

A. HARRIS.
GAS GENERATOR.
APPLICATION FILED JUNE 28, 1909.

972,188.

Patented Oct. 11, 1910.

Fig. 1.

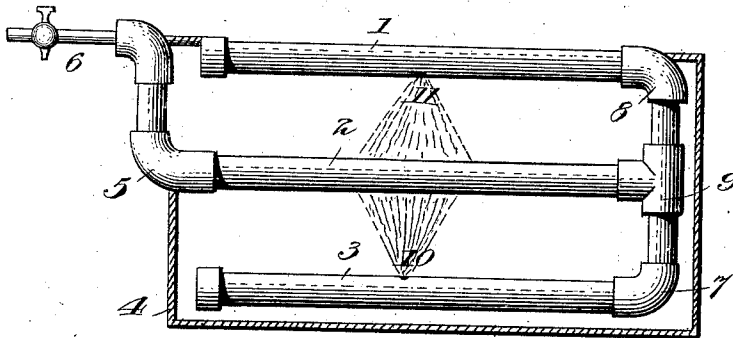


Fig. 2.

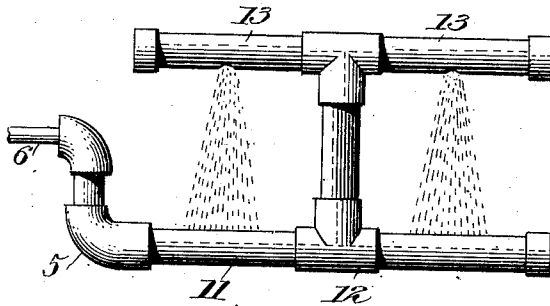
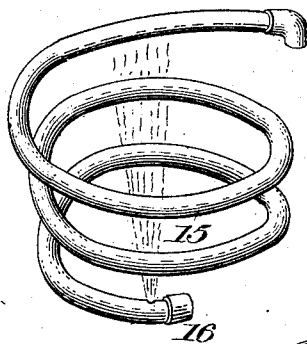


Fig. 3.



Arthur Harris Inventor

Witnesses

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ARTHUR HARRIS, OF SYLVANIA, GEORGIA.

GAS-GENERATOR.

972,188.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ARTHUR HARRIS, citizen of the United States, residing at Sylvania, in the county of Screven and State of Georgia, have invented certain new and useful Improvements in Gas-Generators, of which the following is a specification.

My invention pertains to improvements in gas-generators, adapted for heating, lighting and cooking purposes and particularly for use in connection with stoves and ranges.

It has for its object to promote simplicity and cheapness in carrying out the invention, as well as to provide for readily applying and operating the same.

The invention therefore consists of certain instrumentalities or features substantially as hereinafter fully disclosed and defined by the claim.

In the accompanying drawing illustrating the preferred embodiment of my invention—Figure 1 is a side and partly sectional view thereof. Fig. 2 is a modification of the same, and Fig. 3 is a second modification thereof, all of which are readily apparent.

In practicing my invention, I employ tube or pipe sections or members 1, 2 and 3, (greater or less in number) and a pan or casing 4 adapted to receive the same and form a chamber therefor.

The intermediate pipe section or member 2, which constitutes the generator proper has an upward extension or elbow 5 at one end with which connects a valved supply-pipe 6 leading from a tank not shown occupying preferably an attitude greater than the uppermost pipe section or member for the obvious purpose of suitably delivering with the requisite pressure into the several or respective pipe sections or members of the generator the required gas producing fluid, or oil, preferably kerosene.

The other pipe sections or members 1 and 3, which form burner pipes are connected to what may be termed the delivery end of the intermediate pipe-section or generator 2, by elbows 7 and 8, said generator delivery-end being of T-like formation, as at 9, with whose arms are connected said elbows, respectively. Said pipe-members or burner-pipes 1 and 3 are provided with gas-jet openings 10, 11 facing toward the intermediate

pipe-section or generator proper 2 and accordingly adapted to direct the gas-flames, resulting from the ignition of the oil or kerosene at said points, upon said generator proper, as is obvious, for suitably heating the same for the conversion of the oil or kerosene flowing therethrough into gas for the utilization of the latter for heating, cooking or illuminating purposes, as may be desired. At the outset, however, a quantity of asbestos (in practice) being placed in the pan or casing, a quantity of oil or kerosene is allowed by suitably actuating the valve to drip or run upon said pipe sections and upon such asbestos, and ignited; the flame from which effects the pre-heating of said pipe sections or members and thus provide for initially generating the gas, which gas-generation is continued practically automatically during the issuance of the flame from the burner pipes, as is apparent, the necessary draft or air being admitted or fed thereto to aid combustion, as well understood.

Any number of jet or burner openings may be provided in the burner pipes according to the amount of light or illumination, or heat required.

In the modification as suggested by Fig. 2, is shown a bottom pipe or section 11 forming the generator proper, and having an up-standing T-member 12 to the arms of which are connected the burner-pipe-sections or members 13. Also as indicated in Fig. 3, is disclosed a coil of pipe 14 forming the generator proper 15 and the burner-pipe 16, which is self-explanatory.

The advantages of my invention, including great simplicity of construction and inexpensiveness of manufacture by reason thereof, as well as the application of the same for use and its utilization for purposes of heating, cooking and lighting as before noted, are all apparent from the foregoing description of said invention.

I claim—

A gas generator comprising a plurality of longitudinal pipe-members arranged in a common plane and parallel to each other, a transverse pipe-member, pipe-coupling members, connecting said transverse pipe member at its ends and intermediately thereof with said longitudinal pipe-members at one

end of each, the intermediate longitudinal
pipe-member being adapted for attachment
to a source of supply, the lateral longitudinal
pipe-members being provided with jet-
5 openings at their midlengths and adapted to
deliver the escaping vapor in the direction
of said intermediate longitudinal pipe,
whereby the flame resulting from said vapor

in combustion will impinge against said
pipe, upon both sides.

In testimony whereof I affix my signature,
10 in presence of two witnesses.

ARTHUR HARRIS.

Witnesses:

L. C. REDDICK,

T. J. BLACK.