Aug. 2, 1932. F. DE RIENZO ET AL 1,869,548

RADIATOR DUSTGUARD

Original Filed Dec. 24, 1928 3 Sheets-Sheet 1

Fig. 1

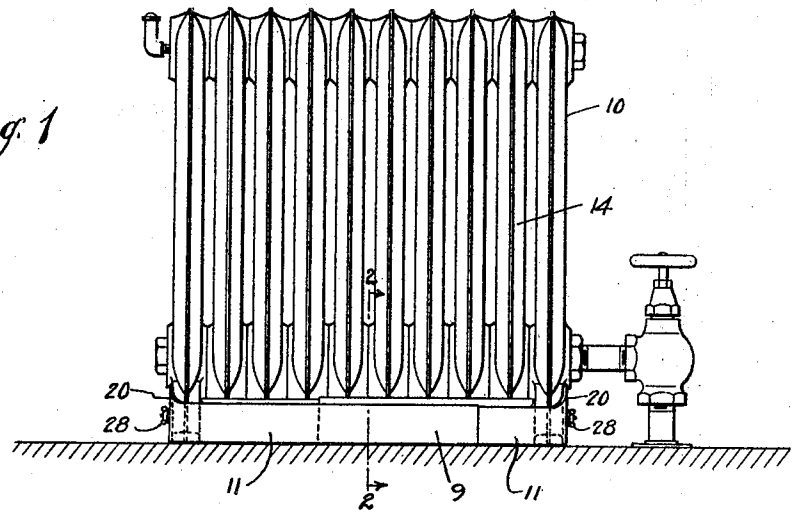
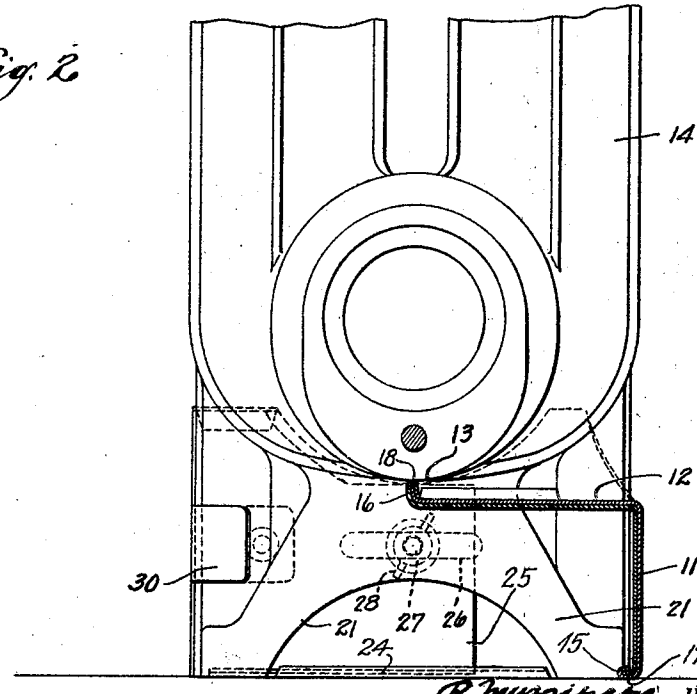


Fig. 2



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RADIATOR DUSTGUARD

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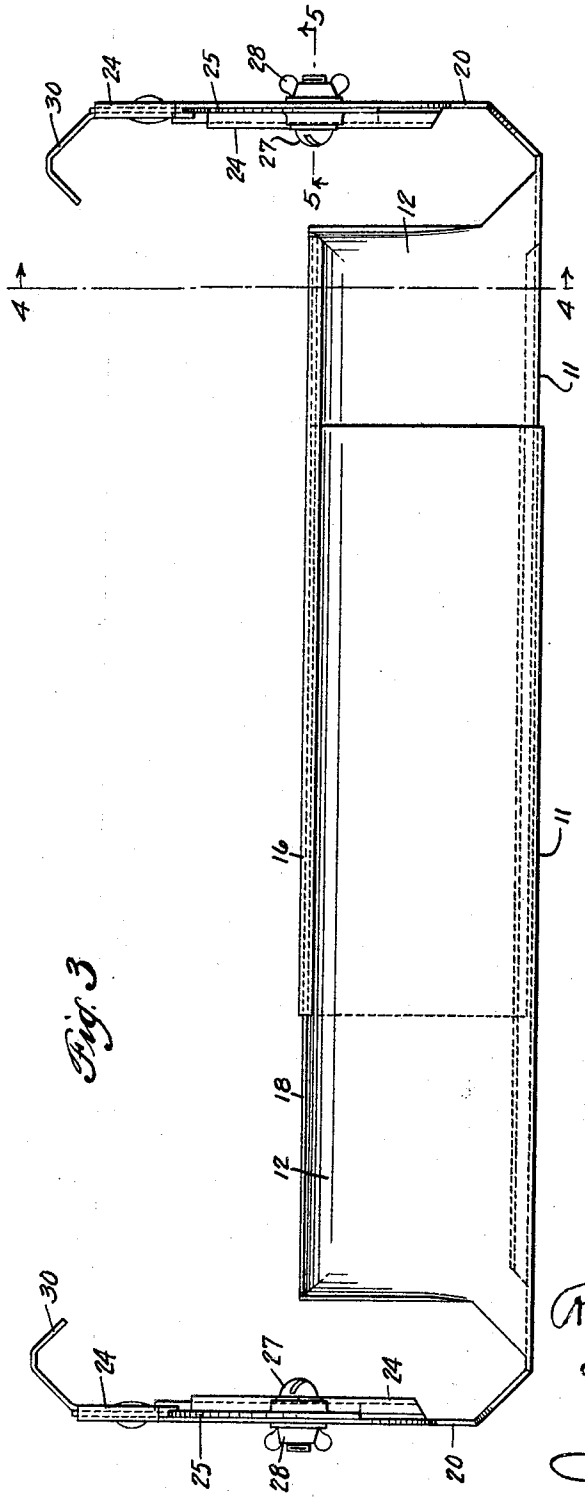


Fig. 3

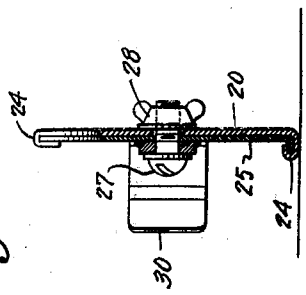


Fig. 5

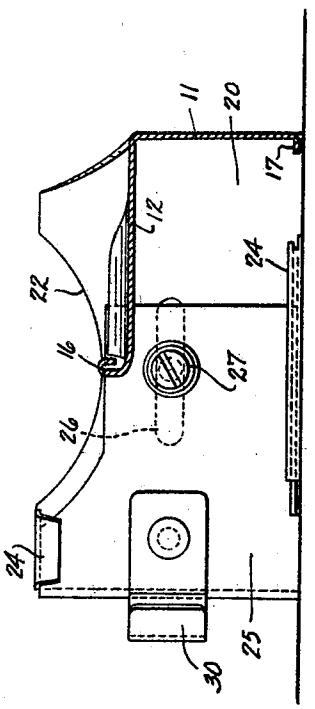


Fig. 4

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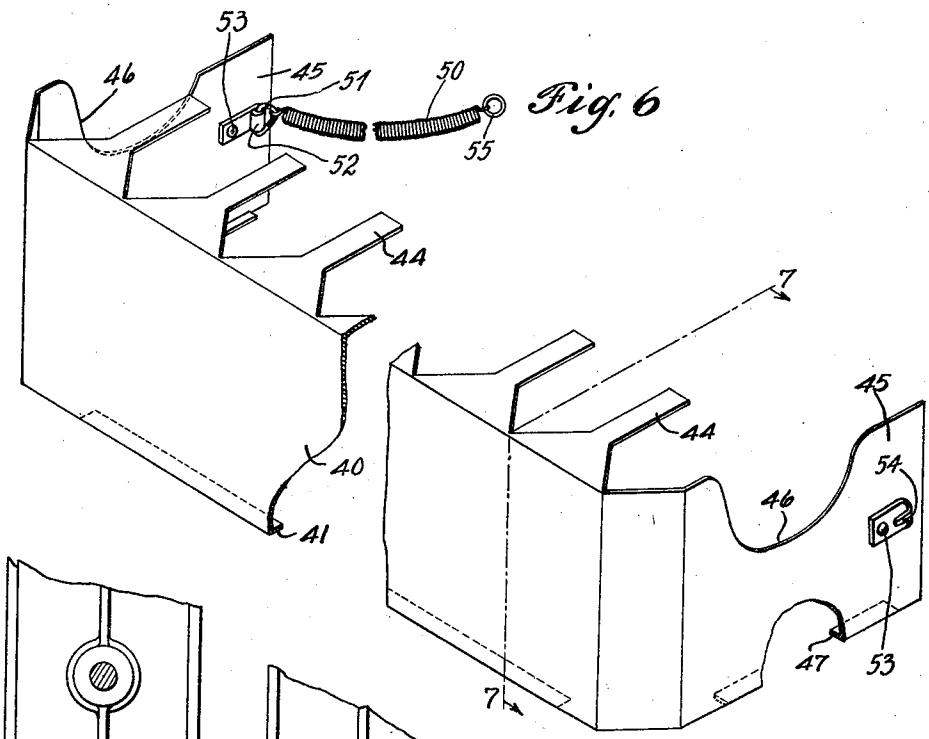


Fig. 6

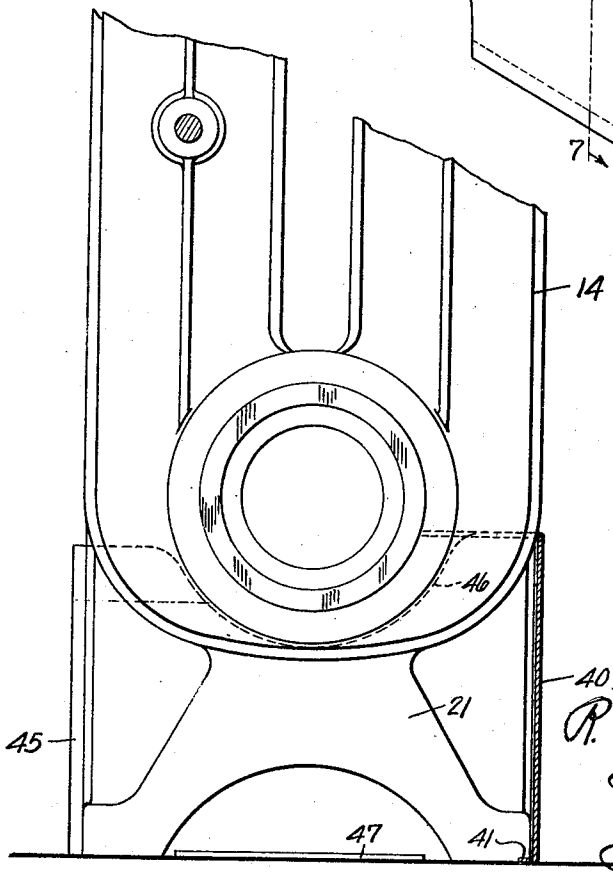


Fig. 7

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UNITED STATES PATENT OFFICE

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RADIATOR DUSTGUARD

Application filed December 24, 1928, Serial No. 328,276. Renewed January 21, 1932.

This invention relates to novel and useful improvements in dust guards, and more especially to dust guards adapted to enclose the base of objects, such as hot-water or steam radiators, thereby preventing the accumulation of dust beneath these or similar objects.

Objects and advantages of the invention will be set forth in part hereinafter and in part will be obvious herefrom, or may be learned by practice with the invention, the same being realized and attained by means of the instrumentalities and combinations pointed out in the appended claims.

The invention consists in the novel parts, construction, arrangements, combinations and improvements herein shown and described.

The accompanying drawings, referred to herein and constituting a part hereof, illustrate one embodiment of the invention, and together with the description, serve to explain the principles of the invention.

Of the drawings:—

Fig. 1 is an elevation showing a conventional radiator to which the invention is applied;

Fig. 2 is a cross-section taken on the line 2—2 of Fig. 1;

Fig. 3 is a plan showing the dust guard of Fig. 1 in detail;

Fig. 4 is a section taken on the line 4—4 of Fig. 3;

Fig. 5 is a section taken on the line 5—5 of Fig. 3;

Fig. 6 is a view of a modified form of dust guard according to the invention; and

Fig. 7 is a cross-section on line 7—7 of Fig. 6 showing the guard positioned around a radiator base.

The invention is primarily directed to the provision of a dust guard adapted to fit around the bottom portion or base of a hot water or steam radiator, thereby to prevent the accumulation of dust in places which are reached with difficulty when sweeping the floor on which the radiator rests. The invention is further directed to the provision of such a dust guard as may be employed in connection with hot-water, or steam, radiators and can be attached thereto without departure from the conventional construction of the radiator element. In addition, there is contemplated a radiator dust guard which may be extended to conform itself to radiators of different sizes.

In the present preferred embodiment of the invention there is provided an upstanding wall of sheet metal along the front and bottom of the radiator base, substantially closing the space between the bottom of the radiating columns and the floor, each end of the wall extending rearwardly around the ends of the radiator base portion and substantially to the wall of the room against which the radiator is placed. From the upper edge of the front portion of the guard there extends inwardly a shield, fitting closely to the bottom of the radiating columns, which diverts the downwardly settling dust and prevents its entry within the base area of the radiator enclosed by the front and end end portions of the guard.

In connection therewith, there is preferably, although not necessarily, provided attaching means whereby the guard may be securely attached to the bottom or base portion of the radiator to prevent its accidental displacement. If desired, the front wall of the dust guard may be made of interfitting sections, thereby rendering the guard extensible to adapt it for use with radiators of different sizes. Also the inwardly extending top shield may be formed of separated projections of a size to fit into and close the space between the bottom of adjacent radiating columns.

It will be understood that the foregoing general description, and the following detailed description as well, are exemplary and explanatory of the invention, but are not restrictive thereof.

Referring now in detail to the illustrative drawings, a radiator 10 of the conventional type is shown from the base portion of which the dust is excluded by a dust guard 9 in accordance with the present invention.

As embodied, the dust excluding means comprise two or more vertical metal sheets 11 forming a wall at the front of the radiator, the upper portion of the sheets being bent inwardly and upwardly to contact with the bottom portion 13 of the radiating columns

14. One extreme edge of each of these vertical wall members 11 is preferably bent over to form channels 15 and 16, within which the unbent edges 17 and 18 of the other sheet are retained in sliding and extensible engagement. The vertical portion of the front wall is preferably slightly lower than the bottoms of the radiating columns 14. The opposite ends of these sheets forming the front wall are bent backwardly to form walls 20 extending approximately to the wall against which the radiator is set, and fit closely against the end legs 21 of the radiator.

For accommodating the radiator piping, and other fittings, the rearwardly extending walls 20 may be recessed, as at 22, thereby enabling the guard to be fitted more closely to the ends of the radiator.

The dust guard is preferably constructed to fit radiators of different depth and as here embodied, the rearwardly extending wall portions 20 are bent over for a short distance at their upper and lower edges to provide channels 24 within which the movable portions 25 of the side walls may slide. Both parts of the side walls are provided with narrow, horizontal, alined slots 26 through which a screw 27 may be passed, which, with wing-nuts 28 serve to retain the side walls 20 in the desired degree of extension.

For securing the guard to the radiator and against inadvertent displacement, there are provided hook members 30, riveted to the extreme rear slidable portion 25 of the end walls, which hook members engage the rear supporting legs 21 of the radiator, and may be closed and tightly held thereto by sliding the end portions 20 and 25 together and screwing the wing nut 28 tight.

For use with radiators of widely different sizes, a modified embodiment of the invention may be provided as shown in Figures 6 and 7, wherein a vertical or upwardly inclined front wall 40 is made of sheet metal, or other suitable material, the bottom edge of the wall being provided, for substantially its entire length, with an inwardly projecting angular portion 41, lying flat on the floor which supports the radiator. The upper portion of this vertical wall 40 is bent and cut away to form inwardly extending shield members 44 of a shape to close the space between pairs of adjacent radiating columns 14. At each end of the front wall 40, there are provided rearwardly extending end-closure members 45, recessed on their top edges, at 46, to accommodate the radiator piping and inwardly bent at their bottom edge to form a floor-fitting edge 47 substantially closing the space between the legs 21 at each end of the radiator. Where this construction is preferred, the dimensions will, of course, be so chosen that the guard will closely fit the base portion of the radiator with which it is used.

A modified form of means for securing the dust guard to the radiator is shown in Fig. 6. As embodied, binding cords preferably formed of flexible and resilient material such as the helical spring 50, are attached to the inner sides of the end members 45 by rings 51, engaging hooks 52, the hooks being securely riveted at 53 to the inner sides of walls 45. Only one such hook and cord is shown, but it will be understood that each end wall 45 is provided with a binding cord as shown on the left of Fig. 6. The outer sides of end walls 45 are provided with hooks 54, preferably secured by the same rivets 53 which extend through the walls as shown on the right in Fig. 6. In securing the dust guard, the cords or springs 50 are looped tightly about the radiator legs 21 and caught in their respective hooks 54 by rings 55.

The invention in its broader aspects is not limited to the specific mechanisms shown and described but departures may be made therefrom within the scope of the accompanying claims without departing from the principles of the invention and without sacrificing its chief advantages.

What we claim is:—

1. A dust guard, adapted for use with a radiator including in combination an upwardly inclined guard to close the front of the radiator base, upwardly inclined guards to enclose the ends of the radiator base, means for holding said guards in place with their bottom edges on the floor, and means whereby any of said guards may be extended to fit radiators of different sizes.

2. A dust guard, adapted for use with a radiator including in combination a vertical section to close the front of the radiator base, vertical, end members rearwardly extending therefrom to close the ends of the radiator base, and a plurality of members extending inwardly from the upper portion of the front section to close the space between adjacent radiating columns.

In testimony whereof, we have signed our names to this specification.

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