April 9, 1929. T. H. ALFREDS 1,708,250

DEFLECTOR FOR VENTILATING APPARATUS

Filed June 2, 1927

Fig. 1.

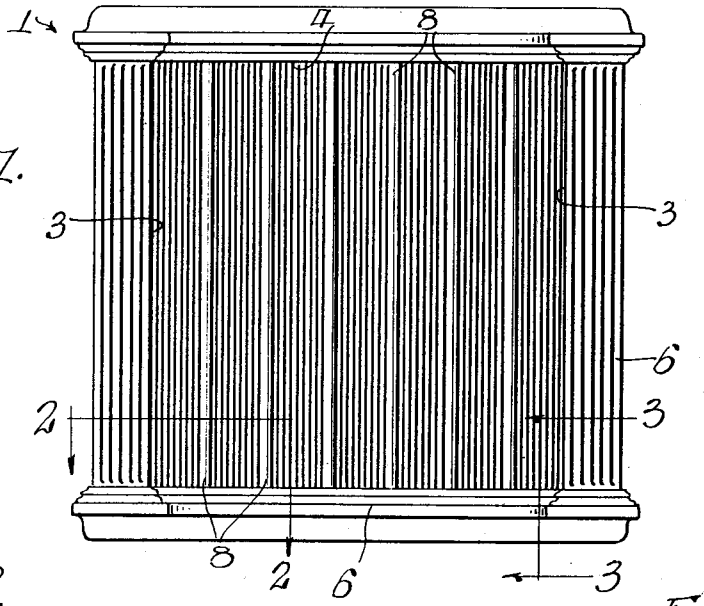


Fig. 2.

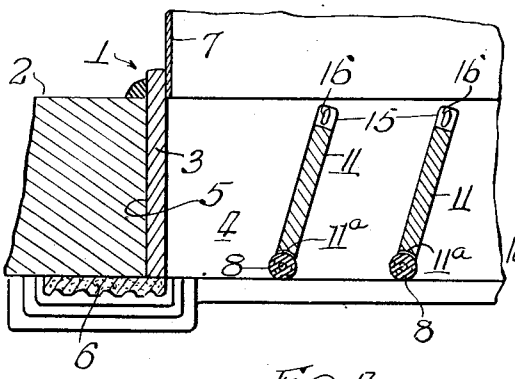


Fig. 3.

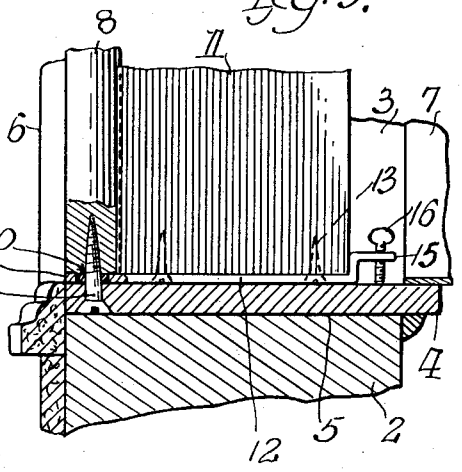
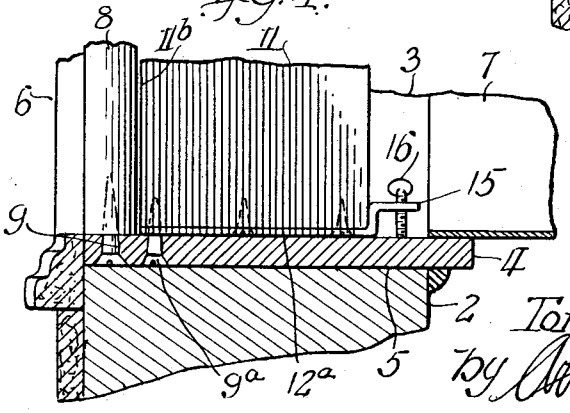


Fig. 4.



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UNITED STATES PATENT OFFICE.

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DEFLECTOR FOR VENTILATING APPARATUS.

Application filed June 2, 1927. Serial No. 195,996.

This invention relates to improvements in deflectors for ventilating apparatus and it consists of the matters hereinafter described and more particularly pointed out in the appended claims.

The primary object of the invention is to provide a deflector casing for such an apparatus, wherein a barred front appearance is presented by the casing, no matter from what position the same may be viewed or no matter in what angular position the deflector blades thereof happen to be in.

Another object of the invention is to provide such a deflector casing wherein bars of high visibility are arranged at the front of the casing and in front of pivoted deflectors which together with the interior of the casing are of low visibility whereby only the bars themselves stand out in appearance and are visible.

These objects of the invention as well as others, together with the many advantages thereof, will more fully appear as I proceed with my specification.

In the drawings:

Fig. 1 is a view in front elevation of a deflector casing embodying the preferred form of my invention.

Fig. 2 is a horizontal detail sectional view through the same on an enlarged scale as taken on the line 2—2 of Fig. 1.

Fig. 3 is a vertical detail sectional view through the same as taken on the line 3—3 of Fig. 1.

Fig. 4 is a view similar to Fig. 3 and illustrates a modified form of construction which will be more fully referred to later.

Referring now in detail to the embodiment of the invention illustrated in Figs. 1 to 3 inclusive in the accompanying drawing: 1 indicates as a whole the casing of the deflector usually positioned in a building wall 2. The casing provides upright parallel side walls 3—3 and horizontal top and bottom walls 4—4 respectively which define a rectangular frame open at its front and rear. This frame is set in an opening 5 in the building wall 2 and fixed to the front of the frame is an ornamental facing 6 which engages against the surface of the wall about said opening and enhances the appearance of the casing as a whole.

The rear end of the casing frame is connected in any suitable manner with a duct 7 leading from a blower such as is employed in ventilating apparatus and the interior surface of the frame as well as associated end of the duct is painted a dark color which will render it lower in visibility when viewed from the front of the casing.

At the front of the casing I provide a plurality of spaced parallel bars 8 which as shown herein are arranged vertically and are circular in cross section although other cross sectional shapes may be employed without departing from the spirit of the invention. Preferably each bar is nonrotative and is fixed in place at the front of the casing by screws 9 which pass through the top and bottom walls 4—4 a short spacing sleeve 10 surrounding the shank of each screw 9 and spacing the associated bar end away from said top and bottom walls as best shown in Fig. 3.

Associated with each bar is a louver or flat blade 11 preferably of wood which as shown herein substantially approximates in thickness the diameter or width of the bar 8. A strap 12 is fixed to each end of the blade as by screws 13, said strap extending at its front and rear ends 14 and 15 beyond the edges of said blade. The front end of each strap is pivoted onto the sleeve 10 while the rear end of each strap is offset to receive a thumb screw 16 by which the blade may be locked in the desired angular position within the casing. When the blade is pivoted coaxially with the associated bar as just described, its front edge 11^a is concaved to more closely approach said bar. All of the blades are colored the same as the interior of the casing to reduce the visibility of said blades to a minimum. By loosening up the thumb screws 16 the blades may be swung about their axes to extend in any desired angular position and said blades may be locked in said position by again tightening up on said thumb screws.

In Fig. 4 I have shown a slightly modified form of construction wherein the bars are fixed at their ends in the top and bottom walls 4—4 of the casing and the spacing sleeves 10 are dispensed with. Each strap 12^a in this instance terminates flush with the front edge 11^b of the blade 11 which is made convexed in this instance, which edge closely approaches the rear side of the bar and is pivoted upon screws 9^a arranged coaxially with said convexed front edge. The strap is secured to the blade in the same manner

and carries the same kind of locking screw as before described.

When such a deflector casing is arranged in place as for instance in a wall of a theatre building within view of the audience nothing is visible to the audience except the bars and ornamental facing plate no matter from what angle the casing is viewed and no matter what angle the blades happen to be in. Thus such a casing may be made to harmonize with the usual rich wall decorations and therefore may be placed to a better advantage so far as more efficient ventilation is concerned and need not be placed in an out of the way or hidden location as is now the practice where such advantages as described herein are not attainable.

While in describing my invention, I have referred in detail to the various forms and arrangement of the parts thereof, the same is to be considered as by way of illustration only so that I do not wish to be limited thereto except as may be pointed out in the appended claims.

I claim as my invention:

1. A deflector of the kind described embodying therein, a casing open at its front and rear, a plurality of spaced parallel bars of circular cross section extending across the front of the casing, screws extending through fixed parts of the casing and into the ends of each bar, sleeves on each screw spacing each bar end from the associated fixed part of the casing, a plurality of blades, one associated with each bar in the casing, a strap on each blade pivoted at one end on said sleeve and means on the other end of each strap to lock said blade in the desired angular position in the casing.

2. A deflector of the kind described embodying therein, a casing open at its front and rear, a plurality of spaced parallel bars extending across the front of the casing, a plurality of blades one associated and in back of each bar, a strap fixed on each end of each blade, means providing a pivotal axis for the blade adjacent the plane of one edge thereof, which means passes through one end of said strap, the other end of said strap being offset in the plane of the rear edge of the blade, and a thumb screw carried by the offset end of said strap to lock the blade in the desired angular position in the casing.

In testimony whereof, I have hereunto set my hand, this 26th day of May, 1927.

TORRIS H. ALFREDS.