Feb. 3, 1925. 1,525,429

L. G. HUNTER

VENTILATOR

Filed Jan. 28, 1924

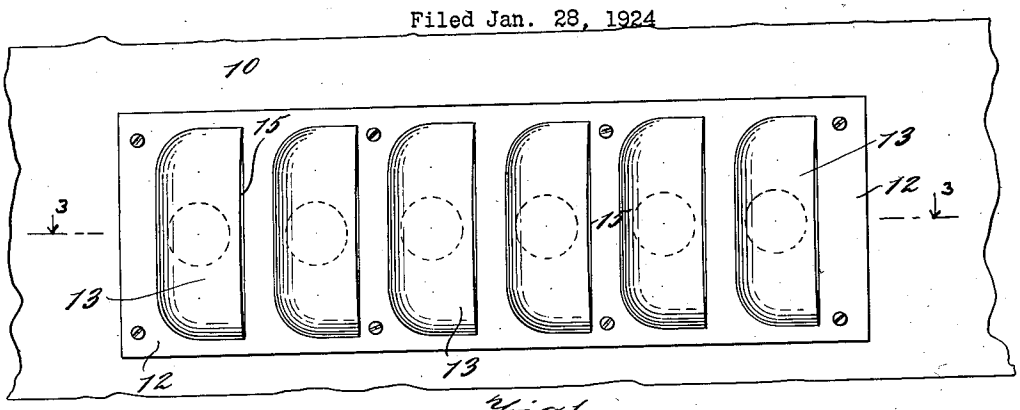


Fig. 1.

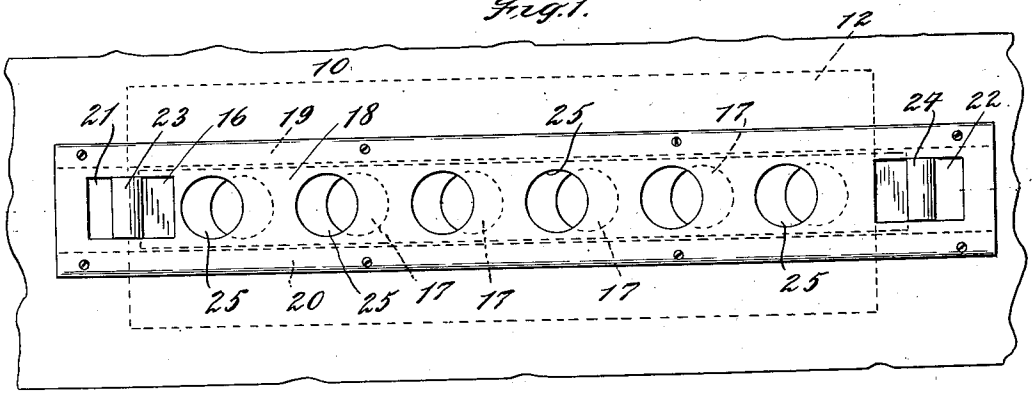


Fig. 2.

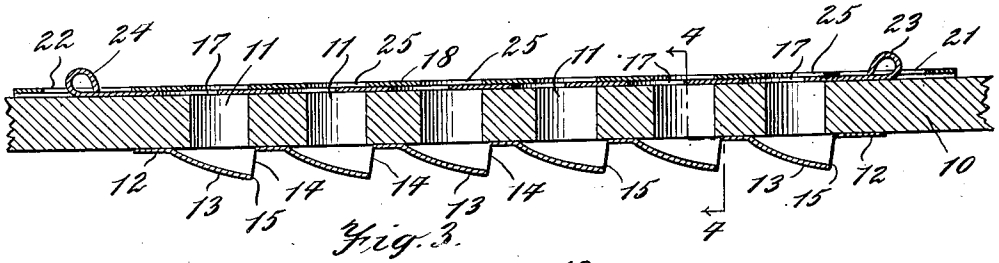


Fig. 3.

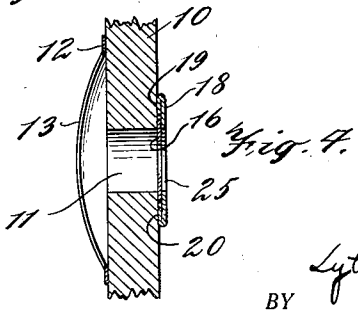


Fig. 4.

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BY

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ATTORNEYS

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UNITED STATES PATENT OFFICE.

LYTLE GALE HUNTER, OF FLUSHING, NEW YORK, ASSIGNOR TO THE HUNTER ILLUMINATED CAR SIGN COMPANY, A COPARTNERSHIP COMPOSED OF LYTLE J. HUNTER, OF FOREST HILLS, NEW YORK, AND FENLEY HUNTER AND LYTLE GALE HUNTER, BOTH OF FLUSHING, NEW YORK.

VENTILATOR.

Application filed January 28, 1924. Serial No. 688,962.

To all whom it may concern:

Be it known that I, LYTLE GALE HUNTER, a citizen of the United States, residing at Flushing, in the county of Queens and State of New York, have invented certain new and useful Improvements in Ventilators, of which the following is a specification.

My present invention relates to ventilators, particularly such as are suitable for use in vehicles.

One of the objects of my invention is to provide such a ventilator which, while inexpensive, will be effective and which may be readily applied under varying conditions to different structures.

My invention will be best understood from the following description and the annexed drawing of an illustrative embodiment of my invention, in which Fig. 1 is an exterior view of a portion of a vehicle with my ventilator applied thereto; Fig. 2 is an interior view thereof; Fig. 3 is a section on the line 3—3 of Fig. 1, and Fig. 4 is a section on the line 4—4 of Fig. 3.

Like reference characters indicate like parts in the several views.

In the illustrative embodiment, the body portion 10 of the vehicle is provided with a plurality of uniformly spaced openings 11, over which on the exterior of the vehicle is placed a louver plate 12 having a plurality of projections 13 open at the side 14, all of these openings extending in the same direction along the plate 12. The plate 12 is arranged so that a projection 13 covers one of the openings 11, so that air can pass through the opening 14 into the opening 11.

The louver plate 12 may be conveniently made from a strip of sheet metal by slitting it along the edge 15 and then pressing the metal outward to form a curved projection, the edges of the projection being within the boundaries of the plate 12. In this manner, a louver plate may be made without undue distortion of the metal, and, at the same time, produce one which has a pleasing appearance and is effective in covering the ventilating openings in the structure.

As a means for controlling the amount of air which will pass through the openings 11, I provide a slide 16 having openings 17 corresponding in size and spacing with the openings 11, this slide, in the illustrative embodiment, being formed of sheet metal and being held movably in a slide cover plate 18, also made of sheet metal and having its edges 19, 20 turned inward against the body portion of the plate 18, the space between the edges 19 and 20 being greater in width, however, than the width of the slide 16, so that such edges do not interfere with the motion of the slide 16, if there should be irregularities on the edges of either one of these members.

On opposite ends of the plate 18 are guide openings 21, 22, through each of which projects a turned-up portion 23, 24 of the slide 16, the width of these turned-up portions being such that the sides are in running contact with the sides of the openings 21, 22, respectively, so that the portions 23 and 24 not only serve as handles by which the slide 16 may be moved, but also as lateral guides to hold the slide 16 in position laterally as it is moved. Furthermore, the openings 21, 22 are made of such length that when the projection 23 is in contact with the left-hand end of the opening 21 in Fig. 2, the openings 17 are in registry with corresponding openings 25 in the cover plate 18, so that the projection 23 serves as a stop to position the slide 16 in full-open position for the ventilator. Similarly, the stop 24 contacts with the right-hand end of the opening 22 only after the openings 17 have been moved to the right in Fig. 2, until no portion of the openings 17 and 25 overlap, this being the closed position of the ventilator.

While my ventilator may be made in many different ways, I preferably form it of sheet metal, as illustrated, because of the cheapness and simplicity with which it can be manufactured. It will be noted that by turning the end edges 19 and 20 in the manner best shown in Fig. 4, the cover plate 18 may be applied to any flat surface, and that a slide space will be formed between this surface and the inner side of the plate 18. By using the projecting portions 23 and 24 as the lateral guides for the slide 16, I obviate any necessity for finishing the edges of this slide or of the inturned edges 19 and 20.

It will be understood that the embodiment of my invention may be widely varied

and that the arrangement which I have shown is merely illustrative. If desired, instead of making a plurality of holes 11 in the body structure, a single long slot may be provided, in which case, of course, the projections on the louver plate 12 need have no stop relation to the openings in the slide 16. In such case, however, it will be essential that the openings 17 and 25 be made to cooperate substantially as illustrated.

I claim:

1. A ventilator comprising a body portion having a plurality of spaced openings therein, a sheet metal cover plate for said body portion, having inwardly turned edges contacting with the body portion to form a slideway between said cover plate and the body portion, said cover plate having openings therein registering with the openings in the body portion, and a pair of guide openings at opposite ends of the cover plate, a sheet metal slide in the slideway of the cover plate having its ends turned outward and extending through said guide openings to provide operating handles for the slide, said handles contacting wth the sides of the guide openings to position the slide and the slide having openings adapted to be registered with the openings in the cover plate, and a sheet metal louver plate on the opposite side of the body member and having projecting portions, each adapted, to cover one of the openings in the body member and having a lateral louver opening to permit air to enter the opening in the body member.

2. In a ventilator, a sheet metal cover plate having a plurality of spaced openings and a pair of guide openings therein and its edges turned inwardly against the main portion of the cover plate to form a slide space between such edges, and a sheet metal slide in said slide space, with its side edges out of contact with said inwardly turned edges and having openings adapted to register with the spaced openings in said cover, said slide having an outwardly turned portion at either end, each adapted to project through one of said guide openings to serve as a handle and having its sides contacting with the edges of said opening to position said slide laterally.

3. In a ventilator, a cover plate having openings and a projecting portion at either edge to hold the plate away from a flat surface against which it is placed and to form a slide space between said projecting portions and between said cover plate and the flat surface, and a thin slide plate in said slide space, with its edges out of contact with said projecting portions and having openings adapted to register with the openings in the cover plate, said cover plate having a guide opening at either end and said slide plate having a handle portion projecting through each guide opening and contacting with the sides thereof to position said slide laterally, one of said handle portions contacting with one end of its guide opening when the openings in the cover plate and the slide are in register and the other handle portion contacting with one end of its guide opening when the slide covers the openings in the cover plate.

LYTLE GALE HUNTER.