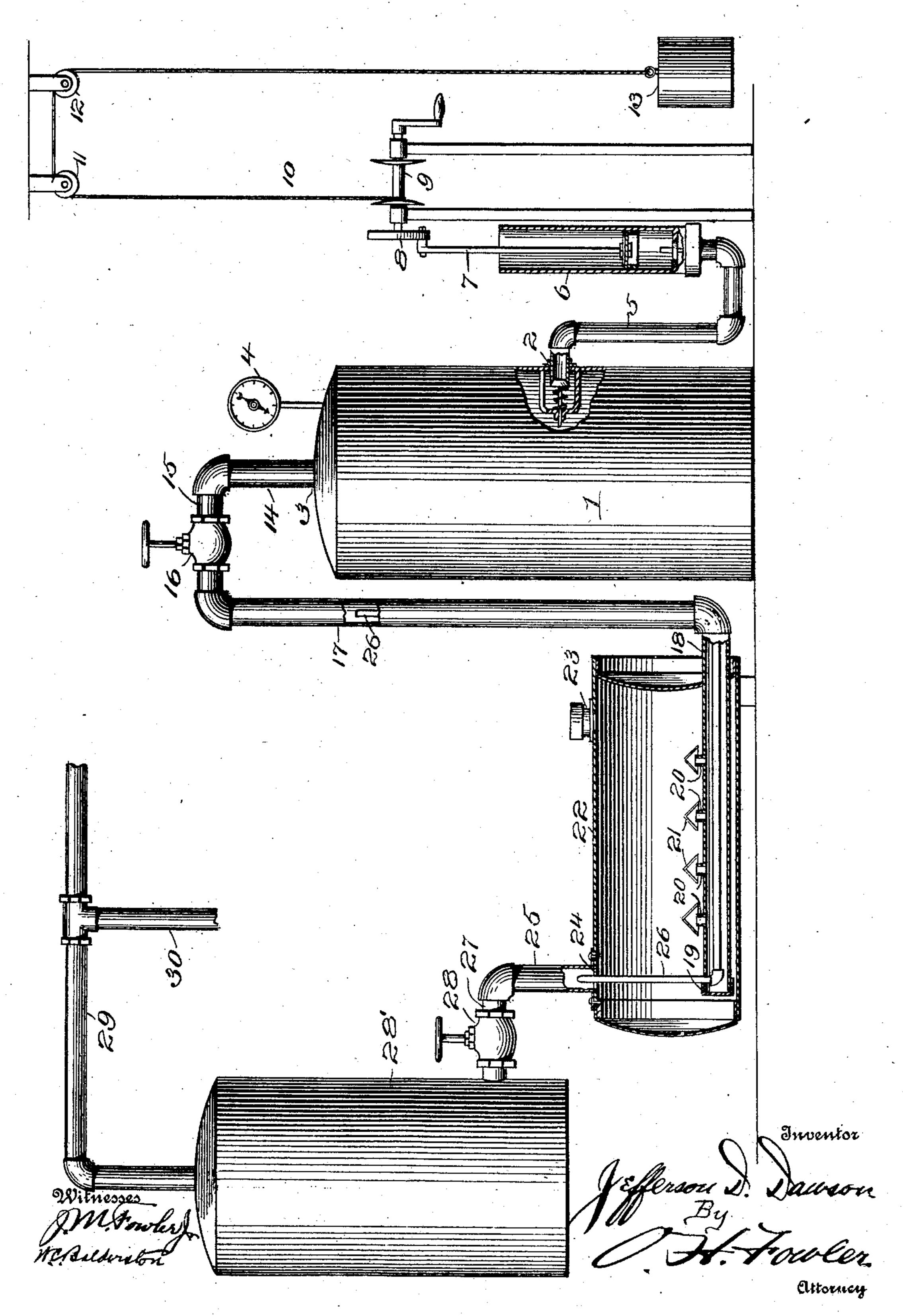
J. D. DAWSON.

GAS GENERATOR.

APPLICATION FILED JAN. 15, 1906.



## UNITED STATES PATENT OFFICE.

JEFFERSON D. DAWSON, OF BEARDSTOWN, ILLINOIS.

## GAS-GENERATOR.

No. 840,115.

Specification of Letters Patent.

Patented Jan. 1, 1907.

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To all whom it may concern:

Be it known that I, Jefferson D. Dawson, a citizen of the United States, residing at Beardstown, in the county of Cass and State of Illinois, have invented certain new and useful Improvements in Gas-Generators, of which the following is a specification.

This invention relates to gas-generators, and more particularly to that class which generate gas by forcing air through gasolene.

The object of my invention is to produce

gas for any and all purposes.

Another object of my invention is to provide a generator for the production of gas and to so construct the same that gas can be produced from air and gasolene without the agency of heat or any other means whatsoever.

A further object of my invention is to provide a generator and to so construct the same that the pressure of air will be uniform

into and through the gasolene.

With these objects in view and such others as may hereinafter appear my invention consists in the particular construction of the various parts and in the novel manner of combination and arrangement of said parts, all of which will be more fully described, and specifically pointed out in the appended claims.

The drawing forming a part of this specification is a diagrammatic illustration, partly

in section.

Referring by numerals to the drawing, 1
35 represents an air-tank having the usual inlet-valve 2, exhaust-port 3, and pressure indicator or gage 4. Connected to the inletvalve 2 is a pipe 5, attached to and communicating with an air-pump 6, the piston 7 of
40 which is driven by a crank-disk 8, whose
shaft is provided with a spool 9, connected
to which by one end and adapted to be
wound thereupon is a rope 10, having its
other end passed over two pulleys 11 and 12,
45 and connected to a weight 13, the arrangement being such as will operate the pump as
the pressure in the air-tank diminishes, and
thereby keep an even pressure in the tank.

Communicating with the exhaust-port 3 is a pipe 14, connected to which is a short pipe-section 15, having a hand-valve 16, by means of which the air-pressure may be shut off. Connected to the pipe-section 15 is a pipe-section 17, extending downward approximately to the bottom of the tank 1 and connected to a horizontal pipe-section 18, closed

at its free end, as shown at 19, and provided with a series of jets 20, each having a hood 21. The pipe-section 18 is inclosed in a gasolenetank 22, having a screw-plug 23, through 60 which the tank is filled, and an exhaust-port 24, communicating with a pipe-section 25. Arranged within the pipe-sections 17 and 18 is a pipe 26 of smaller diameter and having its respective ends terminating at a point in the 65 pipe 17 approximately near the top of the tank 1 and at the mouth or beginning of the pipe 25, which pipe is connected to a pipesection 27, provided with a hand-valve 28 for shutting off the gas. Said pipe 27 com- 70 municates with the gas-supply tank 28', from which leads the supply-pipe 29, having branch pipes 30 leading to the point or points of consumption.

Mode of operation: Air is pumped in the 75 air-tank to the desired pressure, which pressure is maintained by means of the automatically-operated pump. The air upon leaving the air-tank passes through the pipes 17 and 26. The air which passes through the pipe 80 17 escapes through the jets 20 and percolates through the gasolene in the tank 22 and mixes at the exit-port 24 with the air which passes through the pipe 26, thereby forming a perfect gas which passes on through a pipe 85 to the supply-tank 29, leading from which are the supply-pipes for conveying the gas to

the point or points of consumption.

Having thus described the various features of my invention, what I claim as new, 90 and desire to secure by Letters Patent, is—
1. In a gas-generator, an air-tank, a gaso-

lene-tank, a pipe extending into the gasolene-tank, jets arranged in said pipe, a small pipe extending through said pipe and gasolene-tank, the said pipes communicating with the air-tank, a gas-supply tank communicating with the gasolene-tank and said small

pipe, substantially as specified.

2. In a gas-generator, an air-tank, a gaso- 100 lene-tank, a pipe-section extending into said gasolene-tank, a series of jets arranged in said pipe-section, a small pipe extending through said pipe-section and gasolene-tank, the said pipe-section and small pipe communicating with the air-tank, a gas-supply tank having communication with the small pipe and gasolene-tank, substantially as specified.

3. In a gas-generator, an air-tank, a gasolene-tank, means for filling said gasolene- 110 tank, a pipe-section extending into the gasolene-tank, a series of jets arranged in said pipe-section, hoods over the jets, a small pipe extending through the pipe-section and gasolene-tank, the said small pipe and pipe-section communicating with the air-tank, a valve for cutting off said communication, a gas-supply tank communicating with the small pipe and gasolene-tank, and a valve

for controlling the communication, substantially as shown and for the purpose specified.

JEFFERSON D. DAWSON.

Witnesses:

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