

1,273,753.

B. EELHART.
HEAT DISSEMINATOR.
APPLICATION FILED MAR. 19, 1918.

Patented July 23, 1918.

2 SHEETS—SHEET 1.

Fig. 1.

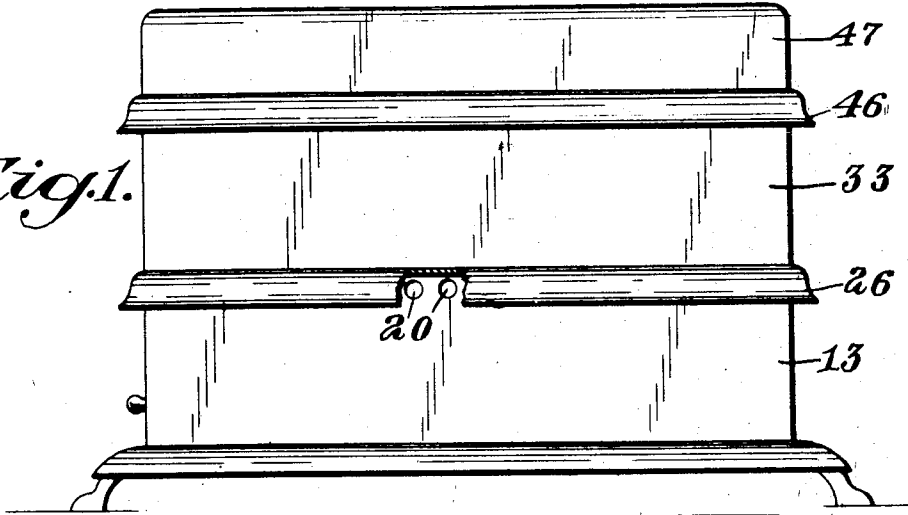


Fig. 2.

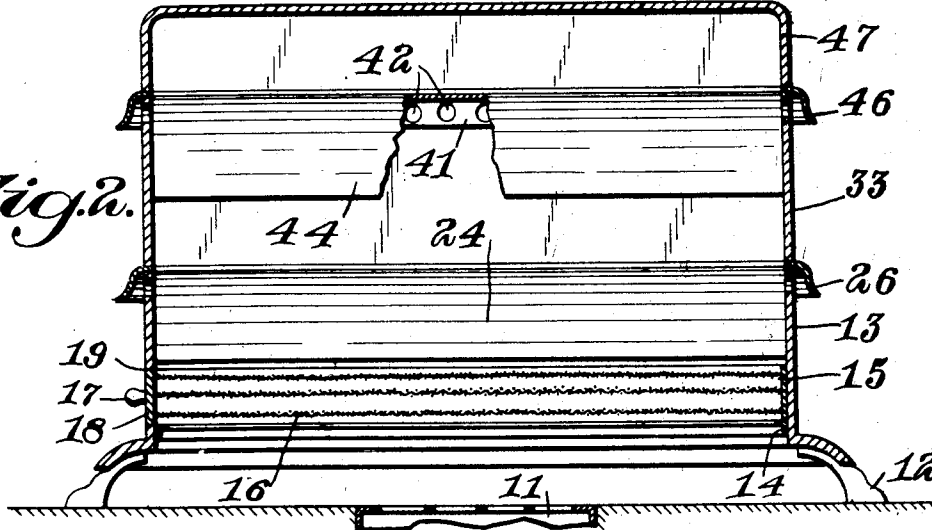
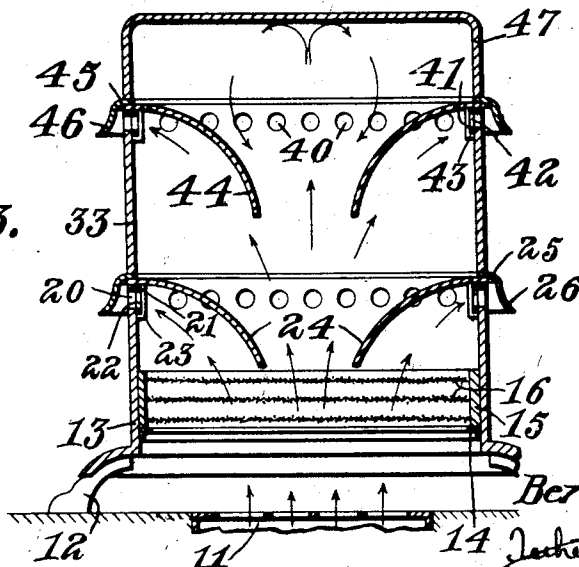


Fig. 3.



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2 SHEETS—SHEET 2.

Fig. 4.

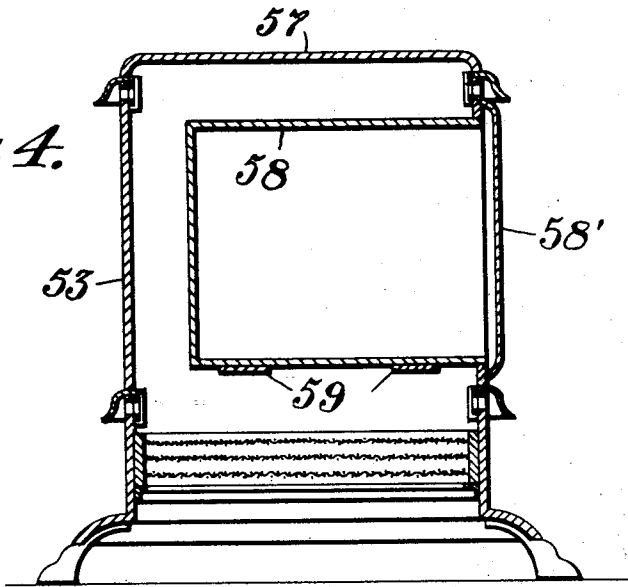


Fig. 5.

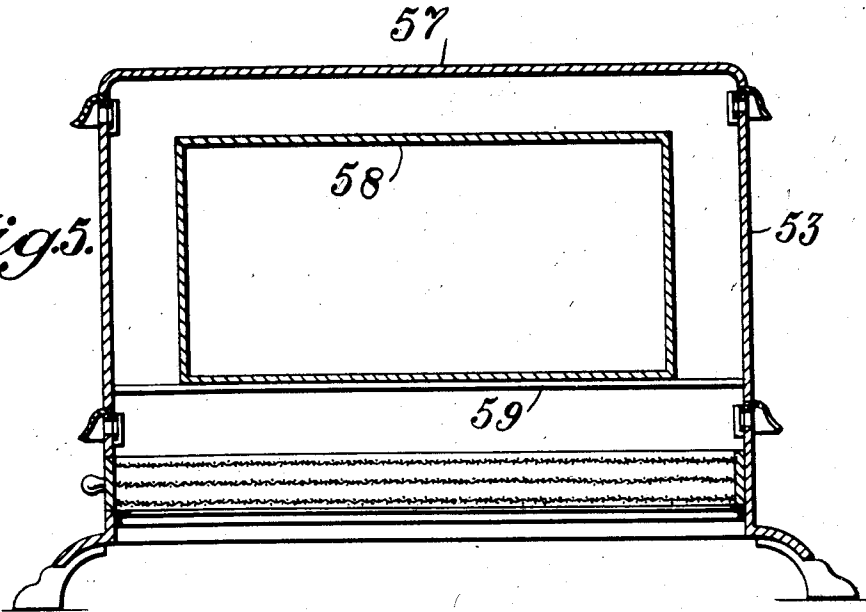
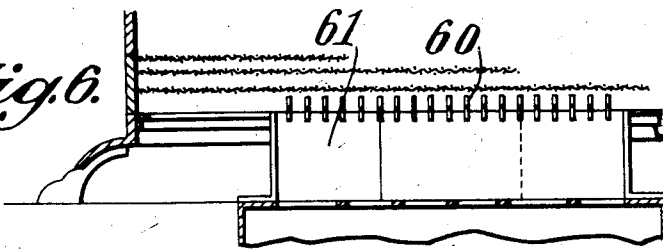


Fig. 6.



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UNITED STATES PATENT OFFICE.

BERNARD EELHART, OF HOLLAND, MICHIGAN.

HEAT-DISSEMINATOR.

1,273,753.

Specification of Letters Patent.

Patented July 23, 1918.

Application filed March 19, 1918. Serial No. 223,361.

To all whom it may concern:

Be it known that I, BERNARD EELHART, a citizen of the Netherlands, residing at Holland, Michigan, have invented certain new and useful Improvements in Heat-Disseminators, of which the following is a specification.

This invention relates to devices for distributing the heat coming from registers of hot air heating systems. The invention is in effect a radiator although this term should not be confused with a radiator of a hot water or steam heating system. The object of the invention is to produce a device that will more efficiently disseminate the heat coming from a register and at the same time free the hot air coming from the register of all dust.

The invention is illustrated in the accompanying drawings in which Figure 1 shows a side elevation of the device; Fig. 2 a vertical longitudinal section of the same, and Fig. 3 a transverse section of the radiator. Fig. 4 is a transverse section of a modified form and Fig. 5 is a longitudinal section of the same. Fig. 6 shows a modification.

In the drawings, the numeral 11 indicates an ordinary register of a hot air heating plant already installed. My device consists of a portable rectangular casing adapted to be placed at random over any desired register. The device is supported on legs 12 and consists of a bottom open ended drum 13 supported on the legs 12. This drum 13 is provided with angle members 14 therearound on which an open bottomed drawer 15 is adapted to rest. The drawer is provided with a plurality of fine mesh screens 16 or other dust catching devices and has a handle 17 on its front face 18 which projects through an opening 19 in the drum 13. The upper portion of the drum 13 has a plurality of apertures 20 and inside the drum, a damper slide 21 is provided having openings 22 adapted to register with the openings 20. These slides 21 are held in runways 23. From the top of the drum 13 a downwardly curved deflector element 24 is carried having a restricted neck, and an

open centered top 25 fits on the top of the drum and deflector, which has a downwardly curved outside guiding flange 26.

Upon the structure so far described, is placed an intermediate drum 33 having apertures 40, damper slides 41, openings 42, runways 43, deflector element 44, top 45, and guiding flange 46—all as provided for the drum 13. Supported upon the top 45 is a crown 47 forming the top of the radiator.

In the operation of this device, the hot air from the register 11 in rising draws in some of the air from the room as is obvious. This mixed air passes through the screens 16 where it is freed from dust. When these screens become filled with dust, the drawer 15 is removed from the drum 13 of the radiator whereupon the screens may be cleaned.

Some of the cleansed heated air is deflected upwardly by the element 24 so that it passes out through the openings 20, provided the dampers 21 are open, and downwardly around the guides 26. The remaining hot air passes upwardly through the restricted neck of the deflector 24 into the intermediate drum 33 where it is again subdivided, part going out through the openings 40 around the guides 46 and part going up through the neck of the deflector 44. It continues to rise until it hits the crown 47 whereupon its direction is reversed and the accumulation of the incoming air will cause this downwardly directed air to descend around the edges of the neck of the deflector 44 whereupon it joins the air passing through the openings 40.

In the modified form shown in Figs. 4 and 5, the intermediate drum 33 and crown 47 of the device of Figs. 1 to 3 are removed and the drum 53 and crown 57 substituted therefor. The principle of construction of these elements is the same as in Figs. 1 to 3, the only difference being that the drum 53 is equipped with an oven 58 supported on bars 59 or other supports. Access may be had to the oven by means of the door 59.

Fig. 6 shows a modified form of my device in which 60 represents a damper for shut-

ting off the heat from the register from rising into the radiator if this should be desired. 61 represents extensible frames adapted to be secured to the register flange for conducting the hot air direct from the register to the radiator.

What I claim is:

1. A radiator of the class described comprising a plurality of superposed drums, 5 restricted deflecting necks inclosed by each drum, and a non-apertured crown surmounting the top drum.

2. A radiator of the class described comprising a plurality of superposed drums, restricted deflecting necks inclosed by each drum, downwardly curved guides outside the drums forming a continuation of the deflecting necks, and a non-apertured crown surmounting the top drum.

BERNARD EELHART.