July 17, 1928. 1,677,629

F. G. GROSS

ATTACHMENT FOR LOGS AND GRATES

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Fig. 1

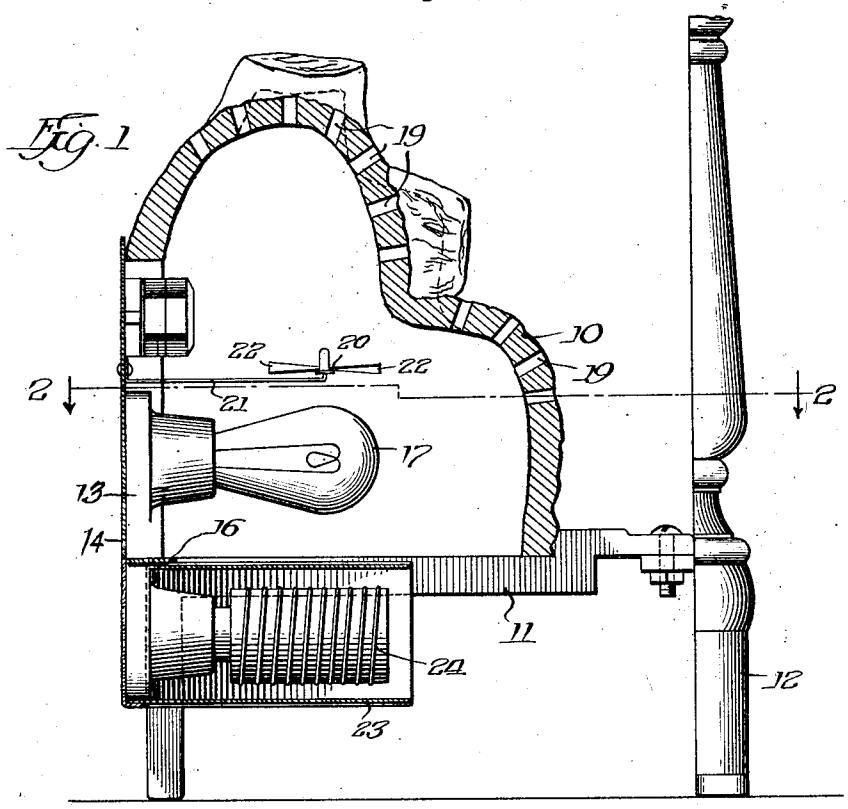
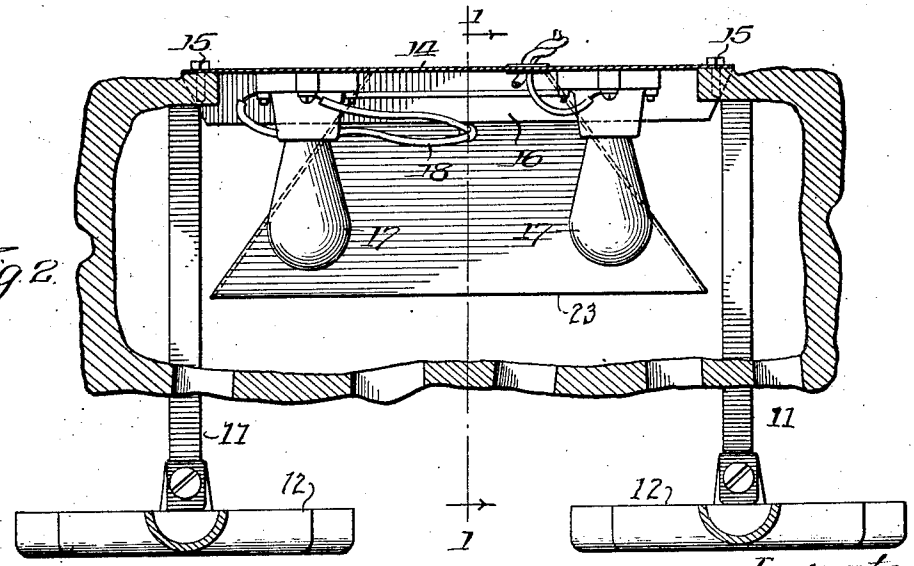


Fig. 2



Witness:

Inventor

Fred George Gross,

By Ernest E. Dufes

Atty

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Fig. 4.

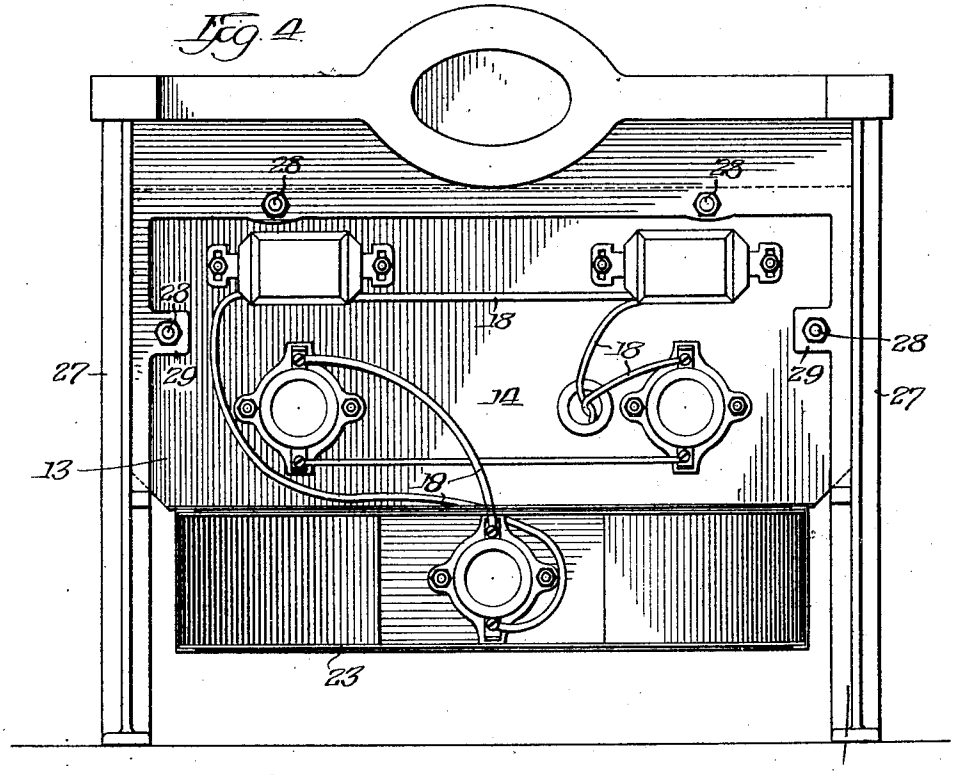
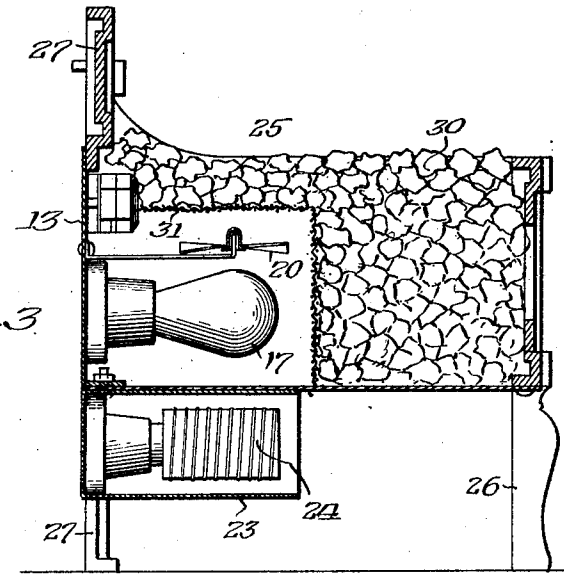


Fig. 3.



Witness:

Inventor

Fred George Gross:

By Ernest E. Dupes

Atty

Patented July 17, 1928. 1,677,629

UNITED STATES PATENT OFFICE.

FRED GEORGE GROSS, OF CHICAGO, ILLINOIS, ASSIGNOR TO MRS. CLARA SCHNEIDER, OF CHICAGO, ILLINOIS.

ATTACHMENT FOR LOGS AND GRATES.

Application filed August 24, 1925. Serial No. 51,921.

The invention relates to improvements in logs and grates and more particularly to logs and grates constructed to simulate incandescence regardless of whether or not they are adapted as a heating device. As is well known, many logs and grates are constructed so as to give the appearance of containing fire. This result is accomplished by positioning lamps interiorly of the log or grate so as to be invisible to the observer from in front with the lamps arranged in the grate so as to give the effect of live coals to incombustible material contained therein and in the log to give the log the appearance of a timber burned to a live coal.

As heretofore constructed, the mounting of lamps or heating coils in such logs and grates required skill and entailed considerable expense and it is one of the objects of the invention to minimize the expense in connection with such installation and to so simplify the mounting and renewal of the lamps and coils that an unskilled person can readily accomplish the same. This result is obtained by the use of an attachment adapted to be detachably mounted upon the log or grate and forming one of the walls thereof, preferably the rear one. Upon this attachment is mounted the lamps, coils and other lighting or heating appliances before it is fastened to the log or grate. This mounting of lamp and coil sockets and conductors can be done in the shop and tends to economy of production. In the case of necessary renewal of lamps or coils this is easily accomplished by a removal of the attachment from the log or grate.

I find it advantageous to use a thin metal plate as the main body of the attachment. This plate, per unit of area, is lighter of weight and cheaper than the walls of the logs or grates and another object of the invention is the provision of an attachment which tends to lighten the weight and to diminish the cost of the material used in such walls or grates.

While some of the logs and grates of the class above described are equipped with heating coils in addition to the lamps which give the effect of incandescence, such coils if used are substantially enclosed by the walls thereof and the heat is thrown out therefrom in all directions. A further object of the invention is the provision of a heating attachment of the class described, so arranged as to direct the heat therefrom out from under to the front of the log or grate where its effects are most readily observed and enjoyed without changing the incandescent appearance, luminous effect or resemblance to a heated log or grate.

A still further object is to increase the simulation of incandescence of such devices by providing for a flickering of the light from the lamps contained therein.

These and other objects will be more fully set forth and described in the following specification and shown in the accompanying drawings, in which:

Fig. 1 is a transverse sectional view through a log equipped with the device of my invention, such section being taken along the line 1—1 of Fig. 2;

Fig. 2 is a sectional view taken along the line 2—2 of Fig. 1;

Fig. 3 is a transverse sectional view through a grate equipped with the device of my invention, and,

Fig. 4 is a front elevational view of the rear wall of the grate showing the attachment mounted thereon.

Referring to the drawings, a log 10 is shown as supported by a pair of L shaped bars 11, which are fastened at their front ends to a pair of andirons 12. The attachment forming the device of my invention is generally designated by the numeral 13 and is shown as mounted upon the log 10 to form the rear wall thereof.

The attachment comprises a plate 14 which is fastened to the log 10 by means of screw bolts 15, with the lower portion of the plate projecting below the log and turned forwardly to form a flange 16. A plurality of lamps 17 are mounted on the front face of the plate 14 with conductors 18 adapted to connect the lamps with the lighting system of the house in which the log is located. The log 10 is provided with a plurality of apertures 19 positioned and taking directions preventing emission of light rays from the lamp directly through the apertures, and is constructed of a material which appears luminous when the lamps are turned on. A decidedly incandescent appearance is given the log by this combination of material and properly arranged apertures which effect is further enhanced by a device which gives a flickering effect. This device comprises a wheel 20, having

radiating vanes 22, and which is positioned immediately over the lamps. The wheel 20 is pivotally mounted upon a bar 21, in such a position that the rising air currents from the heated lamp rotate the wheel with the result that the vanes 22 in rotating give a flickering effect to the light thereby further simulating a fire.

A reflector 23 is fastened on the flange 16. This reflector is wedge-shaped with the narrow rear end closed and the wide front end open and has a heating coil 24 mounted therein. The coil is connected with the lighting circuit by means of conductors 18, in a manner similar to the lamp connections. The flaring side walls permit the heat from the coil to spread out over substantially the length of the log and the hot air currents to flow outwardly and rise in front of the log as if they were coming from the interior of the log. All of the heat thus generated by the coil is directed to the front of the log where it acts most effectively to warm persons standing or sitting thereby without in any way detracting from the impression that the heat is coming from the seeming incandescent log.

In Figs. 3 and 4 the device is shown as mounted upon a grate which is generally designated by the numeral 25. The gate is shown as supported by front leg members 26 and a rear U-shaped standard 27. The attachment 13 is fastened to the standard 27 by bolts 28 extending through the plate 14 and lugs 29 forming part of the standard.

The grate 25 is filled with glass or other non-combustible material 30, which gives the appearance of glowing coals when the lamps 17 are turned on. A screen 31 separates the lamps 17 and the wheels 20 from the material 30. The reflector 23 and the heating coil 24 occupy the same relative position to the grate as described for the log 13 and functions in the same manner.

Thus it will be seen that I have provided an attachment for logs and grates which tends to economy in first cost, ease of assembly and renewal of the heating and lighting elements and which adds to their efficiency without detracting from their general appearance of incandescence.

I claim:

In an electric log the combination of end walls and apertured top and front walls, with a removable back having an electric bulb and socket and a heating socket secured to and projecting forwardly from the back, said back having a downwardly extending portion to provide an exterior mounting for the heating socket, said bulb being mounted within the log in a position that no light rays pass directly through said apertured top and front walls, and conductors connecting said bulb and heating coil, whereby the entire lighting and heating elements can be easily and quickly assembled and dismantled.

Signed at Chicago, Ill., this 22nd day of August, 1925.

FRED GEORGE GROSS.