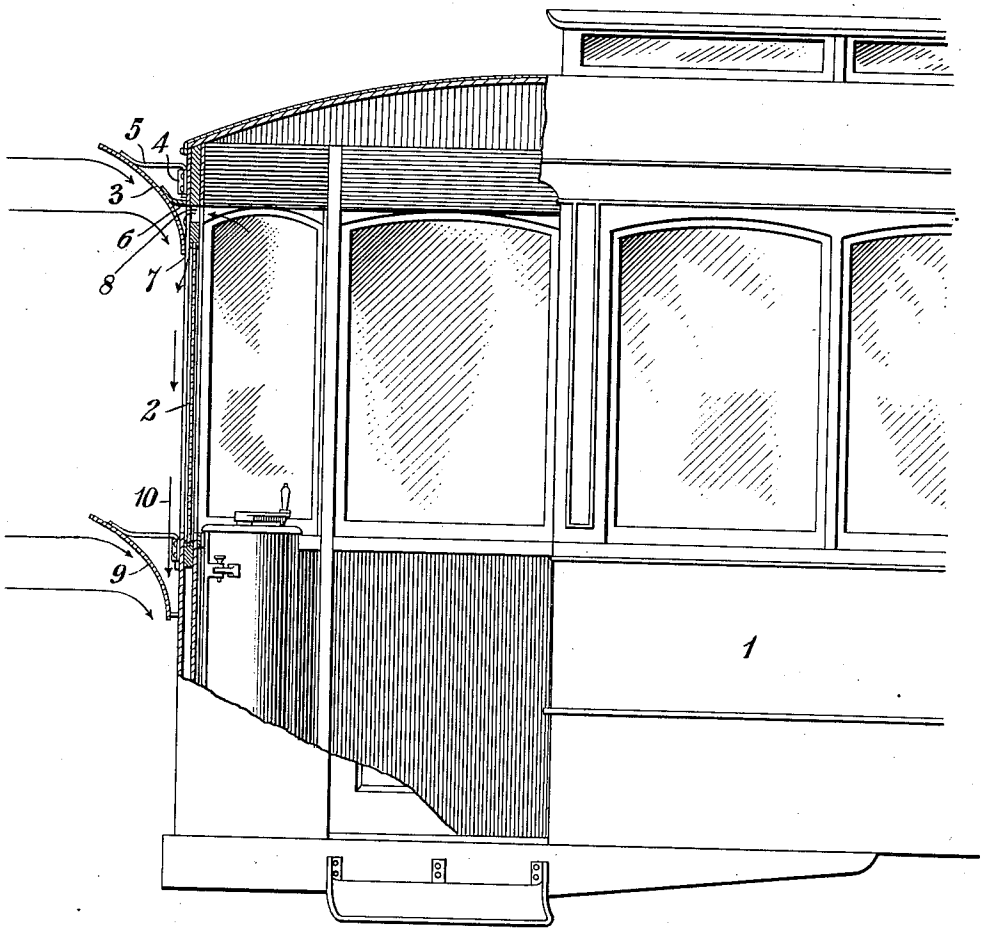
No. 868,279. PATENTED OCT. 15, 1907.

G. M. LITTLE.

METHOD OF PREVENTING THE COLLECTION OF SNOW AND SLEET UPON CAR WINDOWS.

APPLICATION FILED FEB. 4, 1907.



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GEORGE M. LITTLE, OF PITTSBURG, PENNSYLVANIA.

METHOD OF PREVENTING THE COLLECTION OF SNOW AND SLEET UPON CAR-WINDOWS.

No. 868,279. Specification of Letters Patent. Patented Oct. 15, 1907.

Application filed February 4, 1907. Serial No. 355,633.

To all whom it may concern:

Be it known that I, GEORGE M. LITTLE, a citizen of the United States, and a resident of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Methods of Preventing the Collection of Snow and Sleet Upon Car-Windows.

My invention relates to methods of preventing the collection of snow and sleet upon car windows, and it has for its object to provide a method that shall be unusually and adequately effective for the purpose indicated.

During the winter seasons snow and sleet frequently collect and freeze upon the windows of cars and other vehicles obstructing or obscuring the operator's view of the track ahead, and thereby seriously interfering with the running of the cars, as well as subjecting passengers to considerable danger. In order to obviate all annoyance and danger that might thus be caused, I propose to deflect from such vehicle windows, as it is imperative should not be obstructed, considerable quantities, or even all, of the snow and sleet that might otherwise be deposited thereon, and, further, to maintain layers of warm air adjacent to the outer faces of the windows for the purpose of melting such snow and sleet as may be deposited thereon. The layers of warm air also serve as cushions or shields to assist in preventing snow from depositing upon the windows.

The single figure of the accompanying drawing is a view partially in side elevation and partially in section of the front end of a car in connection with which my invention is employed.

A portion of the air that impacts upon the front of a car 1 is deflected downwardly over and substantially parallel to the face of a window 2 in the front thereof by means of a vane or deflector 3, that may be carried in any suitable manner near the top of the car, as, for instance, by staples 4, that are secured to the car, and hooks 5 projecting from the back of the vane and engaging the staples 4. When supported in this manner the vane is detachable and may be removed when it can be of no service, though it will, of course, be understood that it may be constructed and supported in any other suitable manner. A block 6 upon the back of the vane fits closely against the front of the car and provides a substantially air tight partition between the spaces above and below the same. The lower edge of the vane or deflector is separated from the face of the window by a comparatively short space at 7, a convenient distance above which an opening at 8 is provided to the interior of the car either permanently or by lowering the window slightly, as shown.

The currents or drafts of air that are directed by the vane 3 downwardly over and parallel to the face of the window deflect from the window no inconsiderable amount, or may even deflect all, of the snow and sleet that might otherwise be deposited thereon. The downwardly directed currents in passing the lower edge of the vane also cause a draft outwardly through the space at 7, and serve to maintain on the outer face of the window a layer of air drawn from the interior of the vehicle, which may be and preferably is warm, and therefore melts any snow and sleet that may have deposited upon the window. It also serves as a cushion or shield and assists in preventing snow from depositing upon the window. Warm air may, if desired, be drawn from any other suitable location than the general interior of the car, as, for instance from an especially heated chamber.

To assist in creating downwardly directed drafts over the front of the window it may frequently be advisable to employ below the window an auxiliary vane or deflector 9, that may be constructed, supported and located with respect to the front of the car similarly to the vane 3. The auxiliary vane not only deflects downwardly some of the air that impacts upon the front of the car, but by reason of these downwardly directed currents, it also causes a draft downwardly substantially as indicated by the arrow 10.

It will, of course, be understood that the specific means for carrying the invention into effect may be considerably modified as regards structural details, and location and arrangement of parts without departing from the spirit or altering the mode of operation of the invention, and it is also obvious that the invention may, if desired, be applied to other purposes than that here specifically set forth.

I claim as my invention:

1. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in creating drafts of air adjacent and substantially parallel to the outer face of the window.

2. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in deflecting air that impacts upon the vehicle parallel to and over the outer face of the window.

3. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in directing over and substantially parallel to the outer face of the window drafts of air drawn from a warm location.

4. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in directing drafts of warm air over and substantially parallel to the outer face of the window.

5. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in causing the currents of air that impact upon the vehicle to draw warm air from the interior of the vehicle and direct the same over the outer face of the window.

6. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in causing the currents of air that impact upon the vehicle to direct drafts of warm air over the outer face of the window.

7. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in causing the currents of air that impact upon the vehicle to create drafts of air from a warm location and to direct the same over the outer face of the window.

8. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in causing the motion of the vehicle to create drafts of air over and substantially parallel to the outer face of the window.

9. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in maintaining a layer of warm air adjacent to the outer face of the window.

10. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in causing the currents of air that impact upon the vehicle to direct other currents over the outer face of the window.

11. The method of preventing the collection of sleet and snow upon the window of a vehicle which consists in maintaining a layer of air that is substantially free of snow and sleet adjacent to the outer face of the window.

In testimony whereof, I have hereunto subscribed my name this 15th day of January 1907.

GEORGE M. LITTLE.

Witnesses:
OTTO S. SCHAIRER,
BIRNEY HINES.