

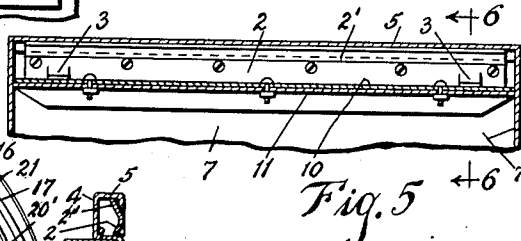
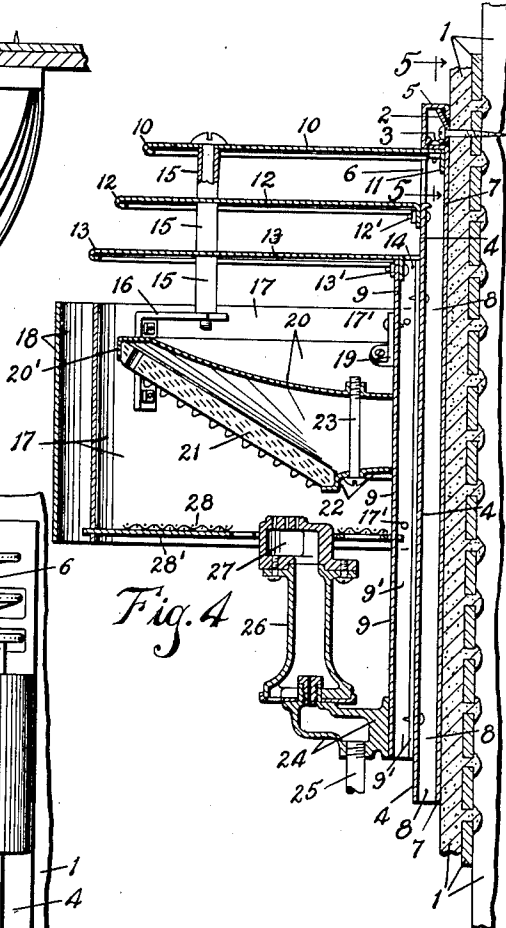
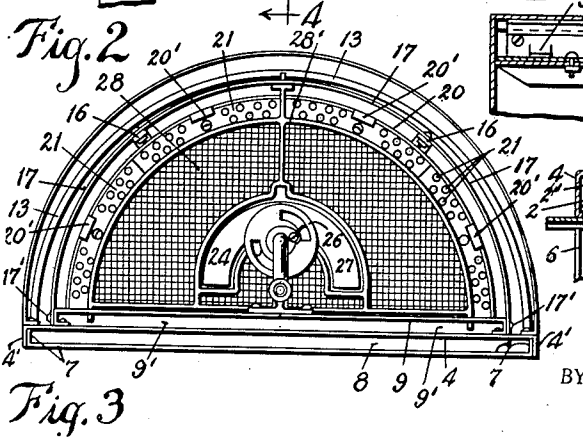
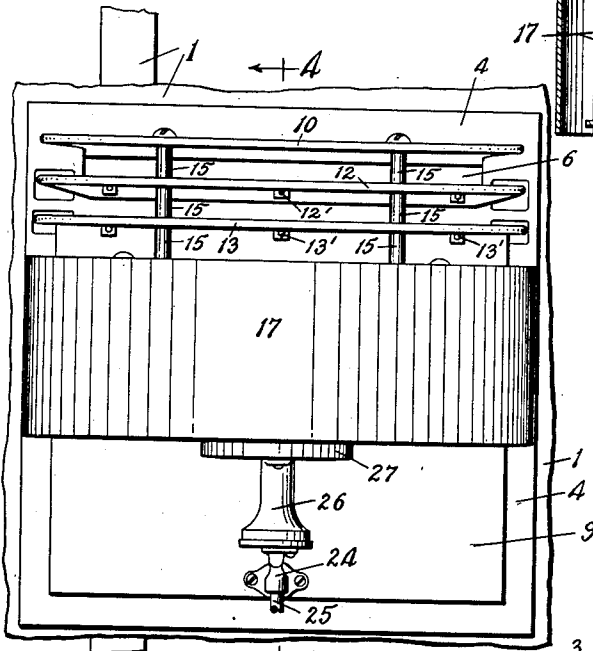
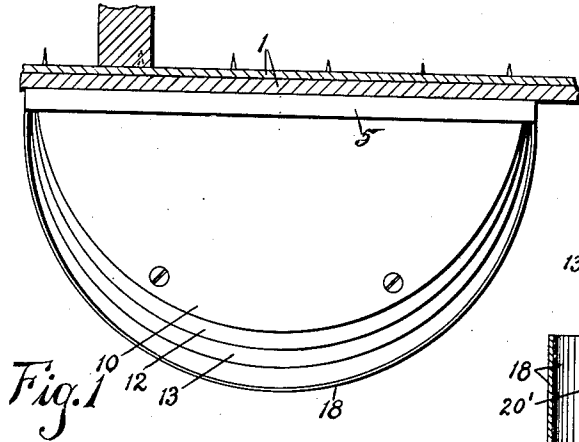
May 23, 1939.

H. W. HART

2,159,149

WALL GAS HEATER

Filed Jan. 10, 1938



INVENTOR.

Harold W. Hart

BY *A. P. Fitzgerald* ATTORNEY.

UNITED STATES PATENT OFFICE

2,159,149

WALL GAS HEATER

Harold W. Hart, Los Angeles, Calif.

Application January 10, 1938, Serial No. 184,223

9 Claims. (Cl. 126—90)

My invention relates to gas heaters something of the type shown and described in my Patent No. 2,130,086 which is a stand lamp type of heater, movable from one place to another in a room as a stand lamp is moved.

My present invention is a combination radiant and air circulating heater adapted and designed to be placed upon the wall and supported at the desired height to give the best results in the room in which the heater is mounted. It combines an effective radiant heater element, with gas burner so related thereto that the best combustion is secured and direct radiation downwardly and outwardly on to the floor, where the heat is desired. In addition, I have provision for effective air circulation upwardly through and outwardly from said heater, so that the best circulating results are secured.

In order to explain my invention more in detail, I have shown on the accompanying sheet of drawings, one preferred embodiment of the same, which I will now describe:

Figure 1 is a top plan view looking down upon a gas wall heater on the wall, shown in section, and embodying my invention;

Figure 2 is a front elevation of the same;

Figure 3 is a bottom plan view thereof;

Figure 4 is a vertical sectional view taken on line 4—4 of Fig. 2;

Figure 5 is a sectional view taken on line 5—5 of Fig. 4; and

Figure 6 is a detail sectional view taken on line 6—6 of Fig. 5.

Referring now more in detail to the drawing, 1 designates a wall, which may be of any construction, and to which is shown nailed a supporting sheet metal strip or bar 2, with its upper portion bent outwardly, as at 2', to have hooked thereover the supporting part of the heater, said supporting strip 2 also having two struck out lips, as 3, 3, to prevent the accidental upward movement of the heater on the wall sufficiently to unhook or dislodge it from the wall.

The present embodiment of the invention comprises a supporting body sheet 4, having its opposite edges bent rearwardly at right angles as at 4', and its top edge bent backwardly and downwardly, as at 5, with an opening 6 in its front upper portion, for a purpose hereinafter again referred to.

A back sheet 7 also has its opposite sides bent forwardly at an angle, to fit into the bent edges of the body sheet 4, forming an air space between said sheets, as seen at 8, for the upward circulation of air to the opening 6.

Secured to said supporting body sheet 4, in front, is another sheet member 9 having its opposite sides bent to an angle, to form a channel portion, as 9', for the upward circulation of air therethrough. These interfitting members can be seen in the bottom plan view in Fig. 3, as well as in Fig. 4.

Mounted through the upper part of the supporting body sheet 4, is a horizontally extending top member 10, having its rear edge extended through the opening 6, and bolted to the back sheet 7, as with an angle member 11.

Mounted also on the front of the body member 4, is another horizontally extending shelf-like member 12, having its rear edge secured, as by bolts 12' to the member 4, just below the opening 6.

Mounted on the front of the front member 9 is another horizontally extending shelf-like member 13, having its rear edge secured, as by bolts 13', to the top of the member 9, with its rear edge cut out around the top of the member 9 to form an opening at 14, for the outlet of air passing upwardly in the member 9, at 9'.

The three horizontal members 10, 12 and 13 are spaced by spacers as 15, 15, held on brackets 16, 16, on a drum member 17, secured to the upper part of the front sheet or member 9, as at its inturned edges, to which it is bolted or secured, as at 17', 17'.

Outside of said drum 17, and spaced therefrom, is another drum or half drum, as the other is, designated 18, which is always cool, and serves as a shield against possible contact with any hot part of the heater.

It will be noted that the three horizontal shelf-like portions or members are successively receding in their rounded front edges, as 13, 12 and 10, being sufficiently back from the outermost drum 18 to be free of possible contact. The top members 10 and 12, have the upwardly flowing air through the back vertical passageways 8 and 9', against their undersides as it passes upwardly thereto and thence outwardly and upwardly around the outer edges of said members 10 and 12.

Secured to front of the outer front member 9, as by brackets, as 19, is a concaved sheet metal member 20, supported on its outer edge on the brackets 16, 16, and having its outer edged turned downwardly, as at 20', to receive and hold therein the upper edges of radiant clay refractory segments 21, 21, the lower edges of which rest upon a sheet metal member 22, secured to the upper member 20 by means of bolts 23. Thus the clay radiant elements are supported at an angle of

substantially thirty degrees so as to radiant heat downwardly and outwardly in an effective manner.

Mounted upon the lower edge of said front member 9, is a connecting member or casting 24, to which is attached a gas supply pipe 25, and connected with the top of which is a Venturi casting 26, upon which is mounted a semi-circular burner head 27, directly under the lower and smaller end of the radiant elements, substantially as illustrated.

Supported under the radiant elements 21, within the inner drum 17, is a screen 28, designed to catch any falling ash or anything which might possibly drop thereupon and to prevent anything from being inserted upwardly thereunder. The screen is supported by its frame members 28' in the drum 17 and member 9, in any desired manner.

Thus I have provided a very practical and efficient wall heater which is adapted to be hung upon a wall at a convenient height for the purpose of radiating heat downwardly and outwardly and for causing a more effective circulation of air through and around said heater, and while I have shown one practical embodiment of the invention, with gas used as the heating medium, I am aware that changes can be made therein without departing from the spirit of the invention, and I do not, therefore, limit the invention to the details of construction and arrangement shown, except as I may be limited by the hereto appended claims.

I claim:

1. A wall gas heater of semi-circular form and including a back structure to rest against a wall and having a vertical air passageway there-through, a top structure having a horizontal air passageway therein communicating with said vertical air passageway, a drum structure open at its top and bottom and positioned in front of said back structure and under said top structure, an angularly disposed heat radiating member mounted in said drum, and a gas burner under said member, whereby air circulates upwardly and outwardly through said back and top structures and heat is radiated downwardly and outwardly from said heat radiating member.

2. A gas heater of semi-circular form and adapted to be suspended upon a wall, said heater having a back and top structure in angular form with an air passageway upwardly through the back and outwardly through the top, a heat radiating member angularly supported in front of said back and under said top, a gas burner supported under said heat radiating member to heat said member, a drum around said heat radiating member, open at its top and bottom, a screen in the bottom of said drum, around said gas burner, and an outer drum around said first drum and spaced therefrom as a guard.

3. A gas heater adapted to be hung upon a wall and being of semi-circular form, a back structure having a plurality of air passageways upwardly therethrough, a top structure composed of a plurality of spaced horizontally disposed members forming horizontal air passageways outwardly from the upper ends of said first passageways, a drum structure from said back structure around the area underneath said top structure, a heat radiating member supported in said drum structure in an inclined position to radiate heat downwardly and outwardly, and a gas burner supported under said heat radiating mem-

ber to heat the same from the flame of combustion thereunder.

4. A wall heater to be hung upon a wall, said heater having a general body structure of semi-circular form, means as a part of said structure forming air passageways upwardly through the back and outwardly through said body structure, a semi-circular drum structure mounted on said body, an inclined heat radiating member supported on said body structure, within said drum structure, to radiate heat downwardly and outwardly on to the floor, under said drum, and heat generating means supported in proximity to the underside of said heat radiating member.

5. A wall heater to be hung upon a wall and including a back and top at substantial right angles to each other, means therein forming air passageways upwardly through said back and outwardly to the front of said top, a drum structure supported on said back under said top and open at its top and bottom, a heat radiating member supported in an upwardly and outwardly inclined position in said drum under said top to radiate heat downwardly and outwardly, a heating element supported in proximity to the underside of said heat radiating member for heating the same, and an outer drum around said first drum and spaced therefrom to form a guard.

6. A wall heater of semi-circular form and including a back wall structure adapted to be hung upon a wall, and a top structure extended horizontally outwardly from said back wall structure, said top structure consisting of a plurality of vertically spaced members, means forming air passageways upwardly through said back wall structure and outwardly between said top spaced members, a heat radiating member supported in front of said back and under said top, a gas burner supported under said member for heating the same to heat radiating condition, a drum around the sides and front of said heat radiating member, and an outer drum around said first drum to form a guard.

7. A heater to be hung upon a wall including a back structure to rest against a wall and having air passageway upwardly therethrough, a plurality of vertically spaced horizontal members of successively receding diameters extended outwardly from said back structure, said air passageway opening outwardly toward the front of said heater between said horizontal members, a heat radiating member supported under said horizontal members for radiating heat outwardly from said heater, heating means in proximity to the under side of said member for heating the same to heat radiating condition, a drum structure around the heat radiating member, under said horizontal members and extended outwardly beyond said horizontal members, to guard against accidental contact with said members and said heat radiating member.

8. A wall gas heater to be hung upon a wall including a back formed of a plurality of walls with air space therebetween, a top formed of a plurality of horizontal members spaced one above the other with the spaces therebetween communicating with the spaces in said back, whereby air circulates upwardly through said back and outwardly between said top members, a drum structure in front of said back and under said top members and open at its top and bottom, a heat radiating member supported in said drum structure to be heated to heat radiating condition, a gas burner under said member for heat-

ing the same, and a screen in the bottom of said drum around said burner.

9. A wall gas heater adapted to be hung upon upon a wall and having a back wall and a top
5 extended horizontally therefrom, said top consisting of a plurality of vertically spaced members of successively receding diameters, a heat radiating member supported in an inclined position under said top to radiate heat downwardly

and outwardly, a gas burner mounted under said heat radiating member to heat the same, a drum around the front of said heat radiating member with a screen in its bottom, around said gas burner, and an outer drum around said first drum
5 and spaced therefrom as a guard to prevent accidental contact with said heater and said top.

HAROLD W. HART.