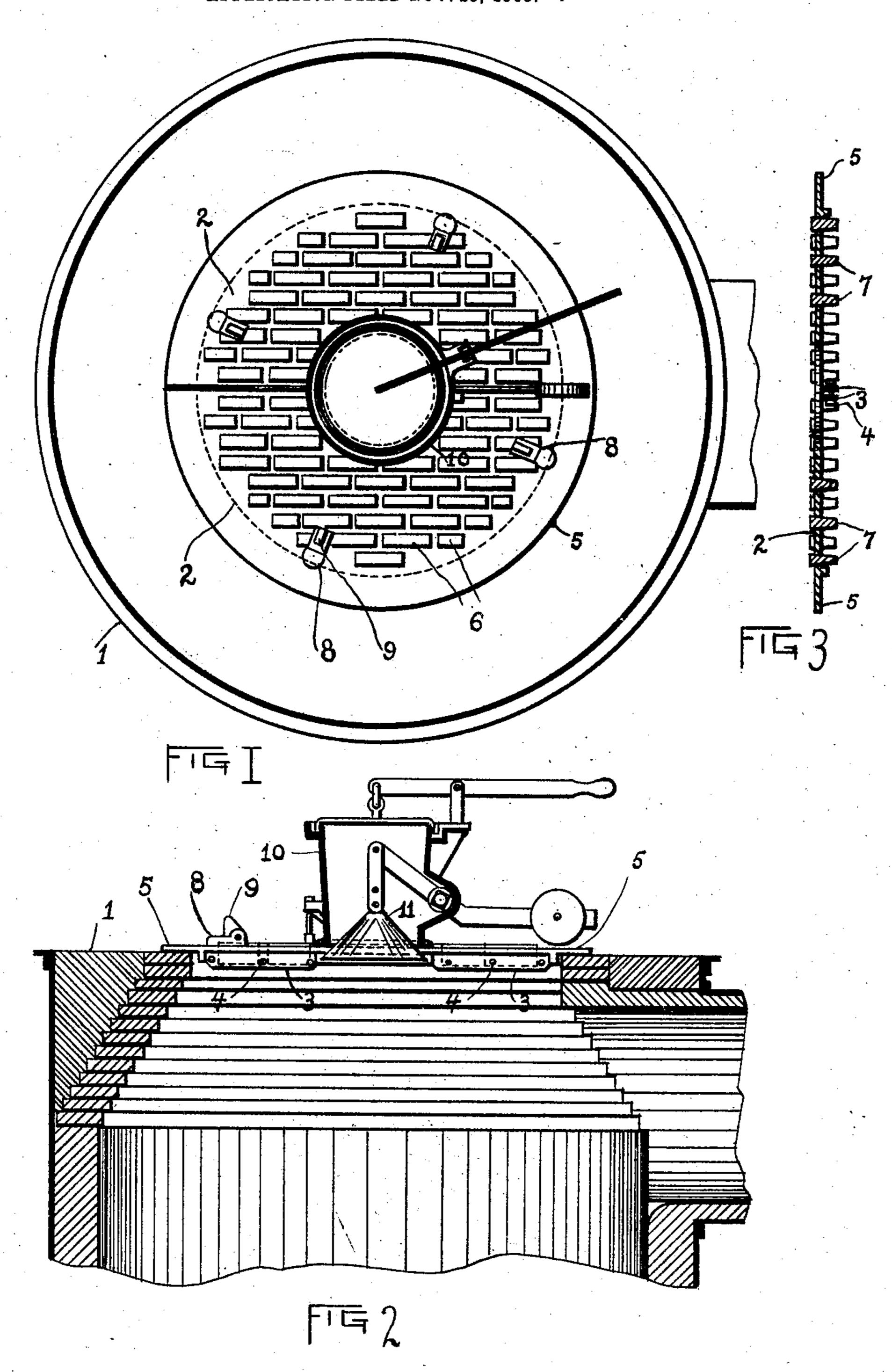
## J. A. HERRICK. GAS PRODUCER. APPLICATION FILED NOV. 25, 1903.

NO MODEL.



WITNESSES:

Legger,

INVENTOR Lund A. Herrick BY

C. n. Buster

## United States Patent Office.

JAMES A. HERRICK, OF PHILADELPHIA, PENNSYLVANIA.

## GAS-PRODUCER.

SPECIFICATION forming part of Letters Patent No. 773,143, dated October 25, 1904.

Application filed November 25, 1903. Serial No. 182,568. (No model.)

To all whom it may concern:

Be it known that I, James A. Herrick, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented certain Improvements in Gas-Producers, of which the following is a specification.

This invention relates to a gas-producer cover or lid; and its leading object is to provide a cheap and durable heat-insulating and

gas-tight construction.

In the accompanying drawings, Figure 1 represents a top plan view of a gas-producer body having the invention applied thereto.

Fig. 2 represents a vertical sectional view thereof, and Fig. 3 represents a vertical sectional view of the lid at right angles to the section shown in Fig. 1.

As shown in the drawings, the producer-body 1 is provided with a cover or lid consisting of the grating-sections 2, having the flanges 3, by which the bolts 4 connect them together, the flange or flanges 5 for supporting the lid on its seat, and the apertures 6, adapted for holding fire-bricks 7, which extend above and project through the grating into the producer. The bricks employed are suitably of the arch type or tapering form to permit their ready engagement by the open iron frame or grating. The cover has therein the poke-holes 8, closed by the hinged caps 9, and carries the usual fuel-inlet 10, controlled by the valve mechanism 11.

When the producer is put into operation, as tar or like by-products resulting from the dis-

tillation of the coal deposits and carbonizes upon the bricks projecting through the grating, covering them as well as the interstices between them and the joints, so as to form a tight heat-insulating shield over the interior 40 of the lid, which is thereby protected from burning out or destruction by heat and is kept sufficiently cool upon the top to permit workmen to stand thereon without discomfort.

Having described my invention, I claim— 45
1. In a gas-producer, a producer-body having a lid comprising a grating and bricks seated in said grating, said bricks extending beyond the inner face of said grating, substantially as specified.

2. In a gas-producer, a frame having openings therethrough, in combination with bricks seated in said openings and having surfaces exposed to tarry deposits distilled from fuel in said producer, substantially as specified. 55

3. In a gas-producer, the combination of a body, with a lid comprising a frame having openings therethrough and bricks seated in said openings, the ends of said bricks extending beyond the faces of said frame, substan- 60 tially as specified.

In testimony whereof I have hereunto set my hand, this 21st day of November, A. D. 1903, in the presence of the subscribing witnesses.

JAMES A. HERRICK.

In presence of— Danl. G. Lacey, Guy C. Heilman.