

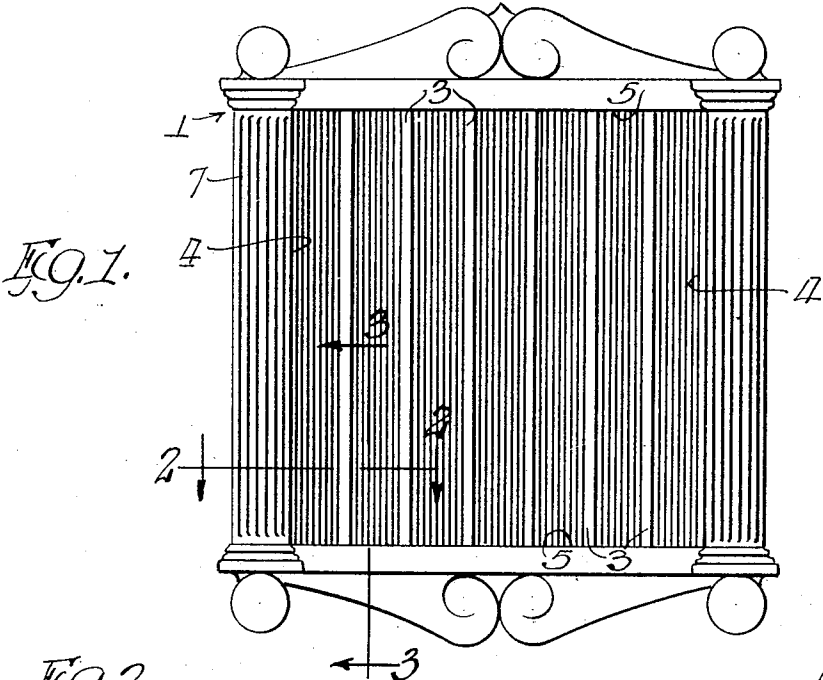
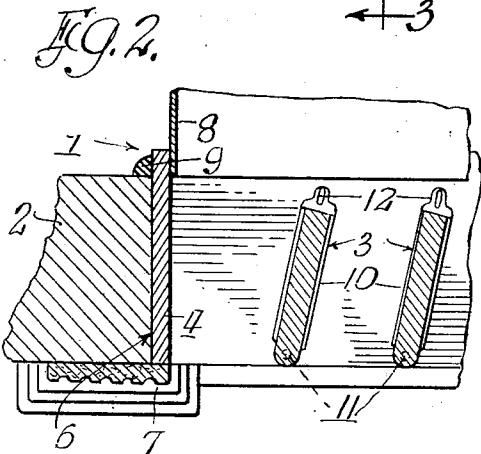
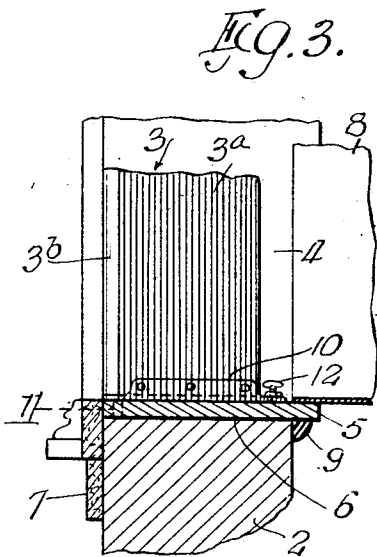
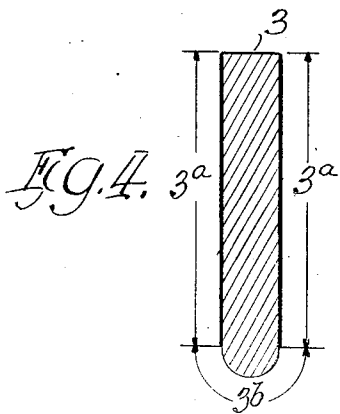
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1,708,243

DEFLECTOR FOR VENTILATING SYSTEMS

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UNITED STATES PATENT OFFICE.

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DEFLECTOR FOR VENTILATING SYSTEMS.

Application filed May 27, 1927. Serial No. 194,622.

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

In the auditoriums of theater buildings and other places of public gathering, the arrangement of the deflector casing for the discharge mouth of the ventilating system presents a somewhat difficult problem due to its appearance which does not harmonize or fit in with the wall furnishings and decorations usually found in such places. Ordinarily such mouths are either covered with a grille or the mouths are placed in an out of the way position, both of which detracts from the most efficient operation of the ventilating system.

The primary object of the invention is to provide a deflector arrangement which may be placed in a richly furnished or ornamented wall and which no matter from what angle the same is viewed, will it detract from the appearance of its surroundings.

A further object of the invention is to provide such a deflector wherein the blades thereof are pivoted at the front of the casing so as to present to view only the front edge thereof; the remaining portion of the blades being so painted or covered as to have a low visibility which blends into the usually dark interior of the casing which thus becomes invisible from the front thereof, leaving the opening appearing as a barred one which appearance is produced by said front edges of the blades.

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

In the drawing:

Fig. 1 is a view in front elevation of a deflector arrangement 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 transverse sectional view through one of the deflector blades and illustrates diagrammatically the arrangement of the different contrasting surfaces thereof of high and low visibility.

Referring now in detail to that embodiment of the invention illustrated in the accompanying drawings, 1 indicates as a whole the casing of the deflector usually positioned in a building wall 2 and 3 indicate the louvers or blades associated with said casing. The casing comprises upright parallel side walls 4—4 and horizontal top and bottom walls 5—5 respectively which define a rectangular frame open at its front and rear. This frame is set in a correspondingly shaped opening 6 in a building wall and to the front thereof is fixed associated facing enhancing members 7 of suitable ornamentation. This facing provides the front part for the casing as a whole and engages that surface of the wall about said opening 6 to conceal the same. The rear end of the casing frame is connected in any suitable manner with a duct 8 leading from a suitable blower or exhaust apparatus. Quarter rounds 9 or other mouldings are fixed to the rear ends of said casing and cover and engage the rear surface of the wall 3 about the opening 6. The interior surface of the casing frame as well as like surface of the duct 8 are painted a nonlight-reflecting color such as black which renders them low in visibility when viewed from the front of the casing.

In the casing thus described, the blades 3 are arranged in laterally spaced relation and parallel with the side walls thereof. Each blade is preferably made of wood to reduce resonance and vibration and is of a suitable thickness and width. The opposite sides 3^a—3^a of the blade are painted a dead black and the front edge 3^b which is semi-circular is painted a contrasting color of high visibility as indicated diagrammatically in Fig. 4. If desired said front edge may be longitudinally fluted but this is not absolutely necessary.

On each end of the blade is secured a metallic shoe 10 secured thereto by screws as best shown in Fig. 3. The front or toe end of this shoe which is made semi-circular to fit the front edge of the blade, has a pin 11 arranged coaxially with said edge and this pin seats in a recess in the front marginal portions of the top and bottom members 5—5 of the casing frame to provide a pivotal axis for said blade. The rear or heel end of said shoe projects beyond the rear edge of

the blade and carries a thumb screw 12 which may be manipulated to lock the blade in the desired angular position as best shown in Fig. 2, the shoe and screws also being
5 painted black to lower their visibility. By means of this shoe construction the blades may be arranged to deflect or direct the air passing from the duct through the casing, to the desired part of the room to be venti-
10 lated.

When such a deflector casing is in the wall of a theater or the like, nothing is visible of the same, except the facing plates and the front edges of the blades, no matter
15 from what angle the casing as a whole is viewed or what angle the blades happen to be in. Thus the casing appears as if having a plurality of narrow, vertically arranged bars, which in its simplicity harmonizes
20 with any wall decoration. Thus the deflector casing which has heretofore been an eyesore is not only rendered more efficient in operation so far as the desired angularity of the blades are concerned but is also more

ornate than it has heretofore been possible 25 to make them.

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

I claim as my invention:

A deflector of the kind described embody- 35 ing therein a casing open at its front and rear, a plurality of deflector blades, a shoe on each end of the deflector blade and having a pin positioned near the front edge of the blade and engaging a part of the casing at
40 the front edge thereof to form the pivotal axis of said blade, and means on the other end of the shoe adapted to be engaged with a fixed part of the casing to lock the blade in the desired angular position therein. 45

In testimony whereof, I have hereunto set my hand this 21 day of May, 1927.

IRVING C. STERNBERG.