Feb. 22, 1927. 1,618,477

T. A. SALA

GAS LOG HEATER

Filed July 21, 1925 2 Sheets-Sheet 1

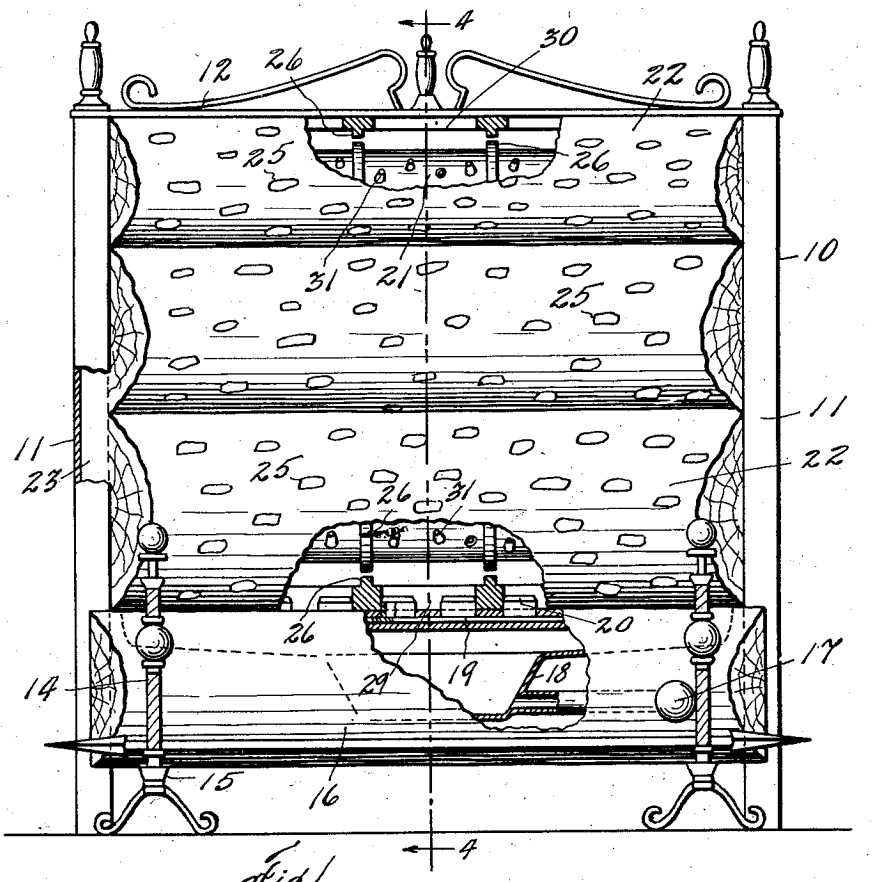

Fig. 1.

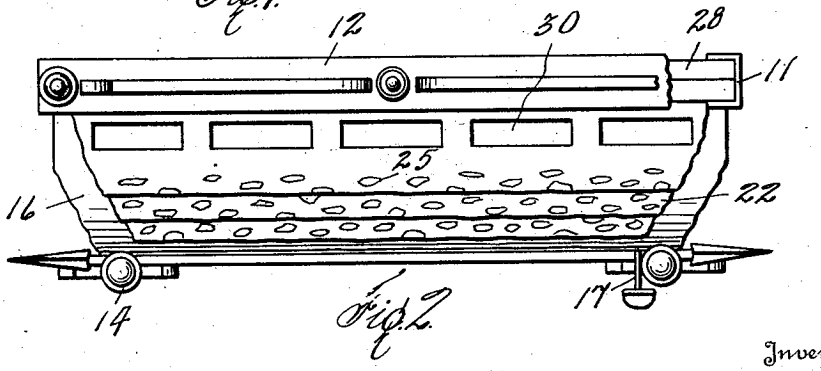

Fig. 2.

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Filed July 21, 1925 2 Sheets-Sheet 2

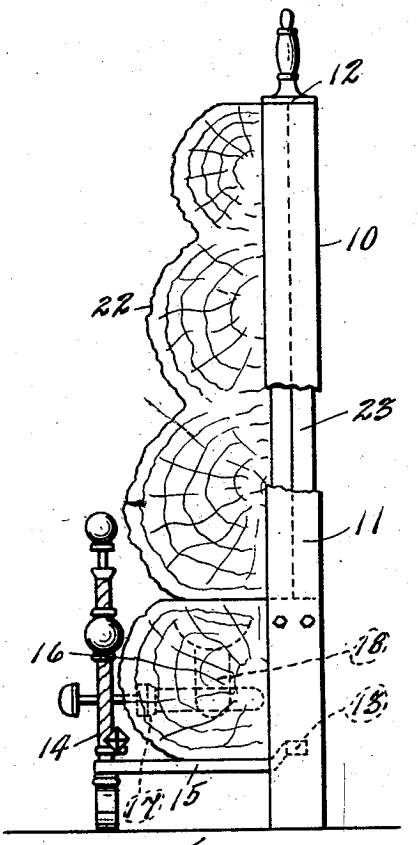

Fig. 3

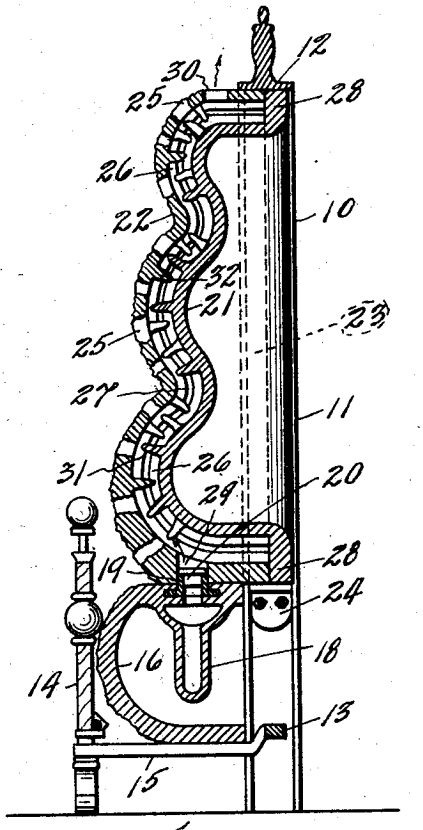

Fig. 4

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UNITED STATES PATENT OFFICE.

THEODORE A. SALA, OF DALLAS, TEXAS.

GAS-LOG HEATER.

Application filed July 21, 1925. Serial No. 45,008.

This invention relates to new and useful improvements in gas log heaters.

The object of the invention is to provide a complete gas log heater combined as a portable unit and including certain new and novel features.

A particular object of the invention is to provide a base log equipped with a manifold and gas burners.

Another object is to provide a radiant gas log front superimposed upon the base log and conforming thereto.

A further object is to provide a back frame with andiron supports and a base log combined therewith, together with a radiant log structure thereabove having a vertical flue.

Another object of the invention is to provide a log heater with a removable and replaceable radiant front.

A construction designed to carry out the invention will be hereinafter described, together with other features of the invention.

The invention will be more readily understood from a reading of the following specification and by reference to the accompanying drawings, in which an example of the invention is shown, and wherein:

Fig. 1 is a front elevation of a gas log heater constructed in accordance with my invention,

Fig. 2 is a plan view of the same,

Fig. 3 is a side elevation,

Fig. 4 is a transverse vertical sectional view taken on the line 4—4 of Fig. 1.

In the drawings the numeral 10 designates an upright support composed of opposed vertical channels 11 connected by a flat top cross bar 12. The lower ends of channels 11 form legs and are connected by a bottom cross bar 13. Andirons 14 of suitable design have log rests 15 extending rearwardly and bent upwardly at a point of connection with the bar 13. This provides a metal supporting structure which may be suitably ornamental.

A hollow base log 16 of fire clay is mounted on the rests 15 and overlaps the channels at each end. The base log has a gas mixing valve 17 for connection with a gas supply pipe and the valve is connected with a manifold 18 in the log. A burner frame 19 is embedded in the top of the log over the manifold. Gas burners 20 are inserted in the frame. The entire burner is thus maintained in the base log and along its top.

A radiant heating element simulating superimposed logs is mounted on the base log and the channels 11. This element comprises a back member 21 and a front member 22. At the sides of the members are vertical flanges 23 which are engaged in the channels and supported under the bar 12 by brackets 24 (Fig. 4). These members may be formed of any suitable material, but one of the features of the invention is to form the members of fire clay or equivalent material and to chemically treat, particularly the face member, whereby it will become more radiant or incandescent when subjected to the flames of the fire. By providing openings 25 at random in the face member 22 the flames and rising currents may be observed therethrough and the realistic effect will be enhanced.

While the face member 22 may be formed according to any suitable design I have shown it molded to represent a plurality of superimposed logs as they are usually piled in a fire place, the larger being at the bottom and the smallest at the top.

The face member is formed with a comparatively thin concavo-convex wall, the inner side of which is comparatively smooth and forms the front sides of the flues between the members. The back member is formed with its front side conforming to the rear side of the face member. Vertical ribs 26 extending from the members form flues 27 therebetween. The back member is formed with top and bottom flanges 28 and the member 22 has its upper and lower transverse edges in contact with these flanges.

At the bottom of each flue is an opening 29 in the face member 22, while a similar opening 30 is provided at the top of each flue. The burners 19 extend into the openings 29 and the flames and products of combustion pass up the flues. It will be seen that the ribs 26 do not contact and this allows communication between the flues; while the ribs also provide heat radiating fins. The curvature of the face and back member is considerable and therefore one overhangs the other in the flues. This causes the products and currents to travel a circuitous or sinuous course in passing up the flues. In order to increase radiation of heat and to rob the products of their heat to the fullest extent I provide staggered fingers 31 on the back member projecting into the flues. These fingers are staggered. On the over-

hanging bays of the face member I also provide fingers 32 extending into the flues, in alternate relation to the fingers 21. These fingers retard the passage through the flues and increase the radiation. This flue construction is claimed in my copending application Serial No. 45,007 filed July 21, 1925.

Various changes in the size and shape of the different parts, as well as modifications and alterations may be made within the scope of the appended claims.

What I claim, is:

1. In a gas log heater, a support comprising opposite uprights having inwardly directed channels, andirons connected with the support, a hollow base mounted on the andirons in front of the support, burners in said base, a back member extending above the base and having side flanges in said channels, and a radiant front member mounted upon the base in spaced relation to the back member and having cooperating flanges within said channels, whereby a flue is formed extending from the burners in the base to the top of the heater.

2. In a gas log heater, a support comprising opposite uprights having inwardly directed channels, a cross bar connecting the upper ends of the uprights, a back member having side flanges disposed in said channels, a radiant front member spaced from the back member and having cooperating side flanges within said channels, and means carried by the uprights for supporting the front and back members in contact with the cross bar.

3. In a gas log heater, the combination of an upright support including side channels, andirons having vertical posts and their rear ends secured to the support, a hollow base mounted upon the andirons between the posts and support, an upright back member provided with side flanges engaging in the channels of the support, and a front member conforming to the front of the back member and spaced therefrom to form a flue communicating with said base, said front member having side flanges engaging the side flanges of the back and retained within said side channels.

In testimony whereof I affix my signature.

THEODORE A. SALA.