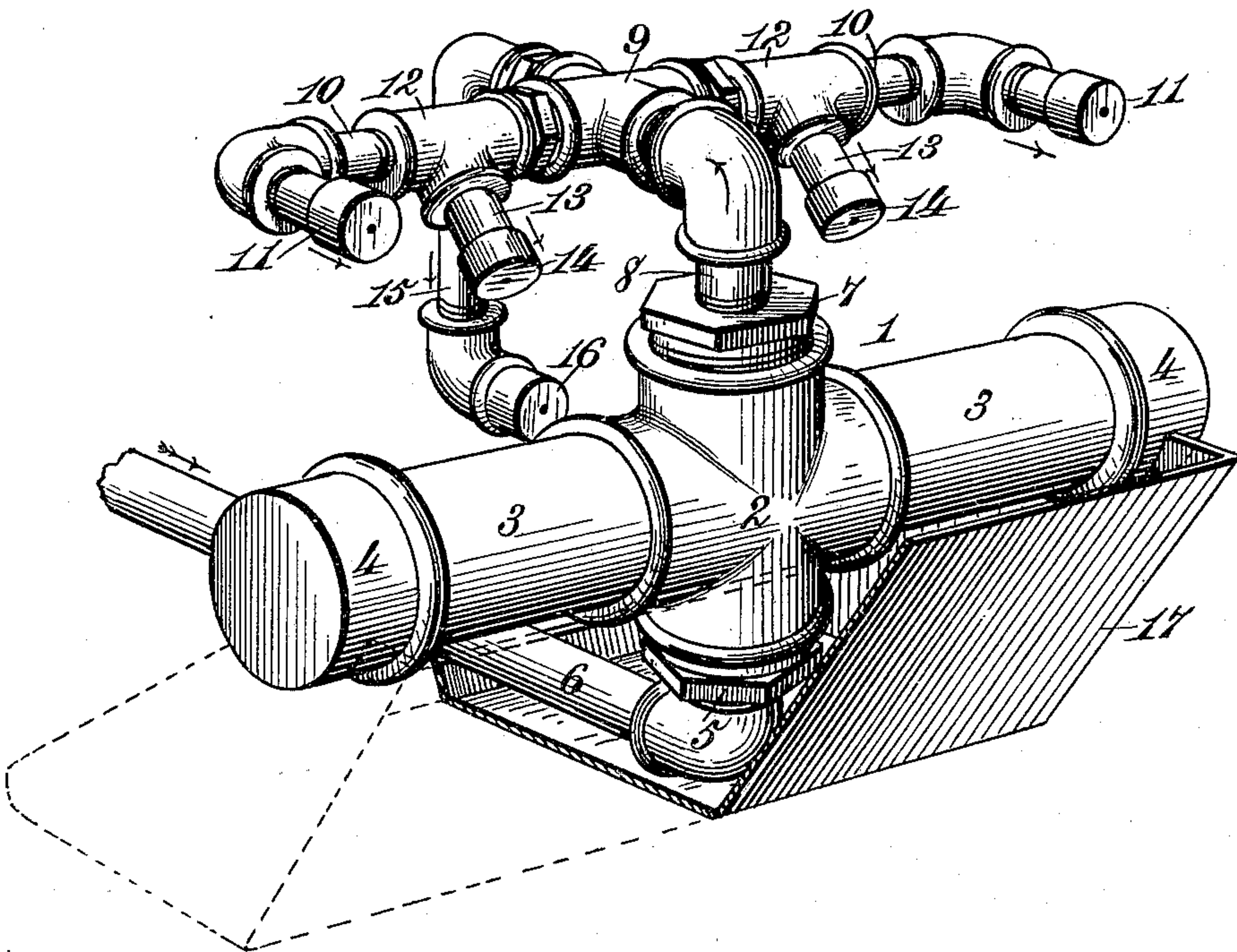


No. 639,122.

Patented Dec. 12, 1899.

G. W. WHITE.
FLUID BURNER FIRE LOG.
(Application filed May 17, 1899.)

(No Model.)



Witnesses.
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FLUID-BURNER FIRE-LOG.

SPECIFICATION forming part of Letters Patent No. 639,122, dated December 12, 1899.

Application filed May 17, 1899. Serial No. 717,177. (No model.)

To all whom it may concern:

Be it known that I, GEORGE WASHINGTON WHITE, a citizen of the United States, residing at Chattanooga, in the county of Hamilton and State of Tennessee, have invented new and useful Improvements in Fluid-Burner Fire-Logs, of which the following is a specification.

My invention relates to fluid-burner fire-logs adapted to be placed in the fire-chambers of stoves, furnaces, boilers, or the like or in an open fireplace and capable of use for many purposes comprised under the general heads of "heating," "cooking," and "generating steam."

To this end the invention consists in the novel construction of fluid-burner fire-logs, as hereinafter described and specifically claimed.

I have illustrated my invention in the accompanying drawing, in which the figure is a perspective view of the device.

Referring to the drawing, the reference-numeral 1 indicates the generator. This is constructed in an economical manner by screwing into opposite side apertures of a four-way union-coupling 2 short pipe-sections 3 and closing the ends thereof by means of caps 4. In the bottom aperture of the coupling 2 is screwed a tap-nut 5, screwed into which is a short pipe-section 6, which is to afford means for connecting the burner with an oil-tank, located at a suitable height and distance from the device, but not shown in the drawing. In the upper aperture of the coupling is screwed a tap-nut 7, screwed into which is a short pipe-section 8, curved forward, as shown, and connected by means of a suitable coupling 9 with a horizontal pipe 10, the outer ends of which are curved backward and provided with caps 11, each of which has a small central aperture for the escape of vapor. At two or more points the pipe 10 has interposed in its length T-couplings 12, secured in which are short pipe-sections 13, preferably projecting backward and downward and having caps 14 on their ends, each of which is also provided with a small central aperture for the escape of vapor.

Secured in the coupling 9, at the front of the device, is one end of a pipe 15, the lower

end of which is curved inward and directed toward the generator 1 and provided with a cap 16, having a small central aperture for the escape of vapor.

The numeral 17 indicates a pan in which the device is located in about the relative position shown.

In operation oil is poured into pan 17 and ignited and the generator 1 thereby heated. Oil is now admitted from the tank to the generator through the supply-pipe 6, and generation of vapor will ensue. By means of the flame directed against the generator from the pipe 15 the generator is kept heated and the generation of vapor rendered continuous. By regulating the quantity of oil admitted to the generator the amount of heat generated by the fire-log may be governed accordingly.

I have not illustrated any application of the device, as the general statement hereinbefore given will be sufficient to indicate to those skilled in the art the uses to which the device may be put. The "burner," however, as its name indicates, is primarily intended for use in an open fireplace, but may be used in an ordinary stove or furnace with equal advantage. In such latter application the grate of the stove or furnace would first be removed before the fire-log and pan are inserted therein.

Having thus fully described my invention, what I claim as new is—

1. A fluid-burner fire-log comprising a horizontal cylinder affording a generator, an oil-supply pipe leading to the same, an escape-pipe leading from said generator and connected with a horizontal distributing-pipe, a series of pipe-sections communicating with said distributing-pipe and having jet-orifices, and a pipe leading from said distributing-pipe and having its free end directed toward said generator and provided with a jet-orifice, substantially as described.

2. A fluid-burner fire-log comprising a four-way coupling having pipes screwed into opposite sides thereof, caps on the outer ends of said pipes, a supply-pipe leading into said coupling, an escape-pipe leading therefrom, said supply and escape pipes engaging, respectively, in tap-nuts screwed into opposite sides of said coupling, a horizontal distribut-

ing-pipe communicating with said escape-pipe
and having pipe-sections leading therefrom
provided with jet-orifices, and a pipe commu-
nicating with said distributing-pipe and hav-
5 ing its free end directed toward said gener-
ator and provided with a jet-orifice, substan-
tially as described.

In testimony whereof I have hereunto set
my hand in presence of two subscribing wit-
nesses.

GEORGE WASHINGTON WHITE.

Witnesses:

M. E. WHITE,

EDNA WHITE.