Nov. 1, 1932. H. G. KLOSTERMAN 1,886,028

REGISTER COVER

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Fig. 1.

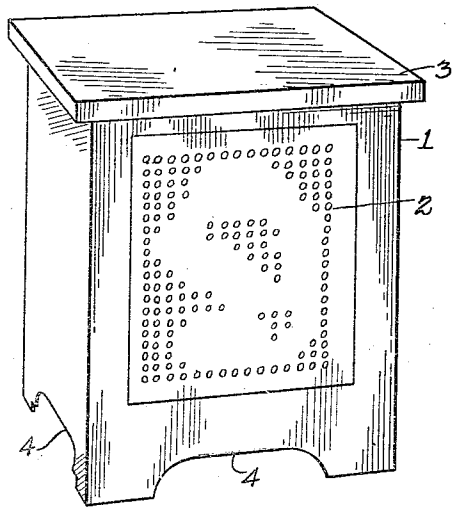


Fig. 2.

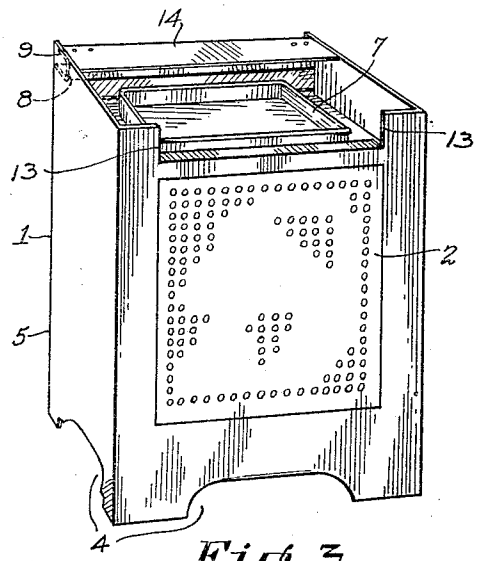


Fig. 4.

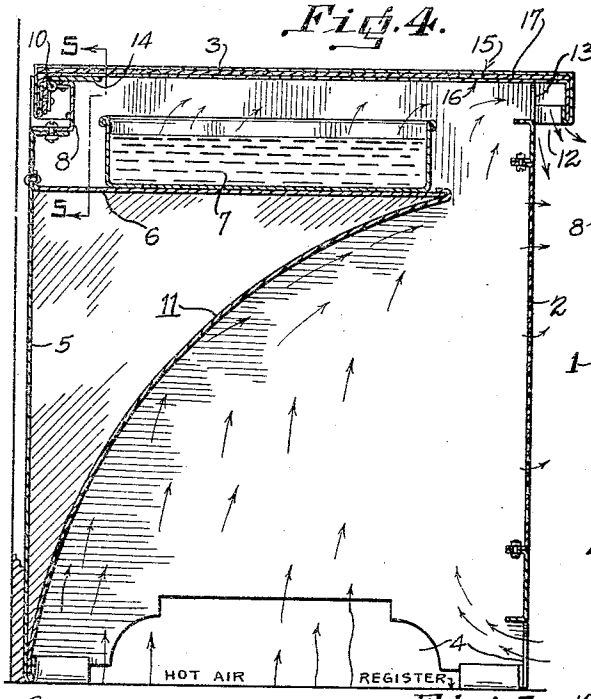


Fig. 3.

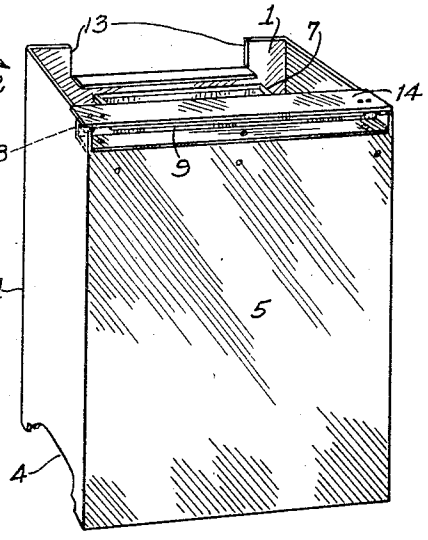
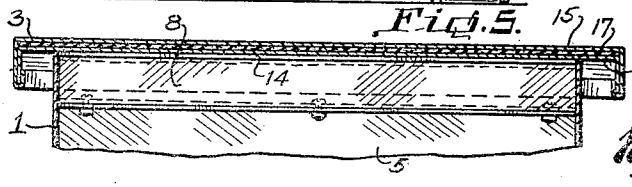


Fig. 5.



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Fig. 7.

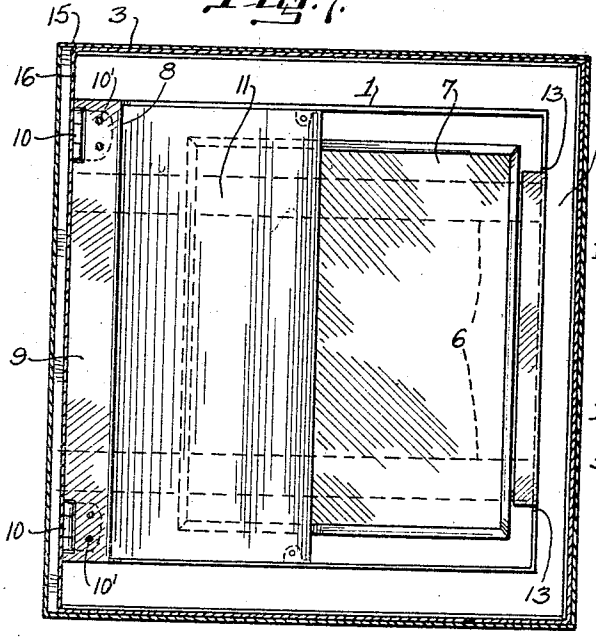


Fig. 8.

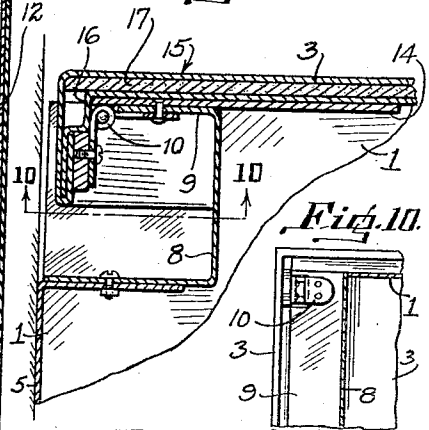


Fig. 10.

Fig. 9.

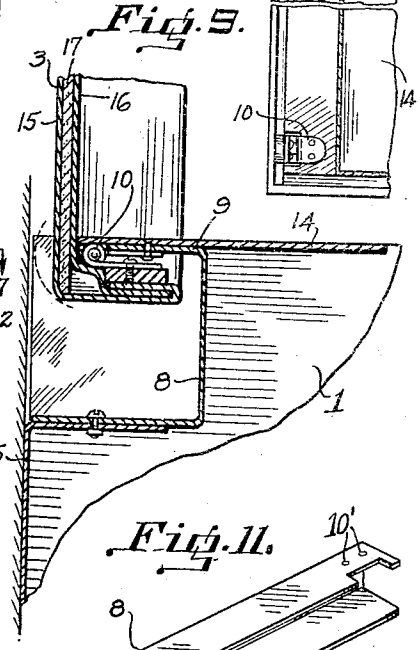


Fig. 6.

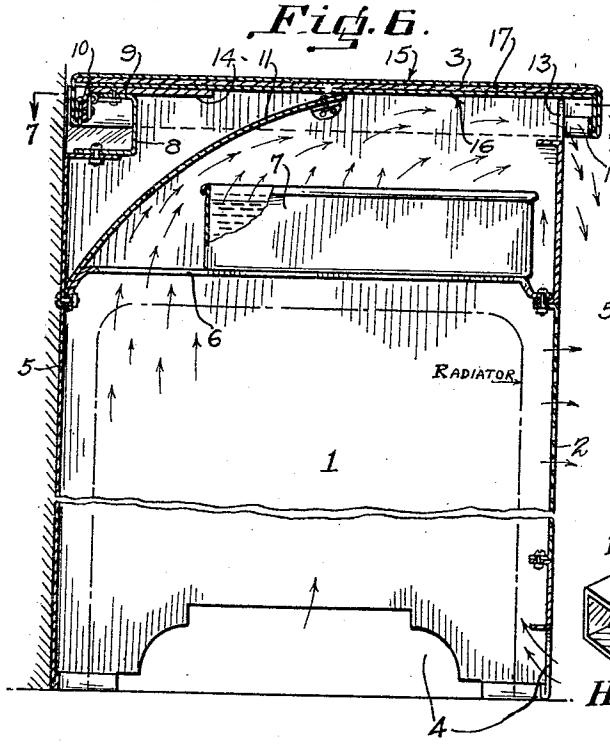
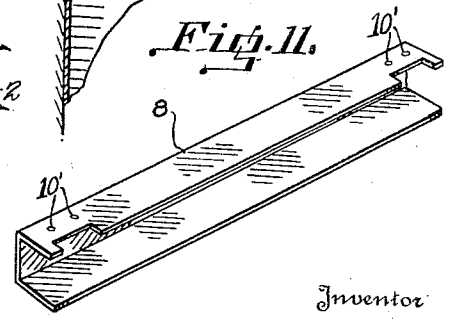


Fig. 11.



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Patented Nov. 1, 1932 1,886,028

UNITED STATES PATENT OFFICE

HUGO GOTTLIEB KLOSTERMAN, OF LOUISVILLE, KENTUCKY

REGISTER COVER

Application filed December 21, 1928. Serial No. 327,737.

This invention relates to register covers in general, and particularly to covers for hot air floor registers wherein the cover is constructed for effective admixture of the relatively cold air of a room with heated air at the point of its emergence from a hot air register or conduit.

The principal object of the invention is to provide a method of mixing cold air with heated air near the place where the heated air is passed out of a conduit into a room or an apartment.

Another object of the invention is to provide novel means for mixing the heated air and cold air for the highly efficient distribution thereof.

A further object of the invention is to provide a register cover of this type with a hinged top adapted to be raised without danger of scarring a wall when the register covered is closely adjacent the wall, as it usually is.

Another object of the invention is to provide register covers of this type with means for properly humidifying the mixture of heated and cold air, before it is directed from the cover into a room or apartment.

Other objects will be disclosed in the specification and drawings:

Figure 1 is a perspective of the cabinet;

Figure 2 is a perspective of the cabinet shown in Figure 1 with the lid removed;

Figure 3 is a rear perspective of the cabinet shown in Figure 2 with the lid removed;

Figure 4 is a perpendicular section of the cabinet;

Figure 5 is a section taken on line 5—5 of Figure 4;

Figure 6 is a slightly modified form showing the air passing directly over the water pan;

Figure 7 is a horizontal sectional view on the line 7—7 of Figure 6;

Figure 8 is a fragmentary section showing the hinge construction;

Figure 9 is also a fragmentary section of the hinge construction shown in Figure 8 with the lid in raised position;

Figure 10 is a section taken along line 10—10 of Figure 8; and

Figure 11 is a perspective of the channel brace on which the hinges are usually mounted, the channel brace being removed from the cabinet.

In the drawings:

Numeral 1 designates a register or radiator cabinet having a perforated face 2 and a hinged top 3. Around the base of the cabinet are air vents 4 which permit the drawing in of the outside air. Secured to the rear wall 5 of the cabinet 1 is a support 6 on which rests a water pan 7 for humidifying the air. Directly behind the pan 7, the rear wall 5 bends inwardly so as to seat a substantially U-shaped member 8. In the drawings the U-shaped member 8 is shown as extending clear across the rear of the cabinet between the side walls thereof, and has portions removed to receive hinges 10, the hinges being secured by way of openings 10′.

The top 3 consists of an upper and lower plate 15 and 16 with an insulating packing 17 between. At the outermost edges in the front and back, the upper sheet is turned down over the lower sheet so as to secure the two together. A brace plate 14 extends across the top of U-shaped member 8, on top of the hinges so as to prevent the escape of air.

As shown in Figure 4 a curved baffle plate 11 extends from the bottom of the back wall 5 up to the outermost portion of the support 6. The top 3 projects over the front face so as to allow a free exit of the warm air at 12. The upper front face of the cabinet 1 has a cut out portion 13 immediately behind the overhang of the top 3 so as to permit the escape of the air through the opening 12, due to the projection of the top 3. In the rear, the top 3 projects down the back, but inside the rear wall so that upon raising the lid its rearmost corner will still be within the line of the rear wall.

As shown in Figure 6, a support 6 extends entirely across the cabinet, the pan 7 being placed nearer the front wall. The curved baffle plate 11 is moved up so as to extend from substantially the middle of the top to the rear of the pan and secured to the rear end of the support 6.

As actually used, the cabinet shown in Figure 4 may be placed over a hot air register, the air being directed up and out through opening 12 and the perforated front portion of the cabinet; the pan 7 containing water humidifies the air in the cabinet.

Ordinarily, the cabinet will be placed closely adjacent a wall and since it is highly desirable to raise the top, the question of scarring the walls due to the raising of the top must be taken into consideration. This I have done by securing the hinges attached to the cover to the top of the U-shaped member 8 and permitting the overhang of the top portion to swing wholly or nearly wholly in the U-shaped hand member and thus avoid the usual defacement or scarring of the rear wall.

As shown in Figure 6, the cabinet is also adapted for use for radiators, and the curved baffle plate 11 is placed at the rear of the humidifying pan, and the air allowed to rise to the rear of the pan and move over the pan in direct contact with the water. The hinged construction is the same and permits the folding of the back wall into the U-shaped member 8 upon the lid being raised. Thus no matter how close to the wall the cabinet may be there will be no danger of defacing the same and the cover may be easily raised.

What I claim is:

1. A heat dispensing cabinet comprising rear and side walls and a top, said rear of less height than said side walls, a channel member secured to said rear wall, the side walls having notches corresponding to the channel member, hinges connecting the top with the upper wall of the channel member and a brace plate covering said hinges and extending from one side of the cabinet to the other.

2. A heat dispensing cabinet comprising rear, front and side walls and a top, said rear walls of less height than said side walls, a channel member secured to said rear wall, hinges connecting the top to the upper side of the channel member, the top having an upper and lower sheet with insulating material between, both the upper and lower sheets bent down at the back and front, the upper sheet bent up around the lower sheet at the overhang at the front and back so as to secure the two sheets together.

In testimony whereof I affix my signature.

HUGO GOTTLIEB KLOSTERMAN.