

O. E. HANSEN.

GAS LOG.

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948,561.

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Fig. 1

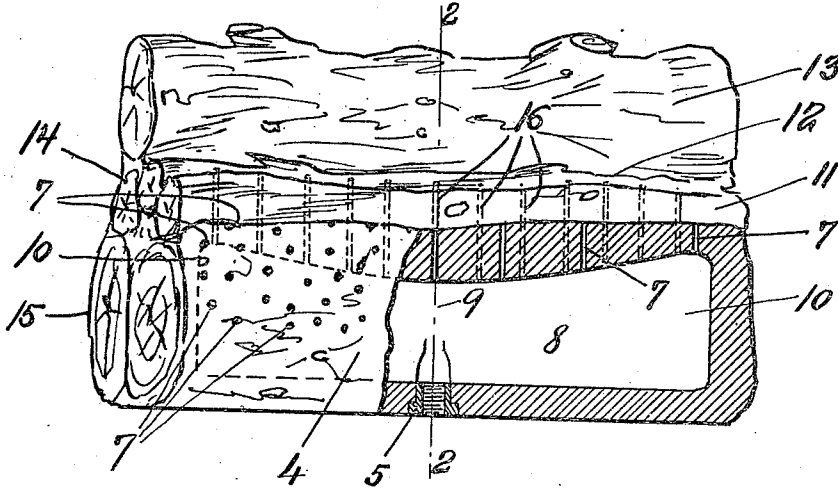


Fig. 2

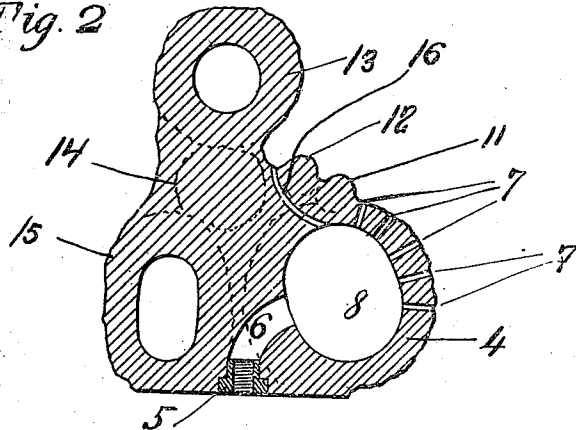
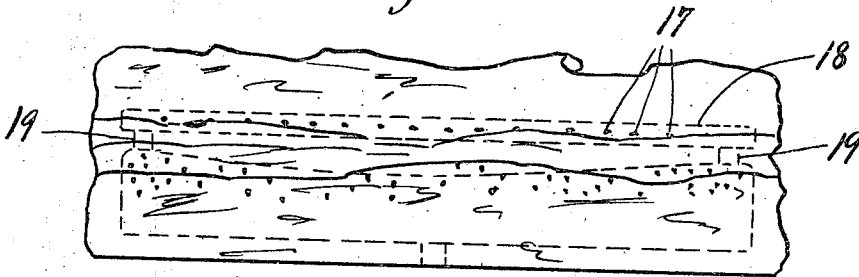


Fig. 3



Witnesses:
A. Parham
M. A. Reimann

Otto E. Hansen Inventor

By his Attorney
Ivan E. A. Kornigebey

UNITED STATES PATENT OFFICE.

OTTO E. HANSEN, OF PERTH AMBOY, NEW JERSEY.

GAS-LOG.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, OTTO E. HANSEN, a citizen of the United States of America, and a resident of Perth Amboy, Middlesex county, New Jersey, have invented certain new and useful Improvements in Gas-Logs, of which the following is a specification.

This invention relates to gas logs and has for its objects to provide a gas log heater of novel and improved construction embodying special features for the purpose of facilitating complete combustion.

Another object of the invention is to produce a gas log at low cost of manufacture.

Other objects will appear as the specification proceeds.

The detailed construction is set forth in the following specification while reference is had to the accompanying drawing in which—

Figure 1 is a front elevation of a gas log embodying my invention partly in section. Fig. 2 is a transverse section on line 2—2 of Fig. 1, and Fig. 3 shows a modified construction for supplying the gas to the surface openings of large logs.

Referring to Figs. 1 and 2 the reference numeral 4 represents a burner log in the form of a hollow member to which gas is supplied through the screw nipple 5 and the canal 6, by means of the usual hose connection with or without air mixer such as is usual and not necessary to show or describe. The said burner log is provided with a plurality of holes 7 which are distributed irregularly over the entire front surface of the log as shown. Care should be taken not to have these holes too low in order to prevent back fire under the log.

As seen, the gas inlet at 5 is placed centrally as is usual and in order to insure that the gas will pass into the extreme ends of the log I form the cavity 8 in the member 4 of irregular diameter, that is the cavity is narrowest in the middle as at 9 and widest at ends as shown at 10, 10. I also take care to form the cavity of somewhat oval shape as seen in Fig. 2. The natural tendency of the gas is to rise and this inner form of the cavity 8 insures that gas will be supplied to all of the holes 7 as will be readily understood. Further, I take care to pierce the wall of the burner log at the highest points of the pockets 10 so that when the gas is

turned off no gas can remain unburned within the cavity 8 to pass out unburned and destroy the purity of the air in the room. This is a feature of great practical advantage. Above and around the log 4 I form the log members designated respectively 11, 12, 13, 14 and 15 shaped and colored on the outside so as to imitate wood logs. These logs are of non burning construction. Wherever practical as a matter of construction the logs are made hollow.

16 represents holes or curved canals, preferably but not necessarily, distributed in a straight line as shown. These canals communicate with the topmost part of the cavity 8 so as to insure that no unburned gas remains in said cavity after the supply has been turned off. As is usual these canals are made by the use of curved needles with which the terra cotta or other refractory material of which the logs may be made is pierced while soft enough to admit the needle.

The number of logs and the special exterior form depends upon the market taste and skill of the maker. Care should, however, be taken to model the logs in such a manner as to imitate closely wood logs as they appear when burning.

It will be seen that after the gas has been ignited at the outer mouths of the openings 7 and 16 the flames will lick up over the logs and when burning the effect is artistical and natural. Also that when the gas has been turned off no unburned gas will remain within the logs or holes.

In Fig. 3 I have shown a log in which the upper row of openings 17 communicate with a chamber 18 which in turn is fed through openings 19, 19. This construction sometimes insures better combustion for very long logs.

It will be understood that changes in the construction shown may be made without departing from the spirit of the invention and I claim all such changes as come within the scope of the claims.

I claim:

1. A gas log comprising a plurality of artificial log members, one of the said members being a burner member provided with a single cavity the roof of which is curved longitudinally of said member, a gas inlet centrally located and communicating direct-

ly with the said cavity, the walls of which are pierced by a plurality of burner holes.

2. A gas log comprising a lower hollow burner member having a single cavity the roof of which is curved longitudinally of said member being highest at the ends thereof, a gas inlet for discharging the gas directly into the center of the said cavity and pro-

vided with burner holes piercing the front wall of the said member.

Signed at Perth Amboy, N. J. this 13 day of October 1909.

OTTO E. HANSEN.

Witnesses:

PETER A. PETERSON,
WM. W. PIERCE.