it will form a relatively tight joint when both sashes are down but will be separable on raising the inner sash. A wire screen as a may be inserted in the outer end of the tube for the purpose of excluding the dust and cinders and a shutter or register D is provided on the inner end of the tube by which the opening may be accurately regulated.

It will be seen that my ventilating device while allowing air to pass through the double windows when the latter are down does not interfere with the ordinary use of the windows. The inner window may be raised and lowered without in any way interfering with the outer window.

I have shown herein two ventilating tubes one near each end of the lower sash rail but it is evident that any desired number of tubes may be used and the tubes may be of any suitable cross section as for instance a wide flat tube may be used and located in the center of the sash.

The device is simple and effective, is well adapted to be used in all cars having double windows but it is particularly adapted to be applied to the windows of sleeping cars to admit small quantities of air to the lower berths.

Any suitable shut-off or shutter may be used for limiting the quantity of air admitted but I prefer to use the well known pivoted shutter as here shown. If a considerable quantity of air is desired a shutter such as shown in Fig. 4 may be used where a slide f runs in suitable guides e and is so formed as to close the inner end g of the ventilating tube or by being withdrawn the tube may be left wide open so that the whole capacity is utilized.

In Figs. 5 and 6 I show a special form of joint which is adapted to make the tube dust proof when it comes together. The two sections of the tube are shown at j' and j. Secured to the inner section j' is a semicylin-

drical plate *h* fitting over the upper portion of the joint formed by the abutting ends of the tube sections. The lower half of the joint is covered by a similar plate *j* secured to the other section and where the plates meet the edge of the upper plate extends over the lower plate making a close joint.

I claim:—

1. The herein described ventilator for double windows, consisting of a ventilating tube extending through the inner and outer windows, said tube being in two parts having a breakable interfitting jointure and capable of separating when the inner window is raised.

2. The herein described ventilator for double windows consisting of a tube extending through the inner and the outer windows said tube being made in two sections having adjacent abutting ends forming a vertically separable joint, a semicylindrical plate secured to the inner tube section and covering the upper portion of said joint and a like plate secured to the outer tube section covering the lower portion of said joint.

3. The herein described ventilator for double windows consisting of a tube extending through the inner and the outer windows, said tube being made in two sections having adjacent abutting ends forming a vertically separable joint, a semicylindrical plate secured to the inner tube section and covering the upper portion of said joint and a like plate secured to the outer tube section covering the lower portion of said joint, the edges of one of said semicylindrical plates overlapping and inclosing the edges of the other plate.

In witness whereof I have hereunto set my hand this 25th day of March, 1909.

DAVID W. SNOW.

Witnesses:

SIDNEY ST. F. THAXTER,

S. W. BATES.