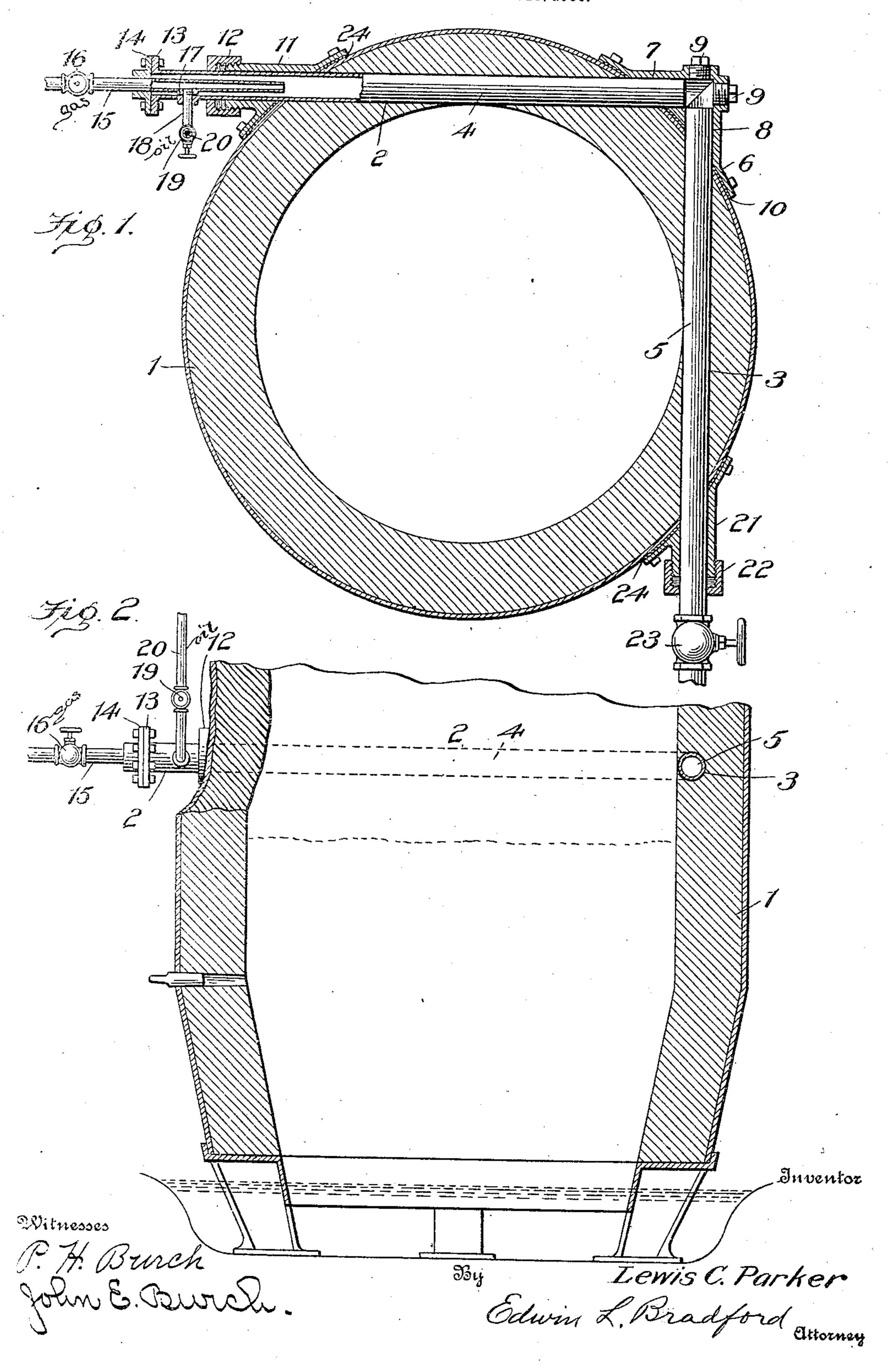
L. C. PARKER.

APPARATUS FOR CARBURETING GAS.

APPLICATION FILED MAR. 13, 1906.



UNITED STATES PATENT OFFICE.

LEWIS C. PARKER, OF ST. JOSEPH, MISSOURI.

APPARATUS FOR CARBURETING GAS.

No. 838,805.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Lewis C. Parker, a citizen of the United States, residing at St. Joseph, in the county of Buchanan and State of Missouri, have invented certain new and useful Improvements in Apparatus for Carbureting Gas, of which the following is a specification.

The invention relates to apparatus for carbureting gas; and it consists, essentially, of the construction and arrangement of certain novel devices for carbureting the gas as it comes from either the generator or from a supply-tank after being washed, said devices being readily adaptable to any of the well-known gas producers or generators now in use.

In carrying out my invention I propose to employ a plurality of pipes running at right angles to each other horizontally through the wall of the producer and to arrange said pipes in such close proximity to the combustion-chamber of the producer that the amount of heat necessary to effect the carburization of the oil-enriched gas as it passes through said pipes will be furnished.

In the drawings, Figure 1 is a horizontal sectional view of a gas-producer, showing my improved carbureting device applied thereto; and Fig. 2, a vertical sectional view of the same, a portion of the wall being broken away to show a part of the carbureting device in side elevation.

In the several views, the numeral 1 indicates 35 agas-producer of the ordinary type, having its wall provided at a suitable distance above the coal-level with channels 2 and 3, running at right angles to each other. Placed in these channels are carbureting-pipes 4 and 5, 40 respectively, the ends of the pipes at their point of juncture being connected by a coupling 6, consisting of a plate provided with two channels 7 and 8, arranged at right angles to each other to receive the respective 45 ends of said pipes, each channel having its outer end internally screw-threaded to receive a screw-threaded plug 9. The coupling is secured to the outer wall of the producer by any suitable means, and a packing 50 10 is placed between said coupling and wall to prevent the escape of the gas.

The intake end of the carbureting-pipe 4 extends through a bracket 11, secured to the outer wall of the producer and through a stuffing-box 12. The extreme end of the pipe 4 is provided with a flange 13, and bolted

to said flange is a packing-nut 14, through which passes a gas-pipe 15, having a regulating-valve 16. The gas-pipe is provided with an internally-screw-threaded boss 17, into 60 which is screwed an oil-pipe 18, passing through a hole in the pipe 4. The oil-pipe is provided with a suitable valve 19 for regulating the flow of the oil, which is furnished from a suitable source of supply (not shown) 65 through the pipe 20. The outer or exit end of the pipe 5 extends through a bracket 21 and a stuffing-box 22, similar to bracket 11 and stuffing-box 12 and is provided with a regulating-valve 23. A suitable packing 24 70 is placed between each of the brackets and the wall of the producer to insure against leakage of the gas.

The gas to be carbureted may be taken directly from the producer or from a tank 75 in which it is stored after being washed, the latter being preferred. The gas entering through the pipe 15 and the oil through the pipe 18, is partially atomized as it passes into the carbureting-pipe 4, in which pipe and 80 pipe 5 the carbureting takes place, the carbureted gas passing out through the exit end of pipe 5, to any suitable storage-tank. (Not shown.)

While I have shown and described only 85 two carbureting-pipes, it will be evident that a third pipe may be employed arranged at right angles to pipe 5 and a coupling similar to coupling 6, used to connect the ends together at their point of juncture.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In an apparatus for enriching gas, the combination with the walls of the producer, of a carbureting-pipe arranged in said walls, in such close proximity to the combustion-chamber as will provide the required amount of heat necessary to effect the carburization and fixing of the gas, a pipe arranged in the not inlet end of the carbureting-pipe for supplying the produced gas, an oil-pipe communicating with the gas-supply pipe, means for controlling the supply of gas, and means for controlling the supply of oil.

2. In an apparatus for enriching gas, the combination with the walls of the producer, of a carbureting-pipe arranged in said walls, in such close proximity to the combustion-chamber as will provide the required amount 110 of heat necessary to effect the carburization and fixing of the gas, said carbureting-pipe

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having its outlet end constructed to be connected with a suitable storage-holder, a pipe arranged in the inlet end of the carbureting-pipe for supplying the produced gas, an oilpipe communicating with the gas-supply pipe, a valve for controlling the supply of gas, and a valve for controlling the supply of oil.

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

LEWIS C. PARKER.

Witnesses:

E. P. Snowden, Warren C. Hill.