

Q. MOORE.
GAS PRODUCER.
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1,065,315.

Patented June 17, 1913.

FIG. 1.

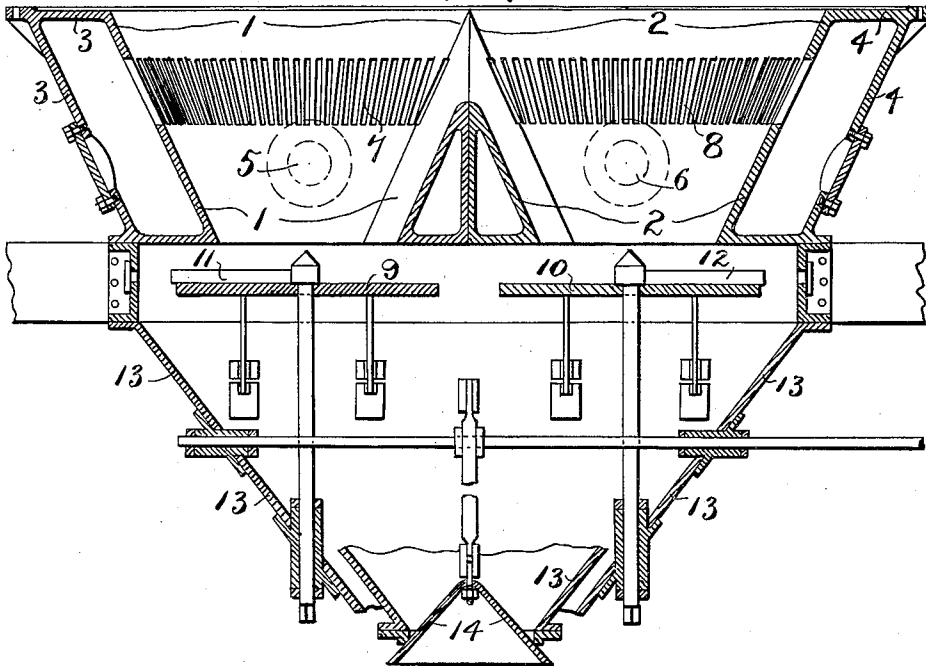
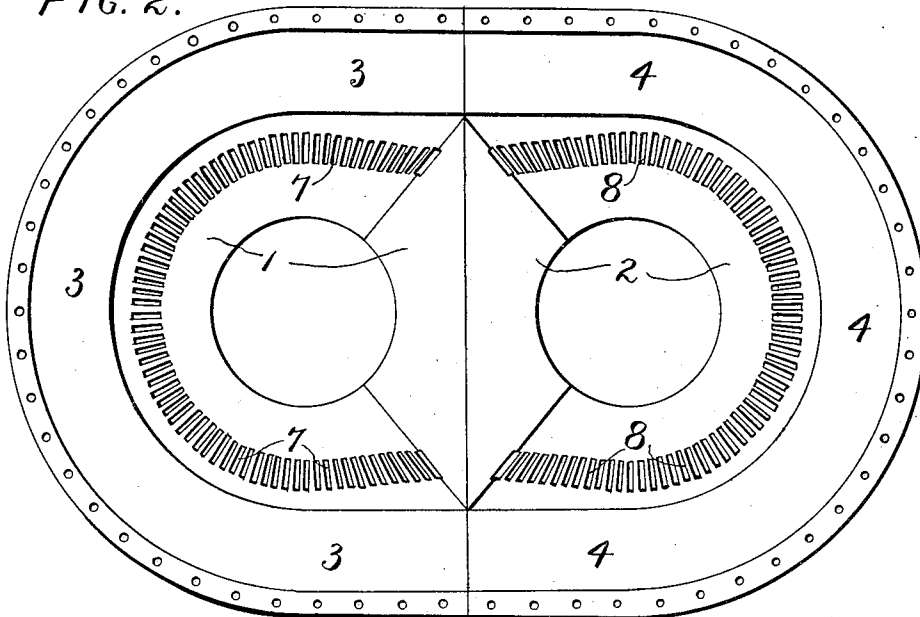


FIG. 2.



WITNESSES

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QUINTIN MOORE, OF GLASGOW, SCOTLAND.

GAS-PRODUCER.

1,065,315.

Specification of Letters Patent.

Patented June 17, 1913.

Application filed January 23, 1913. Serial No. 744,774.

To all whom it may concern:

Be it known that I, QUINTIN MOORE, a subject of the King of Great Britain and Ireland, and a resident of Glasgow, Scotland, have invented certain new and useful Gas-Producers, of which the following is the specification.

In dry bottom producers of the kind which in sectional plan are considerably greater in length than in width, the even removal and discharge of the ash from the bottom thereof and the even distribution of the blast are matters of some difficulty.

The invention has for its object to provide for such a producer a dry-bottom construction in which even distribution of the blast is achieved and the even removal of ash rendered simple.

The producer to which the improved construction is applicable is in plan of length substantially greater than its width and with rounded ends, and according to the invention there are provided at its bottom a series of inverted truncated conical grates, those adjacent to the ends of the longer sides of the producer fitting these parts, while the parts of the grates adjacent to one another merge in one another. Preferably (and the relative breadth of the producer does not usually necessitate that there should be more) there are two such grates merging the one in the other at their adjacent parts and conforming to the producer at their remote parts.

Figure 1 in the accompanying sheet of explanatory drawings is a longitudinal vertical section, and Fig. 2 a plan showing an example of the improved construction of the grate part of a gas producer of the type referred to.

According to this example the producer is in plan of length substantially greater than its width and with rounded ends; and as shown there are provided at its bottom two inverted truncated conical grates, 1, 2. These grates are each surrounded by an inverted truncated casing 3, 4 made in a piece with the grate, the grates and casings conforming to the rounded ends of the producer

at their remote parts, while at their adjacent parts the casings are flat and vertical so that they abut each other and the grates merge in one another.

The grates and casings as a whole are the same projected area in plan as the plan area of the bottom of the producer. Usual blast arrangements (not shown) supply blast to apertures 5, 6 in the casings 3, 4 from the interior of which the blast passes through the grate apertures 7, 8 into the bottom of the producer.

Beneath the central aperture formed by the truncation of each grate is an ash table 9, 10 of the form usual in dry bottom producers. Above each table and coaxial with each grate is a rotary scraper 11, 12, discharging the ashes therefrom and also of usual form, while tables and scrapers are as usual inclosed in a hopper 13 provided at its lower end with a usual discharge bell 14. Alternatively, other convenient means for supporting the fire bottom and removing ash may be employed.

What I claim is:—

1. In a dry bottom gas producer, a series of inverted truncated conical grates the walls of which are apertured in their upper portions to admit an air blast to a superposed producer casing, said assembled grates being, in plan, of considerably greater length than width, those portions of the grates adjacent the ends of the longer sides of the producer being fitted and jointed thereto while the parts of the grates adjacent one another merge into one another, in combination with independent fire supporting bottoms arranged beneath each grate cone, scrapers for removing the ash therefrom and an outlet for the ash, substantially as described.

2. In a dry bottom gas producer, a series of inverted truncated conical grates the walls of which are apertured in their upper portions to admit an air blast to a superposed producer casing, blast supply casings surrounding the grates, the grates and casing conforming to the rounded ends of the producer at their remote parts, while at their

adjacent parts the casings abut each other
and the grates merge one into the other,
in combination with independent free sup-
porting bottoms arranged beneath each grate
5 cone, scrapers for removing the ash there-
from and an outlet for the ash, substantially
as described.

In testimony I have signed my name to
this specification, in the presence of two sub-
scribing witnesses.

QUINTIN MOORE.

Witnesses:

DAVID FERGUSON,
WILFRED HUNT.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."
