

No. 807,594.

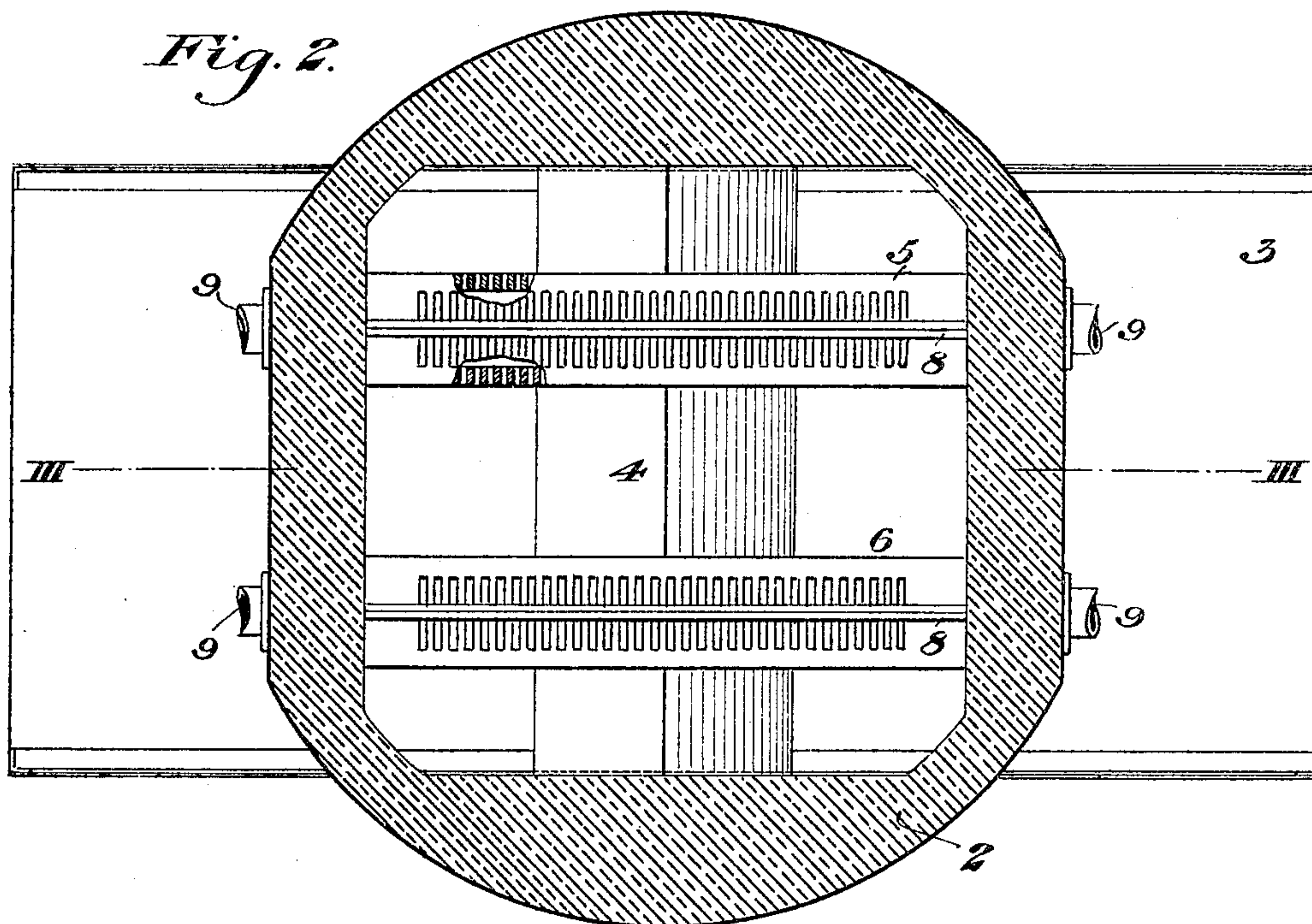
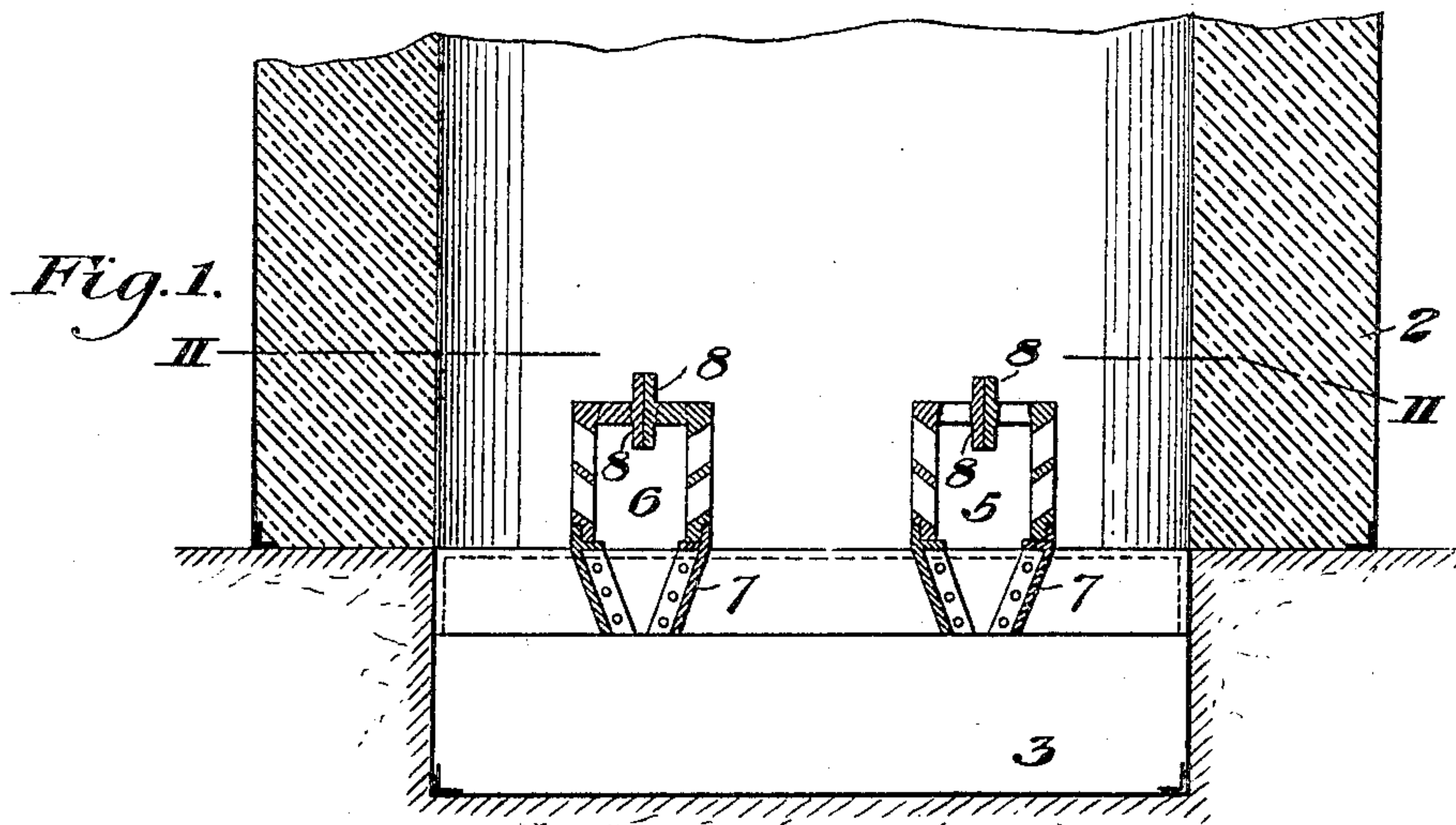
PATENTED DEC. 19, 1905.

W. H. BRADLEY.

GAS PRODUCER.

APPLICATION FILED JULY 21, 1904.

2 SHEETS—SHEET 1.



WITNESSES

W. H. Bradley
J. A. [Signature]

INVENTOR

W. H. Bradley

No. 807,594.

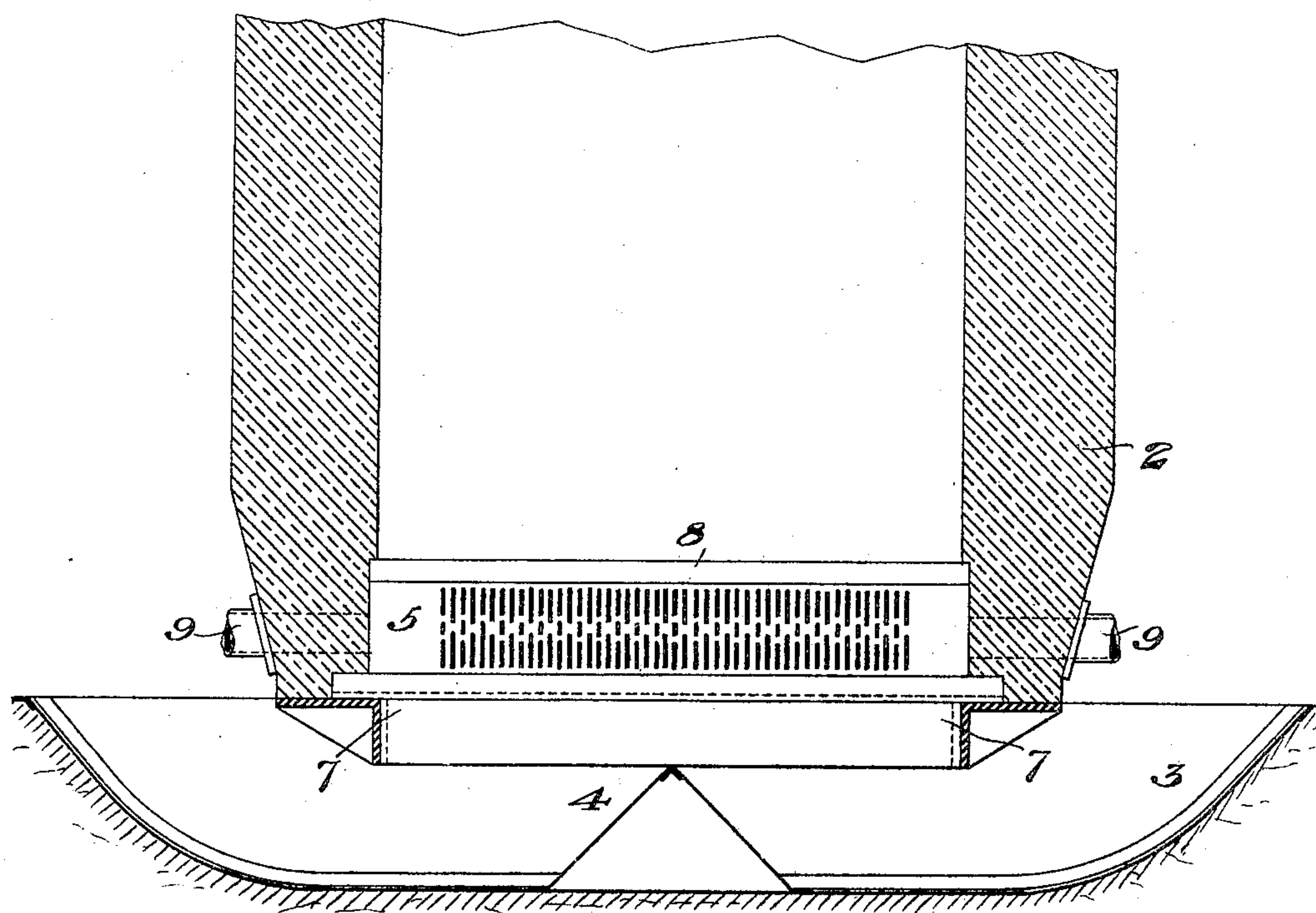
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2 SHEETS—SHEET 2.

Fig. 3.



WITNESSES

W. H. Bradley
L. A. Romer

INVENTOR

W. H. Bradley

UNITED STATES PATENT OFFICE.

WILLIAM H. BRADLEY, OF BELLEVUE, PENNSYLVANIA, ASSIGNOR OF ONE-FOURTH TO ALEXANDER GILLILAND AND ONE-FOURTH TO WILLIAM C. BRADLEY, BOTH OF BELLEVUE, PENNSYLVANIA, AND ONE-EIGHTH TO SARA L. BRADLEY AND ONE-EIGHTH TO MRS. M. E. WEBSTER, BOTH OF ST. LOUIS, MISSOURI.

GAS-PRODUCER.

No. 807,594.

Specification of Letters Patent.

Patented Dec. 19, 1905.

Application filed July 21, 1904. Serial No. 217,571.

To all whom it may concern:

Be it known that I, WILLIAM H. BRADLEY, of Bellevue, 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 the producer. Fig. 2 a horizontal section on the line II II of Fig. 1. Fig. 3 is a vertical central section on the line III III of Fig. 2.

In the drawings, 2 is the masonry-shell of the producer, which at the top is provided with the usual charging-hopper and gas-off-take. (Not shown.) Beneath this shell is a trough 3, adapted to contain water and to constitute a water seal. Across this trough, at the middle thereof, is preferably a wall or partition 4, angular in cross-section and adapted to shed the ashes toward the ends of the producer in the direction in which the trough extends. Above this wall or partition 4 and at right angles thereto are wind-pipes 5 6, supported by cross-girders 7 and preferably constituted of cast-metal sections having strengthening-flanges 8 8. These wind-pipes are perforated for the discharge of air and steam into the producer and are provided with air and steam inlet pipes 9 9. The wind-pipes extend in the direction of the trough 3, and the ashes discharged from the producer are drawn out in the water-trough in a direction parallel with the pipes. This renders the producer very easy to clear, and the use of the elevated pipes thus not only facilitates the distribution of

air within the producer and makes its action more regular, but renders it much easier to tend and keep in working order than has been the case with producers heretofore known. The producer is also very rapid in its action and is otherwise of great efficiency.

I claim—

1. A gas-producer having a water-trough, a cross-inclined wall and a wind-pipe above said wall and transverse thereto, said wind-pipe having clearance-spaces on both sides thereof for the removal of ashes; substantially as described.

2. A gas-producer having a water-trough and a wind-pipe extending along the producer in the direction of said trough, said pipe having clearance-spaces on both sides thereof, substantially throughout its length, for the removal of ashes; substantially as described.

3. A gas-producer having a water-trough and a plurality of parallel wind-pipes extending along the producer in the direction of said trough, each pipe having clearance-spaces on both sides thereof for the removal of ashes; substantially as described.

4. In a gas-producer, a wind-pipe composed of cast-metal sections having a substantially horizontal top and both external and internal strengthening-flanges; substantially as described.

In testimony whereof I have hereunto set my hand.

W. H. BRADLEY.

Witnesses:

J. R. BRADLEY,
H. M. CORWIN.