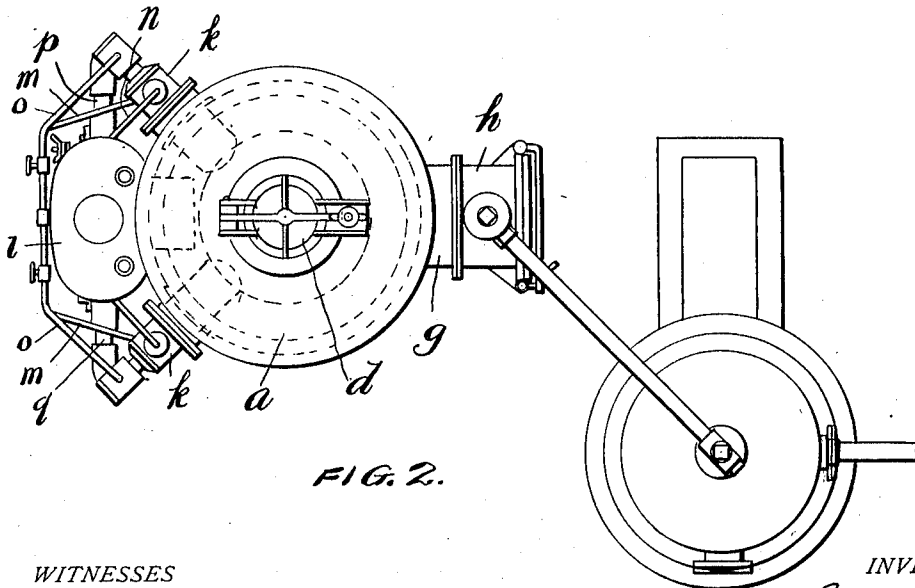
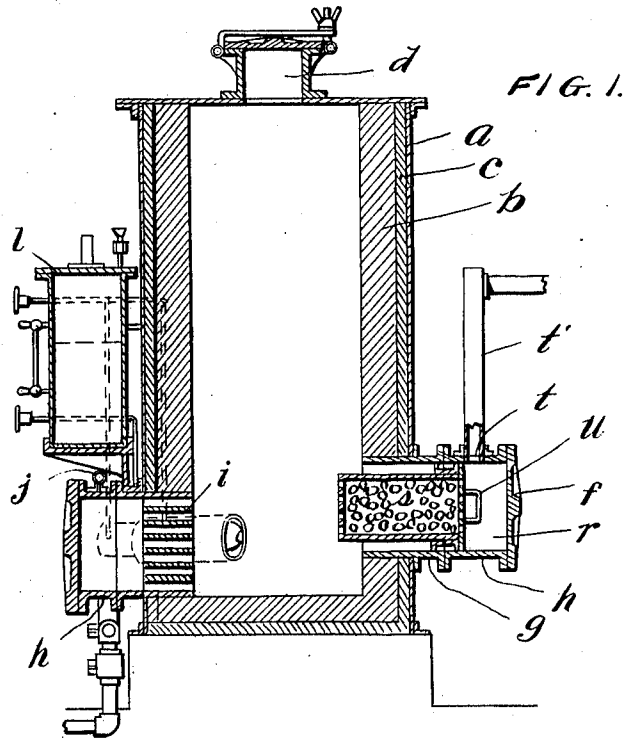


E. LORIN.
GAS GENERATOR.

APPLICATION FILED MAR. 29, 1907.

1,020,651.

Patented Mar. 19, 1912.



WITNESSES
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UNITED STATES PATENT OFFICE.

ERNEST LORIN, OF DOULAINCOURT, FRANCE.

GAS-GENERATOR.

1,020,651.

Specification of Letters Patent.

Patented Mar. 19, 1912.

Application filed March 29, 1907. Serial No. 365,370.

To all whom it may concern:

Be it known that I, ERNEST LORIN, a citizen of the French Republic, residing in Doulaincourt, France, have invented a new and useful Gas-Generator, of which the following is a specification.

This invention relates to improvements in gas generators of the cupola type which are adapted to burn fuel of any and all kinds and in which the admission of air to the fire can be adjusted as regards a forward or backward position in the furnace.

In order that the improvements should be better understood, they are illustrated in the accompanying drawing in which—Figure 1 is a sectional elevation of my invention. Fig. 2 is a plan view, a suitable settling tank being shown in this figure.

In Figs. 1 and 2, the same letters of reference indicate the same parts.

a is a generator cylinder made of plate and angle iron, all the joints of which are closed with asbestos.

b is a lining of brick, earthenware or other refractory material for the combustion chamber.

c represents compressed asbestos packing protecting the outer casing from the heat.

d is the charging hopper of the generator surmounted by a door with tight closing device, with lever and pressure screw.

e is the opening for stoking the fire and cleaning the furnace, provided with a door *f* provided with a lever and screw closing device, said door being mounted on an ordinary sleeve *g* or with a sleeve *h* supporting the door provided with a groove for insuring an air-tight closing, a perforated plug *i* preventing the fuel from falling out toward the door, but allowing air arriving

through the pipe *j*, to penetrate into the furnace.

r is an outlet for the gas, provided with the same accessories *f g h* as the opening *e*, but having in addition to the same a movable dust stopping device *s* and an opening *t* for the escape of the gas. The box *s* can be of refractory material or of metal, and with water circulation. It is provided with holes for the passage of the gases but is filled with refractory products to prevent the carrying away of dust, fuel or ashes. It is, moreover, provided with a cover, also provided with holes and with a handle *u* to enable it to be withdrawn during the working and replaced by another in order to clean it, which can be easily done. The gas flows through opening *t* and through a suitable pipe or pipes *t'* into a suitable settling tank.

What I claim is—

The combination with a furnace, of a gas outlet therefor comprising a perforated box of refractory material therein, a removable perforated cover for said box, a sleeve arranged in the furnace wall, and within which sleeve the said box is arranged, and a second sleeve secured to the first sleeve, and a door for said second sleeve, a settling tank, and a connection between the latter and the said second sleeve for the passage of gas.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ERNEST LORIN.

Witnesses:

GEORGE FANGER,
LOUIS FOURMESTRAUX.