

G. J. HAGAN.
GAS PRODUCER.

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969,273.

Patented Sept. 6, 1910.

Fig. 1.

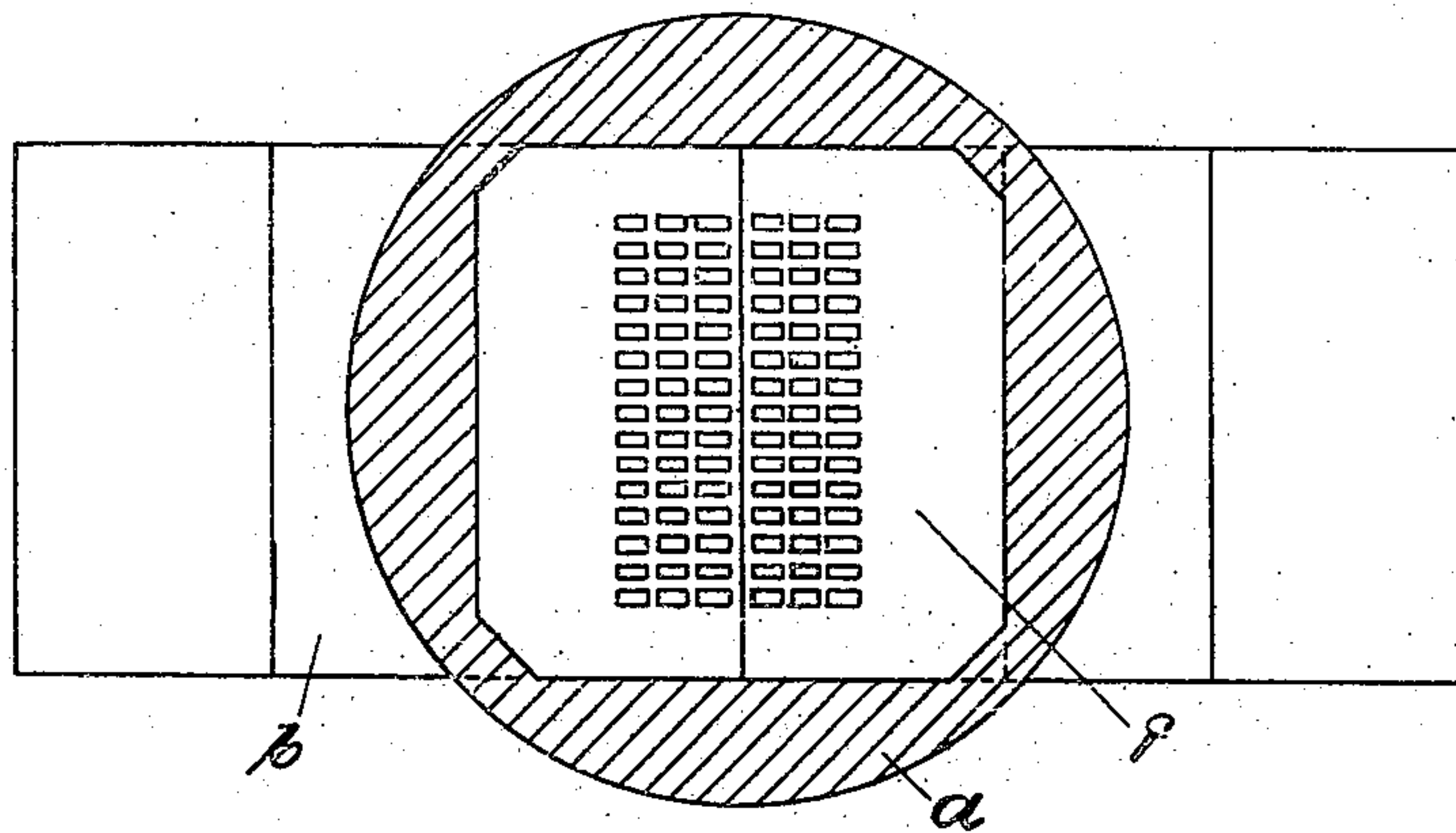
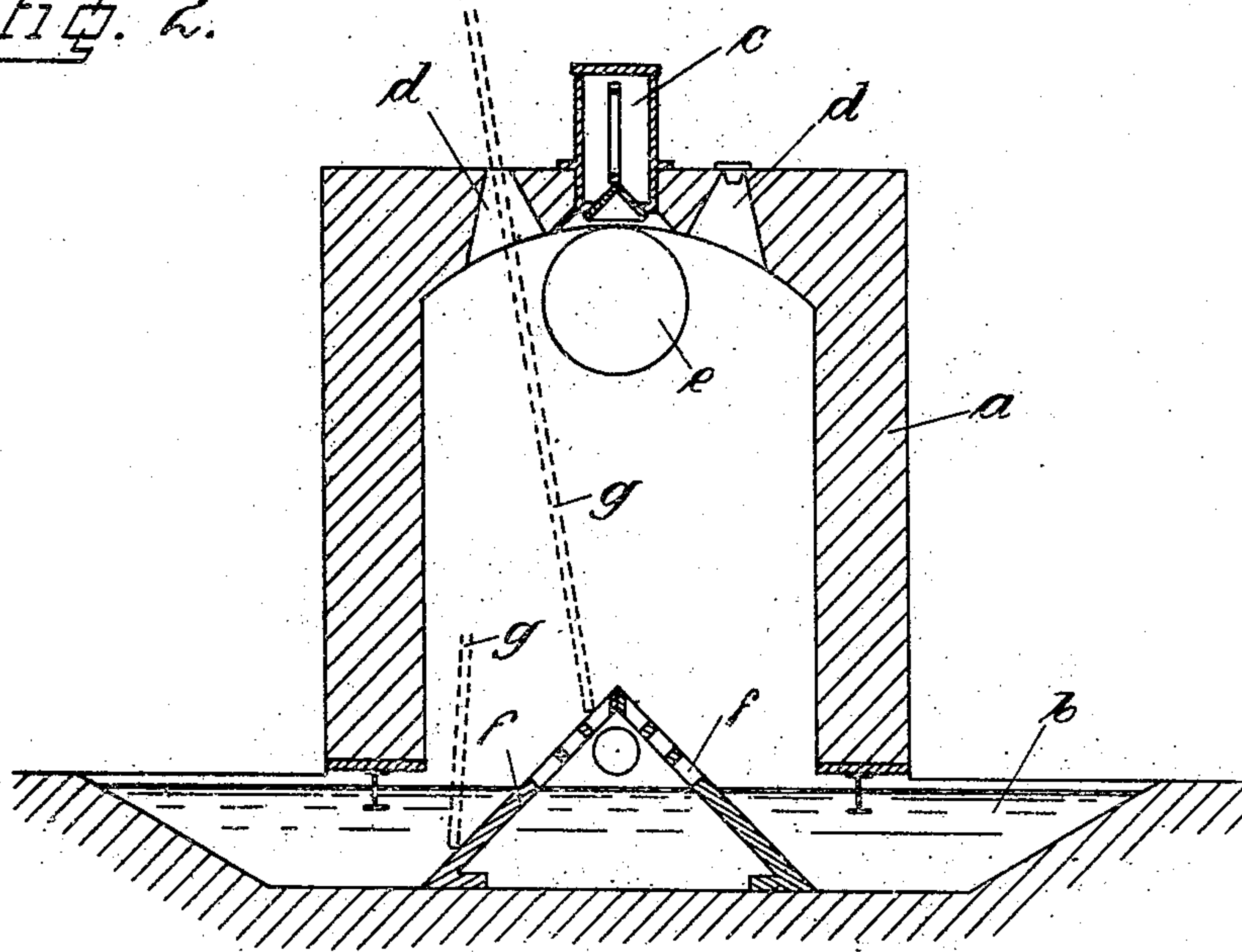


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

GEORGE J. HAGAN, OF PITTSBURG, PENNSYLVANIA.

GAS-PRODUCER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, GEORGE JUNKIN HAGAN, a citizen of the United States, residing at Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Gas-Producer, of which the following is a specification.

My invention relates to gas producers with an inclined grate and a water trough at the bottom, and my aim is to provide a construction in which the removing of ashes from the grate is facilitated. I attain this end by extending the grate down to the bottom of the water trough, as shown in the accompanying drawings, in which—

Figure 1 is a plan section Fig. 2 a vertical elevation of the producer.

The producer is of usual construction, consisting of a brickwork shell *a*, a water trough *b*, a hopper *c*, and poke holes *d* provided in the cover, and a gas flue *e* near the top of the producer. The grate *f* forms a ridge transverse to the water trough and extends on both sides of the ridge down to the bottom of the water trough.

It is obvious that the ashes by gravity slide downward on the grate, and are shed sidewise clear to the cleaning holes of the producer. But the main feature is that the pokers *g* which are introduced through the holes *d* to stir the coals and break the clinkers, by gravity slide along the grate, performing the task more perfectly and at the

same time shoveling the ashes from the grate down to the cleaning holes of the producer, and all this with comparatively small effort of the operators. This construction also shortens the time required for removing the ashes, which means another improvement, since during the cleaning of the producer, a lower grade gas is produced.

What I claim as my invention is:—

1. In a gas producer having a water trough, a ridged grate transverse thereto and extending from wall to wall of the gas producer shell and both ways down to the bottom of said trough; and substantially filling the inside plan profile of said producer, for the purpose set forth.

2. In a gas producer having a water trough, a ridged grate transverse thereto and extending from wall to wall of the gas producer shell and both ways down to the bottom of said trough, and substantially filling the inside plan profile of said producer, and passages for the air from blower in the upper portion of said grate, for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEO. J. HAGAN.

Witnesses:

E. J. HORACEK,
HOWARD G. HAMMER.