R. W. BURNETT.

BERTH VENTILATOR.

APPLICATION FILED MAR. 13, 1913.

1,127,858. Patented Feb. 9, 1915.

Fig-1.

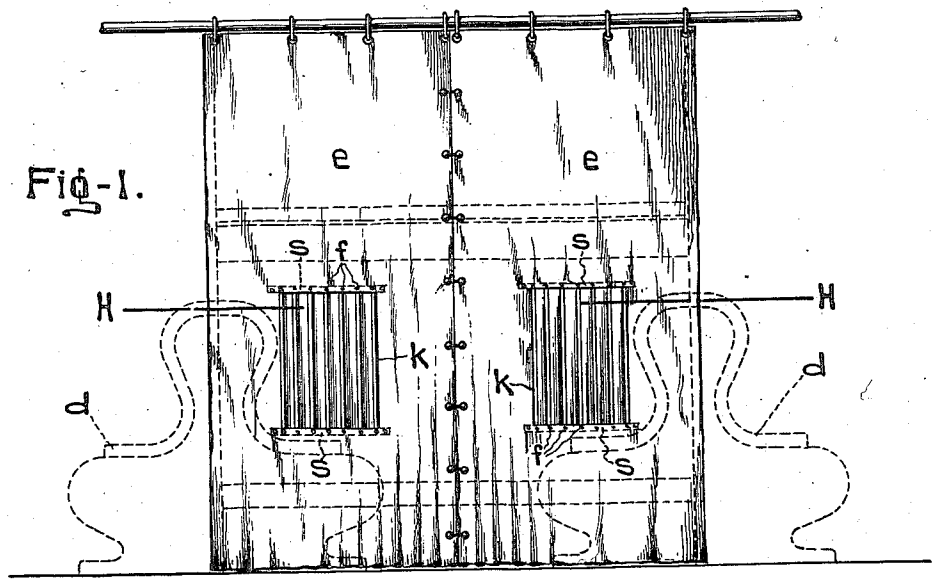



Fig-2.

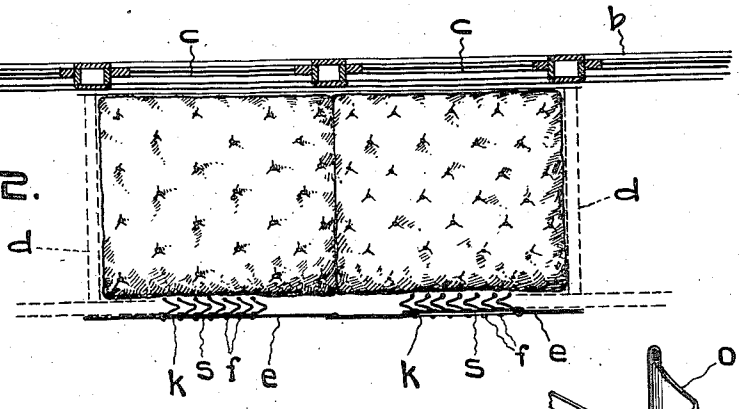



Fig-3

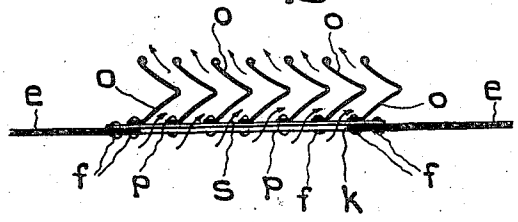
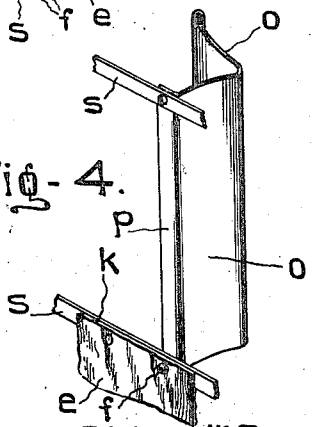



Fig-4.




Witnesses.

London Locke

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# UNITED STATES PATENT OFFICE.

RICHARD WEBB BURNETT, OF MONTREAL, QUEBEC, CANADA.

## BERTH-VENTILATOR.

1,127,858. Specification of Letters Patent. Patented Feb. 9, 1915.

Application filed March 13, 1913. Serial No. 754,134.

*To all whom it may concern:*

Be it known that I, RICHARD WEBB BURNETT, of the city of Montreal, in the Province of Quebec, Dominion of Canada, a citizen of the United States of America, have invented certain new and useful Improvements in Berth-Ventilators; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention relates to the ventilation of apartments occupied by people for sleeping or resting and more particularly to berths or staterooms of passenger coaches and steam-boats. A source of great discomfort to passengers occupying apartments of this nature such as berths in sleeping coaches, etc., is the inability to obtain proper ventilation without exposing the occupant to view. This is because of the fact that the windows are unsatisfactory and although the aisles of the cars are easily ventilated, this fresh air may not be utilized, as the curtains must be kept closed to screen the passenger from view. I have discovered that this fresh air from the aisles can be directed into the berth by mounting deflectors in the curtains. I am aware that horizontal louvers have been tried but they have two serious defects in that they can be seen through at certain angles, and they do not intercept the passing fresh air of the aisle and deflect it therethrough.

According to my invention a plurality of parallel vertically disposed and nested and relatively spaced louvers of angular cross-section are mounted in an opening in each curtain and connected together by resilient straps, the louvers of one curtain of each pair facing oppositely to those in the other curtain of the pair in order that the louvers in one curtain may deflect air into the berth and the louvers in the other curtain deflect air out of the berth thus securing proper circulation. The resiliency of the straps permits the undulations of the curtains due to even slight draft of air through the coach to undulate the ventilator and move the louvers successively into more exposed positions within the car and thus more effectively intercept the air and deflect it into the berth. This flexibility of the ventilator has advantages therefore. The angular form of the louvers presents angular passages between them which, when the louvers are relatively spaced a distance equal to or less than the transverse depth of a louver, cannot be seen through from any position, and these louvers may therefore be disposed vertically and consequently at right angles to the direction of movement of the air in the aisle, the effect being that fresh air is intercepted and deflected into the berth.

For full comprehension, however, of my invention reference must be had to the accompanying drawings forming a part of this specification in which similar reference characters indicate the same parts, and wherein:

Figure 1 illustrates the curtains of a berth in elevation and furnished with my deflecting louvers; Fig. 2 is a horizontal sectional view taken on line H H Fig. 1; Fig. 3 is an enlarged horizontal sectional view of one of the sets of louvers; and Fig. 4 is a detail perspective view of one of the louvers removed.

The side of the coach is indicated at *b*, the windows at *c*, seats at *d* and curtains at *e*. These parts may all be as usual and are not described in detail, the curtains having rectangular openings *k* cut therein for receiving the louvers.

Each louver is formed from sheet metal or other suitable material and of wedge form with externally concaved sides *o*, the free edge of one of which is flanged as at *p*, the other being curled to form a bead *q* for strengthening purposes, and, at the same time, preventing accident by blunting the edge. The louvers of each set are connected together and to the curtain at the upper and lower edges of the opening *k* by straps *s* preferably metallic and resilient to which the flanges are secured by rivets *f* clamping together the flanges *p*, straps *s*, and the edges of the curtain. These louvers may, within the spirit of my invention, be of curved or other bent cross-section provided the form permits of proper ventilation and obstructs the view.

The louvers of one curtain of each pair being arranged to face oppositely to the louvers in the other curtain of the pair not only secures a proper circulation within the berth but enables ventilation to be obtained no matter in which direction the car may be traveling.

What I claim is as follows:—

1. A ventilator comprising a plurality of vertical nested and relatively spaced louvers

of angular cross-section, the apex of each louver extending within the adjoining louver.

2. A ventilator for berths of passenger coaches and the like comprising a curtain having a pair of openings therein, a series of vertical louvers disposed across each of said openings, said louvers being of angular cross-section, the louvers of one series being arranged to face oppositely to the louvers of the other series in order that air may be deflected into the berth irrespective of the direction of the travel of the coach.

In testimony whereof I have signed my name to this specification in the presence of two witnesses.

RICHARD WEBB BURNETT.

Witnesses:
E. R. PITTS,
WILLIAM J. C. STEWETSON.