O. T. PAUSE.

RADIATOR SHIELD.

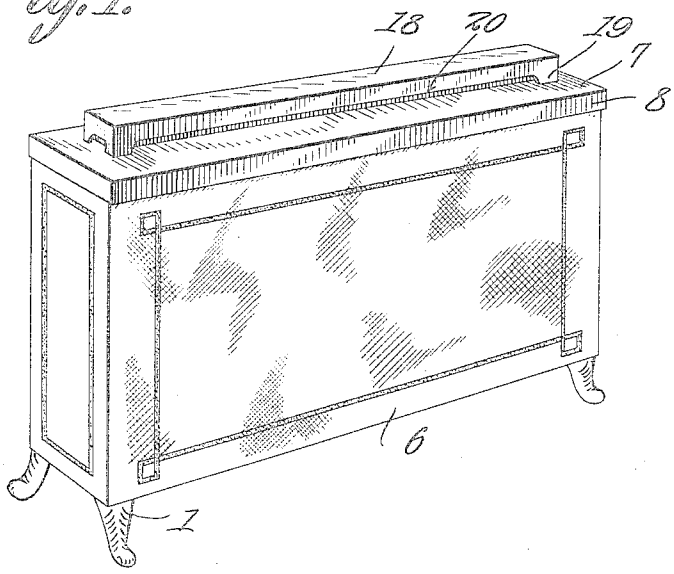
APPLICATION FILED OCT. 31, 1913.

1,097,665.

Patented May 26, 1914.

2 SHEETS—SHEET 1.

Fig. 1.



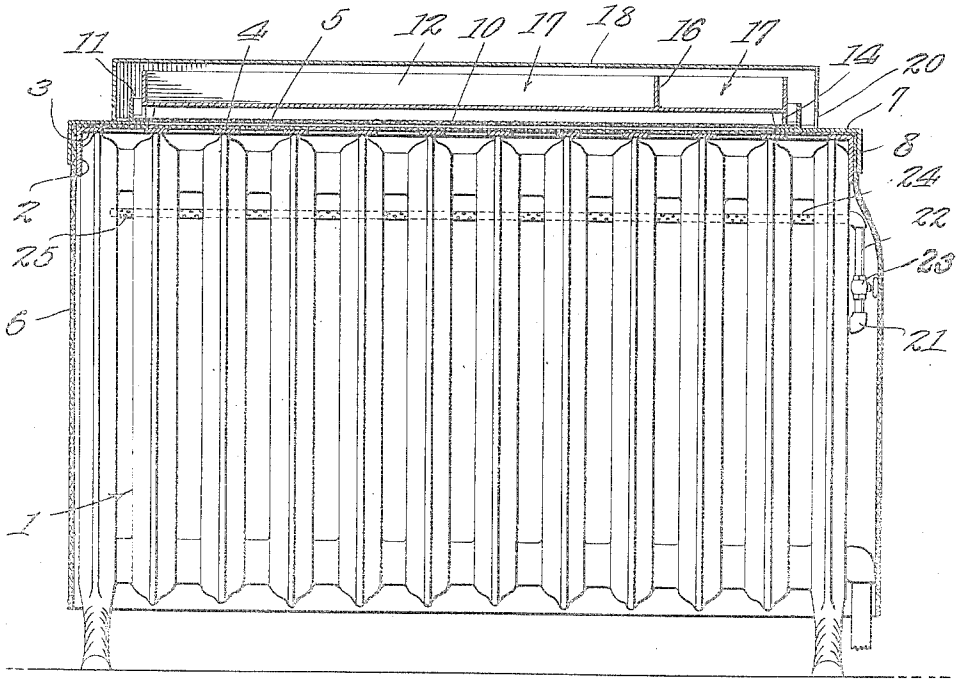


Fig. 2.

Witnesses

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2 SHEETS—SHEET 2.

Fig. 3.

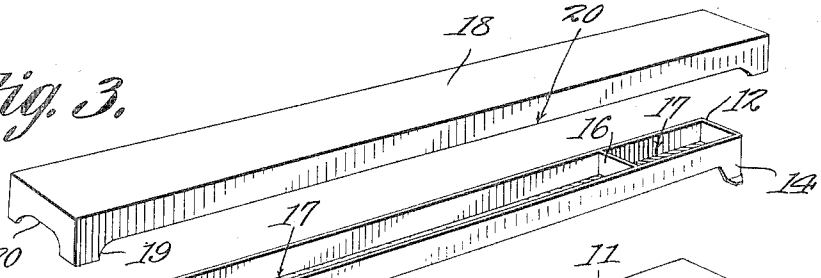


Fig. 4.

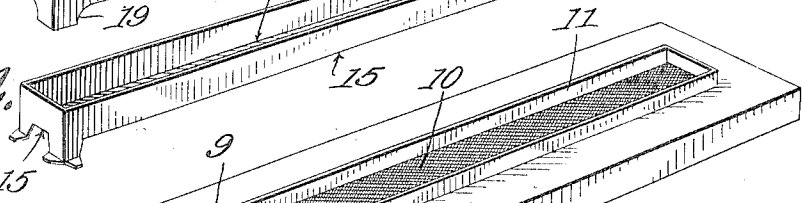


Fig. 5.

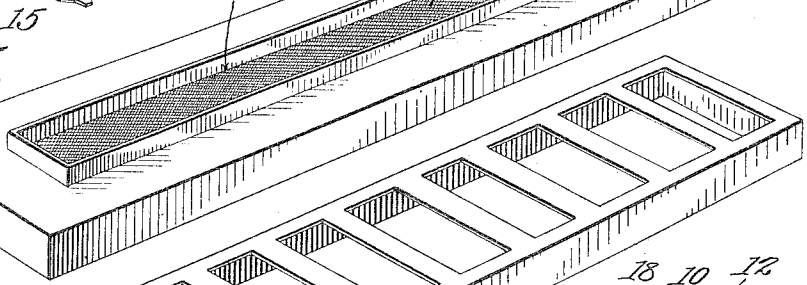
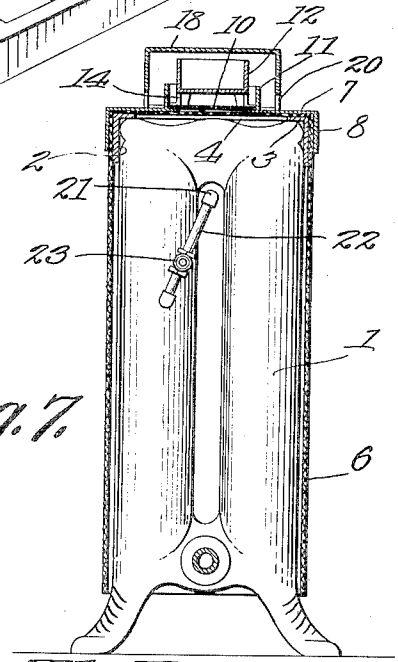


Fig. 6.

Fig. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

OSCAR TH. PAUSE, OF ATLANTA, GEORGIA.

RADIATOR-SHIELD.

1,097,665. Specification of Letters Patent. Patented May 26, 1914.

Application filed October 31, 1913. Serial No. 798,508.

To all whom it may concern:

Be it known that I, OSCAR TH. PAUSE, a citizen of the United States, residing at Atlanta, in the county of Fulton and State of Georgia, have invented a new and useful Radiator-Shield, of which the following is a specification.

The device forming the subject matter of this application is adapted to be applied to a radiator, for the purpose of collecting dust, it being common and well known that the air rising from a radiator collects dust and either discharges the same against the adjacent walls of the building, thereby soiling the walls, or else carries the dust in suspension into the air of the apartment in which the radiator is located.

The present invention aims to provide a covering for a radiator, which covering is permeable by air, but constitutes a means for collecting dust.

Another object of the invention is to provide novel means for moistening the covering or dust collector.

The invention aims, further, to provide means for holding the dust collecting covering in place upon a radiator.

It is within the scope of the invention to provide novel means for holding a moistening tank in place in operative relation to the covering and to provide novel means for shielding the tank.

With the above and other objects in view which will appear as the description proceeds, the invention resides in the combination and arrangement of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed can be made within the scope of what is claimed without departing from the spirit of the invention.

In the accompanying drawings:—Figure 1 shows in perspective, a radiator to which the present invention has been applied; Fig. 2 is a vertical longitudinal section showing in elevation a radiator equipped with the present invention; Fig. 3 is a perspective of the lid; Fig. 4 is a perspective of the trough or tank; Fig. 5 is a perspective showing the casing and the screen which is carried thereby; Fig. 6 is a perspective showing the frame upon which the several parts above mentioned are supported; Fig. 7 is a transverse section through a radiator equipped with the device constituting the subject matter of the present invention.

In the drawings the numeral 1 indicates a radiator of any well known type. Mounted upon the radiator 1 is a frame 2, shown in detail in Fig. 6, the frame including an inwardly projecting flange 3, whereby the frame may be supported upon the radiator. Opposed portions of the flange 3 are connected by slats 4 defining openings 5 in the frame 2.

Surrounding the radiator 1 and supported in any desired manner thereon is a bag-like covering permeable by air and constituting a dust collector, the same being denoted by the numeral 6. In the present instance, the collector 6 is shown as supported upon the open skeleton frame 2. Various materials may be employed in the making of the collector 6, but preferably, a thin and porous textile material is used, so that air may pass readily through the collector, dust, however, being held thereby. When the frame 2 is used, the same serves to space the collector 6 from the radiator 1, and, if desired, the collector may be saturated with a fireproofing solution of any desired sort. An effective fireproofing solution may be made by mixing approximately two ounces of borax and two ounces of Epsom salts with one gallon of water.

Resting upon the foraminous collector 6 and supported by the frame 2 is a casing 7, shown in detail in Fig. 5, the casing 7 being provided with a depending flange 8 which surrounds the upper portion of the collector 6. The casing 7 is provided with an opening 9 bridged across by a fine mesh wire screen 10. Upstanding from the body portion of the casing around the opening 9 is a flange 11.

A means is provided for moistening the collector 6 and this means may be of any form. In the present instance, the moistening means comprises a trough 12 provided with legs 14, the trough being disposed within the contour of the flange 11 of the casing 7 and the legs 14 resting on the screen 10. The legs 14 serve to define openings 15 in the side portions of the trough, through which from below the bottom of the trough, heated air may pass. The trough 12 may be divided by one or more partitions 16 into a plurality of compartments 17. In the compartments 17, water, germicide or the like may

be placed. The trough 12 is covered by a lid 18 having legs 19 which rest upon the casing 7, the legs 19 defining openings in the side portions of the lid.

The vent at one end of the radiator is denoted by the numeral 21, and connected with the vent 21 is a pipe 22 carrying a valve 23, the pipe 22 communicating with a branch 24 extended between the side pipes of the radiator, the branch 24 being provided with a plurality of minute perforations 25. The valve 23 may be located at any desired point and it will be understood that when the valve is opened, the branch 24 is put into communication with the circulating system of the radiator, steam in the form of jets proceeding through the perforations 25 and constituting a means for moistening the collector 6.

The structure last above described is adapted to be used upon low pressure systems, but upon a high pressure system, the tank or trough 12 may be resorted to. However, both of these features may be used together when desired.

The air, when heated by the radiator, moves upwardly and outwardly through the collector 6, and dust which is carried in suspension by the air accumulates upon the inner face of the collector. The air may rise between the slats 4 of the frame 2, and will pass through the screen 10 of the casing 7, the air thence passing outwardly through the openings 15 in the side portions of the trough 12, and passing from beneath the lid 18 through the openings 20. The moisture generated when the trough 12 is heated, will serve to moisten the collector 6 sufficiently.

Having thus described the invention, what is claimed is:—

1. In a device of the class described, a bag-like radiator covering permeable by air and constituting a dust collector.

2. In a device of the class described, a bag-like radiator covering permeable by air and constituting a dust collector; and means for moistening the covering.

3. In a device of the class described, a radiator; a covering for the radiator and permeable by air, the covering constituting a dust collector; and means for moistening the covering, said means constituting a part of the circulating system of the radiator.

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

OSCAR TH. PAUSE.

Witnesses:

SELINA WILLSON,

I. E. SIMPSON.