Oct. 4, 1932. F. C. REYNOLDS 1,880,281

RADIATOR INCLOSURE

Filed July 11, 1929

Fig. 1.

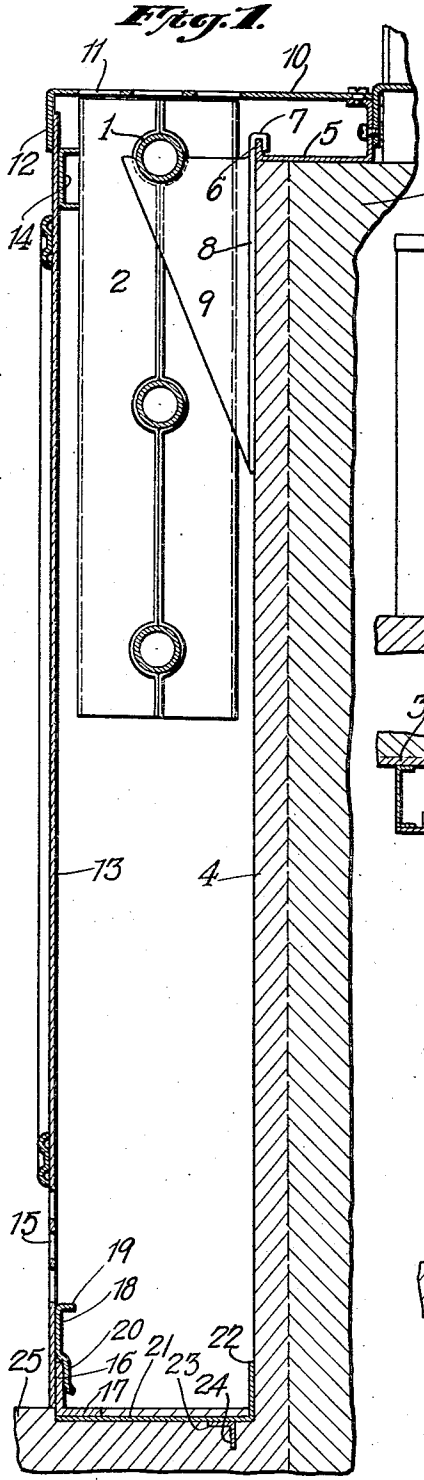


Fig. 2.

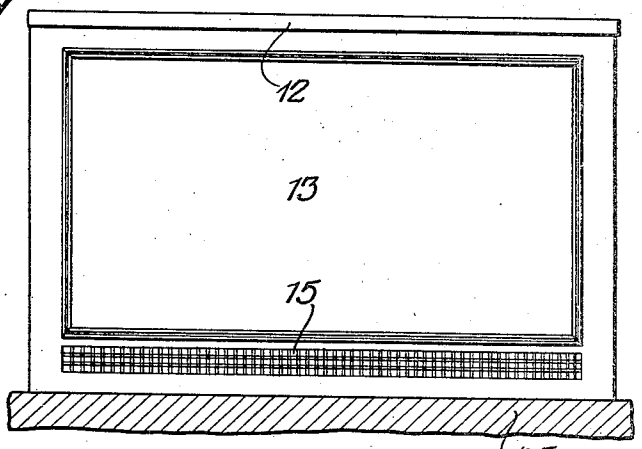


Fig. 3.

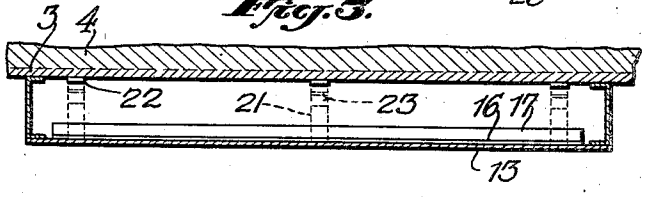
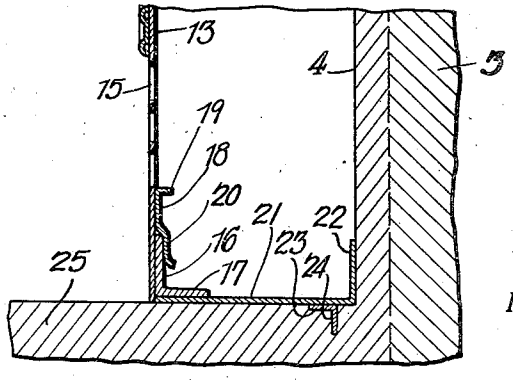


Fig. 4.



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1,880,281

UNITED STATES PATENT OFFICE

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RADIATOR INCLOSURE

Application filed July 11, 1929. Serial No. 377,392.

In a pending application of Irving T. Bennett, No. 355,059 filed April 15, 1929, there are described certain structures for use in the installation of radiators for heating rooms or buildings.

The present application is directed to certain features of improvement in inclosures of the same class.

The accompanying drawing illustrates embodiments of the invention.

Fig. 1 is a transverse vertical section of the inclosure containing a radiator;

Fig. 2 is a front elevation of the same;

Fig. 3 is a horizontal section near the lower end;

Fig. 4 is a view similar to the lower part of Fig. 1, illustrating a modification.

The radiator may be of the type described more fully in the aforesaid Bennett application, comprising steam pipes 1 to which are applied an extended structure 2 of sheet metal forming vertical flues and transmitting the heat from the steam pipes to the air within the flues so as to induce an upward draft and a circulation of the heated air of the room.

The wall 3 of the building has a plastic facing 4. At the window opening there is a sill member 5 with an upturned flange 6 at the inner edge engaged by hooks 7 at the upper edge of a plate 8 which lies against the wall and carries brackets 9 curved on the top to receive the pipe 1 and thus support the radiator.

The plate 8 may be bolted to the wall, omitting the hook 7, or may be supported in various ways. The radiator may be carried by various other supports than the hanger described.

The top of the sill is formed by a plate 10 extending inward beyond the wall and provided with openings 11 for the upward escape of the heated air from the radiator, thus forming the top of the inclosure, and having a downward flange 12 along its inner edge.

The ends of the inclosure are formed of vertical plates 12*a*, Fig. 3, with inward flanges along the vertical edges and extending from the top plate 10 to the floor or to any desired distance below the radiator.

The front of the inclosure is formed of a removable plate 13 with a stiffening channel 14 near its upper edge. The flanges of the channel serve also as spacers between the radiator and the front wall.

The lower edge of the front plate is provided with openings 15 for admission of air to a point below the radiator. The upper structure thus described may be of various other designs, the present improvements being directed to the lower part of the structure as hereinafter described.

Means are provided to hold the lower edge of the front plate and to space the latter at a desired distance from the wall. An angle is fixed at or adjacent to the lower end of the inclosure having an upwardly extending flange 16 for holding the front plate and a horizontal flange 17 by which it is fastened in place.

The plate 13 carries on its inner face a strip 18 which has an inwardly extending stiffening flange 19 and an offset lower edge 20. After the radiator is set in place the front plate is introduced under the flange 12 and lifted so that the offset 20 at the lower edge may be dropped over the flange 16 to the position shown in Fig. 1, thus holding the plate firmly at the top and bottom.

The flange 17 is fastened, as by spot welding, to straps 21 which extend back to the facing 4 of the wall and have upwardly extending flanges 22 bearing against such face. Each of these straps has an angular piece with a horizontal flange 23 welded or otherwise fastened on its underside. The vertical flange 24 is embedded in the cement or other plastic material 25 constituting the top of the floor and thus anchors the straps 21 and the flange 16 at the desired spacing or distance from the face of the wall 4.

The straps 21 may likewise be embedded in the floor 25 (as in Fig. 1) bringing the latter up to the level of the top of the flange 17 (or even higher if desired). Three straps 21 are shown. The number used will depend on the length of the angle 16, 17. The straps provide a very simple and easily applied means, not only for spacing the longitudinal member 16, but also for holding it stiff

and straight along its length. It is a simple matter to apply the straps, since they are supported on the floor structure.

Or, as in Fig. 4, the angle pieces 23, 24 may be embedded in the floor 25, the straps 21 resting on the top of the finished floor. In fact, various other means may be utilized for spacing the part 16 which holds the front of the inclosure and fastening it parallel to the wall and at the exact spacing desired.

In the present case, the construction is simplified (compared with previous constructions) by suspending or supporting the radiator directly from the wall and utilizing a holder at the bottom whose sole function is to space the lower portion of the front plate.

What I claim is:

1. A radiator inclosure adapted for a radiator mounted adjacent to the wall of a room, said inclosure comprising a front plate and end portions adapted to overlie the front and ends of the radiator respectively, a longitudinal member with which the lower portion of the front plate is engaged and holding means supported fixedly on the floor of the room engaging said member and holding it in position at a certain distance from said wall.

2. The radiator inclosure of claim 1, said holding means being fastened to the lower part of said longitudinal member and being also fixed in engagement with the face of said wall.

3. The radiator inclosure of claim 1, said holding means comprising straps attached to the longitudinal member, extending to the front of said wall and fastened to the floor of the room.

4. The radiator inclosure of claim 1, said holding means comprising straps attached to said longitudinal member at intervals in its length and extending to said wall of the room so as to space the member therefrom and anchoring means extending from said straps into the floor of the room so as to hold the straps in place.

5. The radiator inclosure of claim 1, said longitudinal member having a vertical flange engaging the front plate and having also a horizontal flange, and said holding means comprising straps fastened to said horizontal flange, extending back to said wall and having flanges on their rear ends bearing against the wall and anchoring devices fixed to the underside of said straps and extending into the floor of the room.

In witness whereof, I have hereunto signed my name.

FRANK C. REYNOLDS.