Oct. 9, 1934. G. L. BRIDGE 1,975,921

HEATER

Filed April 10, 1933

Fig. 1.

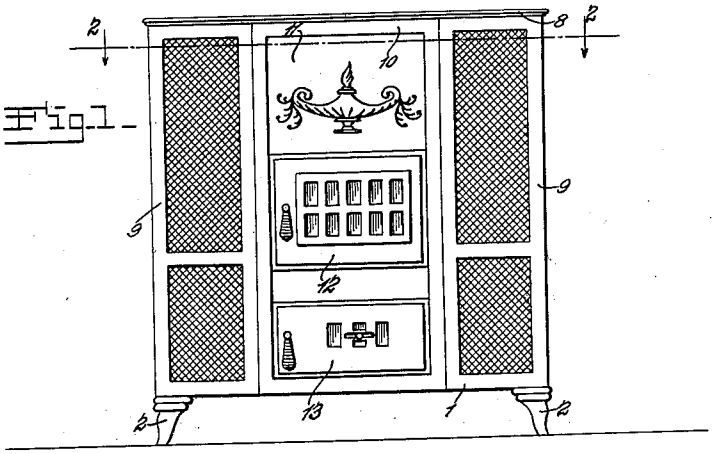


Fig. 2.

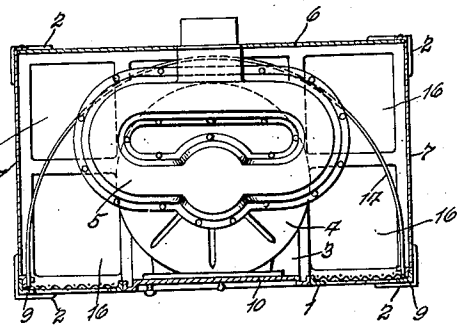


Fig. 5.

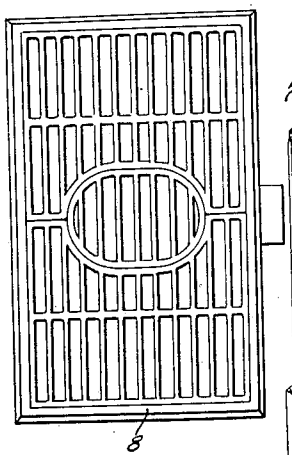


Fig. 3.

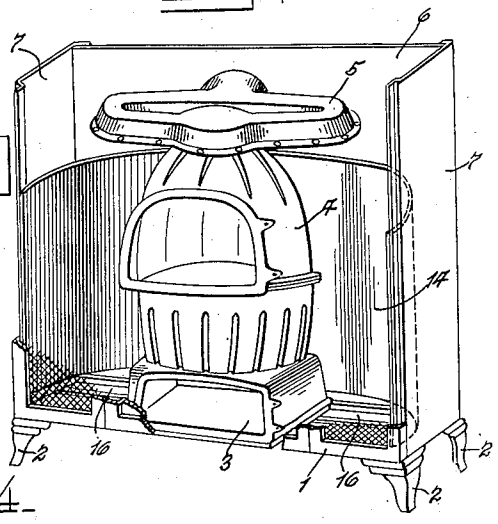
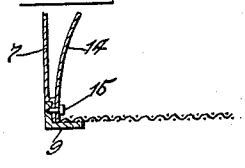


Fig. 4.



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1,975,921

HEATER

George L. Bridge, Clayton, Mo.

Application April 10, 1933, Serial No. 665,282

7 Claims. (Cl. 126—67)

This invention relates to an improvement in that type of heaters in which a stove is enclosed within a casing which has air inlets and outlets whereby currents of air will pass through the casing.

An object of this invention is to provide a heater of the type described with increased radiating efficiency.

Another object of the invention is to provide, in a heater of the class described, a reflecting sheet so positioned that the heater will have increased efficiency in radiation.

Other and particular objects will be apparent from the following detail description, taken in connection with the accompanying drawing, in which—

Fig. 1 is a front elevation of the heater.

Fig. 2 is a cross section on line 2—2, Fig. 1.

Fig. 3 is a perspective showing the detail construction of the interior of the device.

Fig. 4 is a detail of the construction.

Fig. 5 is a top plan view.

The heater includes a base 1 which is supported above the floor by legs 2. The base supports a stove which includes an ash box or pit 3, a combustion chamber 4 and a heating drum or chamber 5.

The base 1 also supports a cabinet having a rear wall 6 and side walls 7, both spaced from the stove. The cabinet also includes a top 8 which is preferably grilled. The front of the cabinet includes grilled panels 9 and a center panel 10, which includes a top ornamental portion 11, a fire door 12 and an ash pit door 13. A curved vertical sheet 14 has its vertical edges secured to the outer edge of the side walls 7 of the cabinet by bolts or screws 15. The sheet 14 is positioned, as shown in the drawing, between the stove and the rear and side walls of the cabinet. The inner surface, that is the surface toward the stove, is highly polished and heat reflecting. It has been found that chromium plated sheet steel serves very well for the purpose, it being unaffected by the heat from the stove and retaining its high polish over a long period of time without deterioration. The sheet 14 extends from the base 1 upwardly behind the combustion chamber 4 but stops short of the top of the cabinet. Openings 16 are provided in the base on either side of the ash pit 3 and, thus, there is provided an inlet for cold air into the stove casing. The openings 16 are so arranged with respect to the sheet 14 that currents of air are permitted both in front of and to the rear of the sheet 14. It will be understood, of course, that the air currents enter the cabinet through the openings 16 and find egress principally through the grilled top 8. The arrangement of the side panels 9 are such that radiant heat from the combustion chamber 4 will be reflected from the sheet 14 outwardly through the openings 9. The arrangement of the heater is such that all of the advantages of circulation upwardly through the enclosed type of heater are attained and in addition the stove is capable of heating by radiation by reason of the reflector sheet 14 to an extent which has heretofore been impossible.

It will be apparent that various changes in the details of construction may be made, within the scope of the appended claims, without departing from the spirit of this invention.

I claim:

1. A heater comprising a stove, a casing enclosing the stove and having rear and side walls spaced from the stove, a curved vertical sheet positioned between the stove and the rear and side walls and having a reflecting surface adjacent the stove, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and grilled panels in the front of the casing.

2. A heater comprising a stove, a casing enclosing the stove and having rear and side walls spaced from the stove, air openings through the bottom permitting free access of air to the interior of the casing, air outlet openings at its top and openings at the front through which radiant heat is projected forwardly, and a vertical sheet positioned between the stove and the rear and side walls, having a reflecting surface adjacent the stove and curved in a suitable manner to cause said surface to reflect heat toward the front of the casing.

3. A heater comprising a stove, a casing enclosing the stove and having rear and side walls spaced from the stove, a curved vertical sheet positioned between the stove and the rear and side walls and having a reflecting surface adjacent the stove, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and grilled panels in the front of the casing, said casing having openings through its bottom permitting air currents therethrough between the sheet and the stove and between the sheet and side walls of the casing.

4. A heater comprising a base supported in spaced relationship above the floor, a stove supported by the base, a casing enclosing the stove and having rear and side walls spaced from the

stove, an air inlet in the base, a curved vertical sheet positioned between the stove and the rear and side walls and having a reflecting surface adjacent the stove, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and grilled panels in the front of the casing.

5. A heater comprising a base supported in spaced relationship above the floor, a stove supported by the base, a casing enclosing the stove and having rear and side walls spaced from the stove, an air inlet in the base, a curved vertical sheet positioned between the stove and the rear and side walls, having a reflecting surface adjacent the stove and extending from the base upwardly and terminating in a plane below the top of the cabinet, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and grilled panels in the front of the casing.

6. A heater comprising a stove, a casing enclosing the stove and having rear and side walls spaced from the stove, a curved vertical sheet positioned between the stove and the rear and side walls with its vertical edges secured to the front portion of the side walls and having a reflecting surface adjacent the stove, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and grilled panels in the front of the casing.

7. In a heater comprising a stove, a casing enclosing the stove having rear and side walls spaced from the stove, air inlets and air outlets in the casing permitting currents of air to pass through the casing, the improvement comprising a curved vertical sheet positioned between the stove and the rear and side walls of the casing and having a reflecting surface adjacent the stove, the curvature of said sheet being such as to cause said surface to reflect heat toward the front of the casing, and open panels in the front of the casing.

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