

No. 775,265.

PATENTED NOV. 15, 1904.

H. L. DIXON.
GAS PRODUCER.

APPLICATION FILED JUNE 13, 1903.

NO MODEL.

3 SHEETS—SHEET 1.

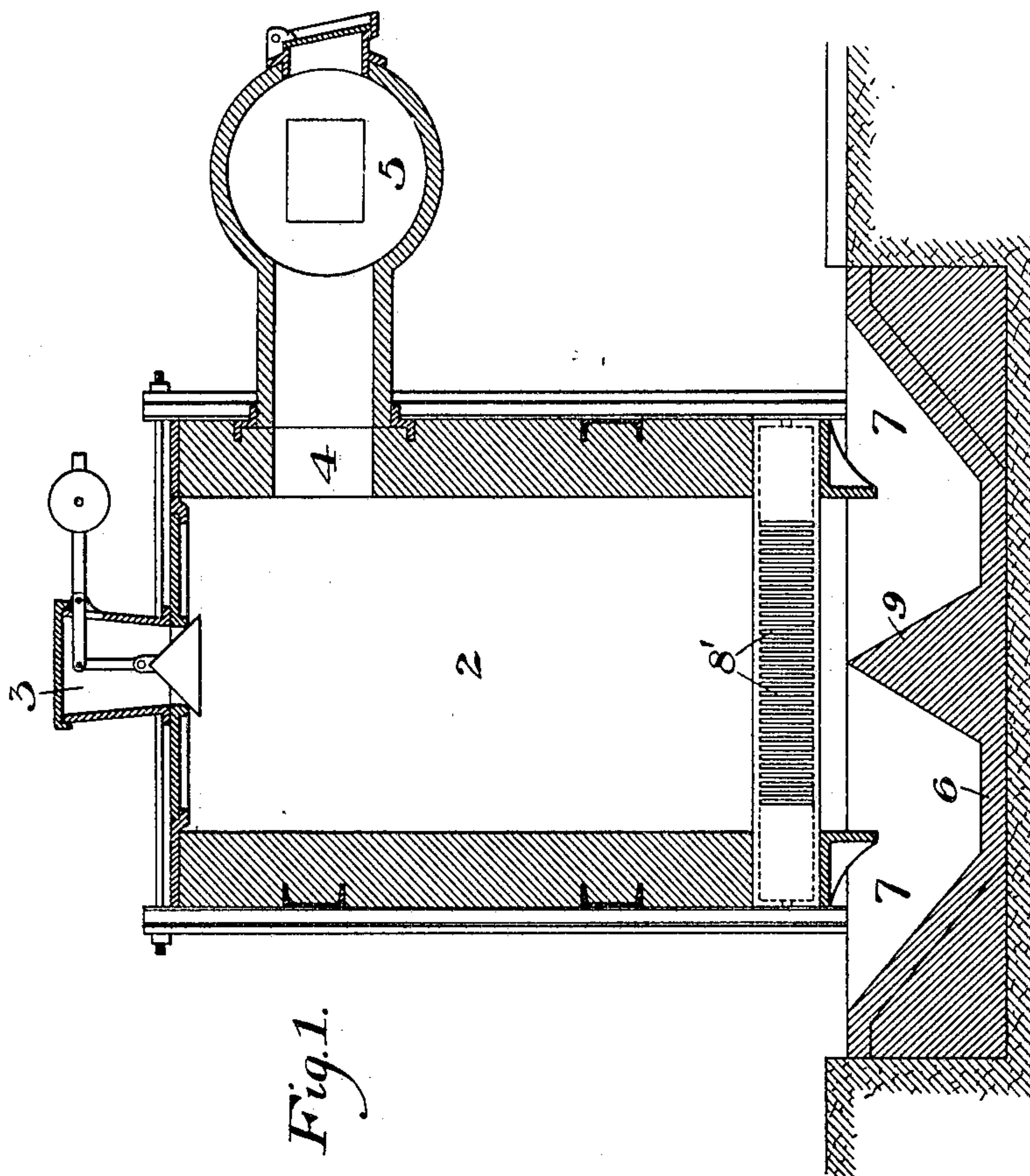


Fig. 1.

WITNESSES

Warren U. Swartz
George B. Blum

INVENTOR

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by Nathan Rynes
his atty.

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3 SHEETS—SHEET 2.

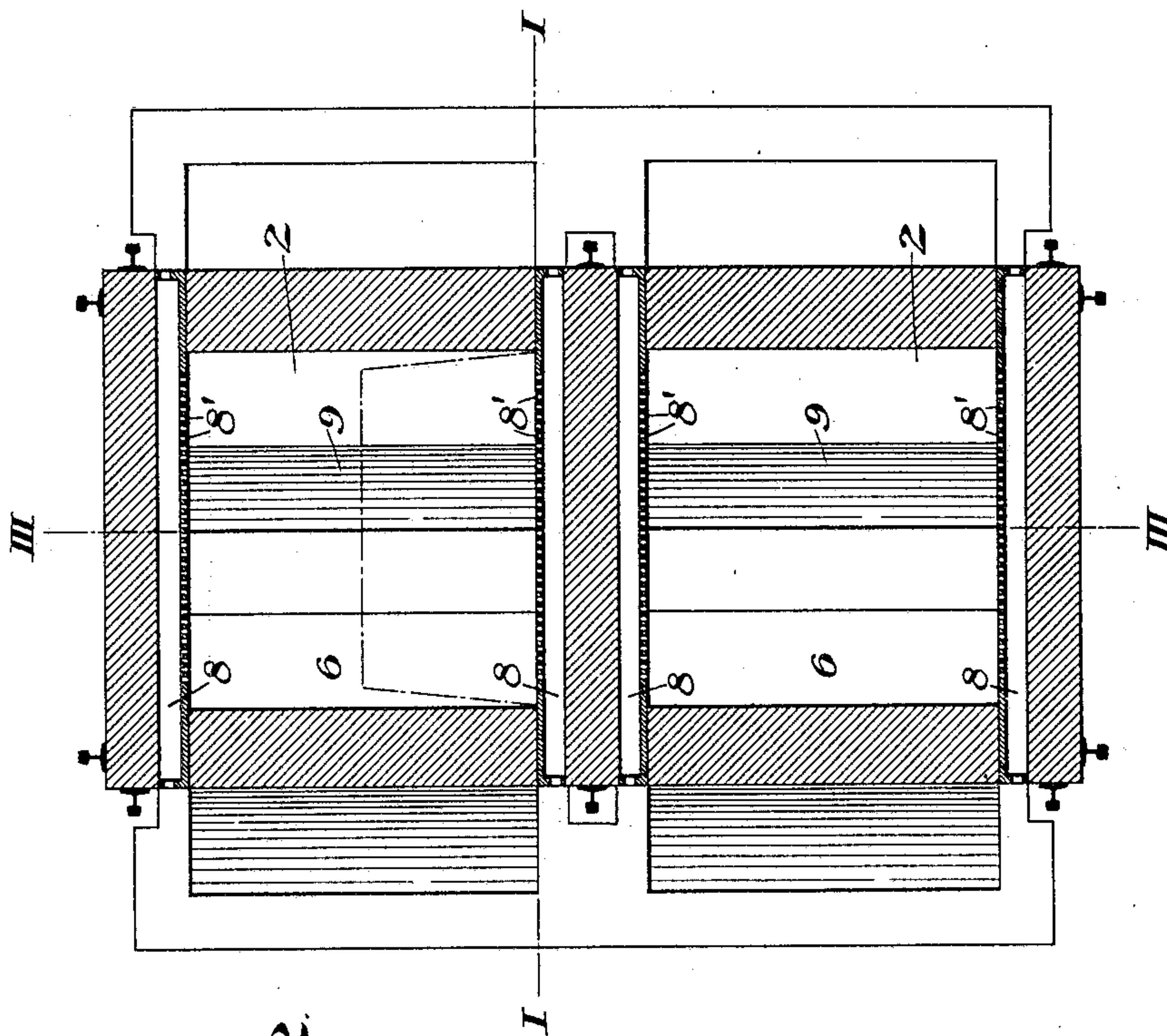


Fig. 2.

WITNESSES

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3 SHEETS—SHEET 3.

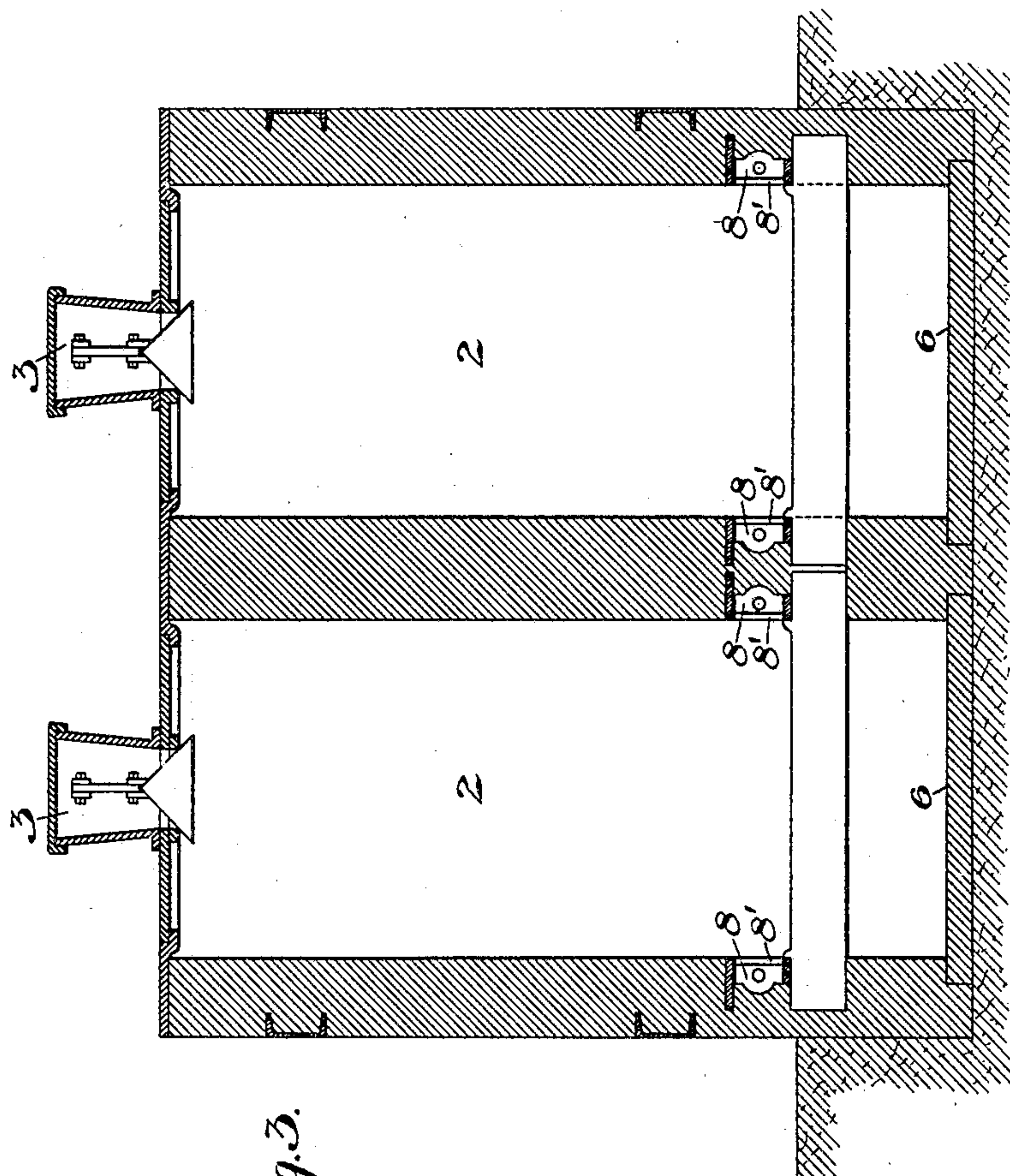


Fig. 3.

WITNESSES

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INVENTOR

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UNITED STATES PATENT OFFICE.

HENRY L. DIXON, OF PITTSBURG, PENNSYLVANIA, ASSIGNOR TO H. L. DIXON COMPANY, OF PITTSBURG, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

GAS-PRODUCER.

SPECIFICATION forming part of Letters Patent No. 775,265, dated November 15, 1904.

Application filed June 13, 1903. Serial No. 161,310. (No model.)

To all whom it may concern:

Be it known that I, HENRY L. DIXON, of Pittsburg, Allegheny county, Pennsylvania, have invented a new and useful Gas-Producer, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a vertical central section of my gas-producer, the section being on the line I I of Fig. 2. Fig. 2 is a plan view showing two of the producers built side by side in one structure. Fig. 3 is a vertical section on the line III III of Fig. 2.

My producer is characterized by the fact that in combination with a water seal it has the inlets for air and steam solely in the side walls, so that the gratings of these inlets will not be clogged by clinkers; but, on the contrary, the clinkers and ashes will be discharged freely into the water seal, and the producer thereby rendered easy to stoke and to maintain in its best working condition. The gratings are not subject to such rapid deterioration and wear as heretofore and the construction is cheap and simple.

In the drawings, 2 2 are the producer-chambers of rectangular horizontal section, two of them, built side by side, being shown in Figs. 2 and 3. Each of them has at the top a charging-hopper 3 and a gas-outlet 4, which discharges into a gas-main 5. At the base of each chamber is a water seal constituted by a pan 6, adapted to contain water, the end walls of the chamber terminating above the pan and affording spaces 7, through which the ashes may be removed.

The air and steam by which the gas is generated in the producer charge are admitted into the chambers solely through inlet-passages 8, formed in the vertical side walls of the producer and covered by gratings 8', which are flush with the walls, and for ease of shoveling out the ashes and for the purpose

of deflecting them toward the openings 7 I prefer to form on the pan 6 an inclined ridge or cross-wall 9.

The producer is fed with coal from the hoppers 3 in the usual way, and air and steam are injected into it through the gratings 8', which being vertical afford no obstruction to the passage of the coal and no lodgment on their grated faces for clinkers.

My invention possesses especial advantage in that it enables me to build producers in batteries of small units. This can be done at much less expense than is entailed in the construction of large producers with central air-supply.

Within the scope of my invention as defined in the claims changes may be made in the form and arrangement of the parts, since

What I claim is—

1. A gas-producer comprising a plurality of adjacent, water-sealed chambers, each pair of chambers having a common, intermediate, vertical wall with grated air-passages on opposite sides thereof, and located solely in the vertical face of said wall, said passages discharging into the corresponding producer-chambers; substantially as described.

2. A gas-producer comprising a plurality of adjacent, water-sealed chambers, each pair of chambers having a common, intermediate, vertical wall with grated air-passages on opposite sides thereof, and located solely in the vertical face of said wall, said passages discharging into the corresponding producer-chambers, said chambers having also air-passages in the vertical faces of their opposite outer walls; substantially as described.

In testimony whereof I have hereunto set my hand.

HENRY L. DIXON.

Witnesses:

JOHN MILLER,
H. M. CORWIN.