

No. 636,084.

Patented Oct. 31, 1899.

M. TAYLOR.  
GAS PRODUCING APPARATUS.

(Application filed May 16, 1898.)

(No Model.)

Fig. 2.

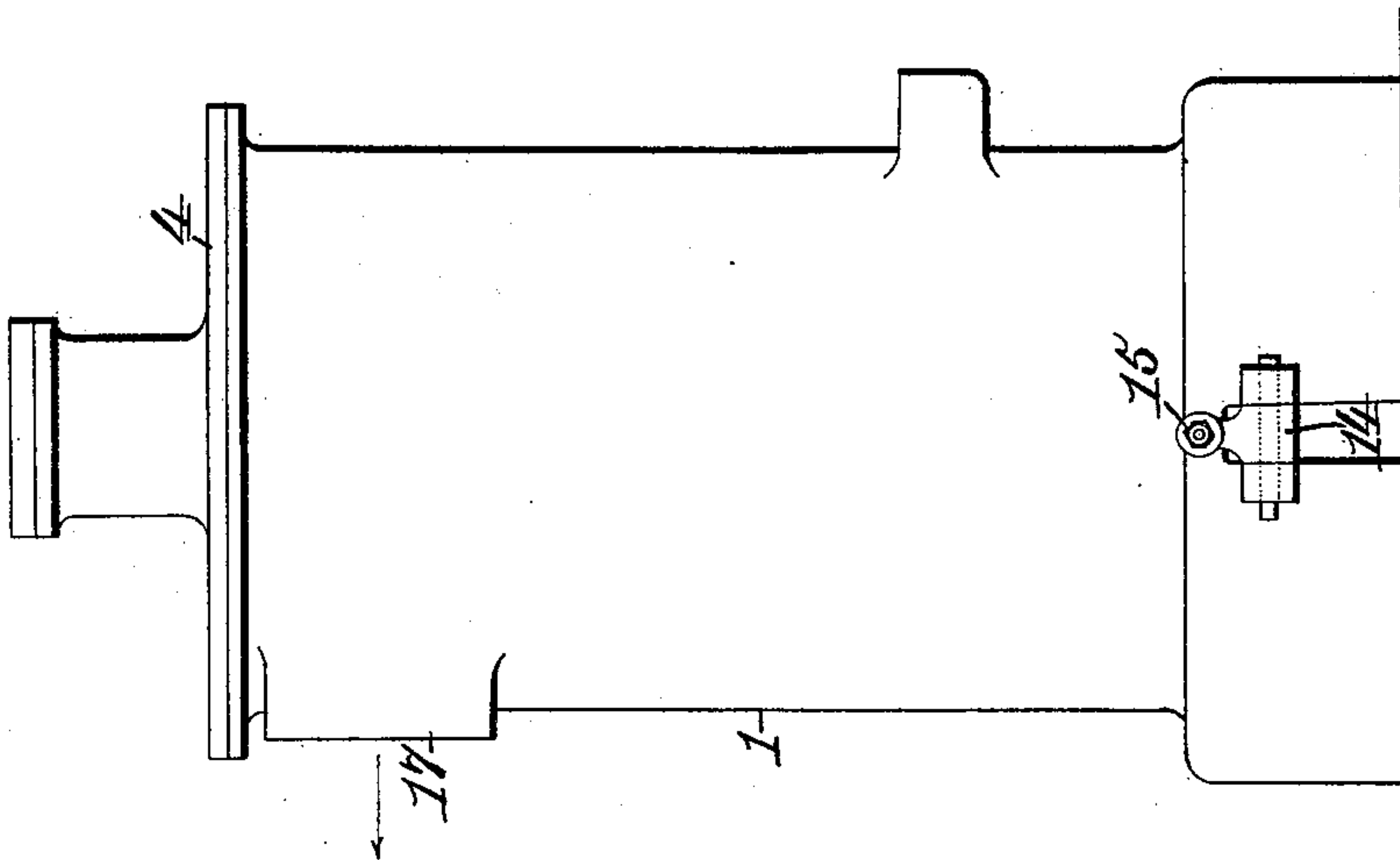
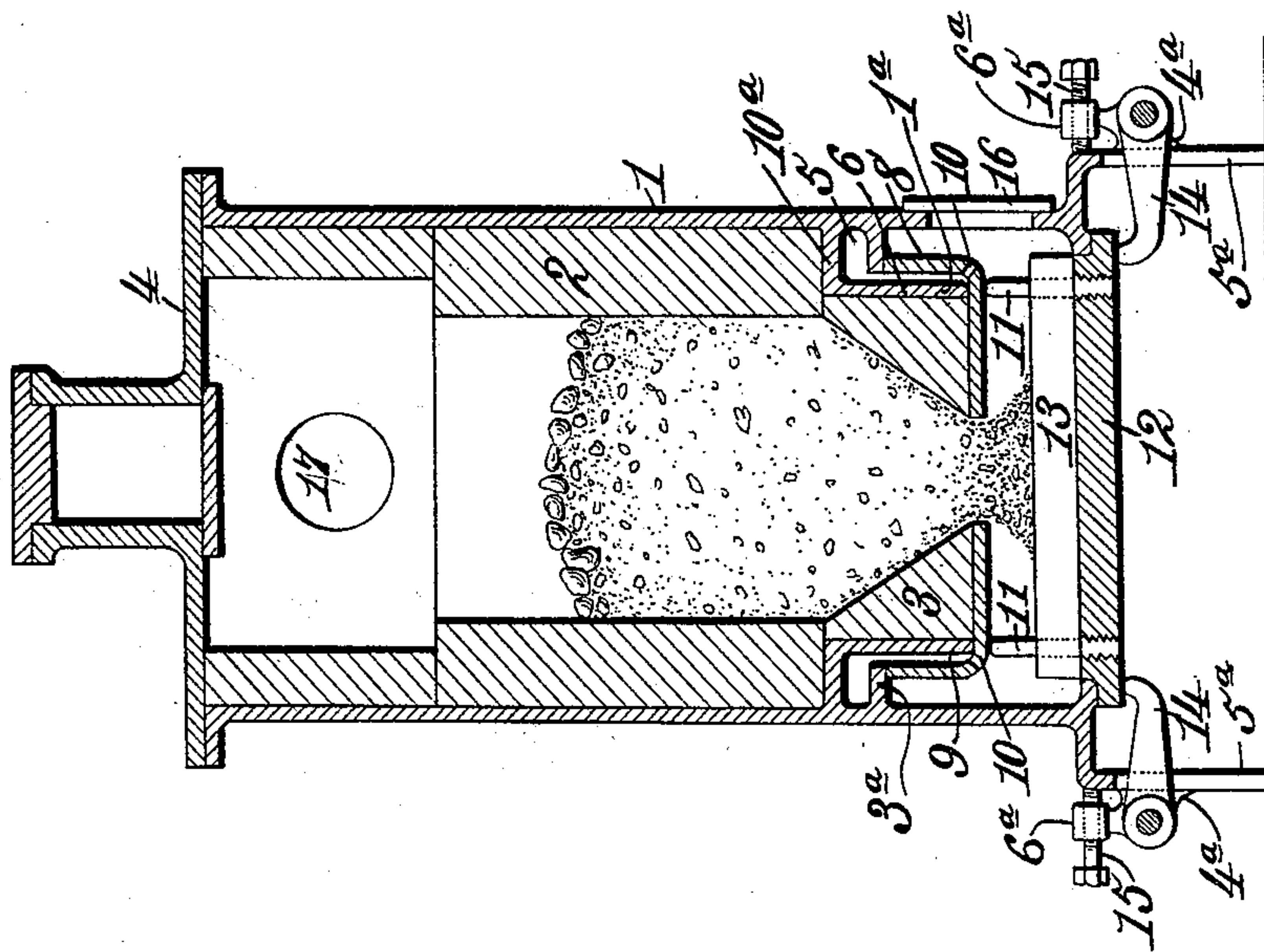


Fig. 1.



Witnesses  
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# UNITED STATES PATENT OFFICE.

MAURICE TAYLOR, OF PARIS, FRANCE.

## GAS-PRODUCING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 636,084, dated October 31, 1899.

Application filed May 16, 1898. Serial No. 680,829. (No model.)

*To all whom it may concern:*

Be it known that I, MAURICE TAYLOR, a British subject, residing at Paris, France, have invented certain new and useful Improvements in Gas-Producing Apparatus, of which the following is a specification.

My invention relates to an apparatus for producing gas, my purpose being to provide such an apparatus with means that will enable it to be easily cleansed.

In order that my invention may be clearly understood, I now proceed to describe the same in detail with reference to the accompanying drawings, in which—

Figure 1 is a vertical section of the gas-producing apparatus. Fig. 2 is an elevation.

The gas-producing apparatus consists, substantially, of a chamber inclosed by a metallic jacket 1, having a lining of fire-brick 2 and closed at the upper end by a plate 4, which supports the fuel-charging devices. At the lower end of the chamber is a retort-block 3, of a material that will resist fire. The exterior diameter of this block is less than that of the jacket 1, and it is inclosed by a jacket or casing 6, that forms part of a flange 10<sup>a</sup>, extending inwardly from the jacket 1 beneath the fire-brick 2. The retort-block 3 has a funnel-shaped recess or chamber, the contracted end of which opens through the lower face of the block, which rests upon a plate that forms part of a metallic casing 8, the circular portion of which surrounds a contracted portion 6 of the jacket 1, at a little distance from the latter, so as to form an annular space 9, which opens above into an annular chamber 5, inclosed upon three sides by the flange 10<sup>a</sup>, and an inwardly-projecting rib 3<sup>a</sup> a little below the flange, the third side being inclosed by that part of the jacket 1 between the flange 10<sup>a</sup> and the rib 3<sup>a</sup>. The upper edge of the metal casing 8 meets the lower face of the rib 3<sup>a</sup>, said casing being supported upon upright rods 11. These rods are supported by a door 12, which has a fireproof plate 13 upon its upper surface, which lies a little below the contracted opening in the lower face of the retort-block 3 to permit air and steam to pass into the fuel-space and to enable the slag to be removed from the retort. The door 12 is supported by bell-crank levers 14, fulcrumed

upon lugs 4<sup>a</sup>, which project from the base or lower portion of the jacket 1. The horizontal lever-arms pass through slots 5<sup>a</sup> in said base, and their upwardly-turned extremities bear against the lower face of the door 12. The upwardly-extending lever-arms are provided with screw-threaded terminals 6<sup>a</sup>, through which adjusting-screws 15 are passed, their ends bearing against the base of the jacket to enable the operator to force the door 12 closely against the lower end of the jacket 1. A door 16 is placed in the jacket at such a point as to enable the slag and ashes to be readily taken out. The metal casing 8 is provided with openings 10 for the passage of air and steam from the annular space 9 into the space between the door 12 and said casing and thence into the furnace.

At or near the top of the chamber 1 there is provided an orifice 17 for the escape of the heated gases.

The details of the apparatus may be varied without departing from the spirit of the invention.

What I claim is—

1. In a gas-producer, the combination with a retort and fuel-chamber, of a jacket inclosing the same, a door closing the lower end of the jacket, bell-crank levers each having an arm extending underneath said door, and set-screws tapped through the other arms whereby said levers may be adjusted, substantially as described.

2. In a gas-producer, the combination with a jacket inclosing and extending below a fuel-chamber and retort-block, a door closing the lower end of said jacket, bell-crank levers fulcrumed upon lugs projecting from the base of the jacket and having one arm of each passed through a slot in said base, and set-screws passing through threaded terminals upon the upwardly-projecting arms of said levers and bearing upon said base, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

MAURICE TAYLOR.

Witnesses:

EDWARD P. MACLEAN,  
ALFRED FRELL.