D. B. BOLINGER.

ADJUSTABLE RADIATOR CASING.

APPLICATION FILED OCT. 19, 1916.

1,242,646.

Patented Oct. 9, 1917.

2 SHEETS—SHEET 1.

Fig. 1.

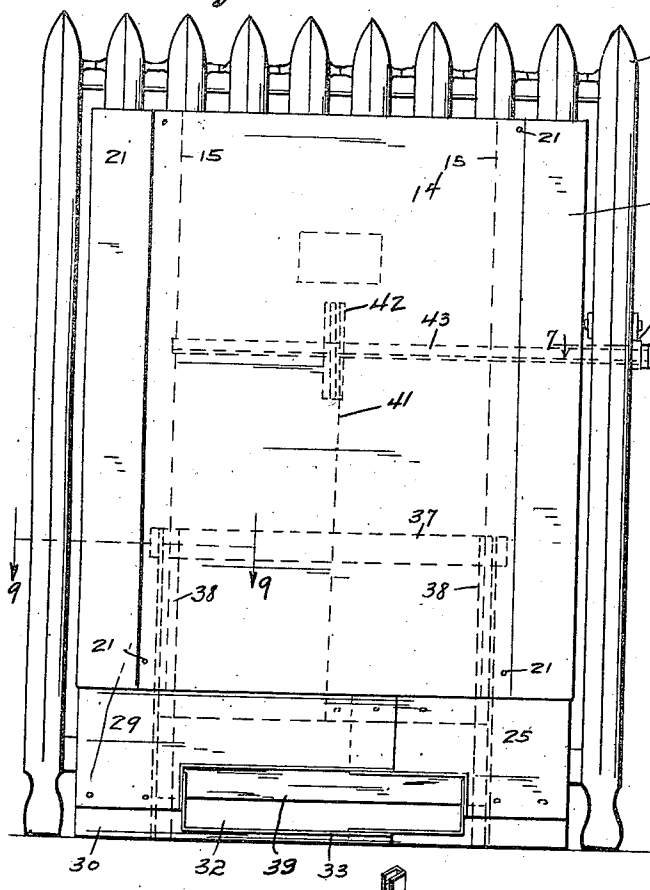


Fig. 2.

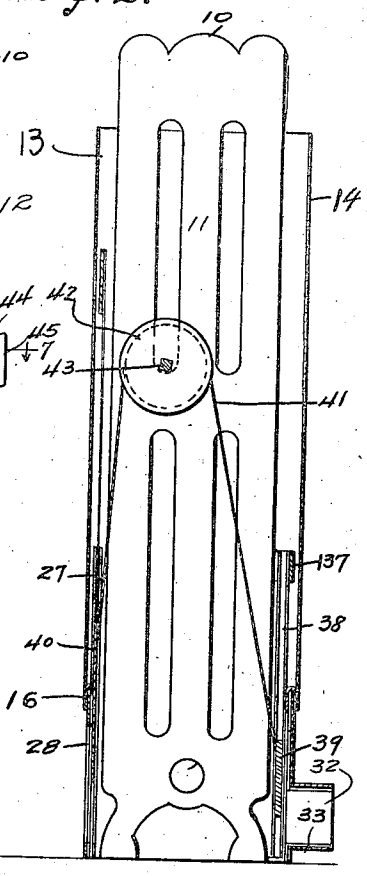
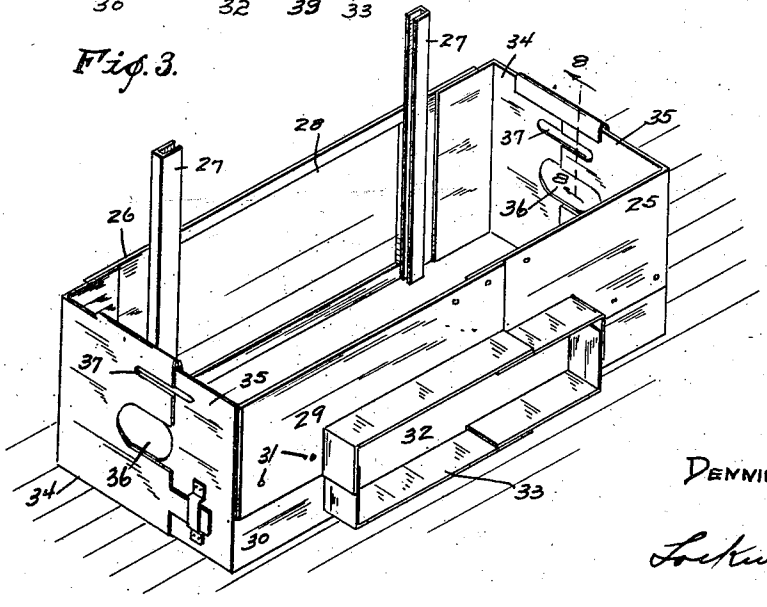


Fig. 3.



INVENTOR

DENNIE B. BOLINGER

BY

Lockwood & Lockwood

ATTORNEYS

D. B. BOLINGER.

ADJUSTABLE RADIATOR CASING.

APPLICATION FILED OCT. 19, 1916.

1,242,646.

Patented Oct. 9, 1917.

2 SHEETS—SHEET 2.

Fig. 4.

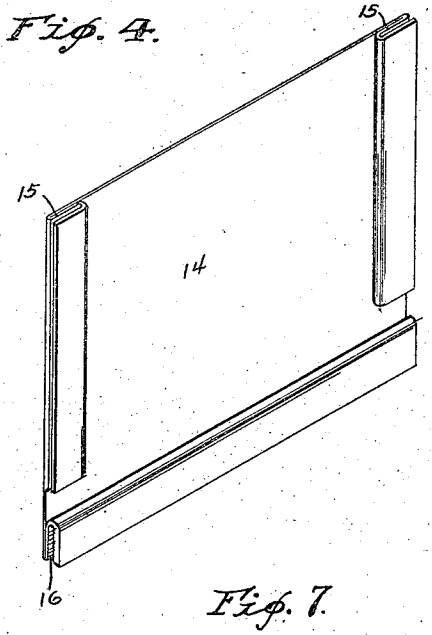


Fig. 5.

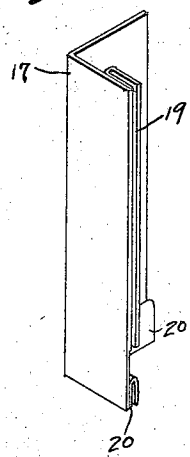


Fig. 6.

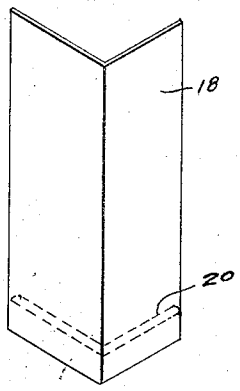


Fig. 7.

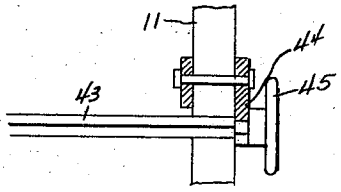


Fig. 8.

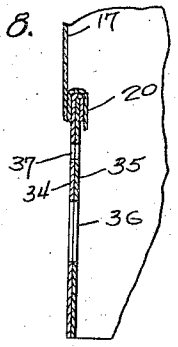
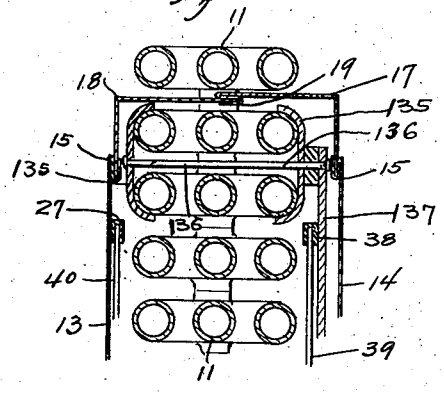


Fig. 9.



INVENTOR

DENNIE B. BOLINGER.

BY

Lockwood & Lockwood

ATTORNEYS

UNITED STATES PATENT OFFICE.

DENNIE B. BOLINGER, OF SULLIVAN, INDIANA.

ADJUSTABLE RADIATOR-CASING.

1,242,646. Specification of Letters Patent. Patented Oct. 9, 1917.

Application filed October 19, 1916. Serial No. 126,588.

To all whom it may concern:

Be it known that I, DENNIE B. BOLINGER, a citizen of the United States, and a resident of Sullivan, county of Sullivan, and State of Indiana, have invented a certain new and useful Adjustable Radiator-Casing; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which like letters refer to like parts.

This invention relates to a casing comprising a ventilating base and a diffuser for radiators, whereby fresh air may be admitted to a room so as to pass through the radiator and be warmed and diffused thereby.

One feature of the invention resides in the adjustability of the ventilating base and diffuser so that it may be adjusted to fit radiators of varying sizes. For example, the same base may be used on a twelve or fourteen section radiator having two, three or four columns. To accomplish this purpose, slip joints are provided whereby the base and diffuser may be elongated or widened.

Another feature of the invention is the means for operating the dampers in the base whereby they slide entirely out of the way and do not in any way obstruct the air openings, as is the case with swinging or pivotal dampers.

The full nature of the invention will be understood from the accompanying drawings and the following description and claims.

In the drawings, Figure 1 is a front elevation of the ventilating base and diffuser in connection with a radiator. Fig. 2 is a side elevation of the radiator showing the base and diffuser in cross section. Fig. 3 is a perspective view of the ventilating base. Fig. 4 is a perspective view of one side piece of the diffuser. Figs. 5 and 6 are perspective views of the end portions of the diffuser. Fig. 7 is a section on the line 7—7 of Fig. 1. Fig. 8 is a cross section on the line 8—8 of Fig. 3. Fig. 9 is a cross section on the line 9—9 of Fig. 1.

In the drawings there is shown a radiator having sections 10 and columns 11. Secured to the radiator so as to surround a certain number of sections there is a diffuser 12 comprising a front plate 13 and a rear plate 14 preferably made of sheet metal. At each end of said plates there are provided slip joints 15 and a slip joint 16 on the bottom thereof. The end plates of said diffuser comprise two members 17 and 18, the member 17 having a slip joint 19 into which the adjacent edge of the member 18 is adapted to slide and the bottoms of said members are provided with slip joints 20 for engaging the ventilating base to be hereafter described. When the diffuser is assembled, one edge of the end member 18 is inserted in the slip joint 19, while the other edge of said member and of the member 17 are inserted in the slip joints 15 of the side plates, thereby forming a box-like structure which is assembled about the sections of the radiator. It may, therefore, be readily seen that the box-like diffuser may be readily adjusted in either width or length, depending upon the size of the slip joints, and secured in its position by the bolts 21 extending through said joints.

Surrounding the bottom portion of the radiator there is a ventilating box 25 adapted to engage in the slip joints 16 and 20 of the diffuser. The ventilating box 25 is composed of a side member 26 having guide members 27 extending upwardly at each end of an opening 28. On the other side there are members 29 and 30 adapted to overlap each other and be secured together by the bolts 31. There is an opening 32 in the members 29 and 30 which have overlapping outwardly projecting portions 33. The end of the box is comprised of the telescoping members 34 and 35 which are provided with an opening 36 to surround the radiator pipe, and a slot 37 provided for radiators using rods, whereby the box may be assembled about the base of the radiator sections and adjusted longitudinally and laterally to embrace the proper number of sections and columns and secured by the bolts 31.

The opening 32 is placed adjacent the wall so that the projection 33 may extend therethrough. The clamps 135 are secured by a rod 136 to two sections of the radiator so as to support a bar 137 on which is secured guide members 38 which extend and are secured to the floor of the room. Said guides are located on each side of the opening 32 so as to engage a sliding damper 39. A sliding damper 40 on the front side of the radiator is adapted to slide in the guides 27. Secured to the upper tops of said dampers is a cable 41 which passes

about a cable wheel 42 which is rigidly secured to a rod 43 extending between the columns of the radiator through a bearing 44 and is operated by a valve handle 45. The dampers are so arranged that when one is in its upper position so as to be open, the other is lowered so as to close the opening and, therefore, when it is desired to have fresh air in the room, the outer damper is opened and the inner damper closed, whereby the fresh air will enter the diffuser and be heated before flowing into the room. If it is desired to shut off the fresh air and circulate the air in the room, the inner damper is opened and the outer damper is closed by the same operation so that the air may circulate through the diffuser.

The invention claimed is:

1. The combination with a radiator, of a casing comprising a ventilating base and a diffuser provided with slip joints for adjusting the size thereof, the end walls of the base having registering recesses therein for the reception of parts of the radiator whereby said ends may be introduced between sections of the radiator, and means for securing said joints in any given position whereby said ventilating base and diffuser may be adjusted to fit different sized radiators.

2. The combination with a radiator, of a casing comprising a ventilating base and a diffuser, said base and diffuser being constructed in sections, certain of which are provided with slip joints whereby the casing may be enlarged or decreased in size, and other parts of said base and diffuser having overlapping sections adapted to be fixed together.

3. The combination with a radiator and a casing comprising a ventilating base and a diffuser, said base having inlet openings, of vertically movable closures for said openings, a winding shaft and means controlled by the operation of said winding shaft for simultaneously elevating one of said closures while the other is being lowered.

4. The combination with a radiator and the base portion of a casing, said base portion having inlet openings in the walls thereof, of movable closures for said openings, a shaft carried by the radiator, a drum on the shaft, and means connecting the drum with said closures, whereby, when the shaft is operated to elevate one of said closures, the opposite closure will descend.

In witness whereof I have hereunto affixed my signature.

DENNIE B. BOLINGER.